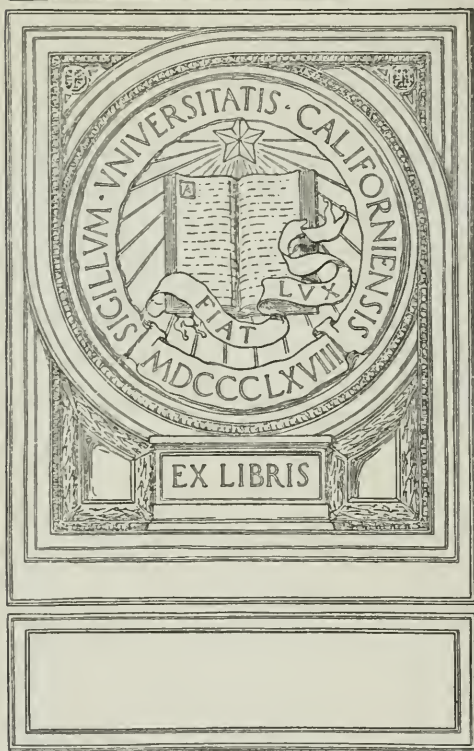


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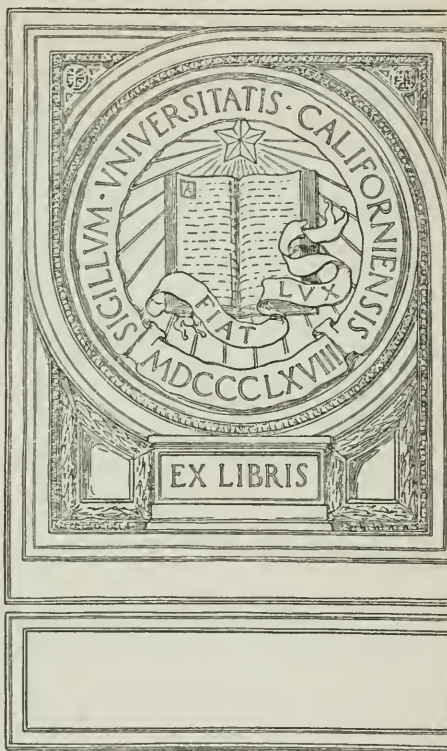
DONALD MACLAINE
CAMPBELL

UNIVERSITY OF CALIFORNIA
AT LOS ANGELES



A : PAST & PRESENT

UNIVERSITY OF CALIFORNIA
AT LOS ANGELES



JAVA : PAST & PRESENT

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A DESCRIPTION OF THE MOST BEAUTIFUL COUNTRY IN THE WORLD, ITS ANCIENT HISTORY, PEOPLE, ANTIQUITIES, AND PRODUCTS * * BY
DONALD MACLAINE CAMPBELL
LATE BRITISH VICE-CONSUL OF THAT ISLAND; MEMBER OF THE DUTCH COUNCIL OF SAMARANG (GEWESTELYKE RAAD); MEMBER OF THE CHAMBER OF COMMERCE OF SAMARANG * * * * *
WITH A MAP AND MANY ILLUSTRATIONS

IN TWO VOLUMES

VOLUME II



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CONTENTS OF VOLUME II

CHAPTER	PAGE
XII. ACCOUNTS OF JAVA BY TRAVELLERS, 1519 TO 1832	657
XIII. ANTIQUITIES	801
✓XIV. THE FRUITS OF JAVA	857 ✓
XV. THE FLORA OF JAVA	868
XVI. THE FAUNA OF JAVA	875
XVII. THE MINERALS OF JAVA	890
✓XVIII. THE INDUSTRIES OF JAVA	909 ✓
XIX. MISCELLANEOUS—	
PART I.—INHABITANTS AND THEIR LIFE : RELIGION, LANGUAGE, ETC.	983
✓,, II.—CLIMATE, HEALTH, ETC.	1032 ✓
,, III.—CRIME, ETC., HARBOURS, ROADS, ETC.	1073
✓,, IV.—SOCIAL LIFE IN JAVA, <u>TRADE</u> , ETC.	1153
,, V.—GOVERNMENT, CONSULS, EDUCATION, ETC.	1182
,, VI.—INFORMATION FOR TRAVELLERS, ETC.	1220
INDEX	1231

LIST OF ILLUSTRATIONS

Vol. II.

	TO FACE PAGE
HARMONIE CLUB, BATAVIA. (BUILT DURING THE ENGLISH TIME) .	658
SUGAR WAREHOUSES	658
THE OLD TOWN HOUSE AT BATAVIA. (DRAWN BY MAJOR THORN, 1811)	666
CASTLE AND WHARF AT BATAVIA, 1811	666
JAVAN LADY	686
JAVAN WOMAN	686
TJISARAWEA LAKE, NEAR SIUDANGLAYA	708
BURO BUDUR	802
BURO BUDUR	802
THE TEMPLE, BORO BUDUR. (AS IT WAS IN THE NINTH CENTURY IN THE TIME OF THE HINDUS)	820
BURO BUDUR: A BAS-RELIEF	836
PASSAGE FROM ONE TERRACE TO ANOTHER, BURO BUDUR . . .	848
BAS-RELIEF FROM THE TEMPLE OF BRAMBANAN	852
BURO BUDUR	852
CHANDI SEWOE TEMPLE RUINS. (BUILT ABOUT SEVENTH CENTURY)	858
COLOSSAL FIGURE IN THE RUINS OF CHANDI SEWU	862
CARVINGS AT BURO BUDUR	864
THE CROWN PRINCE OF JOCKJAKARTA IN PROCESSION	866
VICTORIA REGIAS IN THE BOTANICAL GARDENS AT BUITENZORG .	868
PLABOEAN RATOE, WYNKOOPSBAAI (SOUTH COAST OF JAVA). .	870
PARK OF THE GOVERNOR-GENERAL AT TJIPANAS	872
TJIBEUREUM WATERFALL, SOEKABOEMI	874
THE FRONT VERANDAH LEADING TO THE LIBRARY IN THE AUTHOR'S HOUSE	876
THE REGENT OF KENDAL, WITH ASSISTANT-RESIDENT ENTHOVEN, PATIHS, WEDONOS, ASSISTANT WEDONOS, DJAKSAS, AND COLLECTORS	878
STREET SELLERS, JAVA	882
FISH MARKET. SAMARANG	882
JAVAN LADY	884
JAVAN WOMAN AND CHILD	884
OLD PLAN OF BATAVIA, 1693	886
PUNISHMENT OF A CONVICT AT BLORA	888

	TO FACE	PAGE
JAVAN LADY	892	
GOVERNMENT OFFICES AT WATERLOO PLAIN, BATAVIA. (BUILT DURING THE ENGLISH TIME)	900	
RESIDENCY ROAD, JOCKJAKARTA	900	
NATIVE STREET RESTAURANT, JAVA	910	
SUGAR-CANE FIELD	910	
STREET IN SAMARANG	914	
NATIVE <i>BAMI</i> -SELLER IN JAVA	918	
NATIVE CIGARETTE-SELLERS IN JAVA	918	
COFFEE-SELLER	920	
JAVAN LADY	920	
KANDJENG GOESTI PANGARAN ADIPATI BEHI (LIEUTENANT-COLONEL ON THE STAFF)	926	
MAKERS OF BATIK STAMPS	930	
PANAMA HAT-MAKING	930	
ROAD TO TJIBODAS	936	
CLOTH-PRINTING.	940	
STAMPING CLOTHS	950	
WOOD WORKER	950	
CHINESE <i>BAMI</i> -SELLER IN JAVA	958	
SUGAR-CANE FIELD	958	
FINE ART WEAVERS	966	
MAKING PANAMA HATS	966	
GOVERNOR'S PALACE, SAMARANG. (BUILT BY SIR THOMAS STAMFORD RAFFLES, 1811)	972	
A CLUB-HOUSE IN JAVA	984	
CONCORDIA CLUB, BATAVIA. (THE FIRST MILITARY CLUB OF JAVA)	984	
THE MILITARY AND CIVIL HOSPITAL AT TJILATJAP	990	
THE CROWN PRINCE OF JOCKJAKARTA IN PROCESSION WITH THE ASSISTANT-RESIDENT	990	
ASSISTANT-RESIDENT'S HOUSE AT TJILATJAP	996	
RESIDENT'S HOUSE, PEKALONGAN	996	
THE HOUSE OF THE PUBLIC NOTARY OF REMBANG, WITH THE NOTARY, JHR. J. W. H. SMISSAERT, STANDING IN THE FRONT	1002	
CLUB AT PASOEROEAN	1002	
NEW CLUB, SAMARANG. (BUILT 1909)	1010	
GAMELAN PELOG	1014	
GOVERNMENT HOUSE, CHERIBON	1020	
FRONT OF THE AUTHOR'S HOME IN JAVA	1030	
BATIKKERS	1032	
A VERANDAH IN JAVA	1036	
THE PRADGOERIT CORPS OF THE SULTAN OF JOCKJAKARTA	1052	

LIST OF ILLUSTRATIONS

ix

	TO FACE	PAGE
THE CRATER OF THE BROMO		1064
ROAD-WATERING IN JAVA		1074
THE DONAN AT TJILATJAP		1074
BACK VIEW OF A EUROPEAN HOUSE IN JAVA		1080
LIUDANGLAYA		1090
NON-COMMISSIONED OFFICERS' CLUB, SAMARANG		1098
MAP OF JAVA	<i>At End of Volume</i>	

CHAPTER XII

ACCOUNTS OF JAVA BY TRAVELLERS, 1519 TO 1832¹

1521. The Portuguese Fernão de Magalhaes, or, as he is better known, Magellan, was the first to sail round the world, leaving Seville on the 10th August, 1519, passing through the Moluccas and touching at the island of Borneo, which he calls "that famous isle," in 1521. For fear of the Portuguese, however (which country he had deserted to serve the Spanish), he kept far away from the coast of Java, and does not appear to have touched there. In any case, if he did it was at the very mouth of the straits between Java and Sumatra. He relates regarding the Moluccas as follows :—

"*November 8th, 1521.* Before sunrising we entered the Port of Tiridore (Tidore), which is one of the chief of the Moluccas. The king is a Moor, but notwithstanding the prejudices of his religion, extremely fond of the Spaniards, and so much devoted to the service of their master that he bid us come ashore into his country and houses, and called us his brethren and children, and as a compliment to us changed the name of his country from Tiridore to Castile. These Moluccas are five in number—Ternate, Tiridore, Mutir, Macchian and Bacchian ; of all these Ternate is the chief, and the king of it was once lord of all the rest. The clove trees here are very tall, and as big about as a man, the boughs large in the middle and sharp at the top, the leaves like those of bay trees, and the bark of an olive colour.

"The cloves grow in large clusters at the tops of the boughs ; at first they are white, red when they come to maturity, and grow black by after drying. The leaf, bark and wood being green, is as strong as the clove itself. They gather them twice a year,

¹ In writing these accounts I have always as far as possible avoided repetition ; frequently accounts follow one another.

in June and December, and if they don't make them in time they grow very hard. Every man has his own peculiar trees, but they bestow but little husbandry on them. They have also in this island a sort of tree, the bark of which being steeped in water may be drawn out in small fibres to the fineness of silk, and of this the women make a sort of small apron to cover their private parts, which is all the covering they make use of.

"Near by is the island of Gilolo, which is divided between Moors and heathens. The two kings of the Moors have contributed themselves very liberally to the peopling of the island, the one of them having 600 and the other 650 children.

"*November 12th.* There is a public warehouse appointed in the city for the sale of their merchandise. They exchange at the following rates.

"For ten yards of good cloth, one bahar of cloves, one bahar being four canters and six pounds, and one canter one hundred pounds. For fifteen yards of meaner cloth, one bahar of Gambie (Gambir). For thirty-five drinking glasses, one bahar. For seventeen cathyls of quicksilver, one bahar. They brought daily provisions to our ships, and a sort of fresh water which springs out of the mountains where the cloves grow. It is hot when it comes out of the spring, but very cold when it has stood awhile in some other place. They gave us a peculiar present for the King of Spain, which was a couple of dead birds about the bigness of turtles, with very little heads and legs, long bills, two or three long feathers parti-coloured at their sides, instead of wings their whole bodies, besides of one colour, and that near a tawny; the Moors fancy they come down from Paradise and therefore call them the birds of God. As for the Moluccas in general, their products are cloves, ginger, rice, sagu bread, goats, sheep, hens, popinjays, white and red figs, almonds, pomegranates, oranges and lemons, and a sort of honey made by flies less than ants, besides sugar canes, oil of cocoas, melons, gourds and a fruit which they call camulical.

"We took leave of this royal company, not without great sorrow. In this isle we left a leaking ship behind, giving orders, if it could be repaired, for its return to Spain.

"We steered along the coast of Java the Less taking care not to sail too near the shore lest the Portuguese should chance to discover us. We directed our course therefore to Sumatra."



HARMONIE CLUB, BATAVIA. (BUILT DURING THE ENGLISH TIME.)



SUGAR WAREHOUSES.

1545. From the voyage of Mendez Pinto we have as follows :—

“ . . . it was in the year 1537, and the 11th of March, that I parted from this kingdom, in a fleet of five ships whereof there was no general, for each of these vessels was commanded by a particular captain, for example in the ship named the *Queen*, commanded Don Pedro de Silva. In the *St. Barba* commanded Don Fernando de Lima, of that which was called the *Flower of the Sea* Lope baz bagado was captain, and in the fifth and last ship named *Galega*, commanded Martin de Freitas . . .

“ Being departed from Malaca to go to Zunda,¹ at the end of seventeen days, I arrived at Banta,² where the Portugals are accustomed to traffique. And because there was at that time a great scarcity of pepper over all the country, and that we came thither of purpose for it, we were constrained to pass the winter there. We had been almost two months in this port where we exercised our commerce very peaceably when as from the King of Demaa,³ emperor of all the islands of Jaoa,⁴ Augenia, Bala,⁵ Madura,⁶ and of the rest of the islands of that archipelago.

“ There landed in this country a widow woman named Nhay Pombaya about the age of three score years, who came as ambassador to Tagaril, King of Zunda,¹ that was also his vassal as well as all the rest of that monarchy, for to tell him that he was within the term of six weeks to be in person at the town of Japara, where he was then making preparation to invade the kingdom of Passarwan.

“ Now it is their opinion that every one of these women which the kings are accustomed to send about affairs of importance neglect to have certain qualities for well execution of an ambassage, and worthily discharging the commission that is granted to them, for first of all they say, that she must not be a maid for fear she chance to lost her honor in going out of her house, because that even as with her beauty she contents every one. To this they add, she must be married or at leastwise a widow after lawful marriage that if she have had children, she must have a certificate how she hath given them all suck with her own breasts, alledging thereupon that she who hath borne children and doth not nourish

¹ Sunda.

² Bantam.

³ Demak.

⁴ Java.

⁵ Bali.

⁶ Madura.

them if she can, is rather a carnal, voluptuous, corrupted and dishonest woman, than a true mother. In the meantime Nhay Pombaya had delivered her embassy to the King of Zunda, she presently departed for this town of Banta, whereupon the king speedily prepared all things in readiness, she set sail with a fleet of 30 Calaluzes, and 10 Juripangoes, well furnished with ammunition and victual in which 40 vessels were 7,000 fighting men besides the mariners and rowers. Amongst this number were 40 Portugals of six and forty, that we were in all, in regard whereof they did us many particular favors in the business of our merchandise and publikly confessed they were much obliged to us for following them as we did.

“ The King of Zunda having departed from the port of Banta on the 5th day of January in the year 1546 arrived on the 19th of the same at the town of Japara, where the King of Damaa, Emperor of the island of Jacoa, was then making his preparatives being an army on foot of 800,000 men. This prince being advertised of the King of Zunda’s coming who was his brother-in-law and vassal, he sent the King of Paneruca¹ admiral of the fleet to receive him, who brought along with him an hundred and three score Calaluzes and ninety Lanchares, full of Luffons from the isle of Borneo ; with all this company he arrived where the King of Zunda was, who entertained him very courteously, and with a great deal of honor. Fourteen days after our coming to this town of Japara, the King of Demaa went and imbarqued himself for the kingdom of Passaruan in a fleet of 2,700 sails, amongst which, were 1,000 high built juncks and all the rest were vessels with oars. The 11th of February he arrived at the river of Hicandurea which is at the entrance of the bar, and because the King of Paneruca, admiral of the fleet perceived that the great vessels could not pass into port which was about two leagues off by reason of certaine shelves of mud, he caused all those that were in them to be disimbarqued, and the other vessels with oars to go and anchor in the road before the town. In this army was the Emperor Pangueyran in person, accompanied with all the grandees of the kingdom. The orders were to burn all the ships that were in port, which indeed was accordingly executed. The King of Zunda, with his brother-in-law who was general of the army, went by land with a great part of the forces, and being all arrived at the place where they meant to pitch their camp, they took care

¹ Panaroe kan.

in the first place for the fortyfying thereof, and for placing the canon in the most commodious places to batter the town. As for the night ensuying it was spent in rejoycings, until such time as it was day, when as each captain applied himself to that whereunto his duty obliged him according to the engineers directions, so that by the second day the whole town was environed with high pallisadoes, and their platforms fortified with great beams, whereupon they planted divers great pieces of ordnance, amongst which there were eagles and lions of metal that the Achems¹ and Turks² had cast, whereupon the besieged having taken no notice for two days and taking this fortifying as a great affront, resolved that night to make a sally upon their enemies. Two hours before midnight they all assembled at a great place not far from the palace to the number of 70,000 inhabitants. The King of Passaruan was young, and imbued with excellent qualities, no manner of tyrant, exceedingly affable to the common people, a friend of the poor, and so charitable towards widows. He was wonderfully content to see such heat of courage in the town. He drew 12,000 men and divided them into four companies of 3,000 each, whereof an unkle of the king's was general—of the second was captain of the principal mandarins, of the third a stranger a champa by nature, and of the fourth, one called Panbacalino. They fell upon their enemies with a marvellous impetuosity, and killed 30,000, besides wounded. Furthermore they took prisoner 3 kings, 8 pates, which are as dukes amongst us; the King of Zunda too, with whom we 40 Portugals were. It is scarcely to be believed how much the King of Demaa was grieved with the disaster of the former day as well as the affront which he received from those within by the loss of his people, as for the bad success of the beginning of this siege whereof he seemed to impute in some sort the fault unto our King of Zunda, saying that this fortune had hapned by the bad directions he had given to the centinels. Now he made solemn oath never to raise the siege, and protested he would put to death whomsoever should oppose his resolution, and used all kinds of diligence for the new fortifying of the camp with good ditches, strong pallisadoes and divers bulwarks of stone and timber, garnished on the inside with platforms where he used in great many canons to be planted so that by this means the camp was stronger than the town itself in

¹ Achineeso.

² Arabs.

regard whereof the besieged did often times jeer the sentinels without telling them. That it must needs be concluded they were notorious cowards since instead of besieging their enemies like valient men they besieged themselves like feeble women wherefore they bid them return to their houses, where it was fitter for them to fall to spinning then to make war. These were the jeers which they ordinarily put upon the besiegers who were greatly offended thereby.

“This town had been almost three months besieged, and yet had the enemies advanced but little, for during all that time wherein there had been five batteries, and three assaults given to it, with above a thousand ladders planted against the walls, the besieged defended themselves still like valiant men, so that all the power of the pangueyran which was about 800,000 men, whereof the number was much diminished. Hereupon the ingineer of the camp promised the king he resolved to take another different course. To that effect with a great amass of earth and bavins he framed a kind of platform, which he fortified with six rows of beames and wrought, so that in nine days he raised it a fathom higher than the wall; that done, he planted 40 great pieces of cannon upon it, together with a number of bases and falconets wherewith he fell to battering the town of Passeruau in such sort as the besieged were therewith mightily damnified, so that the king perceiving that this invention of the enemy was the only thing in the world that could most incommode him in the town he resolved by the means of 10,000 volunteers to whom for a mark of honor he gave the title of Tygers of the World to attacque this fort—which was presently put into execution, and for the better encouragement to them the king himself would be their captain. With the rising sun, they fought so valiantly without fear at all of the dreadful ordinances as in less than two hours, they got to the top of the platform and there setting on their enemies who were 30,000 in number, they defeated them all. The Pangueyran of Pate, seeing his forces thus routed, ran thither in person with 20,000 choice soldiers intending to beat the Passeruans from the place they had gained, but they defended it so courageously, as it is not possible to express it in words.

“This bloody battel having indured till evening the Passeruau, who had lost the most part of his men, made his retreat into the town whereunto having first set fire in six or seven places, it took hold of some barrels of gunpowder of which it seems there was a

great store there which inflamed it terribly in some parts which was favourable to the besieged. Of these 10,000 volunteers, 6,000 lay dead on the platform. True it is that the Pangueyran lost 40,000 killed. You are to understand that the Pangueyran of Pate¹ King of Demaa being certified by some of his enemies whom his men had taken prisoners of the piteous estate of the besieged and the king hurt, and their ammunition failing, all these things carried him more ardently than ever to assault the besieged town. He resolved to scale it in plain day and instantly great preparations were made, where divers serjeants at arms on horseback, and carrying maces on their shoulders went proclaiming aloud. 'The Pangueyran of Pate, who created all things, lord of the lands which environ the seas, to the end of nine days, and with the courage of tigers you assist in the assault of the town of Passeruan for a recompence whereof he liberally promiseth to do great favors, as well in money as in honorable titles to those soldiers who shall first plant colours on the enemies walls whereas contrarily do not carry themselves valiantly shall in justice thereof be executed.'

"This ordinance of the king full of menaces being published all over the camp put them in such alarm, as the commanders began to make themselves ready, a thing they had not done before, and to provide all things necessary for the assault which were prepared with hues and cries intermingled with drums and other instruments of war : not to be heard without much terror.

"On the 7th day the King of Demaa sate in council to resolve the affairs of the siege with the principal lords of his army. During this time he had always neer to him a young page who carried his bethel² to chew, and asked this page in age of 12, for some, but he did not seem to hear ! And the king asked him a second and a third time, and one of the lords that was neer to the page pulled his sleeve, and bid him give the king some bethel, which immediately he did, falling on his knees when he presented him. The king took 2 or 3 leaves without being angry, giving him a light touch with his hand on the head³ and said ' art thou deaf, that thou couldst not hear me,' and thereupon re-entered into discourse with his council. Now because the Javan are the most

¹ Pangeran of Pate.

² Betel.

³ Amongst grown ups in the time of Majapahit, such was a mortal insult.

punctilious and perfidious nation of the world, and that withal they of this country hold it for the greatest affront when one gives a touch on the head, this young page imagining that the king had touched him so out of contempt so that he thereby should be infamous for ever, went aside weeping and sobbing, resolving to revenge the injury, so drawing out his knife he stabbed the king within the midst of the left pap, and so because the blow was mortal the king fell instantly to the ground not able to say any more than these three words 'I am dead.' The page was impaled alive with a good big stake which came out at the nape of his neck. As much was done to his father, his brother, to three score and twelve of his kinsmen so that the race was exterminated upon so cruel and rigorous an execution. Now the question was made what to do with the body ; for some said to bury him here would leave him in the power of the Passeruans, and others if he were transported to Demaa where his tomb was, it was not possible, but that it would be corrupted before it arrived there, and therefore not be received into Paradise. One of the Portugals gave counsel which was worth him for the invention 10,000 ducates.

"This counsel was that they should put the body in a coffin full of lime and camphire, and so bury it in a junk full of earth. As soon as this marvellous invention was carried out, the King of Zunda, general of the army, did imbarck the great ordnance, and ammunition making no noise, and taking care, the enemy got no inkling of what they were doing, in order to make an affront to them. But whatsoever care and silence was taken the king marched out of the town in person with only 3,000 soldiers and fell upon the enemies, who were busie in trussing up their baggage, and in less than half an hour's space they cut 12,000 of them in pieces. There were also 400 ships burnt wherein were the hurt men so that by this means all the camp was near lost. The King of Passeruan retreated into his town, for reason that he had lost 400 men. In the meantime the King of Zunda set sail on 9th March with all speed for Demaa, being received by the people with great cries and all signs of mourning. The day after a review was taken as there were found missing 130,000 whereas the Passeruans had only lost 25,000. They had now to create a new pangueyran or 'Eye lid of the World' as he is wont to be called. There was now much trouble in the shipping on account of no king being as yet appointed and notice was therefore given to the King of Panaruca, Prince of Balambuan, and Duke of

Cherebom, and four score were hanged on the shore, for this pell-mell rifling of the merchant ships also of other countries lying in the port.

“ We heard whilst here of the Pate Sudaya,¹ Prince of Surubayoa.”

1579. Francis Drake began his famous voyage round the World in 1577, calling at Bantam. He was the first Englishman to visit Java, and his account of the place appears in Chapter IV.

Drake says :—

“ The names of the Kings or Princes of Java at the time of our Englishmen’s being there.

Raja Donaw.	Raja Tymbantou.
Raja Rabacapala.	Raja Mawgbange.
Raja Bacabatra.	Raja Patimara.

“ Certaine wordes of the naturall language of Java, learned and observed by our men there.

Sabuck—silk.	Sagu— bread of the country.	Larnike—drink.
Tadon—a woman.	Eudam—rain.	Jongek—ship.
Sapelo—ten.	Dopolo—twenty.	Treda—no.
Bayer—go.	Suda—enough.	Cricke—dagger.
Adadizano—I will fetch it.	Calapa—cocoanut.	Totopps—cap.
Gula—sugar.	Paree—ryce in huske.	Braas—wet rice.
Arbo—an oxe.	Cabo—gold.	Bebecke—a duck.
Arigange—a deer.	Hiam—a henne.	Catcha—looking glass.”

1587. Thomas Cavendish, with his pilot Christopher Hare (brother of Stephen Hare, who sailed also to the South Seas), left Plymouth in 1586.¹ He says :—

“ The first day of March (1587) having passed through the Streights of Java minor, and Java major wee came to an ancker under the south west parts of Java Major (at Bantam), where wee

¹ Pati of Sedayoe.

² For the names of the ships under his command see Chapter IV.

espied certaine of the people were fishing by the sea side in a bay which was under the yland. Then our Generall taking into the ship certaine of his company and a negro which could speak the Morisco tongue which hee hath taken out of the great Saint Anna, made towards those fishers, which having espied our boat ranne on shoare into the wood for feare of our men, but our Generall caused his negro to call unto them, who no sooner heard him call, but one of them presently came out to the shore-side and made answere. Our Generall by the negro with many respects enquired of him for fresh water which they found and caused the fisher to goe to the king, and to certifie him of a shippe that was come to have trafique for victuals and for diamants, pearles, or any other rich jewels that hee had for which hee should have either gold or other merchandise in exchange. The fisher answered extremely politely that we should have all manner of victuals that wee would request. Thus the boat came aboard againe.

“Within a while after, we went about to furnish our shippe thoroughly with wood and water.

“About the eighth of March or hereabouts two or three canoas came from the town unto us with egges, hennes, fresh fish, oranges and lymes, and brought worde we should have had victuals more plentifully, but that there were so farre to bee brought to us where wee ridde—which when our Generall heard hee weighed ancker and stooode in neerer to the towne ; and as wee were under saile, wee mette with one of the king’s canoas comming towarde us ; whereupon wee shoke the shippe in the winde and stayed from the canoa untill it came aboard of us, and stooode unto the bay which was hard by, and came to an ancker. In this canoa was the king’s secretarie who had on his head a piece of died linen cloth tied up like a Turkes tuliban ; he was all naked all saying about the waste, his breast was carved with the broad arrowe upon it, hee went barefooted, he had an interpretour with him which was a Mestizo, that is halfe an Indian and halfe a Portuguese.

“This secretarie signified unto our Generall that he had brought him an hogge, hennes egges, fresh fish, sugar canes and wine (which wine was as strong as any aqua vitæ, and as cleare as any rocke water) ; he tolde him farther that hee would bring victuals so sufficiently for him as hee and his company would request, and that within the space of foure dayes. Our Generall used him singularly well, banquetted him most royally, with the



THE OLD TOWN HOUSE AT BATAVIA. (*Drawn by Major Thorn, 1811.*)



CASTLE AND WHARF AT BATAVIA, 1811.

choyce of many and sundry conserves, wines bothe sweete and other, and caused his musitians to make him musicke. This done our Generall tolde him that hee and his company were Englishmen, and that wee had bene at China and had had trafique there with them, and that wee were come thither to discover and purposed to goe to Malaca. All with which the grande secretarie was extremely astonished. The people of Java tolde our Generall that there were certaine Portugals in the land which lay there as factours continually to trafique with them, to buy negroes, cloves, pepper, sugar and other commodities.

“This secretairie of the king with his interpretour, did much enjoy his banquet, and lay aboard our shippe one night. The same night because they lay aboard in the evening at the setting of the watch our Generall commanded every man in the shippe to provide his harquebuze and his shotte, and so with shooting off 40 or 50 small shotte, and one sacre himself set the watch with them. This was no small marveile unto these heathen people, who had not commonly seene any shippe so furnished with men and ordinance.

“The next morning, the Generall dismissed the grand secretarie and his interpretour with all humanity.

“The fourth day after, which was the 12th of March, according to their appointment came the king’s canoas, but the winde being somewhat skant they could not get aboard that night, but put into a bay under the yland untill the next day, and presently after the breake of day there came to the number of 9 or 10 of the king’s canoas so deeply laden with victuals as they could swim, with two great live oxen, half a skore of wonderfull great and fat hogges, a number of hennes which were alive, drakes, geese, egges, plantans, sugar canes, sugar in plates, cocos, sweet oranges and soure lymes, great store of wine and acqua vitæ, salt to season victuals withall, and almost all manner of victuals else, with divers of the king’s officers which were there. Among all the rest of the people in one of these canoas came two Portugals which were of a middle stature, and men of marvellous proper personage; they were each of them in a loose jerkin and hose which came down from the waste to the ancle, because of the use of the countrey, and partly because it was lent, and a time for doing of their pennance (for they accompt it as a thing of great dislike among these heathens to weare either hose or shoes on their feete) they had on them each a very faire and a white lawne

shirt, with falling bands on the same, very decently only their bare legs excepted. These Portugals were no small joy unto our Generall and all the rest of the company ; for wee had not seene any Christian that was our friend of a yeere, and a halfe before. Our Generall used and intreated them singularly well, with banquets and musicke. They told us that they were no lesse glad to see us, than wee to see them ; and enquired of the estate of their country and what was become of Don Antonio their king, and whether hee were living or no, for that they had not of a long time bene in Portugall and that the Spaniards had always brought them worde that hee was dead. Then our Generall satisfied them in every demaund, assuring them that their king was alive, and in England, and had honourable allowance of our Queene, and that there was warre betweene Spaine and England, and that we were come under the King of Portugall into the South Sea, and had warred upon the Spaniards there, and had fired, spoiled and sunke all the ships along the coast that wee could meete with all, to the number of eighteene or twentie sailes. With this report they were sufficiently satisfied. On the other side they declared to us the state of the Yland of Java. First the plentifulness and great chose and store of victuals of all sorts, and of all manner of fruits as before is set downe. Then the great and rich merchandize which are there to be had. Then they described the properties and nature of the people as followeth.

“ The name of the king at that part of the yland was Raja Bolamboam, who was a man had in great majestie and feare among them. The common people may not bargaine, sell or exchange anything with any other nation without speciall licence from their king, and if any so doe, it is present death to him. The king himselfe is a man of great yeeres and hath an hundred wives, his sonne hath fiftie. The custome of the country is, then whensoever the king doeth die, they take the body so dead and burne it, and preserve the ashes of him, and within five days next after, the wives of the said king so dead according to the custome and use of their country every one of them goe together to a place appointed and the chiefe of the women, which is neerest unto him in accompt, hath a ball in her hand, and throweth it from her, and to the place where the ball resteth, thither they go all, and turne their faces to eastward, and everyone with a dagger in their hand (which dagger they call a crise and is as sharpe as

a rasor) stab themselves to the heart, and with their hands all whee-bath themselves in their owne blood and falling grovelling on their faces so ende their dayes. This thing is as true as it seemeth to any hearer to be strange. The men of themselves be very politique and subtile, and singularly valiant, being naked men in any action they undertake, and wonderfully at the commandment and feare of their king. For example ; if their king command them to undertake any exploit, be it ever so dangerous or desperate, they dare not nor will not refuse it though they die every man in the execution of the same. For hee will cut off their heads of every one of them which returne alive without bringing of their purpose to pass, which is such a thing among them, as it maketh them the most valiant people in all the south east parts of the world, for they never feare any death. For being in fight with any nation if any of them feeleth himself hurte with launce or sword, he will willingly runne himselfe upon the weapon, quite through his body to procure his death the more speedily and in his desperate sort ende his dayes, or overcome his enemy. Moreover although the men be tawny of colour and go continually naked, fearing no shame, yet their women be wonderfull faire of complexion, and go more apparelled, thinking it righte to hide their privities when in publick. After they had thus described the state of the yland and the orders, and facions of the people, they tolde us further, that if their King Don Antonio would come unto them, they would warrant him to have all the Malucos at commandment besides China, Sangles, and the Yles of the Phillippinas, and that hee mighte be assured to have all the Indians on his side, that are in the countrey. After we had full contented these Portugals, and the people of Java which brought us victuals in their canoas, they tooke their leaves of us with promise of all goode entertainment at our retournes and our Generall gave them three greate pieces of Ordnance at their departing which they did withe much sorrows. Thus the next daye being the 16th of March we set sail from (Banten) towards the Cabo de buena Esperanza—always intending to returne to Banten whiche we leave with much sorrows—for we like the facions of the Javan peoples.

“ In traversing the vast ocean between Java and the main of Africa, we make many observations as to the appearance of the stars, the weather, the windes, the tides, the bearing, and position of landes.”

A BRIEF DESCRIPTION OF A VOYAGE PERFORMED BY CERTAIN
HOLLANDERS TO AND FROM THE EAST INDIES, WITH THEIR
ADVENTURES AND SUCCESS.

“WHEN AND HOW THE SHIPS SET SAIL.—In the year of our Lord 1595, upon the 10th day of the month of March, there departed from Amsterdam three ships and a pinnace to sail into the East Indies set forth by divers rich merchants. The first called *Mauritius*, of the burthen of 400 tons, having in her six demi-canon, fourteen culverins and other pieces, and four pieces to shoot stones, and 84 men, the master JOHN MOLEUATE, the factor CORNELIS HOUTMAN. The second named *Hollandia*, of the burthen of 400 tons, having 85 men, seven brass pieces, 12 pieces for stones, and 13 iron pieces, the master JOHN DIGNUMS, the factor GERRIT VAN BUININGEN. The third called *Amsterdam*, of the burthen of 200 tons, wherein were 59 men, six brass pieces, ten iron pieces and six pieces for stones, the master JOHN JACOBSON SCHELLINGER, the factor REGINER VAN HEL. The fourth being a pinnace called the *Dove*, of the burthen of 50 tons, with 20 men, the master SIMON LAMBERTSON. With four ships upon the 21st of the same month came unto the TEXEL, where they stayed for the space of twelve days to take in their lading, and the 2nd of April following they set sail.

“The 7th of July we saw the point of the land of Sumatra, which is a very high land descending downward with a long end.

“The 11th of the same month we were close under the land, where there lay an island, and there we anchored.

“The 12th of July in the morning we saw certain ships, whereof one came unto us; we rowed unto it with a shallop and spake with it, but could not understand them, but they shewed us where we should have water, which made us glad that we might once again have our bellies full of water, it being almost four months that we had not seen any land, nor taken in any fresh victuals. We sent our pinnace to the firm land of Sumatra, there to seek for some relief, for at that where we lay there dwelt not any man. The 13th of July the captain or principal ruler of Sumatra came aboard our ships to see us, which was done with great solemnity, he being appareled after the Turkish manner, with a wreath about his head, and a fearful countenance, small eyes, great eyebrows, and little beard, for a man might tell all the hairs upon his chin.

He brought us a present of betele, which are leaves which they continually chew, and eat it with chalk.

“**SUMATRA.**—This island of Sumatra or Taprobana (as it is said) is the greatest of all the Oriental islands. It is divided from the firm land of Malacca by a straight and dangerous sea, by reason of many islands and cliffs that are within it. Out of this island, as some men are of opinion, Solomon had his gold wherewith he beautified the temple and his own palace, and then in the Bible it should be named Ophir, for certainly Sumatra is rich of mines of gold, silver and metal, and the inhabitants thereof are very expert in melting of brass pieces. Therein is a fountain of pure balsam. The Portugeuze have no fortress therein, yet they traffick in certain havens, especially in Pedir and Campar. There is also in this island a place called Manancabo, where they make poynards and daggers, by them called cryses, which are much esteemed in those countries, and those of Malacca and Java hold them for their best weapons, and with them are very bold.

“The same day our pinnace returned again unto us, bringing us good news, that we were welcome unto the country-people, and brought us certain Indian nuts or cocoe, melons, cucumbers, onions, garlick, and a sample of pepper and other spices, which we liked well. The 14th of June we laded in some fresh water. Right over against Sumatra on the south side of the equinoctial lieth the island of Java Major, or Great Java, and these two islands are divided by a streight commonly called the Streight of Sunda, which lieth between these two islands, bearing the name of the principal haven of Java, called Sunda. In this channel there runneth a great stream, and course of narrow waters. Through this streight Mr. Candish, an Englishman, passed with his ship, coming out of the South-sea from New Spain.

“**JAVA MAJOR.**—Java beginneth under seven degrees on the south side, and so stretcheth east and south 150 miles long. It is very fruitful, especially of rice, cattle, hogs, sheep, hens, onions, garlick, Indian nuts, and all kind of spices, as cloves, nutmegs, mace, etc., which they carry to Malacca. The chief haven in the island is called Sunda Calapa. There you have much pepper, better than of India or Malabar, and there you may yearly lade 4 or 5,000 quintals of pepper, Portugal weight. There likewise you have great store of frankincense, camphor, and some diamonds, but they have no other kind of money but a certain

piece called caixa, as big as a Holland doit, but not so thick, with a hole in the middle to hang it upon a string, in which manner they commonly hang hundreds or thousands together, and with them they know how to make their account, which is two hundred caixa's make a sata, and five sata's make a thousand caixa's which is as much as one crusado of Portugal or three Carolus Gilderns, Flemish money, or two shillings sixpence English. Pepper is sold by the sack, each sack weighing 45 catten weight of China, each catte as much as 20 ounces Portugal weight, and each sack is worth in that country at the least 5,000 caixa's and when it is highest at 6 or 7,000 caixa's. Mace, cloves, nutmegs, white and black benjamin, camphor, are sold by the bar, each bar weighing 330 catten of China. Mace that is fair and good is commonly worth from 100 to 120 thousand caixa's. Good cloves accordingly and foul cloves called bastan are worth 70 and 80 thousand caixa's the bar. Nutmegs are always worth 20 and 25 thousand caixa's and sometimes 200,000. The wares that are there desired and exchanged for spices, are divers sorts and colours of cotton linen, which come out of several provinces, and if our cambric or fine holland were carried thither, it would peradventure be more esteemed than the cotton linen of India. The 15th of June there rowed a scute called a prawen, hard under the land by us. We called him but not against his will, and shewed him silver, and other wares that liked him well. He bad us make towards the strand, and told us of Bantam, saying that there we should have all kinds of merchandise. Then we made signs unto him that if he would bring us to Bantam, we would pay him for his labour. He asked us five ryals of eight and a red cap, which we granted him, and so one of the men in the scute came on board the *Mauritius* and was our pilot to Bantam, where we passed by many islands. The 19th of July as we sailed by a town, many Portugueze boarded us, and brought us certain cocos and hens to sell, which we bought for other wares.

“The 22nd of the same month we came before the town of Bantam within three miles of it, and there anchored under an island. The same day about evening, a scute of Portugueze boarded us, that were sent by the governor to see what ships we were, and when we shewed them that we came thither to traffick with them, they told us, that this was the right pepper country, and that there we might have our lading, that new pepper was ready to be gathered and would be ripe within two months after,

which pleased us well, for we had already been fifteen months and twelve days upon our voyage, having endured great dangers, miseries and thirst, many of our men by sickness being dead.

“The 23rd of June we hoisted our anchor and went close to the town of Bantam and anchored hard by four small islands that lay right north from the town. The same day the sabander (who is there one of the great officers next the king) came aboard our ships, asking us what we would have ; we said we were come to buy pepper and other spices, and that we had ready money and certain wares, whereof we shewed him some part, which he liked well, saying that there we might have lading enough, shewing us great countenance.

“The same day likewise there came a great number of scutes unto our ships, bringing all kinds of victuals to sell, as hens, eggs, cocos, bananas, sugar canes, cakes of rice baked, and many other things. The 24th of June there came many men aboard our ships, bringing divers wares to sell, shewing us great friendship and as it seemed were very glad of our arrival there, telling us that there we might have pepper enough and new pepper within two months after, and that pepper was then as good and cheap as it had been any time within ten years before, that we might buy five or six sacks for one cattì (being about twenty guilders) which was ordinarily sold, but one sack for that price. Every sack weigheth 54 pound Holland weight, so that a pound would be worth about a brass penny Holland money. The same day about noon the sabandar boarded us once again, desiring Cornelis Houtman to go on land to speak with the governor, for as then there was no king, for about a month before our arrival there, the king was gone with a great army before the town of Palimban, which he thought to take, and had almost gotten it, but there he was stricken with a great piece by a renegado of the Portugueze, and so was slain. His death was much lamented by the strangers that dwelt at Bantam, for he was a good king being about 25 years of age. He left behind him four wives, whereof the eldest was not above 15 years of age, and a young son of three months old, that was to succeed him in his kingdom, and they had chosen a protector or governor to rule in his minority whom they call kipate, and when the kipate by the sabandar sent to our sarjeant major to come unto him into the town, he made him answer that he had no such commission, but he desired the governor first to

come aboard his ship, and then he would go on shore. He likewise desired us to go nearer to the town with our ships.

“And thereupon we sailed somewhat nearer to the island that lay next unto the town, within half a mile from it, and there we anchored at four fathom clay ground, the town lying about two leagues south from us, where we had a good road. The next morning the governor sent aboard, and the man that came, spake not only good Portugueze but other languages. He let our serjeant major understand that he would come aboard and desired that he would with a shallop, meet him half the way, which was done about noon, and the governor came aboard with a great company of men, where we shewed him all our wares, which he liked well, desiring us to come on land, saying that we should be welcome, promising us much favour, wherewith he returned to the land with certain rich presents that we gave him. The 26th Barent Heyn, factor of the ship called the *Mauritius*, died very suddenly. The 27th and 28th great numbers of people boarded our ships, bringing all sorts of necessaries and victuals to sell. The 29th there came an emperor, named Raia d’Amna, aboard our ship, whose father in time past had been Emperor of all Java, and commanded all the kings of Java, but this man, because of his bad life, was not much accounted of. He spake good Portugueze, for his mother was a Portugueze woman born in Malacca. This emperor had conspired against us with the Portugueze, but as then we knew it not. The 30th of June Cornelis Houtman took a boat and went into the town and there spake with the governor about certain affairs, touching a contract to be made with him. The 1st of July Houtman went again into the town, and when he returned he brought with him a certain contract made and signed by the governor himself, who most willingly consented thereunto, and said unto him, ‘Go now and buy what you will, you have free liberty,’ which done, the said Houtman with his men went to see the town, apparelled in the best manner they could, in velvet, satin and silks, with rapiers by their sides. The captain had a thing borne over his head to keep him from the sun, with a trumpet before him, which certain times he caused to be sounded. There the emperor invited them to a banquet after the Indian manner. From thence they went to the Portugueze, who made much account of Houtman, and made him a banquet, saying that they had seen him in Lisbon. The 2nd July many merchants came on board, proffering us

pepper, very good and cheap, but because we were unskilful in the weight, and other things, we took time to answer them. The 3rd of July the sabandar came aboard and he was our great friend, for that after we found it so, he told us what weight the sacks of pepper were, and what prices they bore, counselling us to buy.

“The 7th of July the governor sent us a man secretly by night, willing us to look unto ourselves, and not to trust the emperor, with whom all the merchants conspired, and went to invade our ships, and that he meant to rob us as being very licentious and evil minded.

“The 8th of July the emperor sent unto our ships and offered to make them a banquet, bidding all the captains, masters, pilots, gentlemen, officers, trumpets and gunners to come into the town to him, and there he would make merry with them. This was done by the Portugueze advice, thereby to have all the chief and principal men out of our ships, but we perceived their intent and returned for answer that they had reason to suspect treachery, and were upon their guard and were resolved to defend themselves. They also desired he would not believe the Portugueze and the day after sent him a present.

“The 11th of July the emperor perceiving that his device would not take place, he went from Bantam to Icatra, a town about 10 leagues from Bantam. The Portugueze had promised him 4,000 pieces of eight, could he contrive to destroy these Dutchmen and put their ships into their hands.

“The 12th of July we had a house offered us within the town. The 13th of the same month, Reyner van Hel with eight gentlemen went into the town, taking certain wares with him of everything a little, and laid it in the house appointed for the purpose, there to keep a warehouse, and to sell our merchandises, and presently both gentlemen and merchants came thither to buy and sell us pepper.

“The 15th and 16th many gentlemen merchants, Chinese and Arabians, came to our warehouse and into our ships, offering us pepper, but our factor offered them too little a price.

“The 25th of July the governor came again aboard our ships and there looked upon certain of our wares, whereof he bought some, and counselled us to buy pepper. About the same time the Portugueze made great suit unto the governor, promising him many gifts to deny us traffick and to constrain us to depart from thence, saying we were no merchants, but that we came to spy

the country, for they said that they had seen many Flemings in Lisbon, but none like us. Among the Portuguese there was one that was born in Malacca of the Portuguese race. His name was Pedro Truide, or Pedro de Tayda, who was a famous pilot, and not only frequented, but made charts of all the coasts and maps of all the islands in the East Indies, a man well seen in travelling and one that had been in all places of the world. He was our good friend, and every day came to talk with our captains, saying, ' You do not well that you make no more haste to take in your lading, you shall have no better cheap wares, and withal shewed us many other things, whereupon the Portuguese hated him, and not long after, he was murdered by sixteen ruffians about noon, as he lay asleep upon his bed. In August we did little and took no great store of lading, in seeking to have pepper cheaper, which the Portuguese liked not well of, and said unto the governor that we desired not to buy, which the governor began to hearken unto, for they offered him great sums of money that he should not permit us to traffick, so that in the end he commanded that no man should carry any rice aboard our ships, whereby we were abashed, and thereupon we sent unto the governor for our money which he owed for the wares he had bought, which moved him and he cast them into prison. Then he sent an interpreter with nine slaves and one of the Dutchmen on board to declare that he did this only to prevent their seizing the two jonques laden with cloves, and that when they were sailed he would release their companions. But when the messenger returned and told the governor, that his interpreter and the rest were detained in chains, he declared that unless they were immediately released he would put the Dutch to death. The 26th of July he sent one of our gentlemen, with some of his men and nine slaves aboard our ships."

" The Situation of the Town of Bantam : The principal Town of Traffick in the Island of Java : Their Strength and Manner of building, with their traffick : What People come thither : What Wares are there most desired : What Nations bring them thither or come to fetch them : Together with their Religion, Customs, and Manner of Housekeeping.

" BANTAM lieth in the island of Java Major about twenty-five miles to sea-ward within the isle between Sumatra and Java.

On both sides of the town there runneth a river about three foot and a half deep, so that no ships can enter into them. The town is compassed about with a river. The town is almost as great in compass as the old town of Amsterdam. The walls are made with flankers. They have great numbers of pieces therein, but they know not how to use them, for they fear them much. All their pieces are of brass and they have many brazen bases. Their walls are not above two foot thick, made of bricks. Every flanker hath divers masts and pieces of wood which they use when they are besieged by their enemies. The houses are made of straw and reeds standing upon four wooden posts. The rich people have their chambers all hanged with silken curtains, or else with cotton linen. Their houses are most placed under coco trees, whereof the town is full. Without the walls are many houses wherein strangers for the most part have their dwellings. The town hath three great market places, wherein daily there are markets holden, where you may buy all kinds of wares, and where there cometh a great number of people very strange to behold. Within the town there is a great church, or mosque of wood, wherein they observe the law of Mohamet. Gentlemen and men of any quality have their own mosques in their houses.

“The town is not built with streets nor the houses placed in order, but very foul, lying full of filthy water, which men must pass through or leap over, for they have no bridges. In the town there is great resort of divers countries and nations, as of Malacca, Bengala, Malabar, Guibereters of Pegu, Sani Malicas, Banda, China and of many kingdoms that have great traffick for pepper that groweth round Bantam, which in August and September is ripe ; there you have nutmegs out of the island of Banda, and cloves from Molucca, which the Portugeuze do most buy up. We bought nutmegs there for a blank a pound. All victuals and necessities are there in great abundance to be had, as hens, harts, fish and rice and divers kinds of fruits, as avanas, cocos, bananas, manges, doroyens, jacca, pruna, grapes, oranges, lemons, pomegranats, cucumbers, melons, onions, garlick, but bread they have none, but instead of it they eat rice. Beef is their dearest victuals, for an ox in that place is worth seven, eight or nine ryals of eight.

“The Chinese have the greatest and most traffick in that town. They come thither in the month of January with eight or nine

great ships, bringing all sorts of porcelane, silks, damasks, gold thread, iron pans, and Javas money called caixas, whereof 12,000 make a rial of eight. They are hanged upon strings by two hundred together, for the which they both buy and sell all kinds of merchandize, and there they load pepper, which they carry into China. Without the town they have a great place wherein they commonly use to sell their wares, and there they dwell, and have greater and better houses than any there are within the town, all made of reeds, only that in every house they have a square place made of stone wherein they put their wares to keep them from burning, as some rich men in the town likewise have. The Chinese are very subtle and industrious people, and will refuse no labour nor pains to earn money. There they make much aqua vitæ of rice and cocos and traffick much therewith, which the Javars by night come to buy, and drink it secretly, for by Mohamets law it is forbidden them. The Chinese live there with free liberty. When they come to remain there for a year or more as they think good, they buy themselves a wife or two, or more as they think good, and live together like man and wife, and when they mean to depart, they sell their wives again, but if they have children they take them with them, and so return to China. They have no special religion, but pray unto the devil, that he would not hurt them, for they know that the devil is wicked and that God is good, and hurteth no man, therefore they think it needless to pray to God. They acknowledge not the resurrection of the dead, but when a man dieth they think he never riseth again. In their houses they have great painted devils, before the which they place wax candles and sing unto them, praying them not to hurt them, and the more monstrous that their shapes be, the more they honour them.

“These people live very hardly and poorly within Bantam, for there is not any work or labour, how filthy soever it be, but they will do it to get money, and when they have gotten something, they return to China. They are very like Jews in our country, for they never go without a pair of balances, and all things are good wares with them, and are ready to do any service. When we came first before Bantam, they came every day in great companies into our ships, and there set out their wares to sell, as silks, sowing silks, and porcelanes, so that our upper decks were full of pedlars, that we could hardly walk upon the hatches.”

“The Manner, Conditions, Custom, Going, Standing, Apparel, Housekeeping, Wares, and Behaviour of the Javars in Bantam.

“The Javars and inhabitants of Bantam are proud and obstinate, with a very stately pace. They hold the law of Mohamet, which they have not had above 35 years, for as yet there are many heathens among them that never were made Moors. It is a very lying and thievish kind of people, not in any sort to be trusted. Their apparel both of rich and poor is a cotton cloth and some of silk about their middles, which they tie about them with a girdle the upper part, and from the knees downward all naked. Most of them go bareheaded, but the principallest of them have a wreath or Turkish roll about their heads, and some little caps. Their priests come out of Mecca in Arabia, and are of a yellow colour. Their weapon is a poniard which they call crisis. It is made with hilts and the handle is a devil cut out of wood or bone ; the sheaths are of wood. With them they are very bold, and it is accounted for a great shame with them if they have not such a dagger, both young, old, rich and poor, and young children of five or six years old, and when they go to the wars they have targets, and some long spears, but most of them such poniards. They use neither great shot nor calivers when they go against their enemies. For a small matter one king will make war against another. When we came first before Bantam, we offered to make a contract with the governor, and the council of the town, that they should deliver us a certain quantity of pepper and we would go with our ships before Palimban and help them to revenge the death of their kings upon their enemies, for (as they said) we might go within a bow shot of the town with our ships, and the town is but of wood without walls, so that we would presently have beaten it down to the ground. They offered us some of their principal governors to be left for pledges in our ships, and their men would sail in their fusts, such as should go on land and we should do nothing else but shoot out of our ships, but our captains would not do it, considering our small number of men.

“The Javars take as many wives as they will and are able to maintain, but the common people have but one, some two married wives, and some ten, twenty and thirty concubines. For a small matter they will send their married wives home again unto their fathers, when they have lain five or six days with them, saying they like them not, and so their marriage is undone, when they desire it.”

“The Manner, Custom, Householding, Child-bearing, Sporting and Cleanliness of the Women in Bantam.

“The women of the town are well kept from such as circumcised, whereof the rich men have many, and from other men or their friends, for their own sons may not come into the house where the women are. They lie all naked, and chew betel, and have a slavish woman that continually scratcheth their bodies, that is such as are married women, but such as are concubines are as waiting gentlewomen to the married women, when they go out to give them more majesty, and those that have the greatest number are of most estimation. The concubines have but few children, for the married women poison their children, and these concubines are bought and sold. By their apparel a man can hardly discern the rich from the poor, for they all go with a cotton cloth about their bodies up to their breasts, and bound about their middles with another cloth, barefooted, and their heads uncovered, their hair bound right upon the top of their heads in a heap, but when they are in their pride, they wear crowns upon their heads, whereof some of them are of pure gold, and rings of gold and some of silver about their arms, every one according to their ability. They are very curious about their bodies, for they wash themselves at the least five or six times every day. They never ease themselves, nor have the company of their husbands, but they presently leap into the water and wash their bodies, and therefore the water that runneth through Bantam is very unwholesome, for every one washeth themselves in it, as well pocky as other people, whereby we lost some of our men that drank of the water. The women are very idle, for they do nothing all the day but lie down; the poor slaves must do all the drudgery, and the men sit all day upon a mat, and chew betel, having ten or twenty women about them, . . . and so they sit playing all day with their women. Many of them have slaves that play upon instruments much like our shakebois. They have likewise great basons whereon they strike, and therewith know how to make good musick, whereat the women dance, not leaping much but winding and drawing their bodies, arms and shoulders, which they use all night long, so that in the night-time they make a great noise with basons and other instruments, and the man sits and looks upon them, every one of the women striving to

do her best, that she may get her husband's favour and her secret pleasure. The gentlemen, citizens and merchants have their gardens and fields without the town, and slaves for the purpose to labour in them, and bring their masters all kinds of fruit, rice and hens in the town, as also the pepper that groweth there, which runneth up by another tree, as hops with us, and groweth in long bunches like grapes, so that there is at the least 200 grains in one bunch. It is first green and after it becometh black and is there in great abundance, so that it is the right pepper country, for when we came thither they said unto us : *A qui ai tanta Pimienta, como terra* : that is, Here is as much pepper as earth ; and so we found it, and yet we departed from thence by our follies without our lading of pepper. We staid for new pepper. Meantime the Portugueze sent their letters into every place, seeking to hinder our trade. At the first we might have sufficient, for there we found enough both to buy for money or to barter. We likewise had money and wares sufficient. We might easily have had six or eight hundred tons, as we were advertised by some of the country, that we should presently buy, for that the Portugueze sought all the means they could to hinder us, as after it appeared, and therefore he that thinketh to come soon enough, cometh oftentimes too late, and we used not our time so well, as it fell out.

“The 29th of August we had a letter, sent us by night, from our men that were in the town, that lay in a manner as prisoners, to will us to let our pledge, viz., the interpreter, etc., detained by force, go ashore, otherwise they feared they should hardly escape with their lives, and great danger might fall upon them. This pledge came aboard with the nine slaves.

“The 30th of August we sent the pledge and the rest of our Javars to land with promise that he would do the best he could to get our men leave to come aboard. About evening of the same day we had news from our men by four of our sailors, that now they were better used, saying they thought they should come aboard when two ships, or jonques, were gone that meant to sail for Malacca, being laden with nutmegs and other things.

“The 1st of September and the 2nd, 3rd, and 4th, we sent many letters to the governor and he to us, and likewise to our men that were in the town, being nine in number, all our best merchants and captains, having with them about 6 or 700 guilderns in merchandise, and they gain to us.

“The 5th of September when we perceived that delays were dangerous, we went close to the town with all our four ships, and so near that we had but two fathom muddy ground, and presently with two of our boats for our security, we set upon three Javan ships, whereof two were laden with fish and coco, wherein we found a man of China of some account. The third ship was laden with 20 tons of cloves, 6 tons of pepper and some benioni, and piementa da rauo, wherein we found five Malabars, slaves to the Portugueze, whom we likewise took, and they were very willing to go with us, thereby to be eased of the slavery whereunto the Portugueze put them, and perceiving that the Portugueze went often to and from another ship that lay not far from us, we took our pinnace and made towards it, and being hard by it, the Portugueze left it and set it on fire. This ship had the richest wares in it, as the Portugueze slaves told us, for it was laden with 50 tons of cloves, which were burnt in it.

“The 6th and 7th of September we heard no news, so that we went close to the town again, shooting with our great pieces into it, slaying divers of the people, as we were after informed. They likewise shot with their pieces against us, which the Portugueze did, for the Javars have little or no skill at all therein, and are very fearful of them; and although they had many pieces in the town, yet they did us no other hurt than only to shoot one of Molenare’s half masts in pieces.

“The 7th of September we had a skirmish which was in this manner: we perceiving a Javan ship under sail, sent our pinnace with twenty six in her to fetch it in, which the Javan ship perceiving, fled behind an island, where our pinnace followed him so fast that she fell a-ground, which the townsmen perceiving, made them ready with four and twenty boats full of men all armed after their manner, and set forward in good order, being divided in two companies, seven on starboard and seventeen on lard-board of the pinnace, in order like a half-moon, threatening us with their spears. They thought by reason of their great number of men that they had already taken it, but it fell out otherwise, for they in the pinnace perceiving them coming, shot among them and they were so near unto that we could not shoot at them, and when they were hard by the pinnace, she got afloat as they thought to take her, having cast out an anchor in good time, and thereby wound themselves off the ground, but for haste they were forced to cut their cable, because they had

not time enough to wind it up, and with all they shot one of their boats under water. The pinnace drawing her boat after her, the Javars presently leap'd into it, and cut asunder the rope that held it, which they immediately stole from us, thrusting with their spears in at the loopholes. Seven of their boats being round about us were so sharply paid with the iron pieces, stone pieces, and calivers that the seventeen others durst not come so near us. I think there were at the least 100 of them that never carried news how they speeded in that skirmish, for every boat had at the least 60 men in it, and they were so thick in them, that they could not help themselves, nor did any thing else but shake their spears, and they shot but one base. Their arrows hurt us not, and so the pinnace returned again unto our ships, sailing close before the town, and shooting into it with her ordnance. They shot out of the town, but it hit her not, because they shot with stone pellets, wherewith you cannot shoot so certainly as with iron bullets.

“ The 8th, 9th and 10th of September we had letters from our men out of Bantam, by the which they desired us not to shoot any more, for that the governor threatened to set them upon stakes or tie them to stakes on the shoar, and shoot them with arrows. Houtman wrote they were in good hope that they should be put to ransom of 3,000 pieces of eight, which we counselled them to do as well as they might.

“ The 11th of September we had a letter from Houtman, and one from the governor wherein he wrote that he would set our men at liberty so we would be quiet, but if we desired war he would once again come and visit us in another fort. We answered him that there he should find us, that words were but wind, and that he should set our men at a reasonable ransom, and thereof send us an answer the next day.

“ The 12th and the 13th of September we had no answer out of the town, and we had want of water and could get none thereabouts, but that which came out of the town, for that the governor had taken order that we should get no water about the town, so that we hoisted anchors to go seek some.

“ The 17th of September we came before three or four islands, which Molenare and Schellenger sailed between, and for that the stream ran so strong there, they were forced to go so nigh the shore, that they might almost leap on land, whereby they escaped great danger, but the other ship and the pinnace sailed about the

islands and so met with the other two, and casting forth their anchors went on shore, where we spake with men that said they would shew us where we should have water, so we would give them two calivers. The 18th, 19th, 20th, 23rd and 24th we stayed to lade water, for it was hard to get, and we were forced to keep good watch, which done, hoisting anchors again, we sailed towards Bantam, holding our course eastward. The 27th we sailed north-east towards the land of Java Major. The 28th setting sail again, we kept east-north-east along by the coast of Java, and about noon, because of the great stream that runneth in the straight, we were forced to anchor, and the 30th day we set sail again.

“ The 1st of October, in the evening, we came to a great island being three miles from the town, and there we anchored, finding good clay ground.

“ The 2nd of October we had a letter from our men, how they were separated one from the other and kept by the gentlemen of the town, and their wares parted among them. The 3rd, 4th, and 5th, when we were again before the town, we had other letters that by our coming they were better used, and hoped to be set at a reasonable ransom, and that they promised that one of our men should come aboard, so he would return again into town, that should by word of mouth certify us what hope they were in, and the cause thereof, that we might the better believe it.

“ The 6th of October in the night, one of our men came aboard and shewed us what he past, when we shot into the town, how they were separated and kept close prisoners and cruelly treated by the Javars, whereby they still expected when they should be put to death, and how they fought all the means they could to make them to deny their faith and become Moors ; but they remained constant, and said they would rather die, and that they had by force shaved three of our men after the Moorish manner, and how the Portugueze had sought all the means they could to buy them for slaves, offering money for them that they might send them to Malacca, how they were set at liberty again, and might go where they would within the town, and so they hoped all would be well, and that they should be set at liberty for some small ransom, and that the governor asked them 3,000 rials of eight, but they hoped to bring him to 2,000, whereat we much rejoiced. The 8th, 9th, and 10th October we passed over to make some agreement with them, that we might be quiet.

“ The 11th October they agreed upon a ransom of 2,000 rials of eight, and were content, that what goods soever we had taken from them we should keep as our own, and for our goods that they had stolen, and forcibly taken from our men within the town, they would keep them, and so exchange one for the other. They likewise were content to quit us of all our debts, that we ow'd within the town, either to the governor or to any other man, and that from thenceforward we should be free, and traffick in the town, both to buy and sell when it pleased us, and with their good wills as we had done, and before we paid our money the town was to send two men aboard our ships, which done, we were to pay the half of our ransom, and upon the payment thereof, they should set half of our men at liberty, and that half of our men being come aboard we were to pay the other half of our ransom, which was 1,000 rials of eight, which being performed, their two men, and their other half of our men were on both sides to be delivered and set free, and without contradiction it was performed.

“ The 12th and 13th this agreement being ended, divers victuallers came aboard our ships to sell us hens, eggs, and all other kind of victuals.

“ The 14th we gave certain presents in sign of good will, to such as had shewed us favour when we were in contention with them.

“ The 15th, 16th, 17th and 18th some of our factors went into the town, where they bought certain pepper, and brought it aboard our ships.

“ The 19th they went again into the town, and bought a greater quantity at five sacks for one catti, minding in that sort every day to take in our lading ; but it fell not out as we desired, for the Portugueze that could not brook our company, made such means to the governor, that he gave command that we should buy no more pepper before we had paid 1,400 rials of eight, which he challenged of us, because we had cast anchor within the stream ; whereupon our merchants went and agreed with him ; which done, we thinking to buy pepper as we did before, the governor again commanded to the contrary ; whereby we perceived their deceit, in that he would not hold his word. The countrymen would gladly have sold their pepper as also the Chinese, Arabians, Mahometans, and secretly some Portugueze ; but when we saw we could not get it out, but with great danger, we thought it not convenient to buy. And when we spake unto

the governor touching the holding of his word he made us answer that he had no bones in his tongue ; and that therefore he could speak that which he meant not to. And to say the truth most part of the Javans are a kind of deceitful people, for whatsoever they say and presently perform, that shall you be sure of, and no more.

“ The 25th of October, there came an ambassador into Bantam sent from Malacca to the governor with a present of 1,000 rials of eight, desiring him to forbid us both his town and stream, that we might not traffick there. Whereof we were advertised by the sabandar and other of our friends, counselling our men to get them out of the town, and not to return again, otherwise they would be in danger to be confined again ; and we having sent a man into the town to save him from being taken prisoner, our host where we lay being on shore, was forced to bring him out covered with certain mats ; so that upon the 26th of the same month all our traffick and friendship with them ceased. But our host being our friend, came secretly aboard our ships, and shewed us that he and his company had two ships lying before the town, laden with nutmegs and mace that came from Banda ; for the which he agreed with us at a price, upon condition that we should seem to take them by force, that thereby he might colour his dealing with us. Whereupon the first of November we sailed close to the town with all our ships, and set upon the two Javan ships, wherein we found to the number of thirty slaves that knew nothing of their master’s bargain made with us, so that they began to resist us, wherewith we shot amongst them, and presently slew four or five of them, the rest leap’d over-board and swam to land ; which done we took the two ships and put their lading into ours. The Portugueze ship that brought their ambassador lay close under the shore, whereunto we sent two of our boats ; but the Portugueze that were in her shot so thick with their pieces upon our men, that our boats were forced to leave them with loss of one of our men, but our ships shot in such sort with their ordnance upon the Portugueze ship, that they spoiled and broke it in pieces, wherein their captain was slain ; and the victuallers that still brought us victuals to sell, told us that with our pieces we had slain three of our men within the town, and that the townsmen began to make an army of ships to set upon us.

“ The 2nd of November we espied a ship that came toward



JAVAN LADY.



JAVAN WOMAN.

Bantam which we joined unto with our boats ; and being near unto it, they spread their fights which were of thick mats and began to defend themselves. Our men shot amongst them with stone pieces and calivers and they defended themselves with great courage, having half pikes wherewith they thrust at us, and that served likewise to blow arrows out of them, for they were like trunks ; out of the which trunks they shot so great numbers of arrows that they fell as thick as hail, and shot so exact that therewith they hurt at the least eight or nine of our men ; but the arrows are thin and light, so that their blast could not make them enter into the flesh above the thickness of two fingers only the head of the arrow (which is made of reed, and stayeth loose in the flesh). When we shot with our calivers they ran behind their fights ; but when they perceived that their matted fights could not defend them, and that they were killed through them, they entered into their boat and by strength of oars rowed from us, leaving their ship wherein we found two dead men, and we slew three more of them as we rowed after their boat ; so that in all they lost five men as we after heard and that they were to the number of forty, which done, we brought their ship to ours, wherein we found good store of rice and dried fish.

“ The 6th of November perceiving not any hope of more traffick for us with those of Bantam, we hoisted anchor and set sail, setting our course towards the Streight of Sunda.

“ The 7th of November we came and anchored before a river of fresh water, about six miles from Bantam, where we took in our provision of water ; thither certain merchants followed us with porcelain, telling us that they were sorry for our departure, and longed for our return again.

“ The 13th of November we set sail and about evening we came before Icatra, which is only remarkable for its river and the country about it very fertile in fruits and provisions. In time past it was called Sunda Calapa, which had been a rich town of merchandise, but upon some occasions and by reason of this hard usage, the merchants had withdrawn themselves from thence, therefore at this present there is little or nothing to do.

“ John Huguen in his book saith this was the principal town of traffick, but that was long ago, for now there is not any trade or merchandise.

“ The 14th November we sent two of our men into the town having some of theirs in pawn, who told us that many of the

inhabitants were gone out of the town with all their goods, being in great fear of our pieces ; and there we had great store of victuals and much more than we required brought aboard our ships.

“ The 18th we set sail from Icatra, and being about two miles from the town, our ship called *Amsterdam*, fell upon a cliff ; but it got off again without any hurt, and therewith we presently made towards the streight.

“ The 2nd December we passed by three towns, which we might easily perceive ; we likewise passed by Tubam, or Tubaon and anchored under Sidaya. The 3rd of December there came men out of the town, and desired us to stay, saying that there we might have cloves and nutmegs as many as we would, bringing certain banqueting stuff (as a present from their king) unto Schellenger’s ship, because it lay nearest to the land, and most of them came aboard.

“ The 4th December they came again into Schellenger’s ship bringing certain presents with them ; and among the rest a certain bird, that could swallow fire, which is a very strange fowl, and was brought alive to *Amsterdam*, which after was given to the States of Holland at the Hague ; and some good fruits, desiring us to send a man on shore to see their spices, whereof they said they had great store, whereupon we sent a man out of the *Amsterdam* and with him an interpreter, one of the Portugeeze slaves, they leaving three or four of their men aboard our ship for pawns till his return. When our man came to land he was well used and there they shewed him forty or fifty bales of cloves ; which done they brought him before the king, who promised him great favour, and told him that the next day he would himself come aboard our ships, and deal with our captains and with that he let our men depart.

“ The 5th of December we expected the king’s coming aboard, putting out all our flags and streamers ; and about noon there came eight or nine different great ships full of men from off the shore, wherein we thought the king to be ; but when they were almost at us, they divided themselves, three of them rowing to Schellenger’s ship ; and when they boarded him, they thinking the king had been there, Reymer van Hell as factor and the master, came forth to receive him ; but the Javans entering all at once, Reymer van Hell said, ‘ What will all these people do aboard the ship,’ for there was at least two hundred men, who all at one time drew out their poniards and stabbed our men that never suspected

them ; so that presently they had slain twelve of the ship, and two sore wounded that boldly withstood them ; the rest of our men being under hatches presently took their pikes, and thrust so fast out at the grates, that the Javars would have forced the middle part of the ship, wherein was two entries, but our men standing at them with their swords in hand, drove them out, not ceasing still to thrust up with their pikes ; meantime they kindled a fire, lighted their matches and shot off their stone pieces that lay above the hatches, wherewith they began presently to fly, most of them leaping overboard and swam to their two boats that lay hard by our ships, whereof one with a great piece was presently stricken in pieces. The rest of our ships hearing us shoot in that manner, entered into their boats and made towards them, rowing hard to the three Indian fusts wherein were at the least 100 men, and shot amongst them with their pieces, wherewith they leaped into the water, every man swimming to shore, and we with two boats after them, hewing and killing them as our deadly enemies, who under pretence of friendship sought to murder us ; and we handled them in such sort, that of 200 men there got not above thirty of them to land, the rest of their fusts lay far off and beheld the fight. Three of their fusts thought to row to the pinnace to take her, which they might easily have done, as having not above seven or eight men in her, being busy to set up a new mast ; but when they perceived their men to be so handled in the *Amsterdam*, and that they leap'd overboard, they turned back again, and in great haste rowed to land, so that at that time they got not much by the bargain. The natives lost 150 men, and no small grief to us, for there we lost twelve men, that were all stabbed with poniards, their names were, John Jacobson Schellenger, master of the ship, Reymer van Hell, factor, Gielis Gieson, gentleman, Barent Bonteboter, Arent Cornedrager, Cornelis van Alemuer, Simon Janson, Wiltschut, Joos the carpenter, Adrian de Metselar, one of the Portuguese slaves and two boys, whereof one was but twelve years old ; whereby we perceived them to be a kind of cruel people for they had given the little boy and the rest of our men at the least twelve stabs apiece after they were dead, which so exasperated the Dutch, that they put all their prisoners to the sword, who confessed that they had followed them from Bantam ; that the jonque laden with nutmegs at Jacatra, was intended to surprise them ; that afterwards they went to Jopara to wait for them ; and that they came to Sidaya

to try if by the two jonques that appeared off, they could draw them into the main, in order to attack them the more easily. The same day about evening we hoisted anchors, and set sail, having manned the *Ansterdam* with men out of our other ships, and so held our course eastward. The 6th of December we came to a great island called Madura, where we anchored and in the evening two of their men came aboard our ships, with a message from their governor saying, that we were welcome desiring us to stay there, for he would traffick with us, and sell us some pepper as they said, but we believed them not. The 7th of December there came another boat aboard bringing certain fruit, saying that the next day their governor would come to see our ships. The 8th there came a great fust, and three small boats from off the land, all full of men saying their governor was among them. We desired them not to go to the *Amsterdam*, but to the *Mauritius*, but they would not, but made to the *Amsterdam* thinking because there had been so many murdered in her, there was not many men aboard here at that time; and when they were within a pike's length of her (although they were directed to the other ships) they remembering their late mischance, shot off three or four stone pieces full loaded, wherewith they slew and hurt many of the Indians; whereupon they presently leap'd overboard and we with our boats followed after and slew divers of them, taking ten or twelve, thinking by them to know what their intent was to do, but they could not certify us, therefore we let them go again, only keeping two boys who long after stole out of the ship and swam to land. They told us that the governor being a bishop or chief instructor of the country, was within the boat and slain amongst the rest; he had therein likewise a little boy, one of his sons, who we likewise took and sent to land. The bishop was of Mecca, and much esteemed of among them, a great clerk, and governor over all the rest of the country. There was a jewel of gold set with precious stones found about him, which as yet is kept.

“About evening we weighed anchors and set sail, and the 11th December we came to two small islands, or the island Laboe or Leboe, or little Madare, surrounded by two other small islands, 13 leagues from Java, where we anchored; there we found none but poor people and fishermen, that brought us fish, hens and fruit to sell. The 13th we set sail, and the 14th we had a west wind, which they call passage wind, that would have served us

well to sail to Moluccas from whence we were not distant above two hundred miles ; and as then it was a good year for cloves, which happeneth every three years, it was told us that we might there have a cabin laden full of cloves ; whereupon we determined to sail thither ; but because we had already endured a long and troublesome voyage and but ill mann'd we would not, longing to be at home. This contrary wind holding upon the 24th December, we came to Leboe, an island where we had been before, being forced back by the currents.

“ The 25th of December John Molenaer master of the *Mauritius* died suddenly of an oppression of the lungs. This death however was reported by the surgeons to be effected by poison ; and Hootman was put in chains as a person suspected of the murder, on account of the constant quarrels and threats that passed between him and the deceased. But three days after, Hootman was released. The 28th, 29th, 30th, and 31st of December we were busy to take all the wares, sails and other things out of the *Amsterdam*, which leaked on every side, her victuals and furniture serving for our voyage homeward ; and lying under that island, we had victuals brought us every day as much as we needed, both fish, hens, venison and fruit, and at a reasonable price ; but there we could get no water.

“ The 11th of January when we had unladen the *Amsterdam*, we set her on fire, to the great admiration of the natives, who strove with their canoes to tow her ashore, to save her iron work, but we let her burn taking her men into our ships. The 12th of January we set sail again, some desiring to sail eastward, others westward : but in fine we set westward to sail once again to Bantam ; wherewith the *Mauritius* sailed south-eastward to get about the island of Java and we followed her. The 14th of January we once again perceived the east point of the island of Madura, and held our course southward. On that side of Madura there lieth many small islands, through which we sailed.

“ The 16th in the morning our pinnace ran aground upon the coast of Java, not far from Pannorocan, where she shot off three pieces ; at the which warning we made thither with our boats, and by the help of God got her off again. There we saw a high hill that burnt under and above the fire having great smoke most strange to behold.

“ 18th of January we entered into the Streight of Balambuan, which is not quite half a league broad in its narrowest part,

which runneth between Java and Baly, and by reason of the hard and contrary stream that runs therein, we were forced to anchor upon the coast of Java ; where we found good anchor-ground.

“ The 19th we set sail, and when we came near to the coast of Baly, we entered into a rough stream, and our ships drove backward as swiftly as an arrow out of a bow ; and there we found no anchor ground, nor any anchor could have holden us ; but the *Mauritius* got the coast of Java and anchored ; which in the end we likewise did, and anchored at the least three miles from him, for so much we had driven back in the space of half an hour. The 20th of January we went and lay by our other ships.

“ The 21st of January there came two barks to the *Mauritius* wherein there was one that could speak good Portugeuze who told us that the town of Ballaboam or Balambuan was besieged by a strange king that had married the King of Ballaboam’s daughter ; and after he had lain with her, he caused her to be slain, and then came to besiege her father. This town of Ballaboam lies on the east-end of the island of Java, and is the same town where Mr. Candish ten years before was when he passed that way ; and the old king whereof he writeth was then living being at the least 160 years of age. There we saw great numbers of bats that flew over our ships, and were as big as crows, which in that country they use to eat, as they say. About noon, we came before the town of Ballaboam, so near unto it that we might easily see it ; and there we lay behind a high point of land, thinking to take in water.

“ The 22nd of January we took our pinnace and sailed about the shore, as near the land as possible we could, to seek for fresh water ; but we found none ; for the river that ran through the town was paled up (by them that lay before it) so that no man might pass, either out or in, but only on the land side, and that with great danger. The same day there came two or three men aboard our ship, that stole out of the town by night, and came from the king to desire our help with our great shot, which we could not do ; because that thereabouts it was very shallow, and we could not go near it with our ships. They told us they had great want of victuals within the town, whereby many of them were already dead for hunger, and much desired our aid ; but it was not in us to do. Those that besieged the town were

Moors, but they in the town were heathens and as yet had not received Mahomet's law ; and that as we heard after, was the cause of their war. There we saw many storks flying and sitting in the field. With us we cannot imagine where the storks remain winter time, but here we saw them in the winter time. The 24th of January we sailed from thence perceiving nothing for us to get, and took our course right over to the island of Baly.

" The 25th we came to Baly, where one of their barks boarded us, telling us that there we should find a river of fresh water, and of all things else sufficient to serve our necessities ; whereupon we anchored.

" The 26th of January our pinnace sent our boat to land to see the river, and there one of our men was sent on shore ; but when he was on land he found nothing but an army of ten thousand men, that meant to relieve the town of Ballaboam and the river was nothing worth to lade water ; whereupon our men came aboard again. Their general thought to have gotten some great prey out of our ships. The 27th of January we set sail to find a convenient place to refresh us with water and other provision, for we were informed by a man of Bengala, that of his own consent sailed with us, and that had been in Baly, that there we should find water and other things, to serve our necessities ; so that by night we anchored under a high point of land on the south-west end of Baly.

" The 28th of January one of their boats boarded us with six or seven men, saying that their king was desirous to deal with us for such wares as he had ; and sent to know from whence we came, and we said we came out of Holland ; and that we came to trade fairly and honestly with the inhabitants. The 29th and 30th there came more men aboard our ships, rowing in great haste afar off, and the king every day sent us some fruit.

" The 1st of February we had two hogs brought aboard our ships, that we bought for two rials of eight and we eat them very favourly.

" The 2nd of February we set sail that we might get above the point, where we thought to find a better place for fresh water, but by reason the wind was contrary, we could not do it, but were forced to anchor again.

" The 3rd of February we set sail again and then we had a storm so that our sail blew every way, and because of the contrary

wind we could not reach above the point, but were constrained to anchor ; but the *Mauritius* and the pinnace got past it ; although thereby the *Mauritius* was in no little danger, but because the pilot had laid a wager of 6 rials of eight, that we would get above it, he would pass what danger soever it might be, and sailed close along the cliffs, whereby we lay at anchor without company.

“ The 4th and 5th we set sail once again to get above the point, but could not reach it. The 6th we had a letter from Rodenburgh that certified us how the *Mauritius* lay at anchor at the least seven or eight miles beyond the point and he that brought the letter came with it by land ; and at the same time there was a man sent on land with a small present for the king, that we might win his favour. The 7th our man came on board again and brought us news how Rodenburgh with one of the Portuguese slaves being on land, were against their wills led before the king, but the sailors of the *Mauritius* had gotten men for pledges.

“ The 8th of February the same man went on land out of our ship, with more presents of velvet and a caliver, the better to get the king’s favour, which liked him well, and desired us to bring the ship nearer to the town, saying he would send us water and other things sufficient to supply our wants.

“ The 9th we sailed into the creek with our ship and anchored about a small half mile from the land ; and being anchored there came at the least 70 boats of the country to see our ship, and the king sent us word that he was desirous to hear us shoot off five or six of our great pieces, whereupon we shot five of our greatest pieces and the king stood upon the shore to see them.

“ The 10th we had a letter from Cornelis Houtman, to desire us to come to them, for that there they had found a good place for water, and of all other necessities ; so that about evening we set sail, leaving two of our men, and a Portuguese slave amongst the Indians, whom the king promised should come unto us by land, yet that night we could not reach above the point Cabo des Porcos, or Cape of Hogs ; meantime we perceived our pinnace that came to help us.

“ The 16th we got by the *Mauritius* that had already laden in her water and hooped her vessels, whereupon we began presently to do the like, and to visit our vessels that were almost spoiled.

“ The 17th our men whom we left with the king, came by land unto our ships and then we bought great store of cattle and fruit. The 18th, 19th, 20th, and 21st, we employed our time to load

water, which we had very easily and refreshed ourselves with cattle, hogs, fruit and lemons sufficient. There came one of the king's principal officers with our men by land, to pleasure us in all things we desired ; he was very desirous to have some present of us.

“ The 22nd of February two of our men that sailed in the *Mauritius* stayed on land, but we knew not the cause. It should seem some great promises had been made unto them, for as we understood, the king was very desirous to have all sorts of strange nations about him, but our people were therein much overseen, for there they lived amongst heathens, that neither knew God nor His Commandments ; it appeared that their youth and wild heads did not remember it ; one of their names was Emanuel Rodenburgh of Amsterdam, the other Jacob Cuyper of Delft. Within a day or two they sent unto us for their cloaths, but we sent them not.

“ The 23rd and 24th and 25th we made a voyage on land and fetched as many hogs aboard our ships as we could eat.

“ The 25th of February we hoisted anchors, minding to set sail, and so go homeward, leaving our two men aforesaid on land, but because it was calm weather we anchored and went once again on land, and the 26th of the same month we set sail, and held our course west-south-west towards the Cape of Good Hope, through the south of Java, but we had a calm.”

1600. Oliver van Noort, who was the first Dutchman to sail round the world, left the port of Goeree on the 13th September, 1598, with the ships *Maurice* and *Concord*, being joined by the ships *Henry Frederic* and the *Hope* from Amsterdam. On the way down the English Channel the ships called at Plymouth to take on board one Mellish as pilot, who had travelled with Sir Thomas Cavendish round the world. His account reads :—

“ The 28th January, 1600, we came to Jortan¹ (a place near where the present town of Sourabaya stands) upon the isle of Java, where we had news of Dutch ships at Bantam. The city consists of about 1,000 timber houses. The king commands a considerable part of that end of the island, and has lately conquered Balambangan, a little island that lies just to the south-

¹ Yantong, or Djiantong of the Chinese.—D. M. C.

east of Jortan. They are said to be Mahometans in the country thereabouts though the pagods in use seem still to argue some kind of mixture of the old Indian superstition with that of Mahomet or at least a toleration of it in the whole amongst the common people. Their chief priest is an old man of 120, who has a good round family of wives, and the old man lives on nothing but the milk which he sucks from his wives' breasts."

1603. Captain Edmund Scott (or Scot) during his residence at Bantam from 1602 to 1605 writes in his diary as follows :—

"In those days the Sultan of Bantam was the most powerful ruler in the island [?], but the Javanese although exceedingly proud were extreame poor by reason that not one amongst a hundred of them will worke. The gentlemen of this land are brought to be poore, by the number of slaves that they keepe, which eate faster than their pepper or rice groweth. The Chinois [Chinese] doe both plant, dresse and gather the pepper, and also some their rice living as slaves under them, but they sucke away all the wealth of the land by reason that the Javan are so idle. The Javan were surely man eaters in times past before that traffique was had with them by the Chinois, which as I have heard some of them say is not above one hundred years since. The Javan delight much in ease and musicke and for the most part they spend the day sitting crosse-legged like a taylor, whitling of a stick, whereby many of them become very good carvers. Of the Chinois many of them hold good opinion that when they die if they be good men, they shall be borne againe to great riches, and be made governors, and if they be wicked men, then they shall be turned into some ugly beast as a frog or a toade.

"The Chinois sacrifice uncooked fruit and food which they eat themselves afterwards burning all the while painted papers cut out in curious workes and valued by them at a certain price. They are well seene in astronomy, they observe no Sabbath, nor one day better than another, except when they lay the foundation of a house, or begin some other great worke, which day they ever after observe as a holyday. When any of them that are wealthy die in Bantam their bodies are burnt to ashes, which ashes they put close in jarres, and carry it to China to their friends. I have seene when some of them have lyen adying, they have set up seven odours burning, foure of them being great, and burning light and have demanded the meaning of it many times, but

could never have other answer, but that it was the fashion in China! They delight very much these Chinois in plays and singing, but they have the worst voices that one shall heare any people have. Moreover they have amongst then some sooth-sayers which some times rage and runne up and down the streetes like madmen having swords drawne in the hands and tairing their haire, and throwing themselves against the ground. When they are in this franticke taking they affirme, and other Chinois do beleeeve that they can tell what shall come to passe after. Whether they be possest with the devill or no, who revealeth something to them I know not, but many Chinois use them, when they send a juncke of any voyage. The Chinois are surely the most effeminate and cowardly people that live. On their heads they weare a caull, some of them being made of silke, and some of haire. The haire of their heads is very long, which they bind up in a knot right on the crowne of their heads. Their nobility and governors weare hoods of sundry fashions, some being one halfe like a hat, and the other like a French hood, others being of net worke with a high crowne and no brims.

“The Chinois that come to Java are tall and strong of body, having all very small blacke eyes, and very few of them have any haire on their faces. They will steale and do any kinde of villanie to get wealth. Their manner at Bantam is to buy women slaves—for they bring no woman from China—by whom they have many children, and when they returne to their owne countrey, not minding to come to Bantam againe, they sell their women, but their children they carry with them. If they die in Bantam all the goods they have is the king’s and if once they cut their haire they may never returne to their countrey againe, but their children may, always provided that they have never cut their haire.

“One day the Chinois and Javan tryed to burn we English out of Bantam, and we caught a Chinois that hath hidden himself in our house. He confessed to nothing wherefore because of his sullenesse, and that it was he that fired us, I caused him to be burned under the nayles of his thumbes, fingers and toes with sharpe yrons, and the nayles to be torne off, and because he never blinshed at that, we thought his hands and legs had been mummied with tying, wherefore we burned him in the hands, armes, shoulder and necke, but all was one with him. Then we burned him quite through the hands and with rasphes of yron tore out the flesh and

sinewes—after that I caused them to knock the edges of his shin bones with hot searing irons. Then I caused cold serues of yron to be serued into the bones of his armes, and suddenly to be snatched out. After that all the bones of his fingers and toes to be broken with pincers. Yet for all this he never shed teare, no nor once turned his head aside, nor stirred hand or foote, but when we demanded any question he would put his tongue between his teath and strike his chin upon his knees to bite it off. When all the extremitie we could use was but in vain, I caused him to be put fast in yrons againe, where the ants which doe greatly abound there got into his wounds and tormented him worse than we had done, as we might well see by his gesture. Even the Javanese now had pity on the miserable creature for the king's officers desired me hee might bee shot to death. I told them that was too good a death for such a villaine—wherefore they being very importunate in the evening we lead him into the fields and made him fast to a stake. The first shot carried away a piece of his arme, bone and all—the next stroke him through the breaste up neere to the shoulder—then he holding downe his head, looked upon the wound, between our men and the Flemings they shot him almost all to pieces before they left him. The other two Chinois we caughte I set free.”¹

1604. Captain (afterwards Sir) Henry Middleton sailed in 1603 in command of a squadron consisting of the *Red Dragon* (Admiral Captain Henry Middleton), the *Hector* (Vice-Admiral Captain Sufflet), the *Ascension* (Captain Colthurst), and the *Susan* (the name of whose captain cannot be traced). These were the same ships in all probability that went before with Captain Lancaster.

“Having taken leave of the [East India] Company the ships departed for Gravesend the 25th March, 1604, and on 20th December following, after various accidents, the men very weak, arrived in Bantam Road. They passed many compliments between them and the Hollanders, who saluted each other with their great ordnance, and the last day of the year the General of the Dutch dined aboard the *Dragon*.

“The day following the English General² went ashore with a

¹ See also above, Chapter XI., for Captain Scott's Journal at Bantam.

² That is, Captain Henry Middleton.

letter and present from the King of England to the King of Bantam, which were with great ceremony received by that young monarch, who was but thirteen years of age and governed by a protector.

“ On the 16th of the said month the General came aboard from Bantam to proceed on his voyage to the Molukkas.”

1605. Captain Sir Edward Michelburne sailed from Cowes, in the Isle of Wight, in command of the ships *Tiger*, 246 tons, and *Tiger's Whelp*, of about 50 tons, on the 5th December, 1604, arriving at Bantam on the 28th October, 1605.

“ On 28th we arrived within 3 leagues of Bantam which standeth in six degrees, and forty minutes south, and here we anchored. The English fleet which we thought to have met with was gone for England three weeks before, but the factors came aboard, and we very . . . to see them. They gave our General¹ an account how grossly the Hollanders who were then in the road had slandered them to the King of Bantam, representing them as thieves and reprobates, who came only to plunder the Javan folk by artifice or violence, if they found an opportunity. They added however, the Dutch were so much afraid of them, that they durst not come into the road, but kept two or three leagues off. The General moved with this report, weighed anchor, and sent the Hollanders word, that he would come and ride close by their sides, giving them to understand at the same time, that if they offered so much as to point a gun at him, or the least insult whatever, he would either sink them or ‘sink by their sides.’

“ There were of these five ships one of seven or eight hundred tons, the rest of a far smaller burden. But of this message, notwithstanding we came and anchored close by them, they never had an answer. On the contrary, whereas the Hollanders were wont to swagger, and keep great stir on shore, before the General's arrival, they were so quiet after, that scarce one of them was seen on land. On the 2nd November, we took leave of our countrymen at Bantam and stood course for Patane, in the way between Malakka, and Pedra Branca.”

1605. Captain John Saris was an Englishman who resided

¹ Sir Edward Michelburne.

at Bantam from 1605 to 1609 (being in 1608 the Governor). He traded between that town and the several islands in the archipelago and Borneo with its two towns of Bemermassin (Banjermassin) and Soocodamia (Succadania). He says :—

“They were celebrated for the great store of diamonds they yieldeth, the which are accounted the best in the world. There is a store to be had at all times brought down the river called Lave by prawes [prahms or lighters]. The manner of getting them is as you dive for pearle. It [Borneo] affordeth great store of gold, bezar stones, wax, rotans, cayulacca, and sanguis draconis. You must understand there are diamonds of foure waters. The first is white, greene, yellow, and neither greene nor yellow but a colour between both. But the white is the best.”

1607. Captain David Middleton, in command of the ship *Consent*, 115 tons, broke ground at Tilbury Hope on the 12th March, 1607, and on Saturday, the 14th November of the same year, anchored in Bantam Road about four in the afternoon. He says :—

“At Bantam we found the merchants in very good health, and all things in good order. Next day the Captain went ashore, and spoke with Mr. Towerson, the chief, concerning the ship’s business, and agreed to have the iron and lead which they had brought, carried ashore. After this having refitted our ship and taken in goods and merchants for the Molukkas, we set sail on 6th December. We returned to Bantam on 22nd April, 1608, and found not one European ship in the road, but there were four juncks which came from China with taffatas, damasks, and divers other merchandizes. On 15th July, 1608, the Captain and merchants, having despatched their business, took their leaves and set sail homewards to their native country England, after their long and tedious voyage.”

1608. Captain William Keeling sailed from the Downs on the 1st April, 1607, in command of the ships *Dragon* and *Hector*, and arrived at Bantam on 4th October, 1608. He says :—

“We got into the road of Bantam where six Holland ships

were found ; two were laden with cloves, and two more to be laden with pepper. The General¹ found thirteen English alive, whereof four were merchants, and received a letter from Captain David Middleton. The sixth October he paid Uncte and Tegin,² the two Chinese, their wages and released them. The 20th October he called his merchants and having formerly resolved to return with the *Dragon* for England, upon special considerations, he now consulted about employing the pinnace not yet finished, and it was resolved to send her with Brown and Sidall for Banda. That John Herne, John Saris and Richard Savage should remain at Bantam, and that so soon as the pinnace should return from Banda, John Saris should go in her to Sequedana in Borneo.

“The 15th November the General sent for Jacques Lermite, the Portugal, and discovered to them a design of the Javans to cut their throats, whereof he received very particular information. The 22nd the ambassador of Siam came to visit the General, and dined with him. He affirmed that one might sell a thousand pieces of red cloth in his country, in two days, and great quantities yearly ; for they cloathe their elephants and horses with it. That gold is there plenty, and good, being worth three times the weight in silver, but there are precious stones in abundance and cheap ; and that his master would account it a great happiness to have commerce with so great a King as His Majesty of England, with whom as he understood, the King of Holland was not to be compared.

“The 28th the General took leave of the king, the governor, the admiral, the old Shah Bandar, Jura Bassa, Tanjong and of the H. Nauders, designing to stay no longer.

“The 2nd December at night, the merchants came on board, bringing a letter from the King of Bantam to King James, and two picots of kanton, as a present to him. The twelfth they espied a sail, before they got out of the streights, which proved to be the *Hector*. Her captain stayed behind Surat. By her they understood that the Portuguese had taken eighteen English, among whom were several of the factors, and goods to the value of nine thousand dollars.

“The 14th they got into the road of Bantam once again, being forced to a longer voyage or loss of reputation.

¹ That is, William Keeling ; the commanders of squadrons were afterwards called “generals” in those days.

² No doubt Ang Te and The Gin.

“ The 16th there came a small Fleming from Amsterdam, with news of peace between Spain, France and the Netherlands ; and that the end of his coming was to order the Dutch to desist from their design against [the Portuguese] Malakka. The General appointed Messieurs Molineux and Pockham to return for England, and took the rest with him for the Molukkas.

“ The 17th he removed into the *Hector* and the masters exchanged ships.

“ The 21st he despatched Mr. Towerson, pressing his departure with all speed.

“ The 23rd the *Dragon* set sail from Bantam.

“ The 1st January, 1609, about one o'clock in the morning, the *Hector* weighed, and with a gale off the shore left Bantam for Jakkatra.¹

“ The 8th the General went and anchored far out before Jakkatra, the king having sent his Shah Bandar to desire powder and match, he presented him thirty pounds of the former and a roll of the latter. The General bought of them for forty-five dollars a Portuguese boy (given to the king by the Hollanders) who would by no means forsake Christianity.

“ On 10th January the General departed.”

1609. Captain David Middleton set sail from the Downs on the 24th April, 1609, in the ship *Expedition*, arriving at Bantam on the 7th December of the same year. He writes :—

“ At Bantam the Captain made all the dispatch that might be, both night and day, to get the iron ashore. He would not stay even to set up his pinnace, but was obliged to give a great many gifts more than would have been necessary, if the former state of the country had been as in former times.² He left Mr. Henworth in the factory, and because he knew more of those who were in it, and besides was in a strange place, the Captain left with him, at his request Edward Neetles, and three more of his company. After this he took such commodities as he thought most vendible in those places where he was to go.

“ Henworth was very loathe to stay behind, but the Captain had nobody else to leave in the factory, being obliged to take

¹ Old Batavia.

² That is, if there had been less competition.

Mr. Augustine Spalding with him, on account of his understanding the language.

“Henworth was charged to tell the governor¹ plainly in case he sent for him, that the Captain had express orders not to yield to any of his former demands ; yet that he might take what he would, for he must deliver him nothing. The 18th December in the evening, the *Consent* set sail for the Molukkas. The 24th January 1610 they arrived at the island of Bangaia, where the king and most of the people were fled, for fear of some enemy, but who that enemy was the Captain could not with any certainty learn. A Hollander who was there told him that this adversary was the King of Makasar as he thought, and that the reason the former fled was because the latter would force him (who was a Gentile) to turn Moor. But the Captain was rather of opinion that he fled for fear of the Dutch, who would have built a fort there, but when they saw the people was gone, they gave over the design. This one Hollander bore such sway, that never a man left upon the island durst displease him. He had as many women as he pleased, and kept two houses full of the choice maidens of the country. He had also many slaves of both sexes. He was withal a pleasant companion, and would dance and sing all day long going almost naked, whereby he won the hearts of the natives, among whom he would carouse and be drunk for two days together. He had lived long in the country, and set up for himself, nor would he be commanded by any Hollander. He lived over against Amboyna, and if the Dutch governor wished to speak to him at any time he was obliged to send two of his merchants in pledge until his return. Here the English met with good refreshing, and were in better health than when they set sail from England.

“On the 9th October, the Captain returned to Bantam. Here he found that Mr. Henworth and Edward Neetles both died soon after he left them, so that all the goods remained, not a yard of cloth having been disposed of to the Chinese.² Most of the company being still troubled with sore legs and many sickly, the Captain left the unsound aboard under the surgeon’s care ; and manned the junks with those who were in perfect health.

¹ The King of Bantam’s representative.

² It is apparent from this remark that even at this early date the Europeans conducted their business of selling to the natives through the Chinese.

“There came eight Dutch ships to Bantam for pepper, while the Captain was there, and because they were to stay a year for their lading, they took in planks and materials for making flangers and strengthening their castles at Nanda and Tarnate.

“The gunner and one of the quarter masters died, and three more presently after them. Messieurs Davis and Thomas Clayborne being sick, the latter dangerously, and the Captain also not feeling well with grief, to see the condition his men were reduced to, he hastened to be gone from that contagious country, hoping that his people would mend out at sea. Three days before he quitted Bantam four sail of a new Dutch fleet of nine ships entered the road. They brought a great number of women, to inhabit the places they had conquered.”

Captain Middleton, having left Richard Moodies in charge (temporarily) of the English factory, and left orders for Mr. Spalding (when he arrived from the Molukkas) to undertake a voyage to Sukkadania in Borneo for diamonds, departed from Bantam on the 16th November, 1610, and had a very good passage to the road of Saldania, where he cast anchor on the 20th January and took in water. At this place he found his brother, Sir Henry Middleton, had arrived on the 24th July, and left on the 10th August. There also he found the copy of a letter which Sir Henry had written to the Company and sent home by a Hollander the day after he came into the road. Upon this occasion he observes to the Company that if they had not received that letter it was plain to see that they were never to expect any at the hands of the Dutch.

1610. Captain Anthony Hippon sailed from Blackwall on the 3rd January, 1610, in command of the ship *Globe*, and arrived at Bantam on the 26th April, 1612. The following is an account written by the master's mate, Nathaniel Marten :—

“The twenty-sixth about four in the afternoon, they cast anchor in Bantam Road, and presently after they came to anchor, Mr. Spalding (the governor of the factory) with two others came aboard.

"On the thirty-first May about four in the afternoon, the merchants came aboard, and about nine they set sail, steering N.N.E. with the wind at South. After a long voyage, the *Globe* arrived abreast of the Lizard on 20th August, 1615, having spent in the voyage four years and about eight months."

The following account of the same voyage of Captain Anthony Hippon is given by "Mr. Peter Williamson Floris, a Cape merchant in the same voyage"¹:

"We arrived at Bantam on 26th April, 1612, and found the Dutch ready to depart for Jakatra, by reason of the governor's new exactions. But the English having no regular factory there after some contest, agreed with him (the Dutch Governor) for three per cent. custom.

"By David Middleton's order a factory had been settled at Sukkadania (in Borneo) and continued by Mr. Spalding; but it seemed (as things were carried) rather for private than public benefit. We sailed from Bantam and on 22nd June, 1612, came into the road of Patane, where they found the *Bantam*, a ship of Enkhuysen, of whom they learned the customs of the place. The people of Patane were at enemy with Japan, and latter had burned Patane twice in five years. Here the English after much ado got leave to build a warehouse here, fire free; which at length they did hard by the Dutch factory, in a place assigned them thirty fathom in length, twenty in breadth. The house they built was eight fathom long and four broad. But the demands on them seemed very unreasonable, amounting, besides former charges, to four thousand rials of eight. To which however, in hopes of future benefit, we yielded. Sickness also much afflicted us, as if the plague had been in the ship, and Captain Hippon died the month of July. Mr. Brown was nominated his successor in the box No. 1, but he being dead before, No. 2 was opened, wherein Thomas Effington was appointed. Hereunto was added loss by thieves, who entering the factory by night, stole out of the chest two hundred and eighty three ryals of eight, and other goods; at the same time fifteen persons were sleeping and a lamp burning in the house besides a great black dog, and watch kept in the yard, which gave a suspicion that the thieves were among themselves, but whoever they were, they were never found out.

¹ This is a translation from the Dutch.

“John Persons and six more were left in the factory here, when the ship departed for Siam on 1st August. On the 3rd of January, 1615, we arrived again at Bantam, where we found the ships *James*, *Hosiander*, and *Concord*. We went on shore and received of Mr. John Jordayne (the governor or principal factor at Bantam) several letters, viz. from Sir Thomas Smith, intimating that the several stocks of the East India Company were united, etc., from Mr. Cockin at Makkasar, that he had received the cargo, sent by William Ebert, with other circumstances, from Adam Denton and Mr. Gourney complaining of the dead market in India on account of the wars, and from Mr. Lucas concerning his fears on the same occasion.”

1611. Captain John Saris, who had already resided in Bantam from 1605 to 1609 and been governor of the English factory there from 1608 to 1609, after Edmund Scott left (as was seen in Chapter XI.), sailed on the 18th April, 1611, from the Downs in command of the ship *Clove*. The account says :—

“On the twenty fourth of October we came to anchor in the road of Bantam, where we found the *Hector*, which arrived there the day before with the *James*.

“The arrival of all these ships, and expectation daily of the trades increase, *Pepper-corn*, *Darling* and *Thomas* to follow, occasioned a great alteration in the prices of commodities, those of any request being raised to thrice the price that they were sold before the *Hector's* arrival. Cloves, which the mariners for the *Hector* and *James* had bought for sixteen ryals of eight the pikul, were now risen to forty, and upwards; pepper from ten ryals of eight, ten sacks to twelve and a half etc.

“The 25th October they went to court, accompanied with the merchants, and made divers presents to the governor, *Pangran Chamarra*, which were well received. This pangran (or lord) ruled all, and was as protector to the king, who did not act himself, though of years sufficient. They desired his order for speedy landing of their goods, which he granted, provided the king's officers were made acquainted with the quantity, that he might not be wronged in his customs.

“The 28th October, a letter from Mr. William Adams out of

Japan, was read to all the merchants, that they might take notice of the hopes there were of trade in that country.

“It was now concluded (in regard the Flemmings were so strong, and almost sole commanders of the Molukkos, and Banda ; that Bantam was so unhealthy, and that their people likewise strangely disordered themselves with drinking and wenching ashore) that the *Hector* should, with all speed, be dispatched for England, and that fourteen thousand sacks of pepper should be provided for lading her, and the *Thomas*. Being apprehensive that if once there should come news of the arrival of other ships expected, pepper would be raised still more. Accordingly, they bargained with Lak Moy, for two thousand sacks of pepper, at an hundred twenty and a half ryals of eight, the hundred sacks, and with Kiwi (Kee Wee) for a thousand sacks, at an hundred twenty five ryals the hundred, and for three thousand sacks more, at an hundred and fifty ryals the hundred. They made trial ashore, what a pikul of cloves weighed English, and found it to be an hundred and thirty two pounduttle, good weight.

“The 9th November Sir Henry Middleton arrived at Bantam in the *Pepper-corn*.

“The 15th (at the governor’s earnest request) there mustered eighty men before the court, out of the *Clove*, the *Hector*, the *Pepper-corn*, and the *Salomon*, which gave him great satisfaction, the Flemmings having denied him. This was to celebrate the end of the Mohammedan Lent.

“The 17th November the Captain agreed with Kiwi for four thousand sacks of pepper, at sixteen ryals for every ten sacks, with allowance of three in the hundred, basse.

“The 18th November there arrived eleven sail of Flemming’s great ships, and the *Thomas* in their company. She had gotten at *Priaman*, only three hundred and twelve bahars of pepper, and twenty tael of gold.

“The 22nd November an hundred Flemmings, properly accounted, with their pikemen in bright armour, marched to the court, where they threw themselves into a ring, and gave three volleys of shot. The governor sent word, that the king thanked them, and that having done enough they might depart with their iron hats, for so the Javans called helmets.

“The 28th November three Holland ships laden for the most part with pepper and mace, set sail, homeward bound, and five more departed for Banda, and the Molukkas.

“The 11th December the *Hector* set sail from Bantam, for *Morough*, the watering place (where there is a sweet air, and good refreshing of oranges, with other wholesome fruits, are to be had there to attend till the *Thomas* was full laden.

“The 28th December Kiwi, the chief China merchant, invited Sir Henry and General Saris, with all the merchants to dinner, and entertained them with a play, performed on a stage, by Chinese actors, with good pronunciation and gesture.

“The 12th January, 1612, the *Thomas* set sail for England, having in her thirty six English and three Indians.

“The 14th January (1612), in the morning, they set sail from the Road of Bantam to Japan (Nangasaki).

“The 3rd January, 1613, we came to anchor once more in Bantam road, where the General (Saris) (to their great concern) found no lading in readiness. For which, blaming those whom he had left there to provide it, all their excuse was, that they did not expect him so soon.

“This was a loss to them, for as it was known that they were homeward bound, and must lade pepper, the people took advantage of it, and raised the price. This Kiwi, the chief Chinese merchant, told the General in plain terms, and refused to sell for twelve and an half ryals the ten sacks. Of the ten left in the factory here for the return voyage (at their departure for Japan) they found but five living on their return. But between Firando (Japan) and Bantam, they only lost one man.

“The 4th, in the morning, the General visited the Governor of Bantam, and presented him with two fair kattans, besides divers other things of value. He afterwards bargained with Kiwi and Lak Moy for four thousand sacks of pepper, at thirteen ryals of eight, the ten sacks, basse, three the hundred, and appointed the merchants to hasten the milling thereof all they could.

“The 5th was spent in reducing their several factories here to one government, and settling them in one house. Order was also taken that the expense of diet should be more frugally managed, and not so much spent in arrack houses, abroad, or on *hang-by-swarts* at home, as of late had been. The number of warehouses likewise were lessened, and the goods better stowed.

“The 6th, the pepper received the day before, being weighed again, they found most of the sacks, hardweight, and many to want of what the king's beam allowed, whereof the General sent



TJISARAewa LAKE, NEAR SIUDANGLAYA.

for the weigher, and using him kindly, begged him to take a little more care for the future, and, to engage him the more, ordered him five ryals of eight, whereupon he promised to mend his fault.

“Sunday, the 16th, the General, happening to stay on board, about two, afternoon, the town was all in a flame. Wherefore the skiff was presently sent ashore, well manned, to help the merchants to guard the goods. The wind was so violent that almost all the town was burnt down in a moment. But the English and Dutch houses had the good fortune to escape.

“The 20th, Saris procured Lak Moy and Lan Ching, two Chinese merchants, to translate the letter, which the King of Firando had given him for King James. It was written in the Chinese character and language, which they translated into the Malayan, and in English.

“The 22nd, another fire broke out, which consumed all the houses that the former had spared, yet the Dutch and English houses escaped again.

“The 26th January, 1614, arrived from Holland, the ship *Flushing*, a thousand tons burden. At the island *Mayo*, the company had mutinied, and would have murdered the captain in his cabin, had not a Scotchman discovered the plot, just as they were ready to execute their design, so that they were seized between the decks with their weapons about them. In this ship were several English and Scotch soldiers. Towards evening they set sail for Jakatra.

“The 13th February, we got through the Straights of Sunda, and arrived at Plymouth on the 27th September, 1614.”

Will Adams was the first Englishman to land in Japan ; Captain John Saris, who arrived in the ship *Clove* in 1614, was the first Englishman to do business there. He met in Japan with a most cordial reception and unusual kindness from all classes. He was given the right to travel anywhere he liked, a charter more liberal than any European Government would have granted to a foreigner at that time. Saris established an English factory at Hirado, but after ten years of commercial intercourse with Japan the factory closed down, the business having been ousted by the

cleverer and more business-like Dutch. The Englishmen attached to the factory left Japan with the factory's last ship, and their countrymen had no further intercourse with this land, until Raffles sent his mission under Dr. Ainslie in 1812, as related elsewhere.

1616. George Spilbergen, a Dutchman, left Texel on the 8th August, 1614, with the ships *Great Sun*, *Full Moon*, *Huntsman*, *Zeemew*, *Arolus*, and *Morning Star* with orders to sail round the world to the East Indies. The account says :—

“ On June 27th, 1616, we put into Japara for a supply of provisions and then proceeded to Jacatra, where we arrived on September 7th, and where we found it necessary to careen our ships, and provide them with double sheathings, which notwithstanding we did with great caution on account of the near neighbourhood of Don Juan de Sylva, who was expected to sail from Malacca, in order to cruise upon the Dutch. While we were thus employed at Jacatra, we had the satisfaction of perceiving the mighty increase of the Dutch trade, for in that small space of time no less than four ships from the Moluccas laded with the richest spices and four more from Holland with very rich cargoes did arrive in ye harbour of Jacatra. But what in this country was of much greater consequence, all the ships were well manned with several hundred soldiers on board for the supply of garrisons. There came in also there, a very rich ship from Japan having on board a very large quantity of rials of plate, uncoined silver and other very valuable goods, taken out of a Portugueze prize in its passage to Macao, which it never reached. There arrived also a vessel which had passed round the Streights of Magellan, called by name the *Concord of Horn*, commanded by Jacques le Maire. But as it was known, he did not make this voyage on account of the East India Company, the president John Peterson Coen caused his ship and cargo to be confiscated, and his crew distributed amongst the ships in the Company's service.”

I cannot help observing here how very soon exclusive corporations began to exercise acts of severity, for the East India Company had not been founded above fourteen years,

and yet they already took upon them to break the spirits and cramp the trade of their countrymen.

1616. William Cornelison Schovten sailed from Texel with his supercargo, Jacques le Maire, on the 14th June, 1615, and the following ships :—The *Horn*, 110 tons burden, 22 men, and the *Unity*, 360 tons burden, 65 men. The former carried eight cannon and the latter nineteen pieces of cannon and twelve swivels. The account says :—

“ October 16th, 1616, we anchored in the road of Japara, and on the 28th at Jacatra, where we found three Dutch and as many English ships in the road. The following night one of our seamen died. On the last of October arrived John Peterson Koen, president of the East India Company at Bantam, and the very next day we sent for the captain and the supercargo. After a very little discourse he required them in virtue of his commission for the East India Company to deliver up the ship and the cargo immediately.

“ The captain and the supercargo agreed that the seizure was unlawful, since they had not offended against the intention of the Company’s charter, since they did not come to the Indies by the forbidden passages, viz. the Cape of Good Hope or Streights Magellan, but by a passage of their own discovery, which in its consequences, must be extremely advantageous to the commerce of their countrymen. But all they could say signified as nothing, for the president told them if they thought they suffered wrong, they received permission to seek redress in Holland. In a little more than a fortnight died Jacques le Maire, chiefly of grief and vexation.”

1621. Commodore Beaulieu, the French naval officer, sailed from Honfleur on the 2nd October, 1619, for the East Indies with the following fleet :—The *Montmorency*, 450 tons, with 162 men, 22 guns and 20 padereroes ; the *Hope*, 400 tons, 117 men, 26 guns and 20 padereroes ; the *Hermite*, 75 tons, 30 men, 8 guns and 8 padereroes.

They were victualled for two and a half years. On the 23rd January, 1621, this fleet arrived at Acheen, where they found an English ship of 600 tons commanded by Captain

Roberts. A very long account is given of the kingdom of Acheen, which was very powerful, being able to call an army of 40,000 from around the town, and a pack of artillery consisting of 2,000 brass guns. The king's fleet consisted of 100 galleys.

The great strength, however, of the kingdom of Acheen seemed to have been in 900 elephants, which had been trained to be unmoved by the noise of cannon, and on a signal to ride over and tread down the enemy, which they never failed to do.

1625. The Nassau fleet left Holland in 1623 under the command of Jacques le Hermite, and consisted of the *Amsterdam*, 800 tons, 237 men, 20 brass and 22 iron cannon ; the *Delft*, 800 tons, 242 men, 20 brass and 20 iron cannon ; the *Eagle*, 400 tons, 144 men, 12 brass and 16 iron cannon ; the *Greyhound*, 60 tons, 20 men, 4 brass cannon ; the *Orange*, 700 tons, 216 men ; the *Holland*, 600 tons, 182 men, 10 brass and 20 iron cannon ; the *Maurice*, 360 tons, 169 men, 12 brass and 20 iron cannon ; the *Hope*, 260 tons, 80 men, 14 iron cannon ; the *Concord*, 600 tons, 170 men, 18 brass, 14 iron cannon ; the *King David*, 360 tons, 79 men, 16 brass cannon ; the *Griffin*, 320 tons, 78 men, 14 iron cannon.

There were thus eleven ships and 1,637 men, of whom 600 were soldiers, divided into five companies of 120 men each.

The fleet left Goeroea by way of Cape Horn on the 29th April, 1623, for the East Indies. The account says :—

“ On January 25th, 1625, we arrived at the Isle of Guan and with a large force landed, to find water and punish the natives who insulted our first party ; on the 5th February, our general decided to hold a review of our negro prisoners which we found were nearly 1,260.

“ Here we bought large quantities of rice for an old hatchet, and 200 fowls, but they would not give us any cattle although we offered them any satisfaction. When we had sold we Dutchmen experienced our dexterity, viz. that of cheating, for when we

examined those balls of rice, which we thought we had bought so cheap, we found inside stones and dirt, besides the natives had stole all they could lay their hands on, which shows how cautious one must be when dealing with the natives of these Ladrone islands.

“ On August 29th, we arrived at Batavia. The ships were here divided and sent to Surat and Malacca, Coromandel and divers places ; the *Delft* and *Amsterdam* were sent to the Isle of Onrust to careen.

“ This was the final decision of the Governor-General, and the council of the Indies, who did enquire into the question.”

1634. Johan Nieuhoff sailed from Amsterdam on the 23rd August, 1633, on board the *Calf*, Cornelius Just, master. They passed the Cape on the 9th March, 1634, and arrived at Batavia on the 30th August, where Nieuhoff went ashore and soon afterwards was sent in the train of an embassy from the Government of Batavia to China as steward. His account of Java is as follows :—

“ The island of Java lies six degrees to the southward of the equinoctial line. On north coast are several good harbours, commodious creeks and flourishing towns. Formerly the island was divided into several petty kingdoms, but at present they are all united under the jurisdiction of the King of Bantam, who governs the western part of the island, and the Emperor of Matarem, who is in possession of the eastern and by far the better part of Java, of which the Dutch still style him Emperor.

“ Near the sea coast the island is fertile, but hitherto the Europeans have made no progress in the country, the ingress whereof is hindered by impossible forests, and stupendous mountains. The island abounds in oxen, hog, sheep, fish, fowl, rice, salt. The woods are infested with rhinoceros, tigers and other wild beasts. Few climates are more temperate and wholesome. The natives of Java are a cheating, lying, proud and barbarous people, they are of brown complexion and have flat faces. Their hair is thin and black, their eyebrows large, their cheeks round. The men are strong limbed and robust, wearing a piece of calico wrapped several times round from their waist downwards. The women are generally small and wear the same

kind of garment, reaching from their armpits to their knees, all below which is bare. For near two centuries past the Javanese who live near the sea have been Mahometans, the rest of the natives are pagans, and they are indulged in the liberty of having two or three wives, besides as many concubines as they can maintain.

“ Formerly Batavia was no more than an open village inhabited by pagans and surrounded by a palisade of bamboos, but since the Dutch have established a settlement there, it is one of the finest cities in the East Indies.

“ The Javanese and Chinese call it Ralakka from a sort of cocoa tree which abounds in the neighbourhood. It is watered by a beautiful river that takes its rise in a neighbouring mountain, and after wandering through a thousand little meanders, collects itself into a body before the city of Batavia, where it discharges itself into the sea.

“ The city of Batavia is of a quadrangular figure, fortified with a stone wall, having 20 bastions and 4 great gates, two of which are exceedingly magnificent.

“ The bay in which it is situated had 17 or 18 islands in or about it, whereby the violence of the waves and winds is checked and broken so that the harbour which will contain above a thousand vessels is one of the safest in the world, and several barks may lie close under the banks of the river in a muddy bottom without anchors ; it is shut up every night at 9 o'clock by a chain, through which no ship is permitted to pass without paying a certain custom. The streets of this city run in straight lines, and are most of them thirty feet broad, being paved with brick near the houses, which are handsome and convenient, each having a good garden, well laid out and stocked with plants, fruit and flowers. There are fifteen streets which have canals of water in them, and over one of the canals which is edged and paved with stone are 4 or 5 strong bridges consisting each of as many arches, every one of which is 12 feet broad. There are 56 bridges in this city besides many draw bridges without the walls, which are made of wood. The cross church which was built in 1640 is superior to any other in Batavia ; its steeple is beautifully adorned with iron work, the stone edgings in its front are very finely carved, and its top ornamented with cherubims. The structure upon the whole is lightsome and airy, and the pulpit and seats are made of ebony, with fine iron work round them. The town

house which stands in the centre of the city is built of brick, two stories high, the ascent to the second storey being by a flight of stone stairs.

“ The courts of justice meet in this house, as do likewise the senators, the directors of hospitals, and other public buildings—criminals are executed on a scaffold erected before it for that purpose.

“ The officers of justice and the prison keeper lodge within the inner court, which is surrounded with a high wall and a double row of pillars.

“ The hospital for the sick, which stands on the banks of the great river, contains generally two or three hundred poor patients who are provided with every necessary in a plentiful manner at the expense of the Company. There is a place called the Spin-house erected for the confinement of lewd women, where they are kept continually at work, and if they neglect it in the least, they are punished in a very severe manner. On the brink of the river are two slaughter houses supported by wooden piles, by which means the offal of the beasts that are killed is easily disposed of in the river. Here they kill twice a week, and every butcher has a particular stall in which he kills his meat, being obliged to pay a tenth penny of excise for every beast according to the value put upon it by the farmer. Beef was sold at fourpence a pound, likewise pork, but mutton was much dearer.

“ Opposite to the town house in the same square, is a building divided into shops, which are let to the Chinese at the rate of three crowns a month for each shop ; in these they sell stuffs and calicoes, and all sorts of cloaths ready made.

“ The Chinese hospital is a neat brick building maintained by a tax on marriages, burials and public shows, together with the voluntary contributions of Chinese merchants. In this house the sick and superannuated natives of China find a refuge. In the same street is a foundling hospital, and a little farther off a building in which all the artizans in the Company’s service are lodged, and in which Mr. Nieuhoff took up his residence for some time.

“ The fish market of Batavia stands on the west side of the river, and is supported by strong wooden piles, and covered with pantiles. About the middle of it is the dwelling place of a certain officer who stops all fishing boats, and obliges them to immediately sell their cargo by public auction to the highest bidder. The

purchasers are Chinese, who pay the officer two pence in the crown for every bargain, and they have their different stalls at the rate of two rials a month. This market is kept open from 10 in the morning till 4 in the afternoon.

“From 4 in the morning till late at night there is scarcely any passing for the crowd through the fruit market, which is supplied with all sorts of herbs, fruits etc. by the Chinese and negroes who are obliged to pay an excise of the hundredth penny. There is a Latin and Greek school, which is a plain handsome building, besides which there are many private academies for the instruction of youth, and in the year 1667 a printing house was established which has met with good encouragement. In the castle are apartments for all the Members of the Council of the Indies as well as for most of the Company’s servants, such as the general bookkeeper, the secretary of the great council etc., but the palace of the governor which is within the walls of the castle is extremely magnificent.

“This edifice which is built of brick is much higher than any other building in the city, and an iron ship curiously wrought, which crowns the turret instead of a weathercock, may be seen a great way at sea. The great hall is adorned with bright polished armour, besides ensigns, flags and other spoils which the Dutch in several engagements have taken from their enemies. In this place the governor hears and redresses complaints, and commonly attends at prayers which are said every evening.

“The inhabitants of Batavia are a compound of divers nations, amongst whom the Dutch are the richest and most powerful. Next to these are the Chinese, who are perhaps the most ingenious cheats in the world ; they farm excises and customs, and have a finger in everything by which money is to be obtained. They live under a governor of their own, and dress in a silk or calico coat with wide sleeves, as they do in China, having their hair long, and neatly twisted, for there they pay no regard to the Tartarian edicts which in China obliges the natives to cut off all their hair except one lock. The Malaysans are next to the Chinese both in riches and trade, and they also have a governor of their own ; their houses are planted round with cocoa trees and covered with leaves. They are continually chewing betel or sucking tobacco through lacquered sugar canes, and their dress consists of light silks and calicoes.

“Most of the pedlars are Moors, who have little stalls in the

neighbouring market towns, and sell coral and glass beads about the streets. Some of them have small vessels in the river wherein they import free stone from the adjacent islands. The natives of Amboyna are a daring, ill-looking quarrelsome people ; they have long black hair and are armed with scymitars and shields of an oval figure, they are most of them carpenters, and esteemed very ingenious. The Javanese support themselves by husbandry, planting of rice, building of boats and fishing ; their boats are extremely swift, and for their expedition are called flying boats. These people build their houses of bamboo cane.

“The country may be laid under water by sluices upon any occasion, and its fertility is apparent from the flourishing state of its gardens and orchards, as well as the rice and sugar fields.

“There are numbers of large scorpions and locusts in Batavia, also all sorts of spiders.

“The gardens about Batavia are pestered with caterpillars about 5 inches long ; they feed on the herbs and leaves like locusts.”

Johan Nieuhoff concludes his remarks about Java with the following lines :—

“*Sic vicina jacet celebris Battavia ponto,
Quae suprema suis turribus astra petit.
Totius mundi vere est paradisus et ingens,
Gloria Belgarum qui reepulere Javos.
Luxuriat gemmis argento messibus auro,
Insula parva capit quidquid in orbe datur.
Pergit Laurigeris nomen praegrande trophaeis
Quaerere sic Patriae fama perennis erit.*”

1639. John Albert de Maudelshoe, the great traveller, left Mecklenburg during 1636 to make an overland journey through Persia, Hindustan, and China.

He visited Java either at the end of 1639 or at the beginning of 1640.

An account of his travels is given in his own tongue, and the following regarding Java is a translation :—

“The inhabitants deduce their origin from the Chinese. Each town of note in Java has its particular prince, the Kings of Bantam and Balambuan are the most potent. Ten leagues to the

north is the city of Panarucan. Ten leagues to the west Joartam,¹ noted for its convenient harbour in the river, where ships going to Moluccas commonly touch to take in fresh water and provisions. Upon the same river lies the city of Gorici ; the city of Surabaca has its own king. He keeps his court at Sidaya, which is well fortified but destitute of a safe harbour.

“To the west lies the city of Toboan, and further on a neck of land the city of Japara. Twenty-five leagues hence and forty-five from Bantam lies Mataram, a great city and the residence of a powerful king, who once pretended to the sovereignty over all the rest of the island, and still styles himself Emperor of Java. Five leagues to the west of Japara is the city of Pata² and three leagues further Dauma,³ under the jurisdiction of King of Mataram as well as that of Tagal.

“The next is the fair and strong city of Charabaon,⁴ next the city of Jacatra, and thence to Bantam. The houses of Bantam are miserably built, and the walls are very wretched as well as the gates ; though at every hundred paces provided with a great piece of cannon which are of little use in a place where the curtains are not defensible, and have instead of towers only scaffolds.

“The whole city of Bantam has only three principal streets which are not paved but sandy, the channels which run through them being stinking and foul, which sends forth a very nauseous smell all over the city. At each corner of the streets stand guards as also at the prison gates near the palace, and each person of note keeps a guard of ten or twelve for his own security in his house. Their houses are merely built upon piles, they are commonly of reeds and canes, and the partitions all of bamboos, or canes slit very thin. All the foreigners here live without the city, and the merchants meet daily in one or other of the three great market places belonging to this city.

“The bazar or exchange is chiefly frequented by foreigners, who meet there at break of day and continue till 9 of the clock.

“The second market place faces the great mosque, where the women buy and sell pepper, beetle, areca, bananas, melons and white and yellow sandal wood.

“The armourers who sell arms, guns, pistols, swords, standing

¹ Near the present Bangil, on the river that flows past Sourabaya.

² Pati.

³ Demak.

⁴ Cheribon.

higher up to the right, and to the left the confectioners with their sweetmeats.

“Near them is the place they sell all sorts of beans, and next to that the onion market, where the cloth sellers and usurers have their meeting. Hard by this you see the poulterers, who deal in geese, kids, pigeons, parrots and all sorts of tame fowl. Thence you see several ways, one leading to the Chinese shops, the second to the herb market, and the third to the shambles. Among the Chinese to the right the jewellers, who deal in precious stones, have their station, and the Bengaliens with their toy shops on the left. The sale of all these things lasts only till 9 o'clock, when the markets for all sorts of provisions are opened before the palace, and about noon the Chinese market begins.

“The city of Tuban, or Tubaon, challenges the next place after Bantam in the island of Java, being stronger than all the rest though not so large, yet better built than Bantam. Its palace is very spacious, and remarkable for the many apartments made here for divers sorts of beasts that are kept with more than ordinary care, such as elephants, fighting cocks, and parrots, the last of which are much more beautiful than those transported to Europe, because they are too tender to endure the fatigues of so long a voyage.

“Their chief traffick lies in pepper, which they exchange in the island of Baly for calicoe, cotton and silk and carry those commodities to Banda, Ternate, and the Philippine Isles, to truck for cloves, mace and nutmegs.

“The natives live mostly on fish ; they have no other garments but a piece of calicoe wrapped round their loins, except that the better sort wear a kind of loose camblet coat reaching only to their thighs. They are great lovers of horses, their saddles being made like our great saddles.

“The natives inhabiting the inland countries of Java are pagans, and believing the transmigration of the soul eat neither fish nor flesh. To the south there are a few Mohammedans of the Turkish sect. They have two great feasts, the chief of which is on the 5th August. There are few amongst the Javanese who have three or four, nay sometimes twelve wives, besides their concubines, who are obliged to wait upon the wives, though their children have the same prerogative as the legitimate offspring. Their children go naked, the girls having only when grown up a plate of silver or gold They marry at 8 or 9,

or 10 years of age. In their marriage they use but few ceremonies. Certain poles are stuck, on the wedding day, before the house of the bride and bridegroom, with tassels of white and red cotton, and after dinner the bridegroom goes on horseback through the town, where the slaves, who are part of his dowry, go to meet him and bring him some presents.

“ Women of fashion are kept under such restraint that they are not permitted so much as to see their sons in their chambers, neither does a man speak or approach a woman of rank when he goes abroad, but everybody gives her way, even the king himself.

“ They are known only by their retinue, being for the rest clad after the common fashion, viz., in a kind of calico or silk petticoat reaching down from the breast to the middle of the leg. They wear neither stockings nor head ornaments, but tie their hair upon the crown, except it be at weddings, or any other solemnity, when they have coronets on their heads, and rings and bracelets upon their fingers and about their arms. They are much addicted to cleanliness that they never do anything without washing or bathing themselves, which is one of their chief employments, and which they look upon as a proper means to intice their husbands, in which they strive to outvie one another.

“ In their courts of judicature the plaintiff and defendant are obliged to plead their own causes. Their punishment of criminals is to tie them to a post, and stab them with a dagger. Foreigners have this advantage, that providing they can make their peace with the party complaining, they may redeem themselves from death, except in the case of premeditated murder.

“ The king’s council, which consists sometimes of 500 persons, meet by moonlight, under a great tree, where they continue till the moon sets. The king when present sits in the middle.

“ The natives of Java are a proud, perfidious, and cruel generation, and so stubborn that such as know they have deserved death will rather be killed than taken. Their hair is very long and generally of a chestnut colour, they have broad flat faces and large jaw bones and eye brows, little ears and thin beards, are for the rest middle sized but very strong limbs. They seem not to want courage were they bred up to all the advantages of our modern arms, but they are contented with their pike, battle axe, broadswords and a dagger.

“ Their bucklers are of wood, and sometimes of boiled leather. They wear also armour, the pieces of which are joined together

with iron rings. Their soldiers receive no pay in time of peace,—they have a way of blowing small poisoned arrows through trunks by which the wound is made incurable.

“ But those inhabiting the Strait of Sunda living under their own king are much more honest and open hearted. The grounds of Java are either farmed out by the king or lords to certain free people, or cultivated by slaves, and produce rice, pepper and cocoa. Some slaves here take their masters’ trees, and other commodities at a certain rate, which they sell to the best advantage they can. Others work abroad for their masters’ profit, at a set rate per diem. Others maintain themselves, and work alternately, six days for their masters, and as many for themselves. They commonly adulterate their pepper with black gravel as they do all other commodities they sell to strangers, being very crafty in their commerce, though very few rich merchants venture their persons on any long voyage, but traffick like our European merchants by the assistance of factors. Bonds and other securities are written upon the bark of trees and characters being engraven with a sort of bodkin, which is either rolled up afterwards, or laid together four square betwixt two boards, which they have a way to tie neatly together with pack thread ; sometimes they use Chinese paper.

“ The traffick of the Persians that live here is precious stones, stuffs and drugs, and the Arabians and Banjans exchange their commodities chiefly for china ware. Those of Guzerat live for the most part upon fishing ; all those foreigners are clad after the same fashion in a calico garment with a turban of the same stuff.

“ At their arrival, they purchase a woman, who is to serve for all purposes. At their departure they dispose of her again, but must make provision for the children if they leave any behind. But the Chinese are of all foreigners here the most industrious in their trading, being looked upon in the same light as the Jews in Europe. Their main business is to forestal and buy up the pepper in the country against the coming of their fleet to Bantam, which consists commonly in ten ships of 50 tons each in January.

“ These bring in a sort of wretched money called pity by the Javanese, and kas in the Malayan language, being a mixture of lead and brass, so brittle that if it fall upon the ground it certainly breaks. They are made in the city of Chincua in China, having each a four square hole in the middle, through which they string them upon straw. It passed at first very current in Java, but

since this baseness has been discovered it goes at a very low rate. The Chinese sell their porcelain here at cheap rates, and bring also silk, satin and damasks of their own manufactory, which they exchange for pepper, lacque, indigo, sandal wood, nutmegs, cloves, tortoise shells and ivory; they have neither temples nor priests at Bantam.

"Java abounds both in wild and tame beasts; the forests are filled with elephants, rhinoceros, leopards, tigers, serpents, lizards, hogs without bristles. The rivers are well stocked with fish, there having been oysters seen. Deer, wild goats and boars. The rivers feed also abundance of crocodiles; the Chinese tame, fat and eat them for a delicacy. Civet, wild fowls. The rhinoceros is in the same esteem nowadays as with the unicorn of the ancients; his flesh, blood and teeth being used for medicinal purposes.

"The Javanese exasperated by the ill usage they often received from the Portuguese, would not for a long time permit any strangers to have any settlements there, till at last the hopes of gain engaged the Kings of Bantam and Jacatra to let the English and Dutch set up their factories there under certain conditions, which being but ill-observed by the Javans, the Dutch took this opportunity of justifying their settlements at Jacatra, and that with so much expedition that the Javans, finding themselves not in a condition to force them, thence engaged with the English to assist them in the expulsion of these bold strangers. In the first sea engagement January 2nd, 1619, near Bantam, the Dutch had the worst, upon which the King of Jacatra, in conjunction with the English, besieged their fort for six months, till the Dutch fleet, being reinforced, obliged the English to quit both the fort and the Streights of Sunda, and landing their men took the city of Jacatra by storm and put all to the sword.

"The next thing they had to do was to compleat their fortifications, which they did so effectually that in a little time they made them very regular, with four bastions of free stone, well entrenched and pallisaded, and defended by a proportionable number of half moons, redoubts etc.

"The King of Matram laid siege to it twice since, viz. 1628 and 1629, but was forced to raise it as often."

1648. John Baptist Tavernier, a Dutchman, left Holland about 1646, and travelled through India.

On the 14th April, 1648, he embarked at Mingrela, a little town about twenty-five miles from Goa, in a Dutch vessel bound for Batavia, where he arrived on the 22nd June, 1648. His story is rather fabulous ; it is as follows :—

“ The King of Bantam’s palace was never by any curious architect. It is a square place encompassed with a great many pillars, varnished over with several sorts of colours, against which the king leans when he sits down. The roof is covered with branches. Not far off is a roof supported by four pillars where he hath 16 elephants. His harem, or the woman’s apartment, was certainly a very small place.

“ The next day about six in the morning my brother and I and a Dutch chirurgeon were going along a narrow way between a river on one hand, and the pales of a great garden on the other. Behind the place, a rascally Bantamois had hid himself, one of these that was newly come from Mecca.

“ These furies presently take their cris in their hand, the blade whereof is poisoned, and run through the streets crying a Mocca (meaning to Mecca) and kill all those who are not Mohomedans and then kill themselves. They think they are thereby serving God. These Bantams from Mecca on their return think themselves saints. I made voyages to Japara and Sumatra, and then returned to Java.”

1681. Captain Robert Knox, the Englishman who escaped from Ceylon in 1680, after being twenty years a prisoner in the hands of Rajah Singh of Kandy, was placed in charge of the ship *Tonqueene Marchant* by the East India Company, when he returned to England and dispatched to Tonquin late in 1681. He says :—

“ She was but 130 tuns burthen. I went out in her anno 1618 and sailed from the Downs in September. We ware in all 25 men in her, and went in company with 5 others, all small ships bound for the East Indies.

“ It being a bad season of the year it was May, 1682, before I came to Bantam, which was the port I was bound to ; being arrived thare in the rode, contrary to our expectations we found the Hollanders had taken the place, and the English were expelled thence and gone to the city of Batavia ; they had left two English

factors on board the Dutch men of war that ware then riding in the rode to advise all English that came theather to repare to Batavia to the English agent and council ; upon this notice the next day I sailed from Bantam and found all our factors at Batavia. Soon after they sent me to Tonqueene, whare by God's blessing I safely arrived, though I had never a man in the ship that had ever bin thare before.

"According to custome, a China pilott came on board of me, whare I rode without ye barre, with a letter from our English factors resident in that place to welcome me to the port ; and advise me to intrust the barer, who was the Compaines pilott, to bring the ship over the barre, into the river, and according to order next morning I set sail and steered as my pilott directed, he only point with his hand to goe this way or that way as he saw by his marks on the land.

"Soone after we ware under saile we came upon the pitch of the barre, and the ship struck on the ground so that she beat ; her rudder head came up into the great cabbin that we could not steere but it pleased God the next sea hover her quite over the barre and the water deepened againe. The ship being new and stronge gott noe harme, and we drew the rudder downe againe into its place, and it was as well as before. The ship went aboute 20 miles up into the river whare I buried aboute 8 of my men, most principal officers, as chief mate, carpenter, and boatswaine.

"In the January, 1682, the ship being laden with very rich goods, as wrought silks and muske, and filled up with lackered wares, I was sent backe to Batavia, and having lost so many men out of my small number, was faint to hire some Chinese to helpe saile the ship, nevertheless by God's blessing I gott safe to Batavia againe. Mine being a small ship and the goods I had brought very rich, the agent and councell, according to orders out of England, tooke out all the silk and muske and loaded them on board a large ship called the *Surratt Marchant* who lay the same time in Batavia rode ; and the English having lost their trade at Bantam, they had noe pepper to lade me, but put in some few parcell of cassa lignum (for they had not goods to fill the ship) and sent me whome for England.

"Heere at Batavia I had gott a recrute of men for those that I had buried, and by God's blessing goeing along with mee. I safely arrived with my small ship to England againe. But note this by the by, that the small ship, which they distrusted to bring

their rich goods whome but sent almost empty away came whome and arrived very safely, without any losse or hazard and the great ship, the *Surratt Marchant*, which was intrusted with all the rich goods I had brought from Tonqueene, perished by the way whome with all her men, and was never since heard of."

1685. Captain Cowley sailed from Virginia on the 23rd August, 1683, in the ship *Revenge* (an old French prize with wine which had not been sold) with seventy men, and Captain John Cooke as master (who died later off Duke of York's Isle). The account says:—

"In the Streights of Le Mairse (Cape Horn), we did meet with the English ship called *Nicolas of London* of 26 guns, commanded by Captain John Eaton, and agreed to keep company to the East Indies together. In the month of December (1685) we put into Cheribon, a factory belonging to the Dutch on the same island as Batavia and Bantam. Here we met several pieces of bad news, such as that King Charles was dead, and the Dutch had deprived the English of their factory at Bantam, which was the second place of trade we English possessed in the East Indies, and we can never sufficiently wonder that care was not taken, the loss of it having been extremely prejudicial to our East India Company.

"While we were here, Captain Cowley did see that the Dutch were forming schemes to the prejudice of our trade, and resolved therefore to hasten with all speed to Batavia, where they were very kindly received by the Governor General, who enquired after their healths. While being there, Captain Cowley and Mr. Hill did leave the ships, and purchased a sloop from Batavia, where there were at this time twenty Englishmen, for we intended to go to see our countrymen at Sillabar, where the English have a factory on the Isle of Sumatra. But so far were the Dutch from permitting this that they took the sloop from us paying however the cost, and put the Dutchman in prison who sold it; to justify this, they made use of pretences, but the true reason was, that they had formed a design on Sillabar, for which attempt they were obliged to postpone; they did not desire the English there should in number become too strong.

"The scheme they made use of for driving the English thence was singular enough, for they had lent the King of Sillabar a considerable sum of money, some years before, which they now

proposed to demand, and to oblige the king pay them in pepper, by which agreement they would have secured all the trade in his dominions, as then the English must have withdrawn their factory. But just as they were fitting out a squadron in order to put this very singular design into execution, the Emperor of Java broke out into war which diverted the storm for the time, because they were obliged to employ those ships against their enemy."

1688. Captain William Dampier, who had already been to Bantam in the ship *Martha*, of London (Captain Earning, commander), as a sailor before the mast, left Virginia on the 23rd August, 1683, for a long voyage round the world. Captain Cowley was in command of this squadron, bound to the South Seas, and to fight the Spaniards. Dampier as soon as they got to the Indies, separated from Cowley. Dampier says :—

"On the 19th May, 1688, we arrived at Achin, and soon after I went to Fort St. George and Tonquin, which after a stay of five months I came back to Bencouli [Bencoolen], an English factory. I then returned to England with extremely much experience.

"On the 14th January, 1698, I sailed from the Downs in His Majesty's ship *Roebuck*, carrying 12 guns, 50 men and boys and 20 months provisions.

"On June 23rd, 1700, we saw the Streights of Sunda, and towards the latter end of the month, we arrived safely in the road of Batavia. I staid at Bantam upwards of three months where I first ordered the ship to be repaired, and afterwards careened, for which purpose I hired vessels to take in our guns, ballast, provisions and stores.

On August 9th, 1703, we fitted out two ships of 26 guns and 120 men each, designed for the South Seas. The one named the *St. George*, Captain William Dampier Commander, in which Mr. William Funnell was mate, and the *Fame*, John Pulling Commander."

1700. Captain Alexander Hamilton, who was travelling about the East Indies from 1688 to 1723, gives the following account of Java, the date being about 1700 :—

"And now having ended my tour around Sumatra, I must

return to the southward, and travel to the eastward of Sumatra, and to the southward of the Equator, among those famous islands, and Java being west-most, I begin there, and march eastward among islands far from any continent. Princes Island is close to the west point of Java. It has a channel between it, and Java, but there is some danger in it. There are no inhabitants on it ; but there are three places that afford good water, and wood enough for ships bound out of the Streights of Sunda to Europe. There are several other islands in the streights, as Caccotoa, Duars in the way, the Button and Cape, and several others without name.

“ The first place of commerce in the west end of Java is the famous Bantam, where the English and Danes had their factories flourishing till anno 1682, at which time the neighbourly Dutch fomented a war between the old King of Bantam and his son, and because the father would not come into their measures, and be their humble slave, they struck in with the son who was more covetous of the crown than of wisdom. They, with the assistance of other rebels, put the son on the throne and took the old king prisoner and sent him to Batavia, and in 1683 they pretended a power from the new king to send the English and Danes a packing which they did with a great deal of insolence according to custom. They next fortified, by building a strong fort within a pistol shot of one that the old king had built before, to bridle their insolence.

“ The only product of Bantam is pepper, wherein it abounds so much that they can export 10,000 tons per annum. The road is good, and secure for the safety of shipping. It is in a pleasant bay, wherein are several small islands, which retain their English names still, and the natives still lament the loss of the English trade among them, but the king has much more reason than his subjects to regret the loss of their commerce. The good-will the natives bear to the Dutch may be conjectured from their treatment, when they find an opportunity, for if an Hollander goes but a musket shot from their fort, it is five to one, if ever he returns ; for they are dexterous in throwing the lance, or shooting of poisoned darts, through a wooden pipe, or trunk ; and the king never redresses them, pretending the criminal cannot be found.

“ Batavia is about 20 leagues to the east of Bantam, and a great number of small islands lie scattered in the way too tedious to mention. Pulo-panjang off Bantam, and Edam off Batavia,

are the most conspicuous, and the road of Batavia is almost surrounded with islands, some of them inhabited, and some not. Its topography I'll refer to another time, with some historical accounts of it both ancient and modern.

"Cheraboan is the next colony on the coast to the eastward of Batavia, where they have a fort, and a small garrison.

"Tagal is also a Dutch settlement, with a small fort for its defence, and there is no other remarkable place, till we come to Samarang, a good colony, with a fort of mud, and wood to defend it.

"Damack, and Contus, two places that lie between Samarang and Japara, are noted, one for the abundance of rice that it exports, and the other for great quantities of good sugars, that it produces. They are peopled mostly with Chinese, and so is Japara, which formerly had an English factory, but is now altogether in the Dutch hands. It is defended by two forts, one on an hill, and the other in a plain, where the town stands, and has a small river to wash its walls. The road is secured by two islands, that lie about a league off the town. I bought good white sugar in cakes here, for two Dutch dollars per picul, being 140 lb. English suttie weight.

"Tampeira is the next place to the eastward, and to the eastward of it is Rambang about 2 leagues from it, where the Dutch have a small wooden fort, and a little garrison of sixteen men. Those two afford nothing but excellent timber for building. And to the eastward of Rambang is Sorobay, which lies within the island of Madura, and I believe is the easternmost settlement the Dutch have in the island of Java. It produces much pepper, some bees-wax, and iron.

"Sorobay is about 125 leagues to the eastward of Batavia, and the country along shore, as pleasant, and fruitful in grain and fruits as any in the world. Tame cattle and wild game are very plentiful, good and cheap. At Rambang, I bought a cow, fleshy and fat, for two pieces of eight, that weighed above 300 weight, and wild hog and deer we killed daily with our fowling pieces as we did also peacocks, and wild poultry. The cocks are all like one another, with red necks and bodies and black wings and tail, and the hens are exactly like large partridges. The cocks are pretty large, and when they take wing, they make a noise that may be heard half a mile. Their flesh is both savoury and juicy, and the wild hog is excellent. In the woods are many

flying squirrels. Some of them I have seen tame in cages, they also have little horses, wild in the woods, and some tigers, but being not much pinched for hunger, they seldom attack men. They have one dangerous little animal called a jackoa, in shape almost like a lizard. It is very malicious and bites everything that offends it, and the flesh cankers unless immediate cauterizings are used, and if that cannot be had, the piece must be cut out, for, if once it blisters the skin, there is no cure for it afterwards, but he seldom fails of giving notice where he is by a loud noise calling jackoa (tokay).

“I was once at supper with some Dutch gentlemen, at Ram-bang, in an house thatcht with cocoa-nut leaves, and we were no sooner set, but one of those jackoas opened its throat almost over our heads. The Dutch gentlemen took the alarm, and rose from the table in great haste, and ran out of the room, calling to me, who sat still (not a little surprised to see their sudden flight) to follow them, for my life was in danger, and on hearing that admonition, I was not long after them, but its noise spoiled our supper.

“As there are many species of wild animals in those woods, there is one particular called the oran-outang. It is nearest to human both in shape and sagacity, among all the herd of animals. I saw one about four feet high, gross bodied, long arms from the shoulders to the elbows. His finger-ends reach just to his knees, as he stood upright. His thighs and legs plump, but too small in proportion to his body, his feet long, and broad at the toes, but a little too narrow at the heel. His belly prominent covered with a light coloured fur, the rest of his body being brown, and the fur thicker and longer than the belly fur. His head somewhat large. His face broad and full. His eyes gray and small, his nose little and flat. His upper lip and under jaw, very large. He blows his nose properly, can kindle a fire and blow it with his mouth, and I saw one broyl a fish to eat with his broyld rice. The females have their regular menstrea, they have no tail, and walk upright. They are of a melancholy disposition, and have a grave dejected countenance, and even when they are young, they are never inclined to play, as most other animals are.¹ There is a smaller sort, but of a different species, called oupmaes, but their legs and arms are very small.

“I was in Samarang in 1704, in the months of July and August,

¹ In fact they are veritable missing links.—D. M. C.

when navigation on the coast is accounted dangerous. A war happened then to break out, between the natives of that part of Java, and the Dutch, about the succession of a new Sun Suonan or emperor, the old one demising about that time. The Dutch would impose the old emperor's brother on them against the general bent of the nation ; and the nobility were for his eldest son, being the established law and custom of the country. I being then bound for Batavia the commodore desired me to carry a packet of letters for the General and his council, which I did, and delivered them, before they were six days old to the General, Jan van Hoorn, which piece of service recommended me to his favour, which he demonstrated afterwards in some indulgences I had, and some confidence he reposed in me.

“ The war begun, lasted 20 years longer than at first the Dutch imagined. It taught the Javans the art of war, having a great number of Maccassers and Ballies, who had been trained up in the Dutch Company's wars against several nations. Many of them came into the eldest son's interest, who having as good courage, and subtle stratagems, with much greater agility of body than the Dutch, made the war more terrible and dangerous than any of the Company had ever entered into, notwithstanding the Pretender had a large party of Javans, and was assisted by Maccassers, Amboinese, Ballies and Bougies, but they wanted the European discipline that the others who had served the young emperor, for they could encamp and mine, as well as the Dutch.

“ A Dutch captain in his march towards the Dutch camp fell with his company into an ambush of Javans. Some of his men were killed, but he and most of his men were taken prisoners. The Dutch camp was pitched, on the side of a river, and the Javans a few miles above them, on the same river's side. Next day to the Dutch great amazement, they saw the captain and his men swimming down the stream, with all their legs, thigh bones and arms broken, and most of them alive. Their country men took them out of the river, and used means to save their lives, but very few lived, which put their whole army in some dread by observing what quarter they might expect if any of them were taken prisoners.

“ The religion of Java is partly Mahometan, and partly pagan. The pagans choose women to be priestesses, and they are generally old, and well skilled in witchcraft. And it is reported, that they have frequent conversation with the devil, who appears to them

in a horrid monstrous shape, and the priestesses sacrifice a hog to him. The emperor resides at an inland town called Cartasouri, about three days journey from Samarang, where I'll leave him and proceed to :—

“The island of Madeira, that produces nothing for a foreign market, but deer skins. They may be had in great abundance, and very cheap.

“The island confronts Java to its very easternmost point. I have no knowledge of the islands to the eastward of Java, but what I have had by information from the Dutch, who are the only possessors of that commerce, except two English ships that fell in among some of those islands, and so I will go on in those same observations, and remarks.

“I observed before that Sorobay was the easternmost settlement the Dutch have on Java, neither have they any footing, that I have heard of, on the south side of that island, though the natives are pretty well civilized and as ships from Europe fall in with that coast, they will bring off provisions to sell them, particularly if they see English colours, for very often the Dutch buy their commodities, but pay nothing for them.

“The island of Bally lies next to Java to the eastward. It abounds in provisions for the inhabitants, but affords nothing fit for exportation. The natives are daring and bold, even to desperation. Many of them enter in the Dutch service and make good soldiers. Between Java and Bally are the Streights of Bally.

“The island of Flores to the eastward of Lamback, next Bally, Combava, next Lamback, and the two islands Sappi, next Combava, is an island 50 leagues long, and 18 broad. In anno 1703 Captain Wright, in the *Leghorn* galley, lost his passage from Banjar on Borneo, to Batavia, and by contrary winds, and strong currents, was driven to this island, and anchored at a town on the west end of it called *Larrentoucka*. Finding the place convenient and safe to pass three or four months of the westerly monsoons, he took an house ashore, and kept some times one part of his ship's crew ashore, and some times another to refresh them. He gave warning to the people of the town not to trust his men, but they minding their own profit, had trusted the seamen about £100 sterl. A little before he was ready to sail, the creditors came and demanded their money. He refused payment, alledging that a public crier was ordered by a magistrate to proclaim the

prohibition. The creditors said it was true they could not recover anything by law, but if he valued his own health, he would satisfy them, if not in all, yet in part, and so he paid one half, which most of them were content with, but one of the witches was not, but threatened his destruction, if she had not all her demand paid. The captain knowing that the natives were very skilful in the art of poisoning, resolved to prevent their taking any opportunity that way, and so went on board to eat and sleep, and was so cautious that he would not so much as taste their green fruits, nor smell their flowers, after the time that the old hag threatened him, and yet before he left the place, he found himself much troubled with grippings and fluxes.

“I was at Batavia when he came there. He could not reach the road with his ship before he anchored, and was forced to anchor without, and sent his boat on board of my ship, to desire help to weigh their anchor. I sent a boat with 20 men and officers to bring their ship into the road, which next morning they did; the poor man was brought to that pass by the effects of poison, that he could not walk without being supported, nor could he lift his hand to his head. I waited on him ashore, and he desired to be carried to his usual quarters, at the sign of the Red Lion, kept by a woman called Black Moll, a native of the island of Flores, and he giving her an account of his condition, and how ignorant he was of the cause of it, she bid him be cheerful, for she knew how he had been poisoned, not by anything taken inwardly, but by a spell, and bid him recollect himself, and try if he could remember if he had not stepped over a bit of paper, or the leaf of a flag, in going in or out of any house, which after a little pause, he could very well remember he had. She assured him that he should be perfectly well in a month’s time, and she performed her promise to admiration. I left Batavia before the cure was perfected, but afterwards when I came to Batavia, she gave an account that she had restored him to perfect health, and seven years after, I saw him at Fort St. George.”

1705. Captain William Funnell’s account is as follows:—

“On October 21st, 1705, we entered the harbour of Batavia, and as soon as we landed, were sent with our men into custody, and our goods were taken. After a little while the major of the castle sent for us, and desired we would transmit to the general, by him, an account of our losses, and that we should be satisfied

on all accounts as to our effects, loss of time, and imprisonment. Accordingly we each of us drew up a list of our losses, and sent it to the general by the major, who very kindly returned to us for an answer that very speedily we should have our freedom. On October 27th we were all sent for to the fort, and most of our ready money was returned to us, but for our goods, loss of time and imprisonment, we could have no satisfaction. In the space of about seven weeks I remained here, I made all the observations I could on the place, and its inhabitants.

“The former I found in as good condition as was possible, and the latter appeared to me as prudent and industrious a people as ever I saw. I shall content myself with making a short description.

“This city of Batavia is the chief place the Dutch have in India, receiving by shipping the product of India, Japan, and China. It is inhabited by several sorts of persons such as Dutch, Portuguese, Chinese, Persians and Negroes, but the Malayans are the natives. The Dutch are masters of the place, and have a very fine large town, in which are seven churches, Dutch, Portuguese, Malays, Chinese, with several very spacious houses built after the European style. The town is all walled and noted round, and the walls are abundantly provided with cannon. In the middle of the town, in a great square place is a very fine Stadt House, where all the public affairs are transacted. The town with all its fortifications is commonly governed by one of the States of Holland who has the title of General of India, and all other governors are subordinate to him.

“The inhabitants here do not care how often they change their general, for at the coming of a new one, all prisoners are released, except such as have committed murder.

“He has twelve to assist him, who have always the title of Rads, or Lords of India. These are such as have been formerly chief governors in several places in India, as of Ceylon, Amboyna, Malacca etc.

“The town is divided by canals, over which almost in every street there are bridges laid, and booms to hale across, which let no boats go in or out after sunset. The chief produce of the place is pepper, of which the Dutch yearly export great quantities. Here are also some few diamonds, and other precious stones. Of fruits here are, plantains, bananas, oranges, lemons, pomegranates, mangastans, and rumbostans.

“ The mangastan is about the bigness of a golden runnet, it is quite round, and looks like a small pomegranate. The wind and weather at Batavia is extremely regular, and the Dutch inhabitants know how to make use of it at all seasons to the best advantage. The anchor ground all along the north side of Java, from the island Madura to Batavia, is fine ousy ground, and clear of rocks. The principal places on this side of the islands are, Batavia, Bantam, Japara, Samarang, Surabon, Taggall, the Quale and Rambang. All these places are settled by the Dutch. They afford rice, with which they supply all their out factories hereabouts, as also very good plank for building ships with. The chief place for building is Rambang, whither the freemen go to build their small vessels, as sloops and brigantines, also several ships of five, six or seven hundred tons, lade with timber at Rambang, the Quale-Japara, and each ship, when full, taketh a great raft of the largest of the timber in tow to Batavia. All this timber is commonly landed upon a small island between four or five leagues from Batavia, where the ship carpenters are usually kept at work, nay, they are said to be never out of employ; they are about 200 in number, and the island is called Unrest, or Onrust. The Dutch careen their ships here, and it is very well fortified, being all round a bed of guns.”

1710. Commander Woodes Rogers, in the *Duke*, 300 tons, 30 guns, and 170 men, with Thomas Dover as second captain, and three lieutenants, and Captain Stephen Courteney, in the *Duchess*, 270 tons, 26 guns, and 151 men, with Edward Cooke as second captain, and three lieutenants, sailed from Bristol on the 15th June, 1708, to circumnavigate the globe. The account is as follows :—

“ On or about the 20th June, we sighted the Celebes, and anchored near three islands, where we saw a small vessel. Our pinnace came up to her, and found she was going to Macassar, but we took her master on board to pilot us, who promised to do so if we would keep it secret, for fear of the Dutch. We later ran by the island of Madura, and soon made the high land of Cheribon. Next day we saw a great ship ahead ; she proved a Dutch ship, about 600 tons, and 50 guns, belonging to Batavia, and was plying to some of the Dutch factories for timber. In the after-

noon of the next day we saw the ships in the roads of Batavia, and there after anchored on 20th July (1710).

“Some sloops came on board, and I was absolutely a stranger to the humours of the people.

“Our men had been quarrelling and jangling for some days before; a disputed title to a lump of sugar would have created a tumult, which could only be pacified with the prospect of a small dram, but now there was nothing but hugging and shaking of the hands, and blessing their stars and questioning if there was such a paradise on earth; and all this because they had arrack for eighteen pence a gallon, and sugar at a penny a pound.

“The city is square with a river running through it, and fortified by a strong wall, and twenty two bastions. About ten years past there was an earthquake which over-turned part of the mountains, and altered the course of the river, so that the canals in and about Batavia are not nearly so commodious as they have been.

“The banks of the canals through the city are faced with stone on both sides, as far as the boom, which is shut up every night at nine o'clock, and guarded by soldiers.

“There are channels cut out of the main river for smaller vessels, and every boom pays toll. All the streets run in straight lines, and most of them above thirty feet broad, on each side clear of the channels, and paved next the houses with bricks. All the streets are very well built and inhabited, fifteen of which have channels, and they reckon 56 bridges on them, most of them of stone. The country seats and buildings round the city are generally neat and well contrived, with handsome gardens, for fruit, flowers, fountains and statues.

“The vast quantities of cocoa nut trees everywhere, afford delightful groves. They have fine structures here, particularly the cross church, built of stone, and inside very neat. There are two or three churches for the Dutch, and two of the Portuguese protestants, who are a mixt sort of people.

“There is one church also for the protestant Malaysans. The town house is built of brick, in a square about the centre of the city, two stories high and very finely built, where all courts are held, and all matters relating to the civil Government determined, and the senators of the military affairs meet. There is an inner court enclosed by a high wall, and a double row of stone pillars, where the officers of justice live.

“ Here are hospitals, spin houses, and rasp houses, the same as in Amsterdam, with all other public buildings equal to most cities in Europe. The Chinese have also a large hospital in this city, for their aged and sick persons, and manage their charity so well that you never see a Chinese that looks despicable in the street.

“ The Dutch women have greater privileges in India than in Holland or any where else. For on slight occasions they are divorced from their husbands, and share the estate betwixt them. A lawyer told me at Bantam, he has known out of fifty eight causes all depending on the Council Chamber, fifty two of them were divorces. Great numbers of the natives who are criminals are chained by pairs, and kept at hard labour, under a guard perpetually, clearing the channels and moats round the city. Three leagues west of the town is the island of Onrest, where all the Company's ships are refitted. There are magazines of naval stores defended by platforms of guns, and the castle at Batavia is quadrangular, lies in a level, and has four bastions and curtains faced with white stones, and provided with watch houses.

“ In this castle or rather citadel, the Dutch Governor General, and most of the members of the Council of India, with other officers of Batavia, have their residence.

“ The governor's palace is of brick, large, and well built. In this palace is the council chamber, the secretary's office, and chamber of accounts. The general's wall is hung with bright armour, ensigns, flags etc. taken by the Dutch there. The governor gives audience to strangers who are introduced to him by the Shabander, who is commissioner of the customs. The garrison on duty is generally about 1,000 strong and all the out works are said to be furnished with provisions, as well as can be, but the soldiers are kept much under, except the governor's guards who have large privileges and make a fine appearance. The Governor General lives in great splendor as a king. He has a train and guard, viz. a troop of horse, and a company of foot with halberds in liveries of yellow satin, richly adorned with silver lace, and fringes to attend his coach when he goes abroad. The guards are as well equipped as those of most princes in Europe. His lady has also her guards and train.

“ He is chosen but for three years, out of the twenty-four counsellors called Raads of India, twelve of whom must always reside in the city. The Chinese have the greatest trade here,

farm most of the excise and customs, live according to their own laws, and are allowed their idolatrous worship, and have a chief that manages their affairs with the Company, who allows them great privileges and particularly a representative in council, who has a vote, when any of the Chinese are tried for life.

“The Javanese, or the antient natives, are numerous, and said to be barbarous and proud of a dark colour, and flat faces, thin, short, black hair, large eyebrows and cheeks. The men are strong-limbed, but the women are small. The former have a wrapper of calico three or four times round their bodies, and the latter from their armpits to their knees. The men have two or three wives besides concubines, and the Dutch say they are much addicted to lying and stealing. Those on the coast are generally Mohammedans, but the others are pagans. The women are not so tawny as the men, and many of them handsome, but in general amorous and unfaithful to their husbands, being very apt to give poison, which they do very cunningly. The town is very populous, but not one sixth of them Dutch. The Chinese go all bear headed and the Dutch say of them that they are more industrious and acute in trade than themselves.

“The discipline and order of the Dutch here both in civil and military affairs is truly admirable. They have all the necessaries for building and careening ships, and their officers as regular, as in His Majesty’s yards, whereas we have nothing like it in India. They keep the natives very much in awe, being perfectly despotic in their Government, because they say the natives are naturally so treacherous, that they are obliged to punish them severely for small faults. But they are more tender to the Chinese, because of the great trade they have by their means, and that they pay great rents for their shops, besides large taxes, and from 16 to 30 per cent. for money, which they frequently borrow of the Dutch. I was told that there are here about 80,000, who pay the Dutch a dollar ahead each month, for liberty to wear their hair, which they are not allowed to wear at home, since they were conquered by the Tartars.

“They come hither from China fourteen of sixteen junks yearly, being flat bottomed vessels from 300 to 500 tons burden. The merchants come along with their goods which are lodged in different partitions in the vessels, like warehouses, for which they pay a certain price, and not for the weight or measure of the cargo, as we do, so they fill them with what they please. They come in

with an easterly monsoon, and generally arrive in November or December, and return the beginning of June, so that the Dutch have all the Chinese commodities brought to them cheaper than they can fetch them, and being conveniently situated for the spice trade they have all in their own hands. They have seldom less than twenty sail of ships at Java, from 30 to 50 and 60 guns each, with men enough for them, on all occasions, *so that they might easily drive us out of most parts, if not all India should we ever have an unfortunate war with them.* Their soldiers are very well trained, and there is a company always on duty at every gate of the city and citadel, and they have 7 or 8,000 disciplined Europeans in and about the city, who can be assembled and ready for action at a very short warning. There are many pleasant seats about the city, and the adjacent country abounds with rice, sugar cane fields, gardens, and orchards, mills for sugar, corn and gunpowder, so that this is one of the pleasantest cities in the world. I do not think it is so large as Bristol, but it is more populous. They have schools for Latin, Greek, etc., and a printing house. They have lately begun to plant coffee here, which thrives very well, so that in a little time they may be able to load a ship or two. But I am told it is not so good as that in Arabia. We sailed from Batavia on 14th October."

1710. Captain Edward Cooke left the Downs in 1708 in the fleet under command of Captain Woodes Rogers. The following account is given :—

"On Tuesday 20th June, 1710, according to our reckoning we came to anker off Batavia, but with the Dutch it was 21st June. When we came to anker we fired 13 guns to salute the Dutch flag, but it being night, the commandant did not answer, but in the morning he sent his boat to make an apology, and then fired gun for gun with every ship. Soon after this very friendly salute we waited upon the Shebander (a sort of master attendant) and were introduced to the Governor who received us with cordiality, and examined our commission, but would not let us heave down in the States dock at Onrust, we not being a king's ship. He was enquiring of the success of the voyage, which we did not tell him too much about, for these Dutchmen are very crafty. All manner of trafique, except for provisions, was prohibited with the natives or inhabitants of the city, upon

the severest penalties, to avoid every occasion of dispute with the East India Companies. On October 14th we sailed, and on the 19th October, we came to anker off the Java Head, when two English gentlemen came off to us to demand the release of a man who had concealed himself, unbeknown on board. A party went on shore to shoot, as winds were contrary. One gentleman was seized quite unawares with a tiger, but he did yell so loud that the tiger ran away, only leaving him very badly hurt. They came in sight of great herds of animals."

1719. Captain John Clipperton sailed from Plymouth on the 13th February, 1719, in command of the ship *Success*, together with Captain Shelvoscke, in command of the *Speedwell*. The ships, after passing round the Horn, visited the ports of Manila, Macao, Amoy, and Canton, at the latter being well received by the English factory. They returned to Europe by the Straits of Sunda, but reported nothing of particular interest.

1722. Commodore Roggervein, a gentleman, we are told, of great "parts and penetration," sailed from Texel on the 12th July, 1721, with his fleet, consisting of the *Eagle*, 36 cannon, 111 men, Captain Job Coster, on which the commodore embarked; the *Tienhoven*, 28 cannon, 100 men, Captain James Bouman; the *African Galley*, 14 cannon, 60 men, Captain Henry Rosenthal.

His intention was to sail to the East Indies by the Straits of Magellan on behalf of the West India Company. The result of this venture has been given earlier in this book.

The Governor-General at Batavia, as the representative of the East India Company, confiscated their ships on their arrival. The account relates as follows:—

"We anchored at the road of Japara just on the close of September (1722), and saluted, according to custom, both the city and the fort, and quickly hoisted out our shallops to go ashore at Japara, and on our arrival were surprised to find that on shore it was Saturday, though in quitting our ships, we thought it was Friday. The first step was to pay a visit to the person

who resided there on the part of the Company, in order to acquaint him with our reasons thither. This person happened to be Ensign Kuster, a very civil, well behaved man, who instantly assembled a council to consider what measures were to be taken on this occasion. An account of the arrival was sent to Mr. Swaardekroon, who was at this time Governor General of the East Indies. The answer he sent us was extremely favourable, and he promised to assist with everything in his power.

“The town was used by the sailors a great deal, and they spent their time in swearing, drinking, and passing whole days and nights in debauched houses, the people at Japara being as profligate and lewd as it is possible to conceive a people, insomuch that the first question many of them asked of strangers, whether they have not brought some new oaths.

“The town of Japara is seated at the bottom of a mountain of moderate height, is of middling size, and inhabited chiefly by Javanese, Chinese and Dutch. When it was in the hands of the Portugeze, it was much more considerable in extent, than it is at present. The East India Company, before they got possession of Jacatra, fixed here the principal magazines for their merchandize, and it was their chief factory, on which all the factories of the island of Java were dependent, but that establishment was sunk long since, the factory being transferred to Samaran [Samarang]. The port of Japara is equally safe, and there is a fort built mostly of wood, on the top of the mountain, at the foot of which the town is seated, that commands the whole road. The King of Japara generally speaking resides at a place called Kattasura [Kartasoera] which lies 29 leagues up the country, where the Dutch have a strong fort, and a good garrison.

“This prince is a Mohommedan, and according to the practice of most Eastern monarchs, is constantly served by women, of whom he takes as many as he pleases, either as wives or concubines. Some of his priests are obliged to go every year to Mecca, in order to make vows there for the safety and prosperity of the king and royal family. His subjects are extremely faithful and to the last degree devoted to his service. The principal persons in his court are obliged, as often as they have an audience, to approach him creeping on their knees. Such as commit the slightest fault are poniarded on the spot with a little dagger called a *krid*. The natives of this country are for the most part

of very brown complexion, and their teeth exceedingly bad, which is owing to their betel, which they are chewing continually. The prevailing diversion among these people is what they call their *tandakes*, which are in fact a kind of comedies. After resting at Japara we sail to Batavia, where our ships are seized.

“The city of Batavia is an emporium where all the merchandise and riches of the East Indies are laid up, and that wealthy Dutch East India Company possess. It fell into the hands of the Dutch in 1618, and was till then known as Jacatra. Soon after it came into their possession they built in the neighbourhood of the old city, a fort¹ which they called Batavia. By that time it was well finished, the natives of the island animated and assisted by the English, attacked it several times, but without success. The last time they kept it blocked up for some time, till the Dutch were assisted by a squadron from Europe, under the command of the Admiral Jan Pietersz Koen. Then it was that affairs began to change their face, the siege was immediately raised and the islanders obliged to flee with the utmost precipitation.

“The Dutch delivered from their enemies, and having considered the excellent position of the fort, they immediately resolved to build a town near it. It was with this view that they demolished Jacatra and built upon its ruins that famous city, which from the name of their fort they called Batavia.

“This city arrived at perfection in a very short space of time, by the extraordinary diligence with which it was carried on, notwithstanding the many obstacles it met with on the part of the two kings of Mataram and Bantam, the former of whom besieged it about 1629, and the latter about 1649. It is surrounded by a rampart of one and twenty feet thick, covered on the outside with stone, and fortified with twenty-two bastions. This rampart is environed by a ditch about 45 yards over, especially when the tides are high in the spring. The avenues of the town are defended by several forts, each of which is well furnished with excellent brass cannon. Among these forts there are six which serve to be particularly mentioned, viz., Autjol, Anke, Jacatra, Ryswyck, Nordwyck, and Vythock. The fort of Autjol is situated on a river of the same name, and at the distance of 1,200 yards from the city. It is built entirely of square stone, and is always provided with a strong garrison. The fort of Auke is on the

¹ Near where the present Bank of the Netherlands India factory stands.—D. M. C.

river of the same name, and distant from the city 500 yards, built like the other of square stone entirely. The fort of Jacatra also lies on a river of the same name, is exactly like the other two forts, and is about 500 paces from the city. The road thither is between two rows of fine trees, regularly planted, with very fine country houses and gardens on each side. The three other forts are built in the same manner, of the same materials, lying all on the land side of the town, and at a very small distance from it. By this means the two first serve to secure the city on the side of the sea, and the other four defend its entrances on the land side, and at the same time protect the houses, plantations and gardens of the inhabitants, and any side on which their enemies should attack them would be sure to meet with a strong resistance. They take besides, another precaution, which is not suffering any person to go beyond these forts without a passport. The river which preserves its ancient name of Jacatra passes through the midst of the town and forms 15 canals of running water, all faced with free stone, and adorned with trees that are ever green, and which consequently afford a most charming prospect. Over these canals are 56 bridges, besides those which lie outside the town. The streets are all of them perfectly straight, and generally speaking 30 feet broad. The houses are built of stone, and mostly very high, because the place has not of late years been exposed to hurricanes. The city is about a league and a half in circumference, it is surrounded with a vast number of houses, so that there are at least ten times the number of houses without the city, that there are within it, and therefore strictly speaking they might be regarded as its suburbs. The city has five gates including that of the port near to which there is a barrier, which is regularly shut at 9 o'clock in the evening, and at which there is posted night and day, a strong guard of soldiers. There were formerly six gates, the last being called Speelman's gate, because built by Governor Speelman, who died about January 11th, 1684, has been walled up since.

“There is a very fine town house, and four churches for the use of the reformed religion, that is to say, the Calvinists. The first of these was built in the year 1640, and is called the Krin's Kirk, *i.e.*, Cross Church. The second was built in 1670. In both these they preach in Dutch. The third belongs to the protestant Portuguese, and the fourth to the Malayans. Besides these churches there are abundance of other places of worship for all

sorts of religions. They have likewise in this city a *spinhuys*, or an house of correction, in which women who behave loosely are confined, an orphan house, a magazine of sea stores, many of spices, wharfs, cord manufactures, and many other public buildings.

“The garrison consists commonly of two to three thousand men. Before the great number of forts, before spoken of, there is the famous Citadel of Batavia, which is a very fine regular fortification, situated at the mouth of the great river,¹ facing the city, and flanked with four bastions, two of which command the sea, and the other two of the town. This citadel hath two great gates, the one called the Company’s Gate, which was built in 1636, with a bridge of square stone, consisting of 14 arches, each 26 yards long, and 10 feet broad, the other called the Water Gate, built in 1630. All the keepers of the magazines have their lodgings in the citadel, along both sides of the curtain. There are besides two posterns, one in the east curtain, and the other in the west, which are never opened, but for the service of the garrison. It is in this city that the Governor General of the Indies has his habitation. His palace is built of brick, 2 stories high, with a most noble front, after the Italian manner. Over against his palace is that of the director general, who is the next person to the governor. The counsellors, and other principal officers of the Company, have also their apartments there, as have likewise the physician, the surgeon, and the apothecary. There is a neat little church, which was built in 1644, remarkably neat and light. There were besides in the citadel arsenals, and magazines² furnished with ammunition for many years. In a word, this citadel is the general factory, where all the archives are kept, and where all the affairs of the Company are transacted.

“The city of Batavia is not only inhabited by Dutch, but abundance of Portuguese, French and other Europeans established here on account of trade. These Portuguese are for the most part, descendants of those who lived here formerly, or at Goa. The Chinese inhabitants are very numerous, it is reckoned in the city and suburbs, they are at least 5,000. These people seem born for trade, enemies to idleness, and who think nothing hard or laborious, the performance of which is attended with a certainty of gain. They can live upon a very little, are bold,

¹ Now known as the Kali Besar.—D. M. C.

² Still standing unimpaired by the climate.—D. M. C.

enterprising, have a great deal of address, and are indefatigably industrious. They have a penetration and subtilty very extraordinary, inasmuch that they seem to make good their own saying, that the Dutch have one eye, but they have two, but with all this they are deceitful to the last degree, take a pride in imposing upon those who deal with them, and boast of their cunning.

“In husbandry and navigation they very far surpass all other Indian nations which assemble here, viz., Javanese, Malayans, negroes, Amboynese, Armenians, Balian, Mardykens, Macassars, Timors, Bougis, etc.

“Most of the sugar mills in Batavia belong to the Chinese, and the distillery of arrack is entirely in their hands. They are the carriers of Asia, and the East India Company itself frequently makes use of their vessels. They keep all the shops and most of the inns in the city, and are likewise the farmers of the duties, excises and customs.”

1747. The following is an account by an Englishman voyaging to the East Indies, but his name is not given :—

“The vessel left Gravesend on 30th July, 1746 :

“On 19th April [1747] we came to anchor in Batavia road, having taken 14 days to pass through the straits of Sunda. The island of Onrust, or No Rest, bore us N.W. by N., the island of Edam N.N.E., and the cupola of Batavia church S. by E.

“We found nine Dutch ships, several Chinese junks, and the English East India Company’s ship *Dragon* from Borneo all at anchor.

“The men of Batavia go naked to the middle, which is covered with a piece of calico, or cotton reaching nigh to the knee. Some of the women go in the same manner, but those about the towns and coast, wear a waistcoat of white cotton, with straight sleeves, and laced before, which sloping at the breast, show their neck to advantage. As their waistcoat does not reach quite down to this thin petticoat, there appears tawny skin all round the middle. Both sexes have generally good features, and marry very young, the women being ripe to bear children at 12 years.

“The Javan women are exceedingly amorous and have a peculiar excellency which many of our English ladies cannot boast, namely constancy. But indeed they expect that the men should be no less faithful in their turn, for if the female find any

reason to suspect her gallant of infidelity, a potion is found to put an end to all future intercourse. They have fine regular features, little swelling breasts, sprightly eyes, shining black hair, a pleasing softness in their manner, and a most agreeable smile. They are very cleanly, bathing every morning and evening.

“The island is exceedingly hot, and in some parts unwholesome, especially about the bays and shores, but it is exceedingly fertile.

“The Malayan language is spoken by the natives, and I have known several Englishmen who in six months’ residence have been capable to transact any business and speak tolerably well.

“Though they have grapes in plenty here, yet is the climate too hot for making wine.

“Until 1682 both the Dutch and English had factories at Bantam, but after a local trouble between the king and his son in which the English supported the father who was worsted by his son, they and their factory were sent a-packing with a great deal of insolence and inhumanity.

“The Dutch still have a garrison here of four or five hundred soldiers to secure their factory, and keep the natives in subjection, who have a rooted enmity to the Dutch, for if a Dutchman goes but a very small distance from the fort, it is a great chance he never returns.

“The only product of this part is pepper, they can export 10,000 tons. The road is still pretty good, with a pleasant bay in which several small islands are situated which till within these few years past retained their English names. The natives called them by those names to show their regard for the English, and how much they lament the loss of their trade among them.

“The town of Batavia is square with a strong wall, 30 bastions, well planted with cannon. The governor’s house and principal officers’ houses are all inside a strong fort at the west side of the city.

“In the middle of the city is a large square, used as a parade for the garrison. On the west side of this square stands a church with a large cupola. On the south of this square is the stadthouse.

“Men of business here seldom wear coats, but a waistcoat. I lodged in an Irishman’s house, who made a deal of money; when I went to bed I had five or six slaves to attend me, one with a candle, another to untie my clothes. There are several

Scotch and Irish gentlemen here, who are people of the best fashion. I became acquainted with Mr. Scot and Mr. Garden, both Scotchmen, who were men in great reputation and in a rising way ; I also saw Captain Gosling of the ship *Sussex*, who may not appear in England.

"The ground from 10 to 12 miles round Batavia is pretty well cultivated. The Dutch grandees have country houses and large retinues and also their pleasure houses in the islands in the bay, where they pass to and fro in boats built for the purpose ; these islands being shaded with groves, are cool and pleasant.

"The English had once a settlement at Japara, which is now well fortified by the Dutch. Sugar is cheap here, and was bought for two Dutch dollars a parcel of 133 lbs. English."

1765. Commodore Byron, in His Majesty's ship *Dolphin*, left the Downs on the 21st June, 1764, to sail round the world. He gives an account as follows :—

"We anchored on 27th November (1765) at Batavia and saluted the fort with 11 guns which were returned. We found lying here above a hundred sail, among others a large English ship belonging to Bombay, which saluted us with 13 guns.

"There is always lying here a Dutch commodore belonging to the Company, who among his countrymen is a man of great importance. This gentleman thought fit to send his boat on board of me, with only the coxswain in her who was a very ragged fellow ; as soon as he was brought to me he asked whence I came, whither I was bound, and many other questions equally impertinent ; he was desired immediately to walk over the ship's side, which he was graciously pleased to comply with.

"As it was the rainy season, and arrack was plentiful, I decided to make my stay as short as possible. I went on shore to wait upon the Dutch governor, but was told he was at his country house, 4 miles distant. I met however an officer called a 'shebander,' who is a kind of master of ceremonies, who informed me that I could visit the governor, and he would attend me. I accepted his offer, and we set out together in his chariot. The governor received me with great politeness, and told me I might either take a house in any part of the city, or be provided with lodgings in the hotel, which I liked. The hotel is a licensed lodging house kept by a Frenchman, an artful fellow who is put in by the governor himself. It has indeed more the appearance

of a palace than a house of entertainment, being the most magnificent building in Batavia.

"All the houses have a stately appearance, and the Chinese were the architects. The streets are well laid out, and canals run through most of them, with trees planted on each side.

"The beef here is bad, and mutton scarce.

"We sailed on the 10th of December."

1767. Captain Samuel Wallis in command of His Majesty's ship *Dolphin* (which had just returned from her voyage round the world) left Plymouth Sound on the 26th July, 1766, for a voyage round the world. He relates as follows :—

"On Monday the 30th November (1767) we anchored in the Batavia road, and found here 14 sail of Dutch East India ships, and a great number of small vessels, and H.M.S. *Falmouth* lying upon the mud in a rotten condition. I sent an officer on shore to acquaint the governor of our arrival, to obtain his permission to purchase refreshments and to tell him I would salute him if he would engage to return an equal number of guns. The governor readily agreed, and at sunrise on Tuesday the 1st of December I saluted him with 13 guns, which he returned with 14 from the fort.

"Soon after the purser sent off some fresh beef, and plenty of vegetables, which I allowed, but no liquor. On the 2nd I sent the boatswain and the carpenter with the carpenter of the *Falmouth* to look at such of her stores as had been landed at Onrust, with orders that if any were fit for our use they were to be brought, but they were rotten, and the ship was in a shattered condition, many of her ports being washed into one, and there was no place in her where a man could be sheltered from the weather. The few people that belonged to her were in as bad a state as their vessel, being quite broken and worn down, expecting to be drowned as soon as the monsoon set in. Among other necessities we were in want of an anchor, having lost two, but the price demanded here was very exorbitant. On the 5th, I went on shore myself and visited the different store houses and arsenals, and found dealers trying to extort four times the value of articles.

"We left on December 8th."

1768. Philip Carteret, commander of His Majesty's ship *Swallow*, left Plymouth on the 22nd August, 1766, to sail round the world. He relates as follows:—

“ On the evening, Sunday 29th May (1768), we saw the cluster of small islands called Carimon Java. On 2nd June, we hauled in and made the land of Java, which proved to be that part of the island which makes the eastern most point of the bay of Batavia, called Carawang Point. We anchored at night near the two small islands called Leyden and Alkmar, in sight of Batavia and next day (3rd February) we anchored in the road.

“ We found here eleven large Dutch ships, besides several that were less, one Spanish ship, a Portuguese scow and several Chinese junks. Next day we saluted the town with 13 guns, and the same number was returned.

“ In the afternoon I called upon the governor, and acquainted him with the condition of the ship, desiring liberty to repair her defects, to which he replied that I must petition the council.

“ On the 6th therefore, which was council day, I petitioned the council, setting forth more particularly the condition of the ship, and requesting leave to use the wharfs and store houses as should be necessary. On the next day, the shebander, with Mr. Garrison, a merchant of the place, as interpreter and another person came to me.

“ On the 15th not having received a reply to my letter to the council, I wrote a second, directed like the first in pressing terms, and on the 18th the shebander came again to me and acquainted me that the council had given orders for the repair of the ship at Onrust.

“ A pilot was ordered to attend me, and on 22nd we anchored at Onrust and cleared the ship of her stores, a Dutch ship taking them in.

“ While we remained here, two ships belonging to our India Company put into this port, and we found among other private ships from India, one called the *Dudley* from Bengal. I received many civilities from the Dutch admiral Houting. Mr. Houting is an old man, an admiral with the rank of commander in chief of their marine.

“ He received his first maritime knowledge on board an English man of war, speaks English and French extremely well. He was so obliging as to give me a general invitation to his table, in

consequence of which I was often with him. He was indeed the only officer belonging to the Company from whom I received any civility, or with whom I had the least communication, for I found them in general a reserved and supercilious¹ set of people.

“The governor, though a servant of a republic, takes upon himself more state than any sovereign in Europe. Whenever he goes abroad, he is attended by a party of horse guards and two black men go before his coach in the manner of running footmen, each having a large cane in his hand, with which they not only clear the way, but severely chastise all who do not pay homage that is expected from people of all ranks as well those belonging to the country as strangers.

“Almost everybody in this place keeps a carriage which is drawn by two horses, and driven by a man upon a box like our chariots, but is open in front. Whoever in such a carriage meets the governor, either in the town or upon the road, is expected not only to draw it to one side, but to get out of it and make a most respectful obeisance, while his Excellency’s coach goes by, nor must any carriage that follows him drive past on any account, but keep behind him, however pressing be the necessity for haste. A very mortifying homage of the same kind is also exacted by the members of the council called *Edele Heeren*, for whoever meets them is obliged to stop his coach, and though not to get out, to stand up in it and make his reverence. These *Edele Heeren* are preceded with one black man with a stick, nor must any person presume to pass their carriage any more than that of the governor.

“These ceremonies are generally complied with by the captains of Indiamen, and other trading ships, but having the honour to bear His Majesty’s commission, I did not think myself at liberty to pay to a Dutch governor any homage which is not paid to my own Sovereign ; it is however, constantly required of the King’s officers, and two or three days after I came hither, the landlord of the hotel where I lodged told me he had been ordered by the *shebander* to let me know that my carriage, as well as others must stop, if I should meet the governor or any of the council, but I desired him to acquaint the *shebander* that I could not consent to perform any such ceremony, and upon this intimating somewhat about the black men with sticks, I told him that if any insult should be offered me, I knew how to defend myself, and would take care to be on my guard, and at the same time pointing

¹ This is not correct.—D. M. C.

to my pistols which there happened to lie upon the table. Upon this he went away, and about three hours afterwards he returned and told me he had the orders of the governor to acquaint me that I might do as I pleased.

“The hotel at which I resided is licensed by the governor and council, and all strangers are obliged to take up their abode there except officers in His Majesty’s service, who are allowed private lodgings. At this place I continued during three or four months, and during all that time I had the honour to see the governor but twice. Soon after the news of the Prince of Orange’s marriage, I arrived here. He gave a public entertainment, to which I had the honour to be invited, but having heard that Commodore Tinker upon a like occasion, finding that he was to be placed below the gentlemen of the Dutch Council, had abruptly left the room, and was followed by all the captains of his squadron, and being willing to avoid the disagreeable dilemma of either sitting below the council, or following the commodore’s example, I applied to the governor to know the station that would be allotted me before I accepted his invitation, and finding that I could not be permitted to take place of the council, I declined it. On both occasions I spoke to his Excellency, he had not the civility to offer me the least refreshment.

“The defects of the ship were at length repaired, and we set sail from Onrust on 15th September, and I sent my lieutenant to take leave of the governor on my behalf, and offer my service if he had any despatches for Europe.

“It was happy for me, I was able to procure a supply of English seamen here, otherwise I should not have been able to bring the ship home, for I had now lost no less than 24 of the hands I had brought out of Europe, and had 24 more so ill that 7 of them died on our passage to the Cape.

“On the 20th we anchored on the S.E. side of Princes Island in the Streight of Sunda, and the next morning, I sent out the boats for wood and water.”

1768. Captain Louis de Bougainville, a colonel of foot, was the first Frenchman to sail round the world, being commodore of the expedition on the frigate *La Boudeuse*, which, with the store-ship *L’Etoile*, left Nantes on the 15th October, 1766. He says :—

“Thus after keeping the sea for so long we arrived on

28th September (1768) at one of the finest colonies in the universe. On our arrival there were 13 or 14 Dutch Company's ships in the road, one of which is a flag ship. This is an old ship which is left at this station ; it has the jurisdiction of the road, and returns the salute of all the merchant ships. I had already sent an officer to inform the governor general of our arrival, when a barge from this flag ship came on board with a paper written in Dutch, which I knew nothing of. The officer who had been sent to the general did not return till 9 o'clock in the evening ; he had not seen his Excellency, who was in the country, and he was brought before the Shabander, or introducer of strangers, who appointed him to return the next morning and told him that if I would come on shore, he would conduct me to the general.

" We set out at 6 o'clock in the morning (as visits are made very early on account of the heat), conducted by the Shabandar, Mr. Van der Huys, and we went to Mr. Van der Para, General of the East Indies, who was at one of his country houses about 3 leagues from Batavia. We found him a plain but civil man, who received us perfectly well, and offered us all the assistance we could be in need of. He consented to have our sick put into the hospital of the company, and immediately sent orders for their reception. He appeared neither surprised nor displeased at our having touched at the Moluccas. As to the supplies which the King's ships were in want of, it was agreed that we should give in an account of our demands to the Shabandar who should be charged with providing us with everything. One of the purquisites of this place was to gain something by us, and something by the undertakers.

" When all this was settled the general asked me whether I could not salute the flag ; I answered I would on condition that the salute was returned gun for gun from the place. Nothing, says he, is more equitable, and the citadel has got the proper orders. As soon as I was returned on board I saluted with 15 guns, and the town answered the same. I immediately sent to the hospital our sick from both ships, in number 28, of the greater part ill of a bloody-flux, but some with scurvy.

" We at the same time thought of getting a lodging in town, during our stay ; this we got in a great and fine house called the Inner Logement where you are lodged and boarded for two dollars a day. The house belongs to the Company who let it to a private person, and by that means give him the exclusive

privilege of lodging all strangers, only men of war are not subject to this law, and therefore the officers of the *Etoile* went to lodge in private family. We hired the carriage with room for two persons to visit the environs. On the third day of our arrival, we went in a body to pay a visit of ceremony to the general, the shabandar having previously given notice. He received us in another country seat named Jacatra¹ of which the distance from Batavia is only about a third of the house where I had been on the first day. The road which leads to it cannot be compared than to the place called Boulevards at Paris supposing them to be embellished with a canal of running water. We ought to have made several other visits of ceremony, likewise introduced by the Shabandar, namely the Director-General, the President of Justice, and the Chief of the Marine. Mr. Van der Huys told us nothing of it, and we only visited later. His title is *Scopenhagen* (Schout by Nacht) which signifies Rear Admiral.

“ He keeps a great retinue, lives very high and makes himself amends, for the bad moments he has often passed at sea, enjoying all the honours due to *Edel Heers* in a delicious villa. The principal inhabitants of Batavia endeavoured to make our stay agreeable to us. Great feasts in the town, and country concerts, charming walks, the sight of the emporium of the richest country in the world. Here is likewise a pretty good play house. We were never tired of admiring the houses with their elegant gardens which are kept in order and taste and with that neatness which is peculiarly observable to the Dutch.

“ Mr. Mohr, a clergyman at Batavia, a man of immense riches, built an observatory in the garden of one of his country houses, which would be an ornament to any royal palace. On account of the unwholesome water, people at Batavia drink nothing but seltzer water which they get from Holland at a vast expence. The luxury which prevails at Batavia is very striking; the magnificence and taste with which the interiors of houses are decorated, are proofs of the riches of the inhabitants. We have however been told that Batavia is not near so great as it had been, as the Company have forbid private commerce which was a source of an immense circulation of riches. I only know that the persons in their service still know the secret of making 30, 40 and 100 and up to 200,000 livres of yearly revenues, of their places, to

¹ Now used as business houses. The Borneo Company, Limited, hire a portion of this old palace.—D. M. C.

which the salaries of 1,500, 3,000, and at most 6,000 livres are annexed. House rents are for certain two-thirds below their ancient value. There are no means of conveying money to Holland except through the Company who take charge of it at the rate of 8 per cent. discount. Besides this it is impossible to send over such cash by stealth, the specie which is current here losing 28 per cent. in Europe.

“The Company employs the Emperor of Java to strike a particular coin, which is the currency throughout India. There are many violent diseases at Batavia, from the best state of health people were in three days brought to the grave by violent fevers.

“The court of justice decides without appeal in all cases. About 20 years ago they condemned a Governor of Ceylon to death. That Edel Heer was convicted of exercising horrible oppressions in his government and was executed at Batavia, on the place opposite the citadel [probably stadt house]. The constancy of the Javanese in suffering the most barbarous torments is incredible, but when they are executed, they must have white drawers on, otherwise there is a revolt for they fear from the tenets of their religion a bad reception in the next world, without them.

“The greatest safety of the Dutch consists in the ignorance of Europe concerning the true state of these wonderfully rich isles, and in the mysterious clouds, which wrap this garden of the Hesperides in darkness.¹

“Mr. Dalrymple, the first governor of Papua, where the Dutch have a settlement, tried to make the Moluccas more known, but his post after three years was abandoned, and he sailed for Bencoolen in the ship *Patty*, Captain Dodwell, which called at Batavia in 1768. The *Patty* sank in the roads of Bencoolen when she arrived there.

“M. Watson in 1764, who commanded H.M.S. *Kingsberg*, a frigate of 26 guns, sailed also many times through the Moluccas, and always obliged the natives to furnish pilots by firing off muskets at them until they furnished one.”

1770. Lieutenant James Cook, commander of His Majesty's bark *Endeavour*, left Deptford on the 25th May,

¹ This was true almost down to to-day.

1768, on his celebrated voyage round the world, visiting New Zealand and Australia. He says :—

“ On October 1st, 1770, bore on to Java Head, and soon after saw Princes Island, and the island of Cracatoa. Cracatoa is a remarkably high peaked island.

“ On 2nd October, we fetched close in with the coast of Java and sent a boat ashore to procure fruit and some grass for the buffaloes. In an hour or two the boat returned with four cocoa nuts and a small bunch of plantains which had been purchased for a shilling, and some herbage for the cattle, which the Indians not only gave us, but assisted our people to cut. We later on passed Auger Head, and saw two Dutch ships lying here. I sent my lieutenant on board one of them to enquire for news of our country. He returned and told me the two vessels were Indian men from Batavia, one of which was bound for Ceylon and one to the coast of Malabar, and that there was also a flyboat or packet, appointed to examine all ships that pass the streight, but said to be here to carry letters only.

“ At 6 o'clock we anchored, the wind having obliged us to do so, and one of the country boats came alongside of us, on board which was the master of the packet. He seemed to have two motives for his visit, one to take any account of the ship and the other to sell us refreshments, for in the boat were turtle, fowls, ducks, parrots, paroquets, rice birds, monkies and other articles which they held at a very high price. I gave a Spanish dollar for a small turtle which weighed about 36 pounds, a dollar for 10 large fowls, afterwards 15 more at the same price ; for a dollar we could also have two monkies, or a whole cage of rice birds. The master of the ship brought with him two books in one of which he desired that any of our officers could write down their names, of the ship with that of the place from which she sailed, and where she was bound to, and in the other, the names of the ship and commander, in order to transmit them to the governor and council.

“ We perceived that in the first book, many ships, particularly Portuguese, had made entries of the same kind. On the 5th a proa came alongside in which was a Dutch officer, who sent me down a printed paper in English, duplicates of which he had in other languages, French and Dutch. It contained nine questions :

“ (1) To what nation the ship belongs, and its name ?

- “(2) If it comes from Europe, or any other place ?
- “(3) From what place it lastly departed from ?
- “(4) Whereunto designed to go ?
- “(5) What, and how many ships of the Dutch Company by departure from the last shore there layed, and their names ?
- “(6) If one or more of these ships in company with this, is departed for this, or any other place ?
- “(7) If during the voyage any particularities is happened or seen ?
- “(8) If not any ships in sea, or Streights of Sunda, have seen, or hailed in and which ?
- “(9) If any other news worthy of attention at the place from which the ship lastly departed or during the voyage is happened.

“Batavia in the Castle,

“By order of the Governor General and the Counsellors of India.

“J. BRANDER BUNGL, Secretary.

“At 4 o'clock in afternoon of Tuesday 9th [October 1770] we came to anchor at Batavia, and we found here the *Harcourt* Indianman from England, two English private traders of that country, 13 sail of large Dutch ships and a considerable number of small vessels. A boat came immediately on board from a ship which had a broad pennant flying, and the officer on board having enquired who we were, we returned him such answer as we thought fit to give him ; both he and his people were as pale as spectres. In the meantime I sent the lieutenant on shore to acquaint the governor of our arrival, and to make an excuse for our not saluting. I applied for leave to heave the ship down.

“We repaired immediately to the house of Mr. Leith, the only Englishman of any credit who is resident at this place, he received us with great politeness, and engaged us to dinner : to this gentleman we applied for instructions how to provide ourselves with lodgings and necessaries while we should stay ashore, and he told us there was an hotel, or kind of inn, kept by the order of the Government, where all merchants and strangers were obliged to reside, pay half per cent. upon the value of their goods for warehouse room, which the master of the house was obliged to provide, but that as we came in a King's ship, we should be at liberty to live where we pleased, upon asking the governor's

permission, which would be granted of course. He said that it would be cheaper for us to take a house in the town, and bring our own servants ashore if we had anybody upon whom we could depend to buy in our provisions, but as this was not the case, having no person among us who could speak the Malay language, our gentlemen determined to go to the hotel. At the hotel therefore beds were immediately hired and word was sent that we should sleep there at night.

"At 5 o'clock, I was introduced to the Governor-General, who received me very courteously ; he told me I should have everything I wanted. I told him what I wanted, and he said my request should be laid before the council. The next morning I attended the council chamber, and I was told I should have everything I wanted.

"In the meantime the gentlemen ashore agreed with the keeper of the hotel for their lodging and board, at the rate of two rix dollars, or nine shillings sterling a day each, and as there were five of them, and they would probably have many visitors from the ship, he agreed to keep them a separate table, upon condition that they should pay one rix dollar for the dinner of every stranger, and another for his supper and bed. Under this stipulation they were to be furnished with tea, coffee punch, pipes and tobacco, as much as they could consume ; they were also to pay half a rupee, or one shilling and threepence a day for each of their servants. Their table, though it had the appearance of magnificence, was wretchedly served. Their dinner consisted of one course of 15 dishes, and their supper of one course of 13 dishes, but nine out of ten of them consisted of bad poultry variously dressed, and often served up the second and third and even fourth time ; the same duck having appeared more than once roasted, found his way to the table as a fricasee, and a fourth time in the form of forced meat. It was not long however before they learnt that this treatment was by way of essay, and that it was the invariable custom of the house to supply all strangers at their first coming with such fare as could be procured for the least money, and consequently would produce the most gain, that if either through indolence or good nature they were content, it was continued for the benefit of the host, but if they complained it was gradually amended till they were satisfied, which sometimes happened before they had the worth of their money.

“ After a few days, Mr. Banks hired a little house, the next door on the left hand of the hotel, for which he paid after the rate of ten rix dollars or two pounds five shillings sterling a month for himself and his party, but here they were very far from having the convenience or the privacy which they expected ; no person was permitted to sleep in this private house occasionally, as a guest to the person who hired it, under a penalty, but almost every Dutchman that went by ran in without any ceremony to ask what they sold, there having been very seldom private persons at Batavia who had not something to sell.

“ Everybody here hires a carriage, they are open chaises made to hold two people, and driven by a man sitting on a coach box, for each of these we paid two rix dollars a day. In the meantime I procured an order that the ship might be sent to Onrust. The expenses to be incurred by refitting the ship, rendered it necessary for me to take up money in this place, which I imagined might be done without any difficulty, but I found myself mistaken, for after the most diligent enquiry, I could not find any private person that had ability or inclination to advance the sum I wanted. In this difficulty I applied to the governor himself by a written request, in consequence of which the shebander had orders to supply me with what money I should require out of the Company's treasury.

“ A few days afterwards, we went alongside the wharf on Cooper's Island which lies close to Onrust, in order to take out our stores. Our men were for the most part all seized with fevers. Dr. Solander was also attacked, and his disorder grew worse, and Mr. Monkhouse the surgeon was confined to his bed ; no doubt all were affected by the low swampy situation of the place, and the numberless dirty canals which intersect the town in all directions. Malay servants were hired to attend the sick, but they had so little sense either of duty or humanity that they could not be kept within call, and the patient was frequently obliged to get out of bed to seek them. Mr. Banks and Dr. Solander were so bad that the physician declared they had no hope of recovery but by removing into the country. A house was therefore hired for them at a distance of about two miles from the town, which belonged to the master of the hotel, who engaged to furnish them with provisions, and the use of slaves.

“ They bought each of them a Malay woman which removed the causes of their being so ill served ; the women were their

own property, and the tenderness of the sex even here made them good nurses. Mr. Banks and Dr. Solander now recovered slowly.

“ 26th November. The raining season had now commenced, as we had seldom seen such rain for near four hours without intermission.

“ Mr. Banks’ house admitted the water in every part like a sieve. Next day we were surprised to see the bedding everywhere hung out to dry.

“ December 24th. While we lay here, the ship *Earl of Elgin*, Captain Cook, belonging to the English East India Company, came to anchor in the road. She was bound from Madras to China, but having lost her passage, put in here to wait for the next season. The *Phoenix*, Captain Black, an English country [?] from Bencoolen also came to an anchor. The ship being perfectly refitted, in the afternoon of Christmas Eve I took leave of the Governor, and several of the principal gentlemen of the place, with whom I had found connections, and from whom I received every possible civility and assistance.

“ On the 26th, we weighed and set sail, the *Elgin* Indiaman saluted us as we passed with three cheers and 13 guns, which we returned.

“ Just before leaving, a seaman ran away from one of the Dutch ships to us, and the Dutch officials demanded his return, but as he turned out to be a British subject, who preferred our service to theirs, I declined to part with the man on any terms, and told the Shabander to inform the governor. I heard no more of this affair.

“ Batavia seems to have been pitched upon by the Dutch for the convenience of water carriage, and in that it is a second to Holland, and superior to every other place in the world. There are few streets that have not a canal of considerable breadth running through them, or rather stagnating in them; as the houses are large and the streets wide, it takes up a great extent. Within the walls in 1726 were 1,242 Dutch houses, and 1,200 Chinese, and without the walls 1,066 Dutch and 1,240 Chinese, besides 12 arrack houses, making in all 4,760. The streets are spacious and handsome, and the banks of the canals are planted with rows of trees, that make a very pleasing appearance, but the trees concur with the canals to make the situation unwholesome. The stagnant canals in the dry season exhale an intolerable

stench, and the trees impede the course of the air by which in some degree the putrid effluvia would be dissipated. In the wet season the inconvenience is equal for then these reservoirs of corrupted water overflow their banks in the lower part of the town, especially in the neighbourhood of the hotel, and fill the lower stories of the houses, where they leave behind them an inconvenient quantity of slime and filth. Yet these canals are sometimes cleaned, but the cleaning of them is so managed as to become as great a nuisance as the foulness of the water, for the black mud that is taken from the bottom is suffered to lie upon the banks, that is, in the middle of the street, till it has acquired a sufficient degree of hardness to be made the lading of a boat, and carried away. As this mud consists chiefly of human ordure which is regularly thrown into the canals every morning, there not being a necessary house in the whole town, it poisons the air while it is drying to a considerable extent. Even the running streams become nuisances in their turn by the nastiness or negligence of the people, for every now and then a dead hog or a dead horse is stranded upon the shallow parts, and it being the business of no particular person to remove the nuisance, it is negligently left to time and accident.

“The houses are generally well adapted to the climate, they consist of one very large room or hall on the ground floor, with a door at each end, both which generally stand open. At one end a room is taken off by a partition, where the master of the house transacts his business, and in the middle between each end there is a court which gives light to the hall, and at the same time increases the draft of air. From one corner of the hall the stairs go up to the floor above where also the rooms are spacious and airy. In the alcove which is formed by the court the family dine, and at other times it is occupied by the female slaves who are not allowed to sit down anywhere else. The public buildings are most of them old, heavy and ungraceful, but the new church is not inelegant, it is built with a dome, that is seen from a great distance at sea, and though the outside has rather a heavy appearance, the inside forms a very fine room; it is furnished with an organ of a proper size, being very large, and is mostly magnificently illuminated by chandeliers.

“The town is enclosed by a stone wall of a moderate height, but the whole of it is old and many parts are much out of repair. This wall itself is surrounded by a river which in some places

is 50 and in some 100 yards wide, the stream is rapid but the water is shallow.

“The wall is also lined inside by a canal which in different parts is of different breadths, so that in passing either out or in through the gates, it is necessary to cross two draw-bridges, and there is no access for idle people or strangers to walk upon the ramparts which seem to be but ill-provided with guns. In the N.E. corner of the town stands the castle or citadel, the walls of which are both higher and thicker than those of the town, especially near the landing place where there is depth of water only for boats which it completely commands, with several large guns that make a very good appearance.

“Within this castle are apartments for the Governor-General, and all the Council of India, to which they are enjoined to repair in case of siege.

“Here are also large store houses where great quantities of the Company’s goods are kept, especially those that are brought from Europe, and where almost all the writers transact their business.

“In this place also are laid up a great number of cannon, whether to mount upon the walls on shipping we could not find out. Besides the fortifications of the town, numerous forts are dispersed about the country to the distance of 20 or 30 miles ; these seem to have been intended simply to keep the natives in awe, and indeed they are fit for nothing else. For the same purpose a kind of houses, each of which mounts about eight guns, are placed in such situations as command the navigation of three or four canals, and consequently the roads upon the banks ; some of these are in the town itself, and it was from one of these that all the best houses belonging to the Chinese were levelled with the ground in the Chinese rebellion of 1740. These defences are scattered over all parts of Java and the other islands of which the Dutch got possession in these seas. If the Dutch fortifications here are not formidable in themselves, they become so by their situation, for they are among morasses where the roads, which are nothing more than a bank thrown up between a canal and a ditch, may easily be destroyed, and consequently the approach of heavy artillery be either totally prevented, or greatly retarded. Besides in this country, delay is death, for that whatever retards an enemy will destroy him. In less than a week we were sensible of the unhealthiness of the climate, and in less than a month half

the ship's company were unable to do their duty. We were told that of a hundred soldiers who arrive here from Europe, it was a rare thing for fifty to survive the first year, that of those fifty, half would then be in the hospital, and not ten of the rest in perfect health.

"The pale wretches whom we saw crawling about with a musquet which they were scarcely able to carry inclined us to believe it was all true. Every white inhabitant of the town indeed is a soldier, the younger are constantly mustered, and those who have served five years are liable to be called out when their assistance is thought to be necessary. The Portuguese, indeed, are in general good marksmen because they employ themselves much in shooting wild hogs and deer. But if it is difficult to attack Batavia by land, it is utterly impossible to attack it by sea, for the water is so shallow that it will scarcely admit a long boat to come within cannon shot of the walls, except in a narrow channel called the river, that is walled on both sides by strong piers, and runs about half a mile into the harbour. At either end it terminates under the fire of the strongest part of the castle, and here its communication with the canals that intersect the town is cut off by a large wooden boom, which is shut every night at 6 o'clock, and upon no pretence opened till the next morning.

"The harbour of Batavia is accounted the finest in India, and to all appearance with reason, it is large enough to contain any number of ships as the ground is so good that the anchor will hold till the cable decays ; it never admits any sea that is troublesome and its only inconvenience is the shoal water between the road and the river. When the sea breeze blows fresh, it makes a cockling sea that is dangerous to boats, and a Dutch boat, laden with sails and rigging for one of the Indianmen, was entirely lost.

"Round the harbour on the outside lie many islands, which the Dutch have taken possession of, and apply to different uses. To one of them called Edam they transport all Europeans who have been guilty of crimes that are not worthy of death ; some are sentenced to remain there 99 years, some 40, some 20, some less down to 5 in proportion to their offence, and during their banishment they are employed as slaves in making ropes and other drudgery. In another island called Purmerent they have a hospital where people are said to recover much faster than in Batavia. In a third called Kuyper they have warehouses

belonging to the Company. At Onrust they repair their own shipping, having wharfs here (and at Kuyper), and keep a large quantity of naval stores.

"The country round Batavia is for some miles a continued range of country houses and gardens. Many of the gardens are very large and are planted with trees almost as thick as they can stand. These impenetrable forests stand in a dead flat which extends some miles beyond, and it is intersected in many directions by rivers, and more still by canals which are navigable for small vessels. Nor is this the worst, for the fence of every field and garden is a ditch, and interspersed among the cultivated ground there are many filthy fens, bogs and morasses ; it is not strange therefore that the inhabitants of such a country be familiar with death and disease ; preventative medicines are taken almost as regularly as food.

"We did not see a single face in Batavia that indicated perfect health, for there is not the least tint of colour in the cheeks either of man or woman, the women indeed are most delicately fair, but with the appearance of disease that can never be perfect beauty. People talk of death at Batavia with as much indifference as they do in camp, and when an acquaintance is said to be dead, the common reply is ' Well, he owed me nothing,' or ' I must get my money of his executors.'

"To this description of the environs of Batavia, there are but two exceptions ; the governor's country house is situated upon a rising ground, but its ascent is so inconsiderable that it is known to be above the common level only by the canals being left behind. His Excellency, who is, however, a native of this place, has, however, with some trouble and expense continued to enclose his own garden with a ditch, such is the influence of habit upon the taste and understanding.

"A famous market also called Passar Tanabank [Tanahabang] is held upon an eminence that rises perpendicularly about 30 feet above the plain [King's plain] and except these situations the ground to an extent between 30 and 40 miles round Batavia is exactly parallel to the horizon. [At a distance of about 40 miles inland there are hills of a considerable height, and where, as we are informed, the air is healthy and comparatively cool. Here the vegetables of Europe flourish in great perfection, particularly strawberries. Upon these hills, some of the principal people have country houses, which they visit once a year, and one was

begun for the governor upon the plan of Blenheim, but it has never been finished. The effects of the air is said to be almost miraculous and to these hills the people are sent by the physicians for the recovery of health.

“The quantity of fruit that is consumed at Batavia is incredible, but that which is publicly exposed to sale is generally over-ripe. A stranger however may get good fruit in a street called Passar Pisang, which lies north from the great church and very near it.

“This street is inhabited by none but Chinese fruit sellers who are supplied from the gardens of gentlemen in the neighbourhood of the town, with such as is fresh, and excellent in its kind, for which however they must be paid more than four times the market price.

“The town is generally supplied from a considerable distance, where great quantities of land are cultivated merely for the production of fruit. The country people to whom these lands belong meet the people of the town at two great markets, one on Monday called Passar Sineen [Parrar Senen] and the other on Saturday called Passar Tanabank. These fairs are held at places considerably distant from each other, for the convenience of different districts; neither of them however are more than five miles from Batavia.¹

“The quantity of fruit is astonishing, 40 or 50 cart loads of the finest pine apples, packed as carelessly as turnips in England, and as common.

“The inhabitants of this part of India practise a luxury; they are continually burning aromatic woods and resins, and scatter odours around them in a profusion of flowers, possibly as an antidote to the noisome effluvia of their ditches and canals. Of sweet smelling flowers they have a great variety. Flowers are sold about the streets every evening at sunset either strung upon a thread in wreaths of about two feet long or made up into nosegays of different forms, either of which may be purchased for about a halfpenny.

“Fish is amazingly plentiful, and there are many sorts, all very cheap.

“Although Batavia is the capital of the Dutch dominions in India, it is so far from being peopled by Dutchmen that not one fifth part even of the European inhabitants of the town

¹ By Batavia is meant where the offices now are.—D. M. C.

and its environs are natives of Holland, or of Dutch extraction ; the greater part are Portuguese, and besides Europeans, there are the Indians of various nations besides the Chinese and negro slaves. In the troops there are natives of almost every country in Europe, but the Germans are more than all the rest put together : there are some English and French, but the Dutch, though other Europeans are permitted to get money here, keep all the power in their own hands, and consequently possess all public employments. No man of whatever nation can come hither to settle, in any other character than that of a soldier in the Company's service, in which before they are accepted they must covenant to remain five years. As soon however as this form has been complied with, they are allowed upon application to the council to absent themselves from their corps, and enter into any branch of trade, and by this means it is that all the white inhabitants of the place are soldiers.

“ Women, however, of all nations are permitted to settle here, without any restrictions. When we were at Batavia, there were not 20 in the place that were born in Europe, but that the white women, who were by no means scarce, were descendants from European parents of the third or fourth generation, the gleanings of many families who had successively come hither, for it is certain that whatever be the cause, this climate is not so fatal to the ladies as to the other sex.

“ These women imitate the Malaysians in every particular, their dress is made of the same materials, their hair is worn in the same manner, and they are equally enslaved by the habit of chewing betel.

“ The merchants carry on their business here with less trouble perhaps than anywhere else in the world ; every manufacture is arranged by the Chinese, who sell the produce of their labour to the merchant, resident here, for they are permitted to sell it to no one else, so that when a ship comes in and bespeaks perhaps a hundred leaguers of arrack or any quantity of other commodities, the merchant has nothing to do but to send orders to his Chinese to see them delivered on board ; he obeys the command, brings a receipt signed by the master of the ship for the goods to his employer, who receives the money, and having deducted his profit, pays the Chinese his demand.

“ With goods that are imported, however, the merchant has a little more trouble, for these he must examine, receive and

lay up in his warehouse according to the practice of other countries.

“The Portuguese have become mixed with the Malays, and have adopted their customs, they live by hunting and washing linen mostly. They are however only now Portuguese in name. The natives, or Oranslams or Islams [Mahomedans] are remarkably temperate; the food consists chiefly of rice with a small proportion of buffalo, fish or fowl, and sometimes of dried fish and dried shrimps, which are brought hither from China; every dish however is highly seasoned with cayen pepper, and they have many kinds of pastry made of rice flour, and other things to which I am a stranger; they also eat a great deal of fruit, particularly plantanes [bananas].

“Wine and strong liquors do not professedly make part of their entertainment at feasts, neither do they often indulge with them privately, contenting themselves with their betel and opium.

“The principal solemnity among them is a wedding upon which occasion both the families borrow as many ornaments of gold and silver as they can to adorn the bride and bridegroom, so that their dresses are very showy. The feasts that are given upon these occasions among the rich last sometimes a fortnight, and sometimes longer, and during this time, the man although married on the first day, is by the women kept from his wife.

“The language chiefly spoken is Malay, for although every little island has a language of its own, and Java has two or three, this is the *lingua franca*. A dictionary of Malay and English was published in London by Thomas Bowrey in the year 1701.

“The women wear as much hair as they can grow upon the head and to increase the quantity they use oils; of this ornament nature has been very liberal, it is universally black. Both sexes constantly bathe themselves in the river at least once a day, a practice which in this hot country is equally necessary both to personal delicacy and health.

“The principal tame quadrupeds are horses, cattle, buffaloes, sheep, goats and hogs. The horses are small, never exceeding in size what we call a stout galloway, but they are nimble and spirited.

“Buffaloes are plenty, but the Dutch never eat them, nor will they drink their milk, being prepossessed with a notion that both are unwholesome and tend to produce fevers.

“ Besides these are dogs and cats. In the distant mountains are wild horses and cattle, but no wild buffaloes. In the forests are deer, wild hogs, tigers and rhinoceroses and monkeys.

“ The Chinese are very numerous in this place, but possess very little property, many of them live within the walls and keep shops. The fruit sellers of Passar Pissang have been mentioned already, but others have a rich show of European and Chinese goods. The far greater part live in a quarter by themselves without the walls called Campang China. Many of them are carpenters, joiners, smiths, tailors, dyers of cotton, and embroiderers, maintaining the character of industry given of them, and some are scattered about the country where they cultivate gardens, sow rice and sugar, or keep cattle and buffaloes, whose milk they bring daily to town.

“ There is nothing clean or dirty, honest or dishonest, provided there is not too much danger of a halter, that the Chinese will not readily do for money, but though they work with great diligence and patiently undergo any degree of labour, yet no sooner have they laid down their tools than they begin to game, either at cards or dice, and this they apply with such eagerness as scarcely to allow time for the necessary refreshment or sleep, so that it is as rare to see a Chinese idle as it is to see a Dutchman or a native employed.¹ In manners they are always civil, or rather obsequious, and in dress they are remarkably neat and clean. The Chinese have a singular superstition with regard to the burial of their dead, for they will upon no occasion open the ground a second time ; their burying grounds therefore in the neighbourhood of Batavia cover many hundreds of acres, and the Dutch grudging the waste of so much land will not sell any for this purpose but at the most exorbitant price ; the Chinese however contrive to raise the purchase money, and afford another instance of the folly and weakness of human nature in transferring a regard for the living to the dead. They take an uncommon method to preserve the body entire. They enclose it in a large thick coffin of wood, not made of planks, but hollowed out of solid timber like a canoe ; this being let down into the grave is surrounded with a coat of their mortar called Chinam about 8 or 10 inches thick which in a short time becomes as hard as stone.

“ The relations of the deceased attend the funeral ceremony,

¹ This exactly describes the Chinaman to this day.—D. M. C.

with a considerable number of women that are hired to weep.¹

“Another numerous class among the inhabitants of this country is the slaves, for by slaves the Dutch, Portuguese and Indians are constantly attended; they are purchased from Sumatra and almost all the Eastern islands. The price of these slaves is from 10 to 20 pounds sterling, but girls if they have beauty sometimes fetch a hundred. The best slaves and consequently the dearest come from the island of Bali, the most beautiful women from Nias; but they are of tender and delicate constitution, and soon fall a sacrifice to the unwholesome air of Batavia. These slaves are wholly in the power of their masters with respect to any punishment that does not take away life.

“The master seldom inflicts punishment himself, but applies to an officer called a mariner, one of whom is stationed in every district. The punishment is again not inflicted by the mariner himself, but slaves bred up to it.

“The punishment is by stripes, and they are given with rods of rattans, and fetch blood at every stroke. A common punishment costs a man a rix dollar, and a severe one a ducatoon, about six shillings and eightpence.

“The master is also obliged to allow the slave three dubbelcheys, equal to sevenpence halfpenny a week as an encouragement, and to prevent his being under temptations to steal.

“Concerning the government of this place I can say but little; we observed however a remarkable subordination among the people. Every man who is able to keep a house has a certain specific rank acquired by the length of his services to the Company. The different ranks which are thus acquired are distinguished by the ornaments of the coaches, and the dresses of the coachmen; some are obliged to ride in plain coaches, some are allowed to paint them in different manners and degrees, and some to gild them.

“The coachman also appears in clothes that are quite plain, or more or less adorned with lace. The officer who presides here has the title of Governor-General of the Indies, and the Dutch governors of all the other settlements are subordinate to him, and obliged to repair to Batavia that he may pass their accounts. If they appear to have been criminal or even negligent he punishes

¹ Exactly as to-day.—D. M. C.

them by delay, and detains them during pleasure, sometimes one year, sometimes two years, and sometimes three, for they cannot quit the place till he gives them a dismissal.

“Next to the governor are the members of the council called here *edele heeren*, and by the corruption of the English *idoleers*; these idoleers take upon them so much state that whoever meets them in a carriage is expected to rise up and bow, then to drive on one side of the road, and there stop till they are past, the same homage is required also to their wives and even their children, and it is commonly paid them by the inhabitants. But some of our captains have thought so slavish a mark of respect beneath the dignity which they have derived from the service of his Britannic Majesty, and have refused to pay it, yet, if they were in a hired carriage, nothing could deter the coachman from honouring the Dutch grandee at their expense. Justice is administered here by a body of lawyers, who have ranks of distinction among themselves. Concerning their proceedings in questions of property, I know nothing, but in criminal cases their decision seems to be severe with respect to the natives, and lenient with respect to their own people to a criminal degree.

“A Christian is seldom punished with death, and indulged with an opportunity to escape, whilst the poor natives on the contrary are hanged, and broken upon the wheel, and even impaled alive without mercy.

“The Chinese have judicial officers of their own under the denominations of captains and lieutenants, who determine in civil cases subject to an appeal to the Dutch court.

“The taxes paid by the Chinese to the Company are very considerable, and that which is exacted for liberty to them to wear the hair is by no means the least. They are paid monthly, and to save the trouble and charge of collecting, a flag is hoisted upon the top of a house, when payment is due, in the middle of the town, and the Chinese have experienced that it is to their interest to repair thither with their money without delay. The rix dollar is equal to forty-eight stivers, about four shillings and sixpence in English currency.

“The language if not exactly similar to the corresponding words in the language of the islands in the South Seas, is manifestly derived from the same source.

“Possibly the learning of Egypt might run in two courses, one through Africa and the other through Asia, disseminating the

same words in each, especially terms of number, which might thus become part of the language of people who had never had any communication with each other.

“From the similitude between the language of the Eastern Indies and the islands of the South Sea, conjectures may be formed with respect to the peopling of these countries.

“After leaving Java Head most of our crew were attacked with fevers and fluxes which no medicine checked, so that whoever was seized with it might consider himself a dead man.”

1775. Charles Peter Thunberg, a Swede, left the Texel on the 14th December, 1771, in one of the Dutch ships which sailed to the Cape called *Schoonzigt*, the captain of which was named Rondecrantz. After spending some years at the Cape, Thunberg, with two Englishmen, Major Gordon and Mr. Mason, embarked on the 2nd March, 1775, on the ship *Loo*, Captain Berg, bound for Batavia.

On the 18th May they arrived safely at Batavia road, and the day following Mr. Thunberg went on shore and put up at the Gentleman's Hotel, a very large house for the accommodation of strangers. The governor, who resided at some distance from the town, received him in the most condescending manner, and assured him of his protection and assistance. Dr. Hoffman, to whom he was recommended, invited him to live with him and make use of his table; and Mr. Radermacker, one of the council, finding that our traveller had been more successful in cultivating plants and natural curiosities than gold, sent him a present of fifty ducats, even before he could wait on him. Through the kind attention of Mr. Radermacker, he had a sensible Javanese to accompany him in his botanical excursions. Mr. Radermacker, who conceived a high degree of friendship for him, tried to persuade him to remain at Batavia and accept the appointment of physician, then vacant, the yearly income of which was 6,000 or 7,000 rix dollars.

Thunberg returned to Europe on the 30th January, 1779.

1789. Captain Bligh, the commander of the ship on which the celebrated mutiny occurred, after having been put, together with several of his officers, in a small boat with a few provisions and some cutlasses, reached Timore after a 2,000 miles journey ; here he got a ship to take them to Java. The following is an extract from Captain Bligh's journal :—

“ Sunday the 6th September, 1789. In the afternoon we saw the high land of Cape Sandana, which is the N.E. part of Java. We steered westward along the coast of Java, and on the 10th, at noon, we anchored at Passourwang in two fathoms distant from the shore about half a league, the entrance of the river bearing S.W. The coast is here so shoal that large ships are obliged to anchor three or four miles from the land. As soon as we were at anchor, I got in my boat and went on shore. The banks of the river near the entrance were mud, on which grew a few mangrove bushes. Among them we saw hogs running, and many were lying dead in the mud, which caused a most intolerate stench, and made me heartily repent having come here, but proceeding about a mile up river, the course of which was serpentine, we found a very pleasant country, and landed at a small and well constructed fort. The houses at Passourwang are neatly built, and the country appears to be well cultivated. The produce of this settlement is rice, of which they export large quantities.

“ There are but few Dutch here ; the Javanese are numerous, and their chief lives with considerable splendour. They have good roads, and ports are established along the coast, and it appears to be a busy and well regulated settlement. The next day, about noon, we sailed, and on the 12th in the evening anchored in the Sourabaya road, in seven fathoms, the flagstaff bearing S. $\frac{1}{4}$ W. distance from the shore one mile. We found riding here seven square rigged, and several smaller vessels. Sourabaya is one of the most pleasant places I ever saw. It is situated on the banks of a river, and is a mile and a half distant from the sea shore, so that only the flagstaff can be seen from the road. The river is navigable up to the town, for vessels of 100 tons burden, and the bank on one side is made convenient for tracking.

“ The country near the town is flat, and the soil light, so that they plough with a single bullock or buffalo. On the 17th we sailed from Sourabaya. At noon we anchored at Grisse, which is a town with a small fort belonging to the Dutch.

“ We remained here about two hours. The navigation through the Straits of Madura is so intricate that with the little opportunity I had I am unable to undertake a description of it. The next day, September 18th, having passed the Straits, we bore away to the westward along the coast of Java. We had regular soundings all the way to Samarang, off which place we anchored on the 22nd in the afternoon, the clunch bearing S.E. distance from the shore half a league depth of water two fathoms. The shoalness of the coast here makes the road of Samarang very inconvenient, both on account of the great distance which large ships (of which there are several in the road) are obliged to be from the shore, and of the landing, which is in a river that cannot be entered before half-flood. This river resembles the one at Passourwang, the shores being low, with offensive dead animals lying about them. Samarang is surrounded by a wall and ditch. Here is a very good hospital and a public school, chiefly for teaching the mathematics. They have likewise a theatre. Provisions are remarkably cheap here, beef being 10 doits per pound, and the price of a fowl twelve doits. On the 26th we sailed from Samarang, and on the 1st of October we anchored in the Batavia road.”

1793. Earl Macartney, with the staff and suite of his embassy, embarked on the ships *Lion* and *Hindostan* for Canton on the 26th September, 1792. The account relates as follows :—

“ On the 6th March (1793) the ships anchored in Batavia Road, and his Excellency first received the compliments of the Dutch Government on board, and was afterwards flattered on shore with distinguished honours.

“ The city of Batavia, situated amidst swamps, and stagnated pools, independent of climate and inattention to cleanliness, is perhaps one of the most unwholesome places in the universe. The morning sea breeze ushers in noxious vapours, and the meridian sun deleterious miasmata, the wan and languid appearance of the people, and the obituary of the public hospitals, which

recognised nearly 100,000 deaths within the last twenty years, are melancholy proofs of the assertion, and proclaim it, with justness, the grave of Europeans. The acknowledged unhealthiness of Batavia, notwithstanding the inducement of rapid acquisition of fortune, discourages Europeans from going thither, if by any possible means they can remain comfortably at home. This accounts for the preposterous unfitness with which offices and professions are filled and personated. There were two men in the place, originally barbers, the one acted as clergyman, for the good of the soul, the other as physician for that of the body. The fortifications of Batavia, which at first view seemed to imply great strength, would not in Europe be considered formidable, and it should be observed that one of the counsellors of the Indies who had exerted his military talents to guard the settlement from external attacks, declared that their chief dependence was upon the havock which the climate and noxious air of the atmosphere were likely to make upon the enemy's forces. The troops on the establishment were 1,200 Europeans, of whom 1,100 were infantry, and the rest artillery and cavalry. There were besides three hundred volunteers of the town, not disciplined, formed into two companies.

"The irregulars consisted of enrolled natives of Java, who were never embodied, and of Chinese; in all very numerous. Add to this every person who becomes a settler at Batavia is compelled to take up arms in its defence.

"The castle is constructed of coral rock, and the town hall partly of dense lava from the mountains in the centre of the island. There is no stone of any sort discovered for miles behind the city of Java. The marble and granite used here in various edifices is brought here by Chinese junks. These sail from the ports of Canton and Fokien and are mostly laden with tea, silks and porcelain.

"The Dutch settlers in this place, acquiring wealth and influence under the Company, neglect their former habits of industry, and temperance, and too often sacrifice health and sometimes life to indolence and voluptuousness. Convivial pleasures in particular are carried to excess. In many respectable houses, fish and flesh are served with tea and coffee for breakfast, very soon after this gin, claret, Madeira, Dutch small beer, and English porter are placed in the portico of the great hall, and pipes and tobacco served to every guest. In this they are busied

with little interruption till near the hour of dinner, which is one o'clock.

“ Just before dinner each guest is served with a bumper of Madeira wine, as a whetter or bracer ; two men slaves attend for this purpose.

“ Afterwards enter three female slaves ; one holds a silver jar containing rose or common water to wash with, a second, an empty silver bason with a cover, to receive the water after having used it, and the third has towels to wipe the hands with. Other female slaves wait at table, which is covered with a variety of dishes, but with stomachs so cloyed, little is received into them, except liqueurs. A band of music, all slaves, play at a small distance during the repast. Coffee immediately succeeds dinner, and soon after they retire to bed, consisting only of a mattress, bolster, pillow and a chintz counterpane, but no sheets, and the night-dress consisting of a muslin cap, and a long loose gown is put on. If he be a bachelor, a female slave attends to fan him during his sleep. About six they rise and dress, drink tea, take an airing in their carriage, and form parties to spend the evening. The morning meetings are seldom attended by the ladies. Most of these are descended from Dutch settlers, and their education has by no means been neglected. When at home they are clothed in a long chequed gown of cotton, with no headdress. When abroad on morning visits, out on airings in their carriages, or engaged in parties in the evenings, they dress splendidly in gold and silver spangled muslin robes, with their hair, unpowdered, adorned with a profusion of jewels. They are not solicitous to mould the shape, from fancied elegance, at the expense of ease, neither are they guided by any standard of fashion.

“ Every native lady takes abroad with her a female slave, handsomely dressed, who, on her mistress being seated, sits before her on the floor, holding in her hand a gold or silver box containing a pungent masticatory. It is compounded of areca nut, cardamom seeds, pepper, tobacco, and slaked lime rolled within a betel leaf.

“ If when at public assemblies the ladies feel themselves incommoded by heat, whether occasioned by their dress or not, they withdraw and change their costly robes for a loose attire. The younger gentlemen follow the example, and substitute white jackets, often with diamond buttons, for their heavy

formal vestments, and the elders of the council quit their periwigs and put on night-caps.

“The members of this Government, but on these occasions, have always combined their personal gratification with the Eastern policy of striking vulgar minds with reverential awe, by assuming external and exclusive distinctions. They alone, for instance, are privileged to wear a broad crimson velvet ; to them only, one of the city gates is opened ; their carriages have distinguishing heraldic ornaments, and others meeting them must stop and pay them homage ; they certainly do succeed in maintaining absolute power, not only over the descendants of the aborigines of the country, but likewise over the slaves imported into it, and the Chinese attracted thither in the hope of gain. The Chinese from their industry and ingenuity have rendered themselves indispensably necessary to the Dutch, who acknowledge the settlement could scarcely subsist without them. Their residence at Batavia is in the suburbs, their houses are low built, mostly of wood, and crammed with people. Every sort of mechanical employment is done by them ; in town also they become clerks, agents, or hucksters, and in the country farmers, particularly in the cultivation of the sugar cane.

“The shops at Batavia, resembling those of brokers dealing in second-hand articles, were thinly supplied with British merchandize, very unlike those at Rio de Janeiro, a plain proof that the interior inhabitants of Java are either unable or not willing to purchase costly manufactures. But there are spacious magazines for depositing the rich product of the Molucca, or Spice Islands, exported hence to all parts of the world, besides sugar, pepper, coffee and arrack, the produce of the place.

“The Dutch Company, from an inordinate thirst for gain, suggested the idea of monopolizing the whole of the spice trade to themselves.

“The districts round Batavia subject to the Dutch, are supposed to contain 50,000 families, enumerating in all 300,000 persons. The city of Batavia, and suburbs, contain eight thousand houses. Those belonging to the Dutch are clean, spacious, and built suitably to the climate, both windows and doors are wide and lofty, and the ground floors are laid with marble. Many of the houses were uninhabited, which with other circumstances indicated a declension of their commerce. The Company’s vessels were lying in the road without men to navigate,

or cargoes to fill them. They had no ships of war to protect their commerce, and even pirates came to the harbour's mouth and attacked and carried off their vessels. They were besides threatened with an invasion from the Isle of France, at a time when they knew the place was not in a proper condition for defence, half the troops destined for this purpose being ill in the hospitals, and lastly commissioners were expected from Holland for the reform of abuses, whose presence were as much deprecated as that of an enemy.

"Notwithstanding all this the ambassador, Lord Macartney, and his suite were treated with all marks of attention and respect, until he embarked on the 17th March."

With regard to the commissioners who were sent out to reform abuses, it must be mentioned that a badly paid Government staff, allowed to do private business to make up for this, had gradually usurped all the Company's profits, by buying too dear and getting a private return, and by profiting by all overweights, etc. Presents (they were really bribes) of a most royal description had to be given to the Dutch officials nearly every time business was done. The cost of these presents coming again into the price, the Company was mulcted of large sums, and gradually made debts, instead of profits, which debts grew as time went on.

The subterfuges made use of to hide all the delinquencies when the commissioners arrived, make one of the most amusing farces ever played. When these gentlemen arrived they were received by a special deputation of ladies and gentlemen, comprising the rank and fashion of the place. Paid crowds were on shore to cheer them on landing, every gun in the place saluted, while the musketeers fired salvoes of welcome.

The ways were lined with troops, in those places where there were soldiers, otherwise with Malays and Chinese. Amidst a great deal of handshaking, introductions, blowing of trumpets, bowing and scraping, and a saluting guard, their high and mighty excellencies were ushered into carriages to drive to the palace or resident's house. Here receptions of the rank and fashion, dinners, dejeuners, balls, supper-parties, picnics, reviews, parties given by the high native authorities, followed one upon the other so quickly, that their excellencies were in too muddled and excited a mood to inspect business or accounts. The great respect moreover that was shown to them (they could

scarcely walk ten yards without forts and musketeers saluting, guards turning out etc.), flattered them so much that they gradually put away all thought of being so impolite as to look into affairs, or to throw doubt on their correctness, by any enquiring.

They gradually fell into the delightful round of dissipation prepared for them ; took their 101 guns, the musket-salvoes, the lining of the ways with soldiers or natives, the parties, balls, dinners, dejeuners and so forth, all as a matter of course, and, flattered up to their finger-tops, returned to Holland with assurances that everything was absolutely in order, and that the losses the Company was making were genuine ones, due to the high price of Eastern produce, so that there was nothing to be done by the Company but to grin and bear it. This the Company did, and in another chapter we have seen what was its ending, and how many millions it closed short. Of course, for all this entertaining the Company had to pay, the Dutch officials in Java arguing that if the East India Company sent out commissioners they must pay for them.

1793. Sir George Staunton also passed through Batavia with Lord Macartney's embassy in 1793. His account reads as follows :—

“ On the 6th March the ships anchored in Batavia Roads, which is very capacious, and has a safe anchorage for shipping. Several Chinese vessels were riding at anchor, and the vast quantity of Dutch vessels lying before the city announced it as their chief place of trade, as well as their principal seat of Government.

“ The Batavian Government celebrated the anniversary of the birth of the Prince of Orange, Stadtholder of the United Provinces, with festivities and increased splendour, and the Earl of Macartney and his suite were invited. A salute of 21 guns was fired from H.M.S. *Lion*.

“ The entertainment took place at the house of the Governor-General a short distance from town ; an avenue of trees bordered by canals lead to the spot ; on one side the unexpected exhibition of the humours of a Flemish fair¹ arrested the time and attention of some of the guests ; while on the other a drama was performed by several Chinese actors, in a cast or pulpitum, said to be the original scene of dramatic representation.

¹ Parsar malem.—D.M.C.

“A grand ball preceded the banquet, and splendid illuminations and artificial fireworks were displayed in the garden. The Mahometan princes in Java are all despots, and do not rule in the hearts of their subjects. According to the Dutch accounts the tyrannic sway of the emperor is supported by prodigious armies throughout his territories, and by a very considerable female guard about his person. These heroines are trained to a domestic, as well as to a military life, among whom many from mental accomplishments are the companions as well as attendants of his imperial majesty. If the same accounts be correct that the number of female births in Java surpasses that of the males, the singular institution above mentioned may have originated from the facility of obtaining recruits.

“The island of Celebes to the eastward of Borneo and some other Eastern Islands supply Java with slaves; and though a change of master may not have generally aggravated their condition, yet some among them, who before they were made captives lived in a state of independence, have been known to take offence on the slightest occasions, and to avenge themselves by assassination. Under this apprehension it is that female slaves are preferred in Batavia, for every use to which they can be applied, and their number of course exceeds that of the males.

“The shops at Batavia resembling those of brokers dealing in second-hand articles were thinly supplied with British merchandise, very unlike those of Rio de Janeiro, a plain proof that the interior inhabitants of Java are either unable or unwilling to purchase costly manufactures. The houses of Batavia belonging to the Dutch are clean and spacious, and built for the climate with windows wide and lofty. The ground floors are laid with marble. There are 8,000 houses in Batavia, and the districts around subject to the Dutch are supposed to contain 300,000 persons in all. Many of the houses are at present uninhabited, owing to the East India Company being on the decline.”

1817. Captain Murray Maxwell, in command of His Majesty's ship *Alceste*, carrying the embassy of Lord Amherst, sailed from Spithead for China on the 9th February, 1816. An account reads as follows:—

“We arrived at Batavia on the 9th March, 1817, and comfortable quarters were provided for us at the hospitable houses of

Messrs. Milne and Terreneau, and much kind attention was experienced from Captains Forbes, Dalgairns Hanson, and McMahon, who were on the staff of Sir William Keir. Comfortable quarters were also found for our men, who in a day or two were landed and marched through Batavia to Weltevreden. At Weltevreden the officers met with a small but choice band of their countrymen whose society will not easily be forgotten, or ever remembered - without pleasure. {Batavia is considered and with much reason to be one of the most unhealthy spots in the world, but this character is applicable only to the town itself, which agreeably to Dutch usage, wherever they could find one, is built in a swamp. The effect of this within seven degrees of the Equator is precisely what might be expected, but at Ryswick and Weltevreden, where the ground rises certainly not above a dozen or fifteen feet and situated within three miles of the town, health is retained. No European who can possibly avoid it ever sleeps in the city, but after transacting his business removes to the neighbourhood.} - Among seamen and soldiers a night or two spent in Batavia is deemed mortal, but the increased fatality among their clan of the community proceeds evidently from their never sleeping there but for the express purpose of getting drunk, and when immersion in putrid and marsh effluvia in so hot a climate is applied to a body rendered highly susceptible of their impression from previous ebriety, it is not to be wondered that a fever of the worst class should be the consequence. All the positions are filled by young men freshly imported, and the ladies, generally surrounded by a crowd of flattering slave girls, creolize the whole day in a delectable state of apathy, at sunset perhaps taking a short airing in the environs. The older dames inveterately adhere to the *kubaya*, a loose sort of gown or wrapper sometimes richly embroidered, but the English and French modes are universal among the rising generation.

“ They form a curious contrast on public occasions, for although sumptuary laws exist, which prevent more especially ladies from wearing jewels beyond a certain amount, and appearing abroad attended by servants exceeding the number allowed for the particular rank of their husbands or fathers, yet all classes seem privileged to *undress* themselves as they please.

“ One evening at a grand ball given at the Harmonie by the British army officers, on the anniversary of the battle of Waterloo, an old gentleman in a full suit of black, highly trimmed, and in

the cut of the last century was seen strutting about the room with a white night-cap on his head.

“ Indeed at dinner in the best companies they do not hesitate to wear their hats, if there is the least motion in the air, for they dread nothing so much as sitting in a current.

“ The villas of the councillors of the Indies are distinguished by having black instead of white statues in their fronts, and about their gardens. They are generally heavy looking houses, situated on the Jacatra and Ryswick roads, but have an air of stateliness. The restored Dutch Government profess to act upon the principles which have been found successful during our possession, but a circumstance which occurred a short time before our arrival here evinced strong symptoms of a recurrence to the system of terror. A body of the natives about 500 in number having had some dispute with the local authorities at Indramayoc, whilst making representation about some hardship were seized and confined in a house which like the black hole of Calcutta being too small for the prisoners, they in desperation attempted to break through the roof, when a body of military having by this time been collected, they were fired upon, the greater part being killed.

“ It is somewhat remarkable that the Dutch who are at home very unassuming, plain, and moral sort of people, should have displayed on so many occasions a ferocious and blood-thirsty disposition in their colonies.

“ On one occasion Marshall Daendels, who found it necessary to place himself above the usual formalities, is said one day to have requested the magistrates to demolish their grand church in Batavia, which was not only in the way of some favourite scheme he had in view, but its cupola was the only land mark for entering the bay, and as such greatly assisted the enemy's (English) cruizers. The burgomasters ventured to oppose this project ; in a very short time the church was found to be on fire and the building thereby being in a great degree consumed and damaged, the remainder was soon razed to the ground.

“ Sir William Keir, Mr. Feudale and Mr. Cranssen were still at Batavia adjusting the final transfer of the colonies with the commissioners of His Majesty the King of the Netherlands.

“ The Dutch squadron was absent at the different islands resuming possession of them.

“ Baron de Capellan, the new governor, is individually a man of humanity and was extremely solicitous about the preservation

of his soldiers and personally interfered with the medical staff who were wedded to old fashioned practices.

“The ship *Cæsar*, Captain Taylor, with the embassy of Lord Amherst on board returning to Europe left Batavia on 12th April, 1818, with Sir William Keir and all his staff, and received from the Dutch authorities every mark of respect due to his rank. The gay scenes we had experienced for the last few weeks among our friends at Weltevreden and Batavia which we had enjoyed with great spirit made us now more susceptible of the dull sameness attending our present sky and water scene. Mr. Davidson’s house at Ryswick was a good building, and here an ourang-outang from Borneo was kept.

“Daendels’ great military road carried some hundreds of miles across the island cost the lives of thousands of Javanese who were sacrificed to the system of forced services. He appears to have been little less despotic with the whites, and many stories are told about him, that he could even make hens lay eggs when he thought proper.”

1823. George Frank Davidson¹ left England early in 1823 for Java, to join Messrs. Macquoid, Davidson & Co. The following is culled from his account of Batavia, Samarang, etc. :—

“Early in the year 1823 I left England quite a youngster, full of life and spirits, bound for the so-called Grave of Europeans, *Batavia*. My passage lasted exactly five months. Well do I remember the 5th October, 1823, the day on which I first set foot on the lovely and magnificent island of Java. How bright were then my prospects, surrounded as I was with a circle of anxious friends, who were not only able, but willing also, to lend me a helping hand, and who now alas to a man, gone from me and all to whom they were dear. I was then prepared—I might say determined—to be pleased with everything and everybody. At this distance of time I can scarcely remember what struck me most forcibly on landing, but I have a vivid recollection of being perfectly delighted with the drive, in a light airy carriage, drawn by two spirited little Java ponies, from the wharf to the house of the friend with whom I was to take up my abode. What a

¹ See also his book called “Trade and Travel in the Far East.”

joyous place was Batavia in those days, with everybody thriving, and the whole town alive, and bustling with an active set of merchants, from all parts of the world. The Dutch Government at that time pursued a more liberal policy than they have of late applied ; and instead of monopolizing the produce of the island, sold it by public auction every month. This plan naturally attracted purchasers from England, the continent of Europe, and the U.S. of America, who brought with them good Spanish dollars to pay for what they purchased, so that silver money was as plentiful in Netherlands India in those days as copper doits have since become. The enlightened individual who now¹ governs Java and its dependencies is, I have good reason to think, opposed to the monopolizing system pursued by his Government : his hands are tied however, and he can only remonstrate, while the merchants can but pray that his remonstrances may be duly weighed by his superiors.

“Java exports one million peculs of coffee per annum, one million peculs of rice, and one million peculs of sugar, besides vast quantities of tin, pepper, hides, indigo, etc. Were its trade thrown open to fair competition, as formerly, it is as certain that His Majesty the King of the Netherlands would be a gainer, as that his adopting the more liberal system would give satisfaction to every mercantile man, connected in any way with his East Indian possessions. The experience of the last three years ought to have taught His Majesty this lesson ; and we may hope he will take a warning from the miserable result of his private speculations during that period.

“Batavia is not the unhealthy place it has been usually deemed. The city itself is certainly bad enough, but no European sleeps a single night in it out of a twelvemonth.

“From 4 to 5 o'clock every evening the road leading from the town to the suburbs is thronged with vehicles of all descriptions, conveying the merchants from their counting-houses to their country or suburban residences, where they remain until 9 o'clock the next morning. These country residences are delightfully situated to the south of Batavia, properly so called, extending inland over many square miles of country. Every one of them has a garden, called a compound, of considerable extent, well stocked with plants, shrubs and trees, which serve to give them a lively and elegant appearance, and to keep them moderately cool

¹ 1845. This was Mr. Merkus.—D. M. C.

in the hottest weather. Servants' wages being very low here, every European of any respectability is enabled to keep up a sufficient establishment, and to repair to his office in his carriage or hooded gig, in which he may defy the sun. Many of them, particularly Dutchmen, have an imprudent practice of driving in an open carriage, with an umbrella held over their heads by a native servant, standing on the foot-board behind his master.

"Having resided several years in the suburbs of Batavia, I have no hesitation in saying, that with common prudence, eschewing *in toto* the vile habit of drinking gin and water whenever one feels thirsty, living generously but carefully, avoiding the sun's rays by always using a close or hooded carriage, and taking common precautions against wet feet, and damp clothing, a man may live—and enjoy life too—in Batavia, as long as he would in any other part of the world. One great and invaluable advantage over all our Eastern colonies, Batavia, in common with every part of Java, possesses in the facilities that exist for travelling from one part of the island to the other.

- ["Throughout Java there are excellent roads, and on every road a post establishment is kept up, so that the traveller has only to apply to the post-master of Batavia, pointing out the road he wishes to travel, and to pay his money according to the number of miles ; he obtains with a passport, an order for four horses all along his intended line of route, and may perform the journey at his leisure, the horses, coachmen, etc., being at his command night or day, till he accomplishes the distance agreed for. Thus a party going overland from Batavia to Samarang, a distance of 300 miles, may either perform the journey in three days¹ or extend it to three weeks, should they wish to look about them, and to halt a day or two at various places as they go along. In no part of British India is there anything approaching to such admirable and cheap facilities for travelling. And what an inestimable blessing they are to the Batavia invalid, who can thus, in a few hours, be transported, with perfect ease and comfort, into the cool and delightful mountain regions of Java, where he may choose his climate, by fixing himself at a height varying from 1,000 to 7,000 feet above the level of the sea.] Java from - east to west, from north to south, is a favourite region with me,

¹ Evidently a figure of speech, as in 1823, and even now, 1912, to travel from Batavia to Samarang by coach in three days is an actual impossibility. —D. M. C.

and I believe with every other Englishman who ever visited it ; gin and brandy have killed five-sixths of all the Europeans who have died in Batavia, within the last twenty years ; but with pleasure I can add that this destructive habit has almost entirely disappeared, hence the diminished number of deaths, and the more robust and ruddy appearance of the European inhabitants. [The surrounding country is both salubrious and beautiful, rising gradually as you proceed inland, till you reach *Buytenzorg*, 40 miles S.S.E. of Batavia, where the Governor-General of Netherlands India generally resides in a splendid palace, surrounded with extensive and magnificent gardens. The climate is cool and pleasant, more particularly in the mornings and evenings, and the ground is kept moist by daily showers ; for it is a singular fact, that scarcely a day passes without a shower in this beautiful neighbourhood.]

“ *Buytenzorg* is a favourite resort of the merchants of Batavia, who take advantage of the facilities for travelling to visit it on the Saturday afternoon, remaining the whole of Sunday, and returning to town, and to the renewal of their labours on the following morning. The scenery is magnificent, and the view from the back verandah of the inn is the finest that can be imagined. Standing on the steps of this verandah, you have immediately under your foot an extensive plain, thoroughly cultivated, sprinkled with villages, each village being surrounded with ever-green trees, and the whole almost encircled by a river. To the left of this valley rises an extensive and picturesque mountain, cultivated almost to the summit and dotted here and there with villages and gentlemen’s houses.]

“ Looking into the valley at early morn, you will see the lazy buffalo, driven by an equally indolent ploughman, dragging a Lilliputian plough through the slimy paddy-field, the lazy Javanese labourer going to his work in the field, the native women reaping, with the hand only,¹ and stalk by stalk the ripe paddy in one field, while those in the next are sowing the seed, the adjoining fields being covered with stubble, their crops having been reaped weeks before.

“ Upon the declivity of the mountain is seen the stately coffee tree, the plantations of which commence at 1,300 feet above the level of the sea, and proceed up the hill till they reach the height

¹ This is not correct. Unseen they have a sharp wooden scythe in the palm of their hand.—D. M. C.

of 4,000 feet. Nothing can be more beautiful than a full grown coffee plantation ; the deep green foliage, the splendid bright red berry, and the delicious shade afforded by the trees, render these spots altogether fit for princes ; and princely lives their owners lead. One is always sure of a hearty welcome from these gentlemen, who are ever glad to see a stranger. They give him the best horse in the stable to ride, the best room in the house to occupy, and express regret when his visit is drawing to a close. I speak from experience, having put the hospitality of several of them to the test.

“During my first stay at Batavia, from 1823 to 1826, the celebrated Java war broke out, the so-called rebel army being headed by a native chief of Djockjokarta named Diepo Nogoro. Shortly after the first outbreak, the then Governor-General, Baron van der Capellen, called on all Europeans between the ages of 16 and 45 to serve in the *schuttery* or militia. An infantry and a cavalry corps were formed, and I joined the latter, preferring a ride in the evening to a walk with a 14 pound musket over my shoulder. After a probation of pretty tight drilling we became tolerable soldiers on “nothing a day and finding ourselves,” and had the good town of Batavia put under our charge, the regular troops being all sent away to the scene of war.¹ As I do not intend to return to this subject, I may as well mention here that the war lasted five years, and that it would have lasted five years longer, had Diepo Nogoro not been taken prisoner—I fear by treachery. I saw him landed at Batavia in 1829 from the steamer which had brought him from Samarang. The Governor’s carriage and aides-de-camp were at the wharf to receive him. In that carriage he was driven to gaol, whence he was banished, no one knows whither, and he has never since been heard of. Such is the usual fate of Dutch prisoners of State. Diepo Nogoro deserved a better fate. He was a gallant soldier, and fought bravely. Poor fellow ! how his countenance fell—as well it might—when he saw where the carriage drew up ! He stopped short on putting his foot on the pavement, evidently unwilling to enter the gloomy looking pile, cast an eager glance around, and seeing there was no chance of escape, walked in. Several gentlemen followed, before the authorities had the door closed, and saw the fallen chief, with his two wives, consigned

¹ See Gillian Maclaine’s letter about this cavalry *schuttery*, which was almost entirely made up of Englishmen.—D. M. C.

to two miserable looking rooms. Java has been quite tranquil ever since.

"The society of Batavia at the time I am referring to was both choice and gay, and the influence of my good friends threw me at once into the midst of it. The Dutch and English inhabitants did not then (nor do they now, 1844) mix together so much as would in my opinion have been agreeable and mutually advantageous. A certain jealousy kept the two parties too much apart. Nevertheless I have been present at many delightful parties in Dutch families, the pleasures of which were not a little heightened by the presence of some ten or a dozen charming Dutch girls. Charming and beautiful they certainly are while young, but ere they reach thirty, a marvellous change comes over their appearance; the fair-haired, blue-eyed, laughing romp of eighteen has, in that short period of ten or twelve years, become transformed into a stout, and rather elderly looking matron, as unlike an English woman of the same age as one can well fancy. When I look back on those gay and pleasant parties, and think how few of the individuals who composed them are now alive, the reflection makes me sad. What a different class its English inhabitants of the present day are from those of 1823—1826.¹ I may be prejudiced in favour of the former state of society, but in giving the preference to it, I shall be borne out by any of the few survivors who knew Batavia at both periods. From 1823 to 1835 the Governor's parties were thronged with our country-men, and country-women. Let anyone enter his Excellency's ball-room nowadays, and he will not meet with more than one or two English of the old school, and not one of the new.² The causes of this change are obvious. It arises from the different class of people that now come out from Liverpool, Manchester, and Glasgow compared with the British merchant of former times, and from the total deficiency of the most common civility, on the part of our country-men, towards the many highly

¹ This was written in 1844, and since then I am afraid the class of English inhabitants has still further degenerated. This comes, of course, from their being drawn nowadays almost wholly from Glasgow and Manchester.—D. M. C.

² Very true. There are none of the old school in Java nowadays. The class for the most part is an inferior one, but fortunately the Dutch do not see it, and the Glasgow and Manchester boys of the new school marry into the best Dutch families.—D. M. C.

respectable, agreeable, and intelligent Dutch families that form the society of the place. It is with pain I write this, but, as a citizen of the world, who has seen a good deal of life, in recording my sentiments on these matters, I cannot avoid telling the plain truth as it struck me from personal observations.¹

"The vicinity of Batavia affords the most beautiful drives, and hundreds of vehicles, from the handsome carriage and four of the member of council, to the humble buggy of the merchant's clerk, may be seen every evening, from 5 till half-past 6, that being the coolest and the best time for taking out-of-door exercise. The roads are excellent, lined on both sides with trees, which keep them shaded and cool nearly all day. The scene is altogether gay, and affords a gratifying indication of the wealth and importance of this fine colony. By 7 o'clock the drives are deserted, and immediately afterwards lights may be seen glittering in every dwelling in the neighbourhood, while in every second or third house, the passer-by may observe parties of pleasure assembling for the evening. The Dutch have adopted the social plan of exchanging friendly visits in the evening, avoiding our more formal ones of the morning. At these chance evening parties, the company are entertained with music and cards, and other diversions, and should the visitor be too old to join the young folks in their gayety, he will find one or two of his own, snugly seated in the far corner of the verandah, where he is sure to be supplied with a good cigar, and the very best wine.

"These groups are perfect pictures of comfort and content.

"With all his good qualities, John Dutchman is jealous of John Bull² and cannot help showing it, particularly in commercial matters.³ How short-sighted his policy is in this point of view, it would be no difficult task to prove.

"The pleasantest months of the year in Batavia are June, July, August, when the sun is to the northward. I have frequently found a blanket necessary at this season; indeed, the

¹ I regret I must entirely concur with the above. With one or two exceptions the present day (1912) Englishmen of Java are poor representatives of our race, and no credit to it, and at times I have been disgusted with some of them for their want of common civility to the Dutch families.—D. M. C.

² I do not agree.—D. M. C.

³ I have never noticed this; if it is so, the Dutchmen I have had to deal with were too polite to show it, and my experience is one of over twenty years to G. F. Davidson's three years.—D. M. C.

nights, throughout Java, are generally sufficiently cool to allow the European to enjoy a refreshing sleep, after which he will find no difficulty in getting through a hot day. The public health is generally very good from May till September inclusive. In April and October strangers, particularly the recently arrived European, are apt to suffer from colds and fever, caused in a great measure by the breaking up of the monsoon, which takes place in those months. In November or December, the north-west monsoon brings on the rains, which certainly then come down in torrents, and render the city of Batavia a perfect charnel house for those poor natives and Chinese, who are unfortunately compelled to remain in it. I have seen it entirely flooded with water to the depth of four or five feet in some parts. The malaria occasioned by the deposit of slimy mud, left all over the town by the water, on its retiring, causes sad havoc among the poorer Chinese and Malays who reside in the lowest parts of the town, and inhabit wretched hovels. These floods seldom annoy the inhabitants of the suburbs, yet I well remember in the season of 1828 a friend of mine lay down on a sofa and went to sleep, about 8 o'clock in the evening; at 3 o'clock next morning he awoke with the water just reaching his couch, much to his surprise and no small alarm, till, on becoming collected, he bethought him of the cause. The neighbouring river had risen, from mountain rains, whilst he was asleep, and had completely flooded his house, to the depth of 18 inches, together with the garden and neighbourhood.

"I know of no market, east of the Cape of Good Hope, better supplied with fruit than that of Batavia.¹

"Between three and four hundred miles eastward of Batavia, on the north coast of Java, is the small, neat, old-fashioned town of Samarang, which when I visited it in 1824 was the residence of several English merchants; now there is only a single one remaining,² so completely has monopoly destroyed mercantile enterprise. The harbour is a safe one in the S.E. monsoon, but the reverse when the N.E. winds prevail. It is, however, constantly visited by European shipping, which take cargoes of coffee, sugar, rice, etc., etc., to all parts of Europe,

¹ This is accounted for by the fact that the early Dutch settlers from the seventeenth century onwards encouraged the natives to grow and sell them large quantities of fruit, for which they paid good prices.—D. M. C.

² Alexander McNeill, of McNeill & Co.

Australia, Singapore, and China. The society of Samarang is neither so extensive nor so attractive as that of Batavia; it is, however, a pleasant and healthy place, notwithstanding its proximity to an extensive swamp. Its safeguard against the malaria we might naturally look for in this situation, is the tide which flows over the marsh twice a day, and keeps it sweet.

“During the Java war, a small volunteer corps of cavalry was formed here, the members of which, in their zeal, offered their services to join a party who were proceeding to Damak (a small village about 40 miles off), to put down a body of armed rebels. Poor fellows! they went out in high spirits, but trusted too much to their unbroken horses, which took fright, and threw them into inextricable confusion on hearing the first volley. The sad consequence of this rash, though gallant day’s work was the death of seven young English gentlemen, all highly respected and sincerely regretted by their countrymen. They were all personal friends of my own. I well remember the gloom which the intelligence cast over the society at Batavia.¹ In and about Samarang may be collected any number of the beautiful Java poneys, animals unsurpassed for symmetry in any part of the world. The work they perform is beyond belief. Ten miles an hour is the common rate of travelling post; four of them are generally used for this purpose, and the stages are from seven to nine miles, according to the nature of the country. When within half a mile of the first house where relays are kept, the native coachman cracks his long, unwieldy whip, which can be heard at a great distance. At this signal, the grooms harness the four poneys whose turn for work it is, and by the time your carriage halts under the shed that crosses the road at every post-house, the fresh poneys are to be seen coming out of the stable all ready for the next stage. Your attention is then attracted by a man with a stout bamboo, some eight feet long, in his hand, full of water, which he pours over the naves of the wheels to cool them. By this time the tired poneys are unhooked, the fresh ones put to, and away rattles the carriage again with its delighted passengers. I know nothing more exciting and agreeable than a ramble amongst the mountains of this favoured isle, under the direction of the post establishment.²

“From Samarang, early in 1824, I posted with a friend to *Solo*

¹ For full particulars see Chapter X.

² Nor do I.—D. M. C.

and *Djockjocarta*, the ancient seats of the emperors and sultans of this part of Java. They are now shorn of their splendour, but they still possess novelty enough to attract a stranger. On our route we visited some beautiful coffee plantations¹ and passed through the pretty and romantic village of *Salatiga*. We had a splendid view of the far famed *Gunung Merapi*, or Fire Mountain, and, on every side, we saw evidence of the thriving condition of this magnificent part of Java. At *Solo* I was so fortunate as to be present at the then emperor's marriage; a scene which brought so painfully to mind the fallen state of the chiefs of this neighbourhood, by its being superintended by the Dutch Resident at the court. There were three days' feasting, royal salutes from the imperial guard, Javanese music, and dancing girls in great numbers, but I found the whole affair very fatiguing.

"Fallen as was the emperor's state at that time, it subsequently became much more reduced, in consequence of his being found guilty of being secretly concerned in the late war or rebellion. He has long since followed his friend and coadjutor, *Diepo Nogoro*. A tool of the Dutch Government now reigns in his stead, who cannot even leave his house for twenty-four hours without permission from the Resident at his court.

"Solo is protected by a small fort, which is always garrisoned by European troops, the Government not choosing to trust native soldiers in that part of the country. For this no one can blame the Dutch, for the chiefs require looking after, and are apt to give trouble. While the island was held by the British Government, a mutiny broke out at Solo among the Bengal sepoys. On its suppression it was found they had been tampered with by these chiefs, and that numbers had been gained over to their cause. Nothing can exceed the hospitality of the Dutch inhabitants of this part of Java; their houses are always open to the stranger, of whom they think too much cannot be made. The Resident's establishment is a splendid one, and to his liberality and hospitality I can testify from personal experience.² Indeed, our countrymen, in many parts that I could name, might, with great advantage to themselves and to travellers in their districts, take lessons from their Dutch brethren in office.³ From Solo I went to *Djockjocarta* distant forty miles, in a gig.

¹ These were in all probability "Ampel" and "Melambong."—D. M. C.

² The Resident at that time was Henry Macgillavry.—D. M. C.

³ With this I fully concur.—D. M. C.

" At Djockjocarta are to be seen many ancient residences of the Javan chiefs, amongst others, the celebrated *craton* or palace, the taking of which in 1812 cost General Gillespie a hard struggle. It is surrounded with a high wall, which encloses an area of exactly one square mile. Outside the wall runs a deep, broad ditch. The place could offer but a feeble resistance against artillery, in which arm Gillespie was deficient when he attacked and took it. Another curious building is that in which the sultans, in days of yore, used to keep their ladies. It is composed entirely of long narrow passages, with numerous small rooms on each side, each of which, in the days of their masters' glory, was the residence according to tradition of a beautiful favourite.

" To prevent the escape of the ladies, or the intrusion of any gallants, the whole pile is surrounded with a canal, which used to be filled with alligators. The only entrance was by a subterranean passage beneath this canal, and which ran under it for its whole length. When I visited the place in 1824, the canal, the passage, etc., were all in good order, though the latter was getting damp from neglect ; a proof that the masons and plasterers of Java, in old times, must have been very superior workmen.

" Djockjocarta was the birth place of Diepo Nogoro, and the scene of his earliest warlike movements against the Dutch. So unexpected and sudden was his first attack, that he caught the garrison napping, and had them within his grasp, before they knew he was in the field.

" In the *craton*, the sultan had in 1824 three noble elephants, each kept under a separate shed. I went with three visitors to see these animals, and we passed some time amusing ourselves by giving them fruit.

" Djockjocarta can hardly be called a town, yet it is more than a village. The houses of the European inhabitants are much scattered, and many of them occupy very pretty situations.

" The climate is delicious, and exercise on horseback may be taken with impunity from 6 to 9 a.m. and from 3 to 7 p.m. It is not uncommon to see Europeans riding about during the intervening hours, but this is generally avoided by old residents. A successful attempt was made here by a countryman in 1823 to grow indigo. The quantity produced was limited, but the quality was excellent, and, but for some vexatious regulations of the Government regarding the residence of foreigners in this part of Java, which drove the spirited individual alluded to from the

neighbourhood, I have no doubt he would speedily have realized a handsome fortune.¹

“Shortly before my arrival at Djockjocarta, a daring house robbery, by a band of Javanese, took place in the neighbourhood. Six of the robbers were afterwards caught, tried, convicted, condemned, and executed *a la Javan* on the scene of their crime. They were tied hands and feet to separate stakes, and *krissed* by a native executioner, who performed his dreadful office so scientifically that his victims died without a groan. The cool indifference with which five of the unfortunates witnessed the execution of the first sufferer, and successively received the *kris* in their own bosoms, was quite surprising, and shewed with what stoical composure the Mohammedan fatalist can meet a violent death.

“The forests of Java are inhabited by the rhinoceros, tiger, black tiger, leopard, tiger cat, boa-constrictor, and a variety of animals of milder natures. The elephant is not found in its wild state in these woods, though numerous in those of the neighbouring island. I am not aware of any other animal that may be called dangerous to man in these unrivalled forests, nor is there much to be apprehended from occasionally coming in contact with either of those above named, though accidents happen now and again. I have known a carriage and four attacked on the main road, between Batavia and Samarang, by a tiger, and one of the ponies killed by the fierce onset. The boa is harmless to man, unless his path is crossed, when a speedy retreat is advisable. A friend of mine in Samarang once kept one of these monsters as a pet, and used to let him crawl all over the garden. It measured exactly 19 feet. While on the subject of wild animals, I may mention a leopard, that was kept by an English officer in Samarang, during our occupation of the Dutch colonies. The animal had its liberty, and used to run all over the house after its master. One morning after breakfast, the officer was sitting smoking his hookah, with a book in his right hand, and the hookah-snake in his left, when he felt a slight pain in his left hand, and on attempting to raise it, was checked by a low, angry growl from his pet leopard. On looking down, he saw the animal had been licking the back of his hand, and had by degrees drawn a little blood. The leopard would not suffer the removal of the hand, but continued licking it with great apparent

¹ This was no doubt A. Davidson.—D. M. C.

relish, which did not much please his master, who with great presence of mind, without attempting again to disturb the pet in his proceeding, called to his servant to bring him a pistol, with which he shot the animal dead on the spot. Such pets as snakes, 19 feet long, and full grown leopards are not to be trifled with. The largest snake I ever saw was 25 feet long, and 8 inches in diameter. I have *heard* of sixty-foot snakes, but cannot vouch for the truth of the tale. In my enumeration of animals dangerous to man, I omitted the alligator, which infests every river and muddy creek in Java, and grows to a large size. At the mouth of the Batavia river they are very numerous and dangerous, particularly to Europeans. It strikes one as extraordinary, to see the copper-coloured natives bathing in the river, within view of a large alligator; they never seem to give the animals a thought, or to anticipate injury from his proximity. Yet were a European to enter the water by the side of the natives, his minutes in this world would be few.

"I recollect an instance that occurred on the occasion of a party of troops embarking at Batavia for the eastward, during the Java war. The men had all gone off with the exception of three serjeants, who were to follow in the ship's jolly-boat, which was waiting for them at the wharf; two of them stepped into the boat, but the third in following, missed his footing, and fell with his leg in the water, and his body over the gunwale of the boat. In less than an instant, an alligator darted from under the wharf, and seized the unfortunate man by the leg, while his companions in the boat laid hold of his shoulder. The poor fellow called out to his friends, 'Pull, hold on, don't let go,' but their utmost exertions were unavailing. The alligator proved the strongest, and carried off his prize. The scene was described to me by a bystander, who said he could trace the monster's course all the way down the river, with his victim in his immense mouth.

"The inhabitants of Java are, generally speaking, a quiet, tractable race, but withal lazy. The Dutch Government would never have made the island produce half the quantity it now yields, of either sugar, coffee, or rice, without a little wholesome coercion—coercion which seemed somewhat tyrannical at first, but which has ultimately pleased all parties concerned, and done wonders for Java. Slavery still exists in Java, and every Dutch family has its domestic slaves. The law forbids the importation

of fresh ones, and provides for the good treatment of those now in bondage.

“The natives of Java are by no means free from the prevalent Eastern vice, or luxury, of opium smoking, and the Dutch Government derives an immense revenue from the article. I have in various parts of the Eastern world seen the evil effects of opium smoking, but am decidedly of opinion, that those arising from gin drinking in England, and from whisky drinking in Ireland, and Scotland, far exceed them. Let any unprejudiced European walk through the native towns of Java, Singapore, or China, and see if he can find a single drunken native. What he will meet with, are numbers of drunken English, Scotch and Irish seamen, literally rolling in the gutters, not from opium, but from rum and other spirits, sent out all the way from England for the purpose of enabling her worthy sons to exhibit themselves to Chinese and other nations in this disgraceful light.

“*Mintow* (Muntok according to the Dutch) is the capital of the island of Batavia, so long celebrated for tin mines. This is a poor town and very unhealthy. It is situated on the west side of the island, and faces the straits of Banca, having the low swampy shore of Sumatra opposite. When Banca was occupied in common with the other Dutch colonies by the British, it proved fatal to nearly the whole of the garrison.

“The once thriving settlement of *Bencoolen* (or Fort Marlborough) which I visited at different times between 1828 and 1830, I found even then to have declined very seriously from its former prosperity. Previous to its transfer in 1825 to the Dutch, great exertions were made to render this settlement important for its exportation of spices of all descriptions, and, so far as nutmegs, mace, and cloves, those exertions were eminently successful. Planters and others, however, soon found, that on the hauling down of the British flag, and the hoisting of the Dutch, their prospects underwent a very material change, arising from duties, and other charges laid on the commerce of the place. Most of the capitalists retired with the British establishment, of which, indeed, they formed part. A hard struggle was maintained by those planters who remained behind, but without success, and the place is now very little more than a station, for a Dutch assistant Resident, or a small garrison. In my time there was a convenient covered wharf at Bencoolen, for landing goods, but not a vestige now remains ; it was originally built by the English,

and the Dutch have not cared to preserve or replace it. In the present wretched state of the settlement, indeed, it is of trifling consequence, since little difficulty can be found by the few merchants from Java who from time to time visit Bencoolen in landing the small quantities of goods they may have to dispose of.

“The climate of Bencoolen is the worst it has been my fortune to encounter since I left Europe. The natives, however, do not seem to suffer from it, but seem to be as healthy and long lived as Asiatics generally. Of the character of these natives I can say little that is favourable. They are indolent, proud, though poor, gamblers, vindictive, and far too ready with the knife, on little or no provocation; they are very fond of dress, and not over scrupulous how they gratify this taste, for which purpose I have known them have recourse to theft, lying, robbery, and even murder.

“Had they one single spark of energy in their composition, they might be a thriving and contented people, possessing, as they do, a boundless extent of rich virgin soil, which they are too lazy to clear and cultivate. The place is over-run with a race of petty rajahs and other nobles, who are a social pest, being poor, and yet too proud to strain a nerve to support themselves and their families. Sir Stamford Raffles succeeded in rousing the ambition of these men a little, by giving some of them commissions in the local corps, which gratified their taste for gay attire, and supplied them with a few hundred rupees per month to keep up a little state. From my sweeping reproach of the chiefs, I would except those *Radins* with whom I have spent many pleasant evenings, and who really possessed gentleman-like feelings and tastes.

“The transfer of this settlement to the Dutch (in exchange for Malacca) in 1825, was a severe blow and great disappointment to all the natives, both high and low. At a meeting of chiefs held at the Government House, at which English and Dutch authorities were both present, for the purpose of completing the transfer, the senior rajah rose to address the assembly, and spoke to the following effect:—‘Against this transfer of my country I protest. Who is there possessed of authority to hand me and my countrymen, like so many cattle, over to the Dutch or to any other power? If the English are tired of us, let them go away, but I deny their right to hand us over to the Dutch. When the English first came here, they asked for, and got a piece of land to

build warehouses and dwelling houses upon. That piece of land is still defined by its original stone wall, and is all the English ever got from us. We were never conquered, and I now tell the English and Dutch gentlemen here assembled that, had I the power, as I have the will, I would resist this transfer to the knife. I am, however, a poor man, have no soldiers to cope with yours, and must submit. God's will be done.' This was a straight-forward speech, but it was thrown away upon the callous ears of the hearers. Delivered in pure Malay, it sounded stronger than in this translation. The speaker was an old man, with whose power and will for mischief, the British had good cause to be acquainted.

"The country round Bencoolen is, with the exception of the spice plantations, covered with a thick forest. The forests abound with tiger and elephant. The elephant here is of a large size, and is occasionally caught in snares by the natives, for the sake of his tusks, which I have seen weighing 120 pounds each. This huge animal is not dangerous to man, unless his path is crossed, when particularly, if a single male one, he becomes a formidable neighbour. He is easily tamed, but the native here is too indolent to trouble himself with the task. The only one I ever saw made use of was sent by the King of Acheen to Sir Stamford Raffles, and was in my time the property of my friend, Mr. Robert Bogle.

"Bencoolen is occasionally visited by the hill tribes from the mountains. They come down in bands of 10, 15 and 20 men, bringing with them gold dust to barter for opium.

"I have frequently heard it said, 'Go where you will, you are sure to find a rat and a Scotchman.' My having visited Bencoolen enables me to contradict this aphorism, for there I found abundance of rats, one Englishman, and not a single Scot.¹ I must confess, however, that this is the only place in which I have ever found the Englishman without the Scot.

"From Bencoolen I proceeded to Padang. Padang, as its name implies, is situated on a plain, and is a very healthy place a few feet above the level of the sea.

"It was once in possession of a considerable trade, but this has diminished.

¹ In 1829, when G. F. Davidson last visited Bencoolen, there were many more than one Englishman, but the rest were inland on the estates. There were also many Americans, but it is quite possible, and, as G. F. Davidson says so, probable, that there were no Scotchmen.—D. M. C.

“ When the English ceded Padang to the Dutch in 1818, the natives of the Mohammedan faith, called Padres, said they would never submit to their power, and well they have kept their word.”

1832. George Windsor Earl visited Java in 1832, and some of his notes are worth recording :—

“ On our arrival in the Dutch schooner *Monkey*, Captain Pace, at Batavia roads on 2nd September, we amused ourselves by examining the ships in the harbour, for the town of Batavia was nearly concealed from our view by the trees. The majority of ships were Dutch, but several other flags were flying, amongst which the Stars and Stripes of the United States were not the least numerous.

“ The English ships, of which there were five or six, did not appear to advantage when compared with the handsome models of the Dutch East Indiamen, the finest class of merchant vessels in the world. On arrival at the Boom or Custom House, a large building below the town,¹ we landed, and passed into the principal part of the town, where a number of whitewashed brick houses chiefly occupied as offices and warehouses by European merchants were ranged along each bank of the river and fronted by rows of trees. We landed opposite to a large retail store, belonging to an Englishman, which I found was the rendezvous of all the English who have an hour to throw away. A group of merchants and ships’ captains were conversing at the entrance of the store, many of whom greeted Captain Pace as an old acquaintance. In the afternoon I accompanied a gentleman to whom I had brought a letter of introduction, to his house six miles from Batavia. All the Europeans reside in the country, sleeping in the town for a single night being sufficient to bring on fever. We left town at 4 o’clock in my friend’s buggy drawn by a fast little Javanese horse. We passed many handsome houses situated in square enclosures, generally planted with shrubs, having a circular carriage drive, arrived at my friend’s residence at 5 o’clock. Several neat gaily dressed native servants were hastening to and fro to the kitchen ; a gardener was chasing a cassowary.

“ We sat down to a dinner of fish, flesh and fowl, aided by curries and stews, and fruits, pine-apples and mangosteins. The mode of life pursued by the Europeans is rather monotonous, but is easily supported.

¹ The shed, etc., still exist.

“Early rising is generally practised, the time before breakfast is spent in riding or gardening, according to the taste of the individual. After a meal at 8 o'clock they repair to their town offices, returning at 5 o'clock, and a drive round the suburbs, or an evening at the Harmonie, an establishment formed on the principle of a large club of London, which the majority of the European residents, Dutch and foreign, are members.

“On Sunday evenings a military band performs in the Konnings Plain, which attracts the residents, who attend in carriages, or on horseback.

“The community is occasionally enlivened by an amateur play, or a grand ball given by one of the public functionaries. The annual races which are always well attended, were established and are principally supported by the English.

“All the Europeans or creoles are enrolled in the *schutterij* or militia, of which there is an infantry and a cavalry regiment, the greater part of the English residents being in the latter. The Dutch ships from Europe seldom penetrate beyond Batavia, and the produce of the other possessions is brought in Dutch country ships, a fine class of vessels, for the most part owned, commanded and officered by British subjects.

“Some of the Dutch families who have been long established in the island possess large bodies of slaves, who are attached to their establishments.

“There are a few private Dutch merchants, but the trade between Java and Holland is principally in the hands of the *Nederlandsch Handel Maat Schappy*, or Dutch Commercial Society,¹ which, like the generality of public companies, is very detrimental to individual enterprise. Some of the most influential individuals in Holland are shareholders in the company, and it is said that the most important personage in the state is deeply interested in it. Possessed of such advantages, it is not surprising that the society is enabled to distance all competitors.²

“The British-born subjects at Batavia form the most influential body of private merchants, and the revenues derived by the Government from the duties imposed on British manufactures

¹ Netherlands Trading Company.

² Extract from a Dutch newspaper of November, 1835 :—“The existence of the Society of Commerce is an estimable benefit to Holland. This society has prevented the commerce of our Indian possessions from falling into the hands of the English and the Americans.”

must materially aid the great expenditure necessary for the maintenance of its power in the island. The Dutch, however, cannot have taken this view of the subject, for although the rate of duties to be levied on British goods has been fixed by treaty, they have not hesitated to raise them to such an amount as to act almost as a prohibition.

"I could not learn the exact number of British subjects in Java, but including those employed in the mercantile navy, it must exceed two hundred. A portion of these are engaged in the culture and manufacture of sugar, machinery imported from England being employed in the works.

"This portion of husbandry is almost exclusively in the hands of the British and the Chinese. Large tracts of land are held by the foreigners, who pay a tax on the estimated value of the property to Government. The extent of land thus possessed is between four thousand and five thousand square miles, and of this nearly two thousand square miles is the property of British subjects, one thousand two hundred square miles being the property of a British Company¹ of which Sir Charles Forbes is the principal.

"From the various accounts I had received of Sourabaya, I expected to find it somewhat different to Batavia, but had no idea of the dissimilarity being so striking as it proved. An appearance of gaiety and activity prevails, which would be sought for in vain in Batavia, and the cheerfulness of the scene exercises a corresponding influence over the mind. Boats came off as we anchored with fruits, etc., for sale, prahms and other craft of all sizes, principally traders from the eastern districts, were passing and repassing up and down the river, several ships were undergoing repairs, both inside and outside the river, Javanese carpenters and caulkers working like bees. The town also presented a more habitable and cheerful appearance, there being several very handsome European villas at its entrance.

"The situation is considered healthy. I took up my residence at the house of a Belgian, who having more room than he required was in the habit of letting a part of it to strangers. My mornings were chiefly spent in visiting the Chinese and native portions of the town, and my evenings at the house of an English merchant, whose hospitality rendered his house the rendezvous of all the conversable part of the European community.

¹ These lands were Pamanoekan and Tjiassem.

“There were several English residents, agents to mercantile houses at Batavia, and the number of Europeans being small the English and Dutch did not form separate societies, but maintained a tolerably friendly footing with each other.

“The quay opposite my residence formed the evening promenade of the European residents, and especially on a Sunday, presented a very gay appearance. Every European on passing another, lifted his hat from his head, but without making any inclination of the body.

“Upon occasions in which the promenade was well attended, these salutations became so numerous as to furnish constant employment for the right hand, and a stranger finds the necessity imposed rather irksome. A story is related of an ourang-outang from Borneo, belonging to one of the Englishmen, sitting in a chair in front of one of the houses, dressed in European costume receiving with the greatest gravity the salutes of the gentlemen *en passant*. The town of Sourabaya being of small extent, carriages are only employed by the ladies, but every resident keeps a saddle horse or two.

“The only annoyance I experienced was from a large lizard called a tokkay, which disturbed my slumbers, but I could never find out its station. These lizards pronounce the word *tokkay* in a loud distinct tone, and one would certainly imagine the word proceeded from the lips of a human being.

“The story is told of an American ship commanded by a Captain Tookey arriving at Samarang, and the captain very fatigued retired to rest in the evening at the house of his agent. When on the point of sleeping, he thought he heard someone calling out *Tookey*. ‘Hullo,’ said the captain, a dead silence; presently again came the voice *Tookey*. ‘That’s my name,’ answered he; ‘if you want me come to my door.’ After a short pause he heard his name pronounced again. ‘Well,’ said he, ‘these savages are unnatural chaps altogether; they come to a fellow’s window and bawl out his name when he wishes to sleep, however I’ll try if I can’t spoil the offender’s pipe,’ and he forthwith seized a decanter and opened the window, but not a soul was to be seen. He was just on the point of closing it and returning to his bed, when he heard his name called out again, as he thought in a jeering manner, and the decanter was dashed to the opposite direction from which the voice proceeded. The host and two or three of his friends happened to be enjoying their cigars in an

adjoining apartment, imagined he was talking in his sleep, but when they heard him rushing about his room, they thought it high time to interfere ; upon their entrance they found him in a violent rage, searching for a missile to hurl at the offender, and it was some time before they could pacify him, or persuade him his conversation had been with a lizard.

“ As a residence Sourabaya is generally preferred by Europeans to Batavia, for not only is the climate better, but provisions and luxuries are to be procured cheaper. The smallness of the number of European females in Sourabaya renders the state of morality rather lax, many of the residents having a Javanese woman at the head of their establishments. Such superintendents are to be found in all the other Dutch settlements, but at Batavia the situation of the individual thus selected is not very apparent, and a stranger might take up his abode in a mansion at that place for some time without being aware that anybody was invested with the authority over its domestic concerns besides the master.

“ At Sourabaya, however, appearances are not so much regarded, and an European may sometimes be seen taking an evening drive, in the most public places in the same carriage with his *chère amie*.

“ The admission of a Javanese housekeeper is defended on the plea that an European wife is not to be procured, and that if they have not someone at the head of the establishment who will take an interest in their affairs, they will be dreadfully plundered. There are of course a considerable number of half-castes, or as they are called ‘ liplaps,’ who, it has been maliciously said, inherit the bad qualities of both parents, without the good ones of either.

“ A considerable number of Arabs and their descendants are settled at Sourabaya, while Gressik, a sea-port town, five miles distant, is almost an Arab colony.

“ I accompanied a friend one morning on a visit to Seyed Hassan, who is supposed to be the richest Arab merchant and ship-owner in the Island. He is a very superior Arab, and speaks Dutch and English tolerably fluently.

“ A great number of ships are built and repaired at Sourabaya, and there is one European ship-builder, an Englishman who has been settled in the country for a considerable period, and is carrying on a very extensive business. His carpenters number three or four hundred, and occupy a village adjoining his dock-yard.”

CHAPTER XIII

ANTIQUITIES

THE antiquities of Java consist of a number of ruins of temples and of other sacred edifices formerly dedicated to the religion of the inhabitants, who after first embracing Brahmanism changed their faith about A.D. 450 to Buddhism, and a thousand years later, more or less under compulsion, to Mahometanism.

Years before Buddhism was openly practised, Buddhist priests from the ancient Hindu settlement (later a kingdom) of Méndang Kamúlan took up their abode in the Dieng mountain, partly, it may be presumed, for safety's sake, and partly to bury their chiefs in secrecy, and in freedom from unwelcome inquiries of their fellow-men. The Dieng, we may take it, therefore, gradually became a sacred city, and was visited as such so soon as Buddhism became predominant in the same way as Mahometans of the present day visit Mecca. It is for this reason that so many temples were built on the top of the Dieng mountain, the remains of some of which in fair preservation may still be seen. These ruins puzzled the experts for years, their number being so remarkable that for a long time, and down to to-day, they were thought to be the remains of the last city of the Buddhists, hurriedly built to receive the faithful fleeing before the Islamic banner. It is of course not only possible, but probable, that a great many Buddhists did flee to the Dieng when the Arabs were winning the day. It is also very probable that in the Dieng Buddhism still existed after Mahometanism was predominant everywhere else in

Java. It is therefore fully entitled to be considered as the last stronghold of the Buddhist religion. The riches which were once hoarded here are shown by the numerous beautiful ornaments cast in gold faithfully depicting scenes from life which are continually being dug up by the natives.

Long before Buddhism or Brahmanism, or any true religion was practised, Java went through a Stone age. The earliest records of this have been found in the Pre-anger or western end of the island, known as the Sunda districts. These very earliest inhabitants lived in caves and have left here and there distinct traces in rough carvings on the rocks on the southern sea-shore near the river of Karang bolang and on the river Jolang near the village Chi-tapen.

Besides these, stone axes and stone spear-heads have been dug up from time to time when new lands were being opened for rice or tea plantations.

There must also, as in Europe, have been a Bronze period, as several bronze hatchets have also been dug up in West Java.

Nothing, or scarcely anything, is known regarding Sunda's ancient history.

The next stage is where sacred spots called by the natives "Kabuyntans" are found decorated with heavy, ugly, and clumsy figures of men and animals; these are thought to go back to A.D. 400.

The Hindu ruins are found principally in the country around the present towns of Djockjakarta, Modjokerto, and Malang. Near the first-mentioned town the world-famous temples of Boro-Budur and Brambanan are situated; while the remains of the old Hindu city of Majapahit, with its temples, etc., are near Modjokerto.

The temples of Singosarie are near the last-named town of Malang.



BURO BUDUR.



BURO BUDUR.



BORO-BUDUR.

The greatest of all these temples is that of the Boro-Budur ; there is nothing to equal it in Java, or even India, and it is the finest example of its kind extant. Buddhism, in fact, has left no such record anywhere else. It is second in the world only to the great Egyptian Pyramids, but it is first in being far more costly and beautiful. Moreover, the amount of human labour expended on the Great Pyramids sinks into insignificance when compared with that required to complete this sculptured hill temple in the interior of Java ; and as the Pyramids surpass the Vihara in height and area and everlasting monoliths, so do the Boro-Budur surpass the Egyptian monuments in decorative elaboration in its three miles of alto and bas reliefs, and in its hundreds of statues. Ferguson, one of the greatest authorities on Oriental architecture, says its sculptures " are complicated and refined beyond any examples known in India."

Buddhism, we know, was introduced into India about B.C. 500, superseding the ancient Hindu or Vedic system. When its founder died, relics were distributed about India, and fitting repositories were constructed in which to preserve them. A reputed tooth found its way to Ceylon A.D. 311. That the Boro-Budur must have been such a repository is unquestionable, for it is scarcely possible to imagine that such a work would ever have been undertaken unless some great object were in view ; and what greater object could there have been than a resting-place for some of the remains of the Buddha ?

It is still a problem when the Boro-Budur was built. That distinguished Buddhist scholar, Professor Rhys Davids, has stated his opinion that this temple was built in the thirteenth century, while Dr. J. Groneman, the honorary president of the Archæological Society of Jogjacarta (Djockjakarta), considers that it has existed for about eleven centuries.

Its artistic value has certainly no equal, and even the great temple of Angkor in Cambodia can scarcely be compared with the grandeur of its conception and the super-excellence of the execution, with the beauty and unity of the whole, and with the harmony of its parts. It may be assumed from this unity that only one architect devised its plan, a man whose ideal must have been far above that of his fellows. Only some strikingly great man could have created such a design, a design which it took thousands upon thousands of skilled workmen and trained sculptors, working through a great many decades, to carry out. That this wonderful building was never actually finished is clear from unfinished sculptural work found at its base, which proves the time it must have taken to build, during which the religion of Buddhism had already undergone a change and was on the decline in Java.

At a distance the Boro-Budur stands out above everything, being built upon a small hill; the observer sees a many-sided pyramid of stone-work, a number of cupolas and spires, surmounted by an unmistakable dome crowned with a large spire.

On drawing near, it is seen that the Boro-Budur is square in plan, having sides about 120 metres long. This square plan, covering almost the same amount of ground as the pyramid of Gizeh, is repeated in four galleries, which mount higher and higher, being connected by stairs in the centre of each side.

The galleries have on their outside a balustrade with sculptures, the inside wall of these galleries containing, similarly, sculptures. The mathematical precision of it all must strike even the veriest novice; it is furthermore adorned throughout, not a foot, not an inch even, having been left unworked by the chisel. There are seventy-two dagobas, resembling gigantic lotus buds, the open lattice-work of which reveals a life-sized Buddha image. Each

face is turned slightly upwards towards the supreme centre shrine, a domed and spired dagoba 50 feet high, which at one time contained an immense full-length image of Buddha. It was inside here that the small phial or vase filled with ashes must have rested. To-day no certainty as to this is possible, as long before the Boro-Budur became the subject of serious investigations by scientific explorers treasure-seekers seem to have broken into the main dagoba. In this way they obtained access to the cella, in which the huge Buddha image was enthroned. The floor was broken up and the ground dug up for a depth of several metres.

In 1842, when a proper survey was made of the head dagoba, the image had unfortunately sunk into the ground,¹ and with the exception of a few metal objects nothing was found. The first treasure-seekers had taken all there was, including, no doubt, the ashes, which would have been enclosed in a golden vase, box, or phial. The sculptured figures on the lower series, which are now out of sight, are supposed to have been merely architectural ornaments. It is possible that they represent some history or legend, but the supposition is based merely on the fact that their import has not been elucidated.

These sculptured pictures are ever-varying repetitions of the same idea, namely, of a man sitting by a scent-offering or a flower-vase, and a man standing between two women slaves, attendants, or nymphs. Each pair of pictures is separated by the isolated figure of a woman holding a lotus-flower. On the cornice over these images there were at regular intervals, right over the sitting men, miniature temples, each containing an image of Buddha, with the *prabha* (glory, or disc of light) behind the head, sitting on a lotus throne.

The whole number of niches with Buddha images in

¹ It has now been replaced by Captain van Erp.

the five enclosing walls reach the remarkable figure of 432. That is to say—

On the lowermost wall	.	.	.	$4 \times 26 = 104$
On the second wall	.	.	.	$4 \times 26 = 104$
On the third wall	.	.	.	$4 \times 22 = 88$
On the fourth wall	.	.	.	$4 \times 18 = 72$
On the fifth and last wall	.	.	.	$4 \times 16 = 64$
Total				432

On the first terrace there is a most exquisitely chiselled set of sculptures, giving a complete series of historical incidents in the life of Buddha from his birth to his death. How long it took, once the idea had been planned, to put it thus into sculpture it is impossible to say; but one thing is sure, that it must have occupied generations upon generations. One of the most remarkable things is that, as already related, the foundation of such a monument as this is wrapped in mystery.

In 1886 a Dutch engineer of the name of Yzerman, who discovered that the temple had in its original plan a different basement from the one it now has, found one or two panels with some short inscriptions on them. These he took to be about eleven centuries old. There is, however, nothing to prevent their being very much older; there are absolutely no other indications, direct or indirect, as to when the temple was begun or when finished.

The physiognomy of all the faces is distinctly Hindu; the type is not to be mistaken. Another remarkable fact is that the sculptured ships are in design of a great age. They are the same as one sees in Egyptian sculptures, with banks of rowers. There are thatched houses on piles; in these sculptures women with lotus-flowers on their heads and the Tree of Knowledge, or sacred *bo* tree of Gaya. We see palm-fringed bathing-tanks, seed time, harvest, ploughing, reaping, bullock-carts, and water-buffaloes;

there are elephants, denoting royal Indian state-life, and coracle-like boats, probably emblems of the vessels in which the first Hindus were rowed to Java, to the peaceful isles, called sacred by them. The number of the sculptures amounts to over 2,000, leaving out the 432 dagoba images. They are distributed as follows :—

On the outside of the outer wall—				
At the top	408	sculptures		
Lower down	160	„		
On the inside	568	„		
On the second wall—				
Outside	240	„		
Inside	192	„		
On the third wall—				
Outside	108	„		
Inside	165	„		
On the fourth wall—				
Outside	88	„		
Inside	140	„		
On the fifth wall, outside	72	„		
Total	2,141	„		

A slight examination of all these terraces soon proves, even to the uninitiated, the reality of the history.

The first scenes are a series representing what happened before the birth of Buddha. The next series shows him leaving his throne attended by three former saints, to descend into the world to initiate his great and pure religion. Next are several images of Buddha's parents—the *Sākya* King, *Suddhodana*, and his first wife, *Maya*, who is honoured as the future mother of the divine son. We then see Buddha in the shape of an elephant lying on lotus cushions and descending to his future mother. The descent is said to have been a dream of *Maya*. The next series show *Maya* travelling, in accordance with the custom of her country, to her father's house, where she was to await her confinement. On her travels she stops at a beautiful

grove, or possibly oasis, called *Lumbini* ; here you see the Buddha unexpectedly born out of her side while she was standing under a tree.

Maya now made seven steps towards the four cardinal points and towards the zenith, as a token that her son should hold sway over all the five worlds.

A shower of lotus-flowers falls upon the Buddha, and lotus plants burst forth into full bloom under his feet at every step he takes. A glory or crescent behind his head denotes his heavenly origin. There now follows a series of groups of the Buddha on his father's knees receiving the homage of all the high priests and laymen, who acknowledge his non-earthly origin. The reason he is on his father's knees is explained by the fact that *Maya* is supposed to have left this earth for Paradise seven days after giving birth to the Buddha.

The Buddha's mastery in sports is indicated by a competition with skilful bowmen, in which he bends a bow which no one else can, and shoots the arrow through a row of seven coconut trees. By this feat he is supposed to have gained the hand of the purest of all the Sákya maidens, his cousin *Yasodhara*. This is all clearly depicted, panel following panel as page follows page in a book. Other sculptures show how, in spite of his father's precautions, the sorrows and sadness of human life are revealed to him. Buddha now dreams, and afterwards he decides to renounce this world with its superficialities and to leave domestic happiness.

He knows he must tear himself away from his wife, his child, his father, and prepares himself by a life of deep seclusion, hardship, penance, prayer, self-renunciation, self-command, and self-denial for his great and noble self-imposed task, the salvation of suffering mankind. He sees a man broken down with old age and a sick man in the agonies of death ; a corpse shows him the transitoriness of this

life, and a begging priest tells him of the narrow way in which life and death can be conquered and peace attained by the subjection of all passion and carnal appetite, and by the desire to do good to all men and to assist by teaching the wicked. He discusses his final decisions with his father, who is disappointed. The sleeping watches show that the discussions last all night.

The next panels indicate that these decisions have been communicated to his wives. The meditative attitude as well as the large shining crescent of light which crowns the higher seat on which he spends the night among his sleeping women show how he has been suddenly raised above ordinary human beings by his self-imposed task. The next sculpture shows him departing on his horse *Kant-haka* ; this is followed by another in which the lotus cushion carries him in aerial flight, showing once again his heavenly mission. He is now seen in the humble and lowly dress of a wanderer.

We then see Buddha in his wanderings learning all he can, or rather trying to see what can be learned, from Brahman teachers. He learns nothing, however, his wisdom being greater than theirs.

In another panel he is visiting *Rajagriha*, the capital of *Magadha*, King *Bimbisara* with his queen coming out to meet him and offering him homage and half his kingdom. Buddha, however, had left all earthly greatness and declined the offer.

Since his wanderings began he has been followed by five disciples ; and Buddha is now seen on the side of a stream striving for more wisdom by self-mortification and fasting.

In the next panel one sees *Sujata*, the daughter of the village chief, nursing the exhausted wanderer and feeding him to recovery on cow's milk. He now grasps everything as it were, and his eyes through his divine thoughts and

wisdom are at last opened. His object has been attained : he has become " The Buddha," that is, the Enlightened One. As the Awakening Light of Heaven he will now go forth into the world of wickedness to teach the true doctrine that men may turn from their evil ways and be yet saved from sin while there is still time. We see him seated on rushes under the fig tree, sacred from this time on as the Tree of Knowledge and Wisdom, the *bodhidruma*, or *bo* tree, going through his last struggle with Satan, who, being conquered, will leave him for ever. Armies of false gods and demons from hell are hurled upon him, but they leave him unscathed. A large disc of light displays the rising sun in all its splendour, indicating Buddha's increase of strength.

The sculpture-work now displays *Mara*, endeavouring to seduce or subdue him through the charms and wiles of his lovely daughters, but he has overcome all earthly passion and weakness, and his life is henceforth devoted to a life of love, charity, kindness, and thoughtfulness for all his fellow-creatures.

As a holy and consecrated teacher, highly revered and worshipped, he sets out for the holy city of Benares. The last of the series of beautiful sculptures represents the washing of his corpse.

This is the story of the Boro-Budur. Can it be supposed, after such a work, that the building of this temple was for any other purpose than that of the preservation of the vase of ashes ? Could any other object have called forth such a display ? The monument itself answers the question.

As stated already, Yzerman found that originally there was another base ; an examination of the foundations showed that the original outside wall was too weak for the weight it had to support. The signs of its weakness must have soon been apparent to the Hindu architect, who, however much it must have grieved him, did the best he

could under the circumstances by burying it, together with 160 reliefs, under a reconstruction. This was carried out with great care, the sculptures being given an envelope of clay, so that when they were discovered they were found in an excellent state of preservation. The 160 buried sculptures, after being photographed, were buried again. These reliefs were different from the others, inasmuch as instead of representing historical facts in the life of Buddha they depicted the life of earthly mortals—feasts, hunting, scenes, bacchanalia, and representations of fearful punishments.

For centuries this temple lay buried, and until 1710 even the Javans did not know of its existence. Raffles hearing about it in 1812 sent Colonel Colin Mackenzie, an officer well acquainted with the antiquities of India, and Captain George Baker, of the Bengal Service, to survey, measure, and take drafts of the ruins of this and other temples.

To unearth this temple two hundred coolies a day were working for six weeks under English engineers, cutting and clearing away a riotous luxuriance of tropical bushes and creepers which had practically grown into and through the living rock. The tons of earth, moreover, under which the ruins lay gave them much work, so that it was years before the temple was entirely uncovered.

To-day, having undergone the careful repairs under Dutch engineers which were needed in parts, although in the main the temple was wonderfully well preserved, this structure is no longer a ruin, but is in a state equal almost to what it was when first completed, before it had felt the effects of earthquakes and the devastating influence of tropical vegetation and of the weight of the thousands of tons of earth under which it lay buried for centuries. Taking all these facts into consideration the Boro-Budur, it must be admitted, is a wonderful example of the great

talent and skill of the Hindu architects, who two thousand years ago were infinitely more gifted than they are to-day. This art of sculpture and artistic decoration would appear to have been lost to the world for ever.

Professor Wallace, in his book on the Malay Archipelago, says "the beauty and number of the architectural remains of Java compared with those of Central America, and perhaps even those of India, the amount of human labour and skill expended on the Pyramids, sink into insignificance when compared with that required to complete the Boro-Budur."

Another writer describes it as "a beautiful sculptured record of the arts, industries, culture, civilization, and despotism of the golden age of Hindu rule in Java, when it was at its height in the sixth century. A record by the sculptor's chisel in picture. A veritable miracle, and the wonder of the world."

Brumund calls it "the most remarkable and magnificent monument Buddhism ever erected"; whilst Ferguson says: "it is the highest development of Buddhist art and ritual, and the culmination of the architectural style which originating at Barhut B.C. 400 had begun to decay in India at the time when the colonists were erecting this masterpiece of the ages in the heart of Java."

CHANDI PAWON.

Chandi Pawon is quite near the Boro-Budur, but was not known to exist until a few years ago, being buried in wood and forest and overgrown with a rich vegetation which practically smothered it.

It is just behind the kampong of Brojonalan, and when discovered a gigantic tree, standing 100 feet high, had grown through and around it, causing great havoc, as can easily be imagined.

Chandi Pawon shows much in common with its neigh-

bour Chandi Mendut, and being both Buddhistic in carving and ornamentation they have much the same motives.

The temple is led up to by a small flight of stairs, which, besides having the Kala Makara ornament, are decorated with beautiful sculpturing.

In this we see a tree covered by a payong (umbrella); beneath the tree are jewels, and next to them a kneeling figure with a prabha behind the head, and several other figures (possibly disciples) standing near.

The external decoration of the temple walls shows the usual uniformity and symmetrical precision so characteristic of Hindu art. On some of the panels male figures (Bodhisatvas) are to be seen; the upper part of their bodies is bare, a light garment hides their hips, showing their rounded bodies, with jewels on their neck, breast, arms, legs, and hips.

The female figures which are seen at Pawon are characteristic of the rather peculiar pose of all Javanese women as they rest on one leg with projecting hip. The proportions of these figures are perfect, bringing out in strong relief the short upper half of the body with full breast and fine waist.

With the exception of the jewels, these figures of male and female Hindus depict faithfully in pose and clothing the Javanese of the present day at the court of Djock-jakarta.

Here on all occasions the men are bared to the waist, whilst the women wear a tightly-drawn sarong round them, barely concealing their breast, above which swells out an absolutely bare upper body and shoulders.

On another part of the temple we see the Tree of Knowledge, with male and female angels; whilst on another panel is seen a tiger. Most of the images here have disappeared from the niches.

In the chamber inside a large-sized Buddha no doubt

once rested, but this, like the other figures, has gone, whither it is impossible to say ; but from the situation of this temple it cannot have been transported anywhere else. The inside walls are not ornamented. The roof is a single one, adorned with different-sized dagobas, at varying heights.

Although not to be compared with the Mendut or the Prambanan temples, Pawon is well worth the small trouble of a visit by anyone who may be at the Boro-Budur.

RUINS ON THE PLAIN OF PRAMBANAN.

These ruins are quite near the town of Djockjakarta, being on the boundaries of this and the Soerakarta residencies. It is generally held that the building of the temples of Prambanan was the high-water mark of Buddhistic monumental art. They were begun after the Boro-Budur, and on old stones bearing Sanscrit ciphers the date given is about A.D. 750.

The old empire of Mataram was then flourishing, and the kraton or palace was situated on the spur of the hill dividing the plains of Sôrôgedug and Prambanan, the remains here being called "Kedaton van Ratu Boko,"¹ after the Mataram prince of that name.

The ruins here show in every way that they could never have belonged to any temple of worship. The plateau is paved with stones of quite gigantic proportions, and there are still some remains of an encircling wall, with its usual four gates, a moat, and a bathing-place. Near the moat are the stones of a lot of small dwelling-houses, such as would be required for attendants, etc. From sundry discoveries it is clear the princes were Buddhists, and grottoes in the neighbourhood suggest a custom still in use among the sultans of Mataram to-day, namely, a disappearance into seclusion and solitude for a short time when an important decision was required.

¹ Probably the same as Báká.

It is quite likely that this palace, being situated where it is, was in point of fact a formidable fortress. Why, therefore, such a situation was abandoned, and so completely (it was lost sight of for centuries), is a question that can only be answered conjecturally. The palace no doubt existed centuries before Prambanan was ever thought of. In the neighbourhood are large quarries of sandstone, which from their appearance of once having been systematically worked prove that the foundations of the Prambanan temples were laid with the stone as a filling.

For no other purpose would it have been required, being of no use for outside work. From where the palace stood, the old princes of Mataram had a magnificent view of the plain and surrounding country.

CHANDI KALASAN.

Chandi Kalasan, or Kali Bening, is near the first railway station of that name, after leaving Djockjakarta travelling eastward. It was built in A.D. 779, and is one of the noblest monuments left us by the Hindus in Java. Quite near a stone was found, on which in "Nagari" character the following was inscribed : " When seven hundred had passed in the Saka era the prince, in order to do homage to his teacher, after a wager (?) founded a Tara temple. The village territory of Kalasa was given to the temple."

The statue of Tara has, however, never been found. This no doubt led Baker in 1812 to call this chandi a state reception hall, differing from Mackenzie, who always maintained it was a temple, which of course is the case.

The plan is square, with a projection on each face, but the whole is in a condition of utter decay, and unless speedily taken in hand will soon be no more.

The principal chamber, where the statue of Tara must have stood, is still to be seen, although the roof is in a

damaged and ruinous state. One of the projecting parts, with signs of beautiful sculpturing still visible, is to-day in fair preservation; the other three, however, are almost gone, the stones being used by villagers for making walls for their "kampongs." The two lateral chapels and the eastern porch, together with the surrounding terrace and its flight of four steps, have unfortunately all disappeared. The roof originally was a high pyramidical structure.

This pyramid was composed of erections rising one on top of the other with dagobas at the corners resting on lotus cushions, the top being one large dagoba, of far greater dimensions than the others, which decreased in size as the circumference of the rising erections decreased. When completed it must have been a beautiful piece of workmanship, although it is said that in its construction no other tools than a chisel, hammer, water-level, square, and plumb-line were used. This is quite possible, as the skill of the Hindu architects was undoubtedly very great.

Although not a single image to-day remains, each of the niches, which are sculptured with exquisite beauty, contained at one time a figure standing, or more likely sitting, on lotus cushions (*padmāsana*). The doorway to the temple was comparatively small and flanked by two pillars, on the tops of which were two figures supporting on their raised hands the lintel, a plain stone. On this stone rested a fine sculptured arch, under the recess of which there was formerly a figure. Outside the pillars there is a Nāga head, with a widely opened mouth, and an upper lip curling into an elephant's trunk.

The roof, already described, consisted of three edifices. On the first rose the second, which was octagonal in shape and at each side provided with a niche or small temple for the reception of the Buddha image, which over the four principal walls was flanked by two panel-shaped divisions on each side and surmounted by three smaller

dagobas, a large dagoba being on the cornice over the four oblique sides.

The third storey of the roof rose from within the circle of the dagobas of the second. It was also octagonal, each side containing the Buddha niche, flanked by two richly ornamented festooned bands, and likewise surmounted like the other roofs, with dagobas, a larger one on each oblique side, and three smaller ones on the principal sides. Above this (as already said) from inside the dagobas of the third roof rose the crowning dagoba.

With considerable difficulty Mr. Yzerman and Mr. Leydie Melville have constructed a drawing from which the original appearance of this temple can be studied, and if the design is even only approximately correct, the building, with its carvings and sculpture-work, must have been a beautiful specimen of Hindu art, while the roof must have made a powerful impression on the inhabitants who worshipped here.

Chandi Kalasan can therefore be classed as one of the masterpieces of the Hindu remains of Central Java—notwithstanding that to-day it is a decayed and fast-crumbling ruin—a work worthy of the founder of a perfect religion.

CHANDI SARI.

Chandi Sari, or Chandi Bendah, was built at the same time as Chandi Kalasan, that is to say, in A.D. 779.

Its purpose, however, was to be a monastery for the priests or monks who worshipped at Kalasan or took care of it. The distance between the two was less than three-quarters of a kilometre.

The building at one time had a second floor, and in this the monks dwelt. The first floor was used for religious worship, and the remains of altars upon which statues stood are still to be seen.

A glance at the plan will show that it was divided into three separate compartments on each storey. The proof that the top floor was used as the dwelling-house of the priests is found from the fact that in the window openings there are still flanges visible against which wooden shutters would have been closed ; and such shutters would only be used if the apartments were used for sleeping in. The windows in the lower floor show holes, which goes to prove that they had iron or possibly wooden bars.

In the interior it is possible still to see the holes where the ends of bulky wooden beams were inserted to hold up the wooden floor of the top storey. The way up to this was by a stone staircase, slight traces of which are still discernible.

When complete it was a rather long rectangular building of dark-grey stone. The entrance was in the middle, and it had formerly a porch, but this has now quite disappeared. To the right and left, on each side of the entrance, there are square windows, flanked by panels with bas-relief images. Two Nâgas are on the side posts of the door ; their heads, with the usual curled elephants' trunks, are turned out, and rest upon kneeling elephants ; on each elephant there is a man. In the opened mouth of the Nâga there is a bird. The chief windows have been beautifully carved and surmounted by some perfect sculpturing.

On the roof in front there were formerly three dagobas with spires each containing an image. At the back there are no windows on the ground, only dummies adorned with bas-reliefs ; on the top floor, at the back, however, there are three windows, so that it is possible that this floor was subdivided into six compartments instead of three. All the windows, sham or otherwise, are flanked by panels with standing images. The central room on the ground floor received light and air only through the entrance. The inside may therefore have been artificially lighted in some

way, as otherwise there would scarcely have been light enough. Despite the fact that this building has had to bear the ravages of time and has passed through numerous volcanic eruptions of the mountain Merapi and some severe earthquakes, it is still in very fair state of preservation.

The Hindu architect when building the Chandi Sari, as with the other Hindu temples, built the walls without mortar or cement; nevertheless they are so strong that, having defied thirteen centuries, they look as if they will withstand as many more. If there were, as has been assumed, six dwelling-rooms on the top storey, then, allowing four monks to each one, this cloister or monastery housed twenty-four priests, which number would have been sufficient for a day and night service at the Chandi Kalasan.

Chandi Sari was a very richly decorated and sculptured structure, and reflects glory on its architect.

THE GROUP OF TEMPLES NEAR PRAMBANAN.

The Netherlands India Railway has a station of this name; it is only half an hour from Djockjakarta. Whether the temples here are Buddhistic or Brahmanic is a question about which there is some difference. Those who hold them to be Brahmanic justify their opinion by the fact that there is not here a single genuine Buddha image, but many Brahmanic gods; while those who hold them to be Buddhistic point to the sacred *bo-trees* covered with parasols and other signs, which would never have occurred in any Brahmanic temple. Then there are the dagoba-shaped bells, the posture of the figures, which is that peculiar to Buddha images, and numerous other marks, which must in any case be taken into account even if they do not absolutely prove that the temples are Buddhistic.

These temples were built about A.D. 750 to A.D. 779 one after the other, and it is reasonable to suppose that they were

built by Buddhists over the ashes of the kings and princes of a Buddhistic empire.

Before they were finished, circumstances the nature of which will never be ascertained stopped short the undertaking. There must have been some striking and appalling event to throw this Hindu empire of Middle Java into confusion. The catastrophe must have been sudden and overwhelming. At one of these temples the stones that were being shaped into Nâgas were a few years ago still to be seen ; the labourers had suddenly suspended their work whilst in the midst of it. On other temples the work was never completed, while some had scarcely been begun : all degrees of completion can be seen. The ruins here form a group of eight chandis ; three are large, three are smaller, two are still smaller. The three large ones are on the west, whilst the three smaller ones have been built on the east side of a spacious square. The two small ones are at the end of the space between the two rows. The western chandis have the entrances facing east ; the eastern ones look towards the west. Around the terrace at least 156 very small temples were found. Allowing that the larger temples were built over the remains of the Hindu princes, then the smaller ones would be for the ashes of lesser members of the royal family.

Beyond an inscription found on a stone slab with the words " Raja-Mataram," proving the existence of a Hindu empire of that name, absolutely nothing has been found to show who were buried in all these mausoleums. The three temples on the west side are polygonal in shape, raised on high basements, and led up to by rather steep steps. Those on the east side are quadrangular. The two small chandis, which are now in ruins, were probably also quadrangular.

Most of the images from these temples have disappeared, European treasure-seekers, and possibly native ones also, having ransacked them a century ago. The sculptured panels



THE TEMPLE, BORO BUDUR. (AS IT WAS IN THE NINTH CENTURY IN THE TIME OF THE HINDUS.)

that are not mutilated show excellent workmanship and an exuberance of fancy and execution. The various niches, which contain three heavenly nymphs standing, or possibly dancing, with arms interlaced, show considerable skill.

This motive is repeated for some reason or other over and over again, but the posture of the three Graces is always a varying one. The great art displayed in the various reliefs here cannot but excite the admiration even of those cynics who are "temple-proof" (as I once heard remarked).

The exquisite carving and the sublime beauty of Hindu sculpture are here in abundant evidence.

We will now give a short description of the three principal temples—namely, Siva, Vishnu, and Brahma, called by some the Chandi Loro Djonggrang ("the shrine of the maid with the beautiful lips"), in the belief that one of the images represents Rara Djonggrang, the daughter of the Ratu Bâka, the remains of whose kraton on the hill have already been described. She was a maid of gentle birth, but was led astray before her marriage. To-day Javans, Chinese, half-castes, and even Europeans offer incense and flowers to Loro Djonggrang and ask her goodwill.

CHANDI SIVA.

Until 1886 the temples on the Prambanan Plain were to a great extent buried. At this time, however, the Archaeological Society of Djockjakarta began the work of excavation, which under the able hands of the engineer Yzerman was carried out on a systematic and thorough plan, and to-day the glories of these temples are fully exposed to view. The honorary president of the above society, Dr. J. Grone-man, has published a book richly illustrated, called "Chandi Prambanan op Midden Java," in which he does justice to them.¹

¹ There is an English translation of another of Dr. Yzerman's works called "Beschryving der Oudheden naby de grens der Residenties Soera-

The Siva temple is the chief temple of this group, but until 1733 its existence was unknown, when a Dutch engineer officer happened to rest here on his journey to Klaten to inspect the place with a view to building a fort.¹ Up the stairs of the temple and before the entrance on each side there are two Siva figures ; one rests his right hand on a club and the left on his hip, and is standing on a lotus throne, with a glory round his head.

The club is an attribute of Kala, that is Siva the Killer, destroying Time ; but there is a gentle Kala, as generally conceived by true Buddhists, who considers death to be no enemy. The images of Kala in the non-Buddhistic temples of India depict him as a terrible and horrible monster, with the face of a brute, a large tusked mouth, a collar of skulls, and several other attributes of the same kind ; none of these images, however, are found in any of the temples of Central Java, that is, none with anything more than the club.

At Singâsari, between Lawang and Malang, it is, however, otherwise, for there the sculptured guards of the non-Buddhistic Hindu temples were figures of Kala the Terrible, with all the usual attributes.

The walls of the porch of the Siva temple and the chamber into which it leads show bas-reliefs of flowers and lotus rosettes. In the centre of the chamber is a Siva figure 9 feet high. The image has been beautifully cut out of one block of stone. At the foot of the image are the remains of the pedestal, in which there was a groove for the sprinkling of sweet water as an offering to the gods. The sink through which the water was carried off is on the left side, passing out of the head of a *nâga*, or snake, below, from

karta, en Djogdjakarta," which is also worthy of perusal. The full details contained in these two books will go far towards filling in the following slight sketches.

¹ The fort was built in 1746.

which it was caught up by true believers into urns as holy water.

The large Siva image has three eyes ; it has four arms, and a large disc of light at the back of the head.

The sculptures on the terraces are jewels of exquisite artistic conception, and when the engineers under Yzerman gradually unfolded these hidden treasures they gave way to ecstasies of delight at the ravishing ornamentation that was daily being brought to light.

One of the series of panels refers to the Râma legend, as told in the great Indian epic "Râmâyana."

The god Nârâyana is to be recognised by the symbols on his two hind hands ; he is adorned with a crown of light ; on the right behind him is his vâhana, the sun eagle or holy bird.

Garuda, represented as a man with a beak, wing and talons, and Dasaratha, the King of Ayodhya, with his three wives offer flowers to Nârâyana. The small breasts of these women mark their barrenness.

In this connection it is curious to observe that the Javanese still offer flowers when they ask their gods for a favour.

In the next panel the king is seen with one of his wives, whose full breasts mark motherhood.

The following panels, completing a series of twenty-four, are speaking and life-like reliefs : Visvâmitra is depicted receiving the homage of the king, and the two proceed on horses to the forests, where Râma kills a she-demon recognisable by her brutish face. Visvâmitra is next seen feeding his birds. The next is the daughter of the King of Vidéha being given to the hero who is able to bend Siva's bow.

The happy couple are next seen returning to their home and are being met by envoys, who, just like the attendants of Javan princes of the present day, are carrying princely

insignia. Games are now indulged in, and shooting with the bow and arrow is depicted.

The King Dasaratha is again seen conversing with one of his wives, thus symbolising the legend of the desire of the second wife to have the eldest son of the first wife banished from the court and her own son called to take his place. The king is next represented as dead through the washing of the body, just as Buddha's death was depicted.

Another panel shows dancing taking place, symbolic of a coronation feast. Dasaratha's body is now on the funeral pile.

The next panel shows the brothers discussing which of them is to become king. They next defeat the giants of the forest.

Next Râma, the eldest son, and Lakshmana are in their hut in the forest together ; the former goes hunting.

Râma is next in the hut by himself with Sitâ, his wife. Then Sitâ is in the hut alone, and the wicked man Râvana, disguised as a monk, visits her suddenly and drags her off. Râvana next becomes himself, having ten heads and twenty armed hands, and flies through the air on a winged giant to Lanka in Ceylon.

Râma and Lakshmana now search for Sitâ, and proceed from one place to another to look for her. Râma next shoots through seven cocoanut trees. The cocoanuts fall to the ground and the squirrels are seen eating them.

After a further series Râma is seen crossing the straits between India and Ceylon, in which he is assisted by an army of monkeys. He now arrives at the island and marches to Lanka. Such is the story told by the chisel of the Hindu sculpturers.

The Râma legend has also been represented in the Vishnu and Brahma temples, but the story could never be properly followed owing to numerous mutilations. While working here Dr. Yzerman discovered a stone urn, which in addition

to some ashes contained lozenge-shaped gold, silver, and copper plates, the whole surrounded by a thin copper sheet. Seven thin gold plates with ancient Javan characters on them, five small figures cut in gold-leaf, namely, a snake, a tortoise, a lotus, an ellipse, and an altar pedestal, besides some spherical gold coins and some small stones, were also found.

CHANDI VISHNU.

The Chandi Vishnu was more or less a copy or repetition of the Chandi Siva, with the difference, however, that there is only one interior.

The image in the inner chamber is that of Vishnu, and is 7 feet high. The pedestal is much the same as that of the Siva image, but with less ornamentation.

Vishnu has a crown, a glory, and four arms, and bears a chakra, or symbol of the sun, in his upper right hand, and in the left the wringed conch ; while the lower right hand rests on a club (the Buddhist Kala) and the left grasps a triangle.

During the excavations which were carried on here three smaller Vishnu images were discovered—namely, Vishnu bearing his wife on his left arm in the shape of a dwarf ; Vishnu as the lion-man ripping open the body of the demon Hiranya Kasipu, who denies the existence of the gods ; and Vishnu disguised as a dwarf approaching the King Bali, who has obtained power in the lower world by his wonderful penance.

There are some twenty-seven groups of images. Each group is the modified representation of one and the same idea, the chief Hindu sculptor who planned all these representations having evidently the one motive running in his head. This is a god as Bodhisatva seated on a throne, between two women, who stand behind him. These women hold

a lotus in one hand, and are very like the women in the Boro-Budur. The women are sometimes taken for nymphs or attendants, but on account of the crowns they probably hold a somewhat higher position in the Buddhist system.

The first of the twenty-seven series denotes women with flowers in the hand and a god with a lotus in his right hand. There is a dagoba on the flower and the nymphs are in varying postures. In changing form this subject continues nine times.

In the tenth group the god has on his left side a bow and arrow instead of the lotus. The next shows again the nymphs holding flowers in their right hands.

The following one shows a club in the right hand of the god, whilst he has in his left hand in the next a staff with a flag on it, his right clasping the usual lotus.

The fourteenth group once more proves what has already been said here, namely, that these temples on the Plain of Prambanan were still being built, occupied, or used as mausoleums when they had suddenly to be abandoned. The god in this group is wholly wanting; the stone, however, out of which he was to have been cut is there. From this it is apparent that the temples were built first and the sculptures cut afterwards.

In the next the god again appears, this time in the posture of one of the Dhyâni Buddhas; the right hand is evidently watering a flower, but the intention has not been fully carried out by the sculptor; his work was cut short. We next see a god quite finished, but one of the women has only been roughly hewn, the sculptor having been again cut off from his work.

One cannot help here pausing to consider the question when exactly, if these temples were constructed about the middle of the eighth century, the disaster or calamity can have occurred which caused this sudden cessation of the work. If it was at the time of the great rise in the power

of the empire of Majapahit,¹ there are about 350 years from the time the first stone was laid to the practical completion of the sculpturing of these temples. If this is so, and if, as we know, the Boro-Budur was already in existence in the seventh or at any rate eighth century, we come to the question once more, how many years would then have been required wholly to complete a work like this or to bring it to the stage where it now is from the time the first stone was laid ? Nor must the fact be forgotten that the foundations, as is proved by the earlier sculptured 160 bas-reliefs which lie buried under the soil, had twice to be laid. This in itself would probably have taken up a not inconsiderable length of time.

To continue after this digression the series of the panels. The next one is merely a repetition of the last, and this design continues with slight variations until we come to the end of the series.

An earthenware urn was found here filled with some ashes, a copper leaf, a chakra, a wajia, and some precious stones. There cannot be any doubt as to what these ashes are. The extraordinary thing is that never has anything been found in all these temples, large or small, that would give even the slightest indication for whom they were erected. For the Buddhist princes it was evidently sufficient that the temples were built around their ashes ; but the designation of the persons for whom they were built does not seem to have been of any account to them ; this attitude is symbolic of the insignificance of this life.

CHANDI BRAHMA.

The name of the third chandi is ambiguous ; and here we see that the steady, sober, and elevated style of the old

¹ Majapahit had already existed some time before it became very powerful.

building form is undergoing a change. The sculpturing, however, is very rich, and still remains quite classical, without any of that decadence which is so apparent in the monuments of East Java. In fact it may here be said that the temples of Central Java belonged to the old school until the end.

The inner chamber in this chandi contained the Brahma image, which when new was probably somewhat larger than the Vishnu image. It had four arms and four crowned faces. During the excavations three statuettes were found, but soon after they disappeared. They were—

A four-headed Brahma statue with eight arms, in whose hands were a flower-stalk, a sword hilt, and a lotus-bud ; the second was a four-headed Brahma image with six arms holding a sword, an arrow, a shield, and a conch ; and the third was a four-headed Brahma image with four arms holding a flower, a trident, a shield, and a conch.

During the same excavations as brought the above images to light some gold coins were found, but no urn.

THE CHANDIS ON THE EAST SIDE AND THE SMALLER CHANDIS OUTSIDE THE TERRACE.

In the middle chandi, which is the principal of these smaller temples, is a gigantic humped ox or Indian bull, as large as life and on a plain pedestal. This served as Siva's steed, and is an excellent piece of sculpture, both in conception and execution. The head of the beast is turned towards the chief temple of the western row, where his master is enthroned.

Besides the bull there are two small images, each standing on a car drawn by horses. The one with seven horses is Sūrya, the Sun-god, while Chandra, the Moon-god, is in that with ten horses.

The northern chandi contained a Siva image with a skull,

a crescent, and the three eyes, one of which was over the nose.

Of the 157 small chandis there is little to say ; they are practically ruins, and had been devastated and plundered by treasure-seekers long before the Dutch Government ever thought of taking any interest in them. Even up to twenty years ago any traveller visiting these ruins could secure small images from the natives for some trifling sum ; whilst before that, in the days when unlimited labour could be secured for nothing, Dutch Government officials removed some of the largest images to the Resident's gardens in Djockjakarta, where they are still to be seen, instead of being removed to some more suitable museum or collection.

CHANDI SEWU.

The Chandi Sewu make up probably one of the most interesting groups of temples in Central Java. Their circumference is, moreover, far larger than all the others in these parts. The Javanese call them the "thousand temples," which will give some idea of their number. The temples are of Buddhistic origin, and must have been exceptionally beautiful eleven centuries ago. The principal temple, which was considerably larger than all the others, stood on a raised terrace, and was enclosed by a wall which had four gateways in it. In the court around there are four rows of smaller temples.

The first two rows lie in a square, and number twenty-eight and forty-four respectively. The entrances to all these temples were on the side away from the chief temple. Between the first two rows and between the third and fourth is a broad court, rectangular in shape, having eighty and eighty-eight miniature temples, or mausoleums.

The entrances to the first were in the walls facing the principal temple, while the latter had their entrance outside.

The foundations of five more temples of a fair size can still be seen, which therefore brings the total to—

First row	28	chandis
Second row	44	„
Third row	80	„
Fourth row	88	„
Foundation still visible	5	„
		1 principal
		— chandi
Total	246	

The temples are all in a poor condition—they are ruins in the strict meaning of the term. The earthquake of 1867, which did such a lot of damage at Djockjakarta, made itself severely felt amongst these temples. The English engineer Baker visited them in 1812 and made drawings of them for Raffles, who was greatly impressed with this veritable city of the dead.¹

There is probably no such cemetery in the world.

There are two great guards to the temples, each cut out of one piece of stone and facing the other. According to Professor Groneman they represent Kâla, that is, Siva as the God of Death, or All-consuming Time, to whom the worshippers of Siva attributed all the horrors of the Indian Kala. The two colossal temple guards at Singasari, as already stated, represent this demon.

The balustrade of the main temple is adorned with some very fine sculpturing: dancing figures, musicians, etc. What strikes one here, as in all the temples, is the perfect system for draining off the rains, of which the Hindu architect had felt the power, and could calculate the probable effect if they were allowed to remain to filter through the uncemented blocks. From the raised plateau of the

¹ The earliest survey, however, was made by a Dutch engineer, Lieutenant Cornelius by name, who visited these temples in 1806. Brumund was here in 1854.

principal temple, for instance, eight gargoyles discharged the rain-water on to the low-lying terraces of the first and second row of temples, whence it ran off very easily.

A huge dagoba with a long spire crowned the centre-piece of these temples, and below and around, as at Kálasan, there was a vast amount of ornamentation and decoration in various motives, well showing the skilled handiwork of the sculptors here. Each of these temples was a perfect specimen in itself, so that the number of men that must have been employed at one and the same time on all these temples must have been enormous ; and although we know that the population of Java even at this early date must have been very considerable, a great proportion of the inhabitants for centuries must have been employed upon temple work. The others attended to their wants by tilling, sowing, and reaping their rice-fields, a far more thankful task to these others than it was in their own country, for the country around Djockjakarta and the Kedoe is highly fertile.

One of the charms of these temples lies in the fact that the approach is such a beautiful one ; while the panorama from here, with the ever-active volcano Merapi on one side and a magnificent tropical view on the other, shows that the Hindus in choosing the situation for their mausoleums had as great an eye for natural beauty as for hygiene.

The latter, it is quite clear, they also considered, for the districts where these temples have been erected are amongst the healthiest and driest in Java.

CHANDI LUMBUNG.

Quite near to the Chandi Sewu there is a group of ruins which, reminding the Javanese of his rice-sheds, are called Chandi *Lambung*. Further on there is one chandi to which the Javanese gave the name of Chandi Bubrah. Both of

them are undoubtedly Buddhistic. This group (Chandi Lumbung) consists of one principal temple in a square containing sixteen other temples. The principal temple has a square plan, with a projection on each side ; on the east was the gateway. The sixteen temples were also square with pyramidal roofs, the base having eight sides. Dagobas and spires there were as usual.

The pyramidal roof of the principal temple doubtless overtopped those of the smaller temples, lending to the whole a very imposing appearance.

The entrances to the sixteen temples are all turned towards the chief temple.

These chandis, like all the others in the plain, were robbed years ago of their contents by treasure-seekers. A few of them, however, are still in a fair state of preservation, and in one the roof adornments are still fairly complete.

What, however, is to be regretted is that not a single statue of the entire group remains. The object of the Chandi Lumbung has, therefore, never been positively ascertained.

Dr. Yzerman says as regards this :

“ Knowing as we do that the Buddha occurs in various mudras with two Bodhisatvas, usually *Padmapî* and *Madjucrî*, in the last Buddhistic temples of western India, that in Chandi *Mendut* we find a similar representation, that the galleries of *Bôro-Budur*, the roof of *Kalasan*, the outer temples of Chandi *Sewu*, and *Plaosan* are all adorned with statues of the Dhyani Buddhas, there will be little rashness in the assumption that they also at one time had their seat in this temple group, while the remaining places were occupied by other Bodhisatvas whether accompanied by their Caktis or not.”

CHANDI BUBRAH.

Chandi Bubrah is larger than the chief temple in the Lumbung group.

It once had twenty sides with a terrace all round. The

superstructure bore in its niches at one time Dhyani Buddhas, which prove its purpose, but little now remains of this chandi beyond the basement.

The usual treasure-seekers did not fail to ransack and even excavate here, carrying off, no doubt, the urn and any valuables there were in it.

Raden Saleh, the well-known Javan painter, has been accused, being one of the treasure-seekers who was digging around here in the seventies ; what he may have secured probably no one knows.

CHANDI PLAOSAN.

About a mile to the north-east of the Chandi Sewu lies a heap of ruins which bear the name of Chandi Plaosan. They are now overgrown with rank grass, and are to be found in a wood of trees and thick tropical undergrowth. Owing to the fact that practically all that remains of these buildings is their foundations, nothing can be definitely said as to their object ; it is generally supposed, however, that they were not mausoleums like the rest of the chandis on the Prambanan Plain, but, like Chandi Sari, were cloisters or monasteries for the monks to live in with a temple attached.

A survey of these temples was made by Brumund in 1854, and again by Yzerman in 1886, and this latter investigation was a sufficiently thorough one to prove that they are Buddhistic.

The buildings of these temples would appear to have been divided into three groups, of which the two northernmost adjoined each other.

The southern is separated from the centre temple by an open space.

The principal group lies in the centre, and a double wall originally surrounded all the buildings, while inside a wall probably divided the innermost court in two.

There are also some miniature¹ temples here, which were no doubt built over the ashes of the priests attached to the temples, who lived in the monasteries.

A path must have led from the open country around the small chandis to the flight of eight steps leading up to the porches of the monastery, as there are four temple guards, or sentinels, smaller in size than those at Chandi Sewu, but more or less replicas of them, with a snake in one hand and a club in the other.

The two principal buildings were rectangular in form, and were divided into three oblong compartments. Sculptures adorn the outside of the walls, reminding one of those at Kalasan and Chandi Sari: these are standing Bodhisatvas flanked by high pillars and framed in panels with festoon-bearing prayer-bells.

The entrance at the top of the stairs was sculptured with richly cut Nâga heads, which are now the worse for wear. The Garuda head is also observed here, and the niches, which originally held images, are to be seen in the walls.

In the southern ruin are two niches with images of Bodhisatvas.

At Plaosan we have no doubt a monastery, a temple, and a cemetery all in one, a combination which is not at all uncommon in India. Treasure-seekers have proved very destructive here, and in their anxious endeavours to find gold and precious jewels destroyed numberless images and generally caused a lot of needless damage. It is not unlikely that treasures have been found in various places, but probably nothing like what there would have been found had the Government in earlier days had a thorough and systematic search made under qualified officials who would at the same time have prevented unique and

¹ So called on account of their being smaller in size than the others.

exquisitely carved temples from being ruined by thoughtless and ignorant Europeans, whose sole object was gain.

CHANDI SAJIVAN.

Chandi Sajivan, which is only a mile away from the railway station of Prambanan, is a chandi containing only one chamber.

It was built in the main of white sandstone from the southern mountains near.

In form it is square, with its entrance facing towards the west.

In each of the side walls was a window, which provided light.

There is an altar on the back wall, on which originally stood images. These, however, have been removed.

Between the altar and the windows are niches with Bodhisatva images in them, which clearly proves that the temple is Buddhistic.

A Dhyáni Buddha Amithaba image was found near here, which may have once had a resting-place inside the Chandi Sajivan. It was cut out of a single stone, and decorated in the usual manner.

This temple is in a ruinous condition.

CHANDI KALONGAN.

North of Chandi Sajivan lies Chandi Kalongan, which was visited by the Englishmen Colin Mackenzie and Baker in 1812, who have left illustrations of these ruins behind them, showing the state they were in during Raffles' time.

Brumund also was here in 1854. The plan of this temple is square, with a projection on each face.

The basement is adorned with twenty-one panels, which lack nothing in decorative beauty, having been executed by perfect sculptors. To the last these sculptors seem

to have maintained their skill, so that it was no process of degeneration that caused the sudden abandonment of the art of sculpturing. This stoppage was so abrupt and sudden that one is led to pause and consider what became of these hundreds of thousands of skilled workmen, who had been trained from boys to carve in stone and would be fit for nothing else. Signs of a gradual degeneration would be as stepping-stones to a total extinction of the art, but of these there is no sign. From perfect and superb magnificence the work on the temples ceased, as it were, in a day, and the art of sculpturing was lost by the Javans for ever.

Of the twenty-one panels, nineteen are illustrations of well-known fables, as on the basement of the stairs of the Chandi Mendut.

These fables are taken from the old Indian book of fables, which found its way to all parts of the Eastern world, Arabia, Persia, Turkey, and to Greece and Italy, later spreading into every European country.

You see sculptured the fables of the talkative tortoise, of the crocodile with the monkey, of the race between the Garuda and the artful tortoise, and of the Brahman, the crow, the crab, and the snake. These representations are faithful and correct and beyond any mistaking.

The main part of this temple is a ruin, but one can still perceive its adornment and the windows in the sides from which light was obtained.

Against the back wall are the remains of an altar, on which there was at one time an image.

Two Bodhisatva statues were found here, which no doubt originally occupied the niches in the side walls.

The Chandi Kalongan was probably erected about A.D. 900.

THE DIENG.

The plateau of the Dieng is situated between 6,500 and 7,000 feet above the level of the sea, and in olden days was practically inaccessible. This plateau, which was rich in temples, was never discovered until the British Resident Crawfurd was stationed at Djockjakarta in 1812 and caused inquiries to be set on foot to ascertain for Raffles particulars as to all the ruins within and around his district. Captain Baker was sent to survey in 1815, and spent three weeks here. Dr. Horsfield, the English botanist, who did such excellent work in Java during the British occupation, also tried to visit the ruins in 1816, but could not reach them. So impressed, however, was Raffles by the reports he received that in his history he writes :—

“ Next to the Boro-Budur in importance, and perhaps still more interesting, are the extensive ruins which are found on Gunung Dieng, the supposed residence of the gods and demi-gods of antiquity. This mountain, from its resemblance to the hull of a vessel, is also called Gunung Prahū.”

There is a road up to the top of this mountain, constructed in ancient times and having at least 4,000 stone steps in it, for the pilgrims, who had to climb the face of the mountain to reach their destination. Of this staircase little now remains, earthquakes being accountable for its destruction, but what there is, however, still to be seen makes one to wonder at the infinite trouble and pains the ancient Hindus brought to bear on everything they undertook in Java.¹ Up to about 1870 all the temples stood in a lake,² the old Hindu drains, which formed a perfect system, having from long disuse become choked with rubbish, so that the plain soon became full of water from the rains. This lake was known to exist as early as 1864.

¹ It is said that such a staircase existed on each of the four sides of the mountain for the use of pilgrims.

² Now drained.

Owing to their lying so far out of the beaten track, the temples here have unfortunately been greatly neglected by the Dutch Government; consequently the natives and Chinese have purloined large numbers of the hewn stones for building their own houses. The Chinese especially, who have come to the Kedu to plant tobacco, finding them excellent material for foundations, are great offenders. There is not much doubt that owing to this whole temples, the most interesting in Java, have utterly disappeared.

On a rock here the date corresponding to A.D. 1210 is painted. It was discovered by Dr. Junghuhn, the celebrated Dutch botanist.

Other stones discovered give a date equivalent to A.D. 800. One stone, according to Dr. Brandes,¹ is inscribed with the so-called "Wenggi" character found in West Java, and extremely old.

Beyond these few records nothing decisive has been found, but some think that in the Dieng we are dealing with a settlement dating from the very earliest days of the Hindu invasion; and there are numerous reasons for drawing such a conclusion.

Originally there were certainly not less than forty temples. To-day there are only eight, besides the foundations of numerous groups of buildings, which were probably monasteries for the housing of the large priesthood that must have been maintained here and kept up by the pilgrims who visited the Dieng.

All the remaining temples have the names of heroes from the epic poem *Brata Yudha*, given in full and described in detail by Raffles in his history. It is a poem written in Kawi, and is well worth reading, having been beautifully conceived and written.

As stated above, there were not less than forty temples

¹ A brother of Mr. Brandes, late agent of the Agricultural Company of Central Java (Cultuur Maatschappij der Vorstenlanden).

on the Dieng plateau. According to Raffles, however, a minute examination in 1815 by Baker proved that there were traces of nearly four hundred temples "having broad and extensive streets running between them at right angles." Whether there were really so many as this it is now impossible to say, but there is nothing to prevent it; and Raffles was as a rule not the man to make statements in such matters unless there were good grounds for doing so.

From Raffles' history we also glean the following:—

"Near the summit of one of the hills is a crater of about half a mile diameter. At no great distance from this crater in a north-west direction is situated a plain or table land, surrounded on all sides but one by a ridge of mountains about a thousand feet above it. At some very remote period it was perhaps itself the crater of a vast volcano. On its border are the remains of four temples of stone greatly dilapidated, but manifestly by the effect of some violent shock or concussion of the earth. The largest of them is about forty feet square; the walls are ten feet thick and the height about thirty-five feet. The only apartment which it contains is not more than twenty feet square, and has only one entrance. The roof is arched to a point in the centre, about twenty feet above the walls, so that the whole building was one solid mass of masonry, composed of the most durable cut stone, in blocks of from one to two feet long, and about nine inches square. Yet these walls so constructed are rent to the bottom. It was particularly observable that little or no injury had been done by vegetation, the climate being unfavourable to the *waringin*, whose roots are so destructive to buildings of the lower regions. The entablatures of these buildings still exhibit specimens of delicate and very elegant sculpture. Several deep excavations are observed in the neighbourhood. These it is said were made by natives in search of gold utensils, images and coins, many of which have from time to time been dug up here."

From Raffles' account it seems that the lake that was here in 1864 did not exist in 1815, for although mention is made of the whole plain being covered with scattered ruins and large fragments of hewn stone, nothing at all is said about any water.

At the present day the Arjuno temples are the most important and best preserved. The northernmost is the Chandi Arjuno itself. It is square in form, with a porch projection facing west. Inside there is a pedestal whereon an image once stood. In the pedestal is a spout which carried off the holy water after its use as a sacrifice ; under the spout can be seen the well which received it. This water was no doubt a source of considerable gain to the Hindu priests, if one may judge by the cost of the holy water obtained at Mecca nowadays. The roof of the Chandi Arjuno was originally of three storeys ; only two now remain. In front of this chandi is the small Chandi Semar, whose purpose is uncertain ; it may possibly have been used by the priests to live in, or as a store-house for keeping the temple furniture when not in use.¹ There must have been a season here just as there is at all other places of pilgrimage. The Chandis Arjuno and Semar were encircled by one wall.

Southwards from Chandi Arjuno is Chandi Srikandi,² a dilapidated building. The panels here show sculptured representations in very fine relief of Siva, Brahma, and Vishnu.

Chandi Srikandi, like Arjuno, had a small satellite, and both are encircled by one wall.

Chandi Puntadewo, another temple, is southwards, and architecturally is certainly the most beautiful of all the Dieng temples.

From a distance it might be mistaken for Chandi Arjuno, so like is it, but on drawing nearer one sees that its proportions are much handsomer, and in its original state it must have been very imposing.

¹ Temple utensils, the incense, flowers, and sacrificial water.

² In the *wayang* Sri Kandi is always represented with a *patrém* (a woman's dagger). In the features of the Eastern theatrical puppet the Javans see the amazon character.

Chandi Sembodro, the last of these temples, is on another scale, but in form it is somewhat the same as Chandis Arjuno and Puntadewo.

It differs, however, in having a projection on each face, with numerous niches in and around the porch, which originally contained images.

On the Dieng plateau lived the last of the Hindu families descended from the first Hindus who visited and colonised Java. Towards the end they had almost all left and mingled with the natives in the plains. The exact cause of this abandonment has never been definitely determined, some thinking that violent volcanic eruptions had made the region uninhabitable, whilst others maintain that the plateau was abandoned when the Mahometans broke up the Hindu armies and the old Hindu religion died out. Both opinions are equally probable.

That the Dieng temples were chiefly tombs there is little doubt; and since living near a town of the dead even then was not very pleasant, it is supposed, as also on account of the severe climate, that the plateau was populated chiefly by the priests and their followers, whose duty it was to take care of the state tombs and to conduct the ceremonies at the burial of the ashes of the princes and their relations. During the pilgrimage season, however, which would probably be between the months of June and September, accommodation would have had to be provided for probably at least ten thousand pilgrims, though no certainty can be claimed for these figures beyond that the gigantic and stupendous staircases, great terraces, embankments, and chapels with richest ornamentation far away from all centres were never constructed for the relations of the dead princes only. They must, therefore, have been carefully prepared places for pilgrimage, as at Palenque and Chichen Itja. Friedrich, an archæologist and Sanscrit scholar, who in 1844 enlisted as a soldier in the Netherlands

Indian army, did a lot of good work in the Dieng, and states that there is no doubt that the burning of widows took place here.

Until a few years ago rich treasures in gold, silver, and bronze were continually being discovered by agriculturists ; in fact, the natives for years paid as much as 3,000 guilders a year in such bullion for their taxes, while the value of the treasures from an antiquarian point of view would probably have been three or four times as much.

In the Dieng may be seen the *tjawat* (leg-coverings for men in the daily dress of the peasants), and in them the dress of the stone gods of the seventh century may be recognised.

It is a long piece of cloth, which is worn round the waist like the *sárong*, and hangs low down on the left and higher on the right leg. It is folded in front, the other end being passed between the legs and then through the belt at the back. This dress is nowadays considered indecent by the people in the towns.

As the Dieng is still as isolated as ever, it is not surprising that old habits and customs from the Hindu period, when this region was much more frequented than it is now, are still practised.

CHANDI MENDUT.

Chandi Mendut is quite close to the confluence of the rivers Progo and Elo, in the residency of Kedu.

On the other side of the river, and not more than one and a half miles beyond, is the Boro-Budur, so that the two temples are generally visited by travellers from Djockjarta at the same time.

This temple was discovered by Raffles' engineers in 1812, and in his history he writes :—

“ At no great distance, situated within a few yards of the

confluence of the rivers of the Elo and Progo, are the remains of several very beautifully executed and interesting temples."

The Chandi Mendut, which during recent years has been restored by that very clever Dutch engineer Captain T. van Erp to something like its original state, is a magnificent and imposing building with a lofty and beautifully constructed dagoba-crowned roof.

The Dutch do not appear to have known of the existence of Chandi Mendut until 1834, when a planter laying out some coffee plantations came across it. It was then buried under a mass of earth like the Boro-Budur, which has led to the suggestion that these temples were purposely buried by the Hindus when the Mahometans were proselytising the country.

This suggestion has, however, never been borne out; on the contrary, from one or two inscribed stones found, there is reason to believe that Central Java was suddenly depopulated and the temples consequently abandoned. The reason of this, as already stated, it is impossible to determine, and whether it was disease, famine, or war we shall probably never know: what is certain is that the country around these temples was deserted.

Volcanic eruptions had no doubt a considerable effect on the temples of Mendut and Boro-Budur, and the ashes of the Merapi probably account for the first deposit and the collection of earth and tropical vegetation under which they were hidden for centuries.

When the Government decided on excavations the earth was raised from a considerable area, which brought to light the ruins of a second temple, or more probably a monastery, for the priests to live in.

The huge image of Buddha, Bodhisatva Padmapani, was found in the principal temple lying on the ground. It is now, however, in its proper place, and the interior was put in order under the eye of the late president of the

Antiquities Committee, Dr. Brandes. The best book on this temple is that of B. Kersjes and C. den Hamer, entitled "The Chandi Mendut before its Restoration."

The Chandi Mendut is square, with a projection on each side. On the side where the entrance lies the projection is larger in order to give the sculptor a greater scope for his talent, which is fully displayed on this jewel of architecture. No space or part of this temple has been left unornamented, and it is adorned with rich carvings, which are certainly not excelled, if they are equalled, by any of the other temples of Central Java.

The panels on the basement, which has been very solidly constructed on flat ground, may be divided into two groups.

The first consists of entablatures of a floral character, beautifully conceived and executed.

The second group consists of figures sitting and kneeling; their perfection is a marvel, and the way these panels have been carved, leaving not a single small corner unadorned, shows that the sculptors who were employed on this temple were pastmasters in their art.

The balustrade also is a splendid piece of work adorned with panels on the sides on a perfect symmetrical plan.

Amongst these groups of panels can be seen representations of old and well-known fables. For instance, the chattering tortoise and the geese can be seen distinctly and clearly here, the tortoise holding in his jaws a stick, which is carried by flying geese, while beneath lies the tortoise who could not hold his tongue, already on the ground, and the small buffalo-boys (just the same as at the present day) are already fighting for it.

In another is a panel representing once more the Brahman, the crab, the crow, and the snake. This illustrates the well-known fable of the Brahman who became friendly

with a crab, whom he had rescued from a critical position. The crab witnessed the evil plans of a snake and a crow, the first-named deciding to kill the Brahman in order to enable the crow to secure his eyes, which he longs for. The crab now shows his gratitude to his benefactor, and seeks a friendship with the crow and snake and promises to assist in their plans, and to seal the alliance offers to embrace them, and while doing so bites off the heads of both the crow and the snake.

In another panel one sees a monkey sitting in wanton humour, doubtless descriptive of the monkey who had stolen a mouthful of peas, one of which he dropped, and in his endeavour to save it lost all.

One sees parrots and other birds, together with leaves and flowers, ornamenting vacant spaces here and there.

The capella is crowned, as previously mentioned, by a huge and beautiful dagoba of tremendous size ; leading up to this, however, are three small roofs in gradually decreasing size, elegantly decorated and richly adorned with dagobas ; while the basement of the succeeding roof is carved all round, being topped again on its outer edge with dagobas smaller in size and fewer in number.

The interior of the temple of Mendut is the only one in Java which is still to all intents and purposes intact ; and no one visiting Java should leave without spending a day at this jewel of Central Java.

The Dutch Government have spent a considerable sum of money on repairing it, and it has well repaid them.

From a small inscribed stone which was discovered, the late Dr. Brandes has given his opinion that Mendut is as old as the Boro-Budur.

At the Boro-Budur there is a small hotel, which enables visitors or tourists to spend all the time they wish examining these temples. It is kept by a pensioned German non-commissioned officer, and is quite comfortable and clean.

CHANDI PEROT.

Chandi Perot is on the volcano Sindoro, in the residency of Kedu. It is now in ruins, but before it became absolutely so a survey proved its Sivatic origin, an inscribed stone found near giving the date corresponding to A.D. 852. Chandi Perot was formerly very beautiful, and the remains of some fine carvings on its back walls show great skill.

When the temple was first discovered a large waringin tree had already claimed it, and during a gale in 1907 demolished its victim. I am afraid that nothing now can be done with the remains, if they still exist, natives and Chinese probably having removed quantities of the smooth hewn stones for building purposes. Still, while the Dutch Government can make use of such highly talented services as those of Captain van Erp, everything is possible in the way of temple repairing.

CHANDI PRING APUS.

This temple is situated near Chandi Perot, and, like its neighbour, is Sivatic.

The old square plan with projections is here repeated. Adornment and ornamentation, although not overdone, is very excellent. A huge image occupies the chamber inside, and from its size leads to the idea that it was constructed first and the temple afterwards built around it.

The entablatures are splendidly carved, and, although no fables are represented, some interesting pictures of parrots and other birds, etc., are depicted.

In one panel a man and woman are seen tenderly embracing each other.

Some of the decorations are certainly remarkable if not quite classical, and the temple is deserving of more notice than it receives.

CHANDI SELO GRYO.

The Chandi Selo Gryo is on the volcano Sumbing, which is only a few miles from Magelang, a military station in Central Java. In plan it is square and is neatly built.

The interior chamber is empty, the image which no doubt once rested here having gone.

Various niches at regular intervals contain figures of Durga, Ganesa, and Siva.

The temple itself has been finished by the architect, but the sculptors were still at work when they were interrupted.

CHANDI UNGARANG.

The ruins of the temples built on the volcano Ungarang near Samarang are neither numerous nor very important.

Raffles in his history writes regarding them as follows :—

“ There are found at Ungárang the ruins of several very beautifully executed temples in stone with numerous dilapidated figures, and among them several chariots of Suria, or the Sun God.”

This note was made about 1814; but, as far as I am aware, only the remains of two small temples have been discovered on this mountain, one on the east side and one on the tea estate Medinie.

In 1833, when Pieter Henry Meyer Timmerman Thyssen, of the firm of Timmerman and Thyssen, of Samarang, bought the estate of Soesoekan, or as it is generally called Djatikarangan, the whole of the western side of the Ungarang down to its foot was one dense forest. Each successive owner, however, began opening up more land and cutting away more and more of the forest. These were George Waitz in 1843, Huibert van Gessel in 1847, the Ottenhoff family in 1863, and later the widow, Mrs. J. H. Ottenhoff, who was a Miss von Franquemont (one of that large German family that had been in Java since 1797, but which has now

died out unless their offspring are in the kampong). About 1877 the cutting down of the forest had already reached the height of 4,000 feet, where the remains of a Hindu temple were found crumbling in pieces. Beyond a good half-dozen Siva and Dunga images, some sacrificial utensils, and a number of decorative stones used on the corners of the roof, nothing was found. On the same estate, however, at 5,500 feet, there is a square tank with crystal-clear water in it. Overlooking the tank is a serpent's head and a portion of its body. This is purely Hindu, and is certainly very old. Natives when visiting this well, which they do since there is a small kampong near, always appease the monster by throwing down an offering of a handful of cooked rice before drawing water.

When asked why they do so, they merely reply that they throw down the rice to feed the serpent because it is their *adat* (custom), and they are afraid that if they do not do so they will have bad luck.

It is perhaps irrelevant to observe here that as soon as the natives have disappeared hungry kampong dogs greedily swallow the offerings.

On the eastern side of the Ungarang the remains of a temple show that we have here a more important one than the former on the western side ; little, however, still remains of it. There is also here a fairly large water-tank, and as more and more forest is cut away Hindu remains are continually coming to light, but it is quite certain that no very important temple still lies buried on this mountain.

[It may be mentioned here that on every volcano in the island there once stood a temple dedicated to Siva. Some still remain in fair condition, but most have crumbled away during the thousand years they have been buried in the dense forest.]

[The position of all these temples proves that the ancient Hindus were very particular as to the place which they chose

to erect their *chandi*. All of them without exception command a splendid and extensive view over the surrounding country.]

When the priests had finished worshipping their gods, a service they attended to daily, they worshipped Nature, and anyone who has visited one of these spots can fully understand how with such magnificent surroundings their whole life could be spent up in the mountains in calm and quiet contemplation.

[At certain periods of the year pilgrims visited these temples in the mountains and remained a certain time,] and during these occasions the priests were kept very busy, being no doubt glad when the pilgrimage season was over and they were able to revert once more to their quiet normal life.

The volcanoes of Java are so to say on one string, being more or less in a line with each other. On the top of one volcano you can see its neighbours right and left, and it has always occurred to me that in ancient days the priests perhaps had some means of communicating with each other, either by bonfires or by sun signals, or by both.

CHANDI SINGA SARI.

The Chandi Singa Sari, between the small towns of Lawang and Malang, is the most important Hindu temple still left in this part of Java.

In construction it is square, with its entrance on the western side. In height it was probably about 30 feet. Over the entrance was a large Nâga head, and gigantic Kalas (the Terrible) guarded each side of the porch. A flight of steps carried one into the large chamber, on one side of which the altar was built, upon which originally rested a large image.

The interior is dark, and there are no signs of there ever having been any natural light let in; the temple must

therefore have been artificially lighted. There is nothing beautiful here, the carvings and sculpturings being rude and rough, a clear sign that Hindu art in this part of Java had begun to degenerate.

There is no mistaking, however, the fact that the temple at one time, notwithstanding its rude carvings, was an imposing structure and served its purpose well. Near to this chandi¹ numerous Siva and Brahma images have been discovered from time to time. These invariably show a very high standard of excellence, and would lead one to imagine that side by side with the degeneration a higher standard of craftsmanship still existed. Singa Sari was probably built in the eighth or ninth century.

CHANDI PANATARAN.

In the district of Blitar, where once stood a large and populous Hindu town, there are the remains of a beautiful and magnificent temple, which if not of the first rank must be at any rate considered as belonging to the second rank, and is of interest on account both of its extent and of its execution. A complete and accurate description would require too much space for the present book.

Sir Stamford Raffles, whose account is worthy to be read, visited these Hindu antiquities in 1813 and Dr. Horsfield in 1815.

The general plan of these ruins indicates the purpose both of devotion and of habitation. They comprise an extensive area of oblong form, which was surrounded by an external wall, of which the foundations may still be traced ; and the whole was divided into three compartments.

The principal edifice is situated in the eastern compartment, and was only accessible after passing three separate gates, which are all still discernible although much decayed. They are each guarded, as at Chandi Seivu and Chandi

¹ That is, temple.

Singa Sari, by porters resting on their hams, while a knee is drawn up to support the hand clasping a club.

The principal gate, in ancient times probably the only entrance, is of huge dimensions and guarded by porters of gigantic size. This led to the first sub-division of the whole area. Here are two elevated plains of an oblong form, confined by walls rising above the surrounding territory, in all probability the floors of former dwelling-places; they are the most interesting objects that now remain.

One of the plains extends to the north-east extremity, having been in contact with the external wall, as appears from its situation relative to the gate and to the foundations that still exist; it is of great dimensions. The other inclines more to the middle of this compartment, and is somewhat smaller in extent.

Both exhibit the appearance of having supported a building, and are elevated at present about 3 feet above the level of the surrounding forest, while the same depth is buried under a layer of vegetable mould, accumulated during many successive ages and proving a great antiquity.

The sides of the smaller plain are covered with elegant sculpture in relief, the details of the design of which would alone require a considerable time to describe.

Four entrances to it are indicated by as many flights of steps, the sides of which are elegantly decorated, and the pedestals still remaining at regular intervals along the edges, having the form of truncated pyramids, appear to show that it was covered by a roof supported by wooden pillars, somewhat in the style of the *pascébans* of the present Javans.

Similar pedestals are likewise placed in regular order along the sides of the larger plain, which has the same number of entrances as the smaller; those of them at the north and south are guarded by porters of comparatively small stature.

The second compartment is less extensive than the western; a small chandi of excellent workmanship built of stone here attracts particular notice.

The remains of various buildings, pedestals, and broken ornaments are also observed, and it is probable that others are concealed by the forest and mould that cover this compartment, which must be considered as the vestibule to the third or eastern division, containing the principal edifice. This of all the remains in this area deserves, probably, the most attention. It is indeed a surprising and wonderful work; the labour required in the construction and the art displayed in the decoration are alike beyond words.

The general base is a large square, but each of the sides has a projection in the middle, the largest being on the west, where the ascents are placed, and the outline thus exhibiting twelve angles.

It belongs to the same class of buildings as that at Séntul, containing no chamber or vacancy within, but exhibiting a solid mass, highly decorated at the sides, and affording places of devotion on the outside.

It consists of three compartments, of successively smaller dimensions.

Two pairs of steps, one to the north, the other to the south of the most projecting part of the western side, lead to the area formed by the lower compartment, the form of which agrees with the general base.

From the middle of the most projecting part of the western side of this area a single flight of steps conducts to the second, and is immediately continued to the third area on the summit of the whole building.

The second compartment does not agree in form with the general base, but by means of the diverging of the sides in a direction opposite to the most projecting parts of the lower area it furnishes in the west a plain before the steps, and in the north, the south, and the east extensive areas



BURO BUDUR.



BAS-RELIEF FROM THE TEMPLE OF BRAMBANAN.

or squares, which were probably intended for particular worship.

By the form of the second compartment the second area is likewise modified, but to demonstrate this a plan would be required ; and I shall only add that the upper area was a regular square, but, as appears from the remains of various foundations, subdivided into partitions. Here the figure of Brahma as the *récha* with four faces is placed alone, and is of superlatively beautiful workmanship and finish.

In 1815 Dr. Horsfield discovered among ruins near here in the district of Srangai a stone with a Kawi inscription which mentions a hero of Javan romance, Panji Makarta Pati, as the reigning prince of the kingdom of Janggala, and his princess, by whom the neighbouring temples were constructed.

Jonathan Rigg, another Englishman, visited these ruins in May, 1848, and wrote an account of them.

TEMPLE CAVES.

As in India so in Java there are found temple caves, although those in the latter can in no way be compared to those in the former.

Firstly, the size of the Java cave temples is very insignificant beside the enormous ones in India.

In the Bagelen residency four of the caves have been discovered, and in Kediri one.

The latter was surveyed by Dr. Horsfield in 1815 at the request of Raffles. The following is his interesting account :—

“ The cave of *Sela-mangleng* is situated about two miles in a western direction from the capital, at the foot of the hill *Klotok*, an appendage to the large mountain of Wilis ; it consists of four small apartments cut into the solid rock, composing the hill, on a very gentle eminence. The apartments are adjoining to each other, forming a regular series, which stretches from north to

south. The two middle apartments, which are the largest, have each an entrance from without, while those at the extremity communicate by an interior door, each with the apartment next to it. They differ but little in size. The form is square or oblong ; the largest is less than twenty feet in length.

“ The walls of the two principal apartments are covered with sculpture, and various platforms and projections indicate the place of devotion or penance. Several *réchas* now arranged in the avenue leading to the cave, as well as the sculpture covering the walls of the apartments within, are handsomely worked, but the external sculpture of the rock is coarse and the steps by which one ascends, which are cut out of the same general mass of rock, appear to have been made intentionally rude. Several niches for *réchas*, lamps, etc., are cut in various parts of the walls. A *lingam*, several reservoirs of water, and other figures are arranged on the vestibule.

“ Of an inscription of the external rock, one regular line, stretching from the door of the outer apartments to the northern extremity of the rock, is still discernible, but many of the characters are probably too much effaced to afford an explanation.”

This description by Dr. Horsfield is a faithful one.

These cave temples are clearly not Buddhistic, but Brahmanic, and probably date back to a period before the introduction of the former religion into Java.

From an artistic or architectural point of view their value is not very great ; but it is of considerable importance and interest to know that this form of worship existed in Java.

The strange part is, however, that the temple caves in India were Buddhistic, while in Java they were Brahmanic or belonged to a closely allied creed.

COINS.

Wherever excavations were made around the Hindu temples coins were almost invariably discovered.

These were mostly brass and copper and bore allegorical representations on them. A square hole was generally

pierced through them, no doubt for the convenience of stringing them together, just as is done in China to-day with the copper coin called *cash*. Some of these coins were probably struck locally; their execution is rude, and not what one would have expected from a cultured people.

The dates of these coins—or the supposed dates, for there is nothing on them to show it—are various. There are coins whose date is supposed to be A.D. 850, others whose date may be A.D. 900, A.D. 1000 or A.D. 1200, and so on. The earliest of these were in use by the inhabitants of ancient Mataram when worship at the temples of Boro-Budur, Mendut, Prambanan, and elsewhere in Central Java was carried on.

The richest harvest of coins has been found near the ruins of the old burnt-brick city of Majapahit. Here the Chinese money dug up proves that the current coinage of the realm was not of local mintage, but Chinese, imported in junks and placed on the market in a regular manner so that its value should never decline.

Collectors of Chinese coins have observed that the most complete sets of ancient pieces have been discovered in Java, and not in China.¹ A collection of coins is to be seen in the museum of the Batavia Society of Arts and Sciences, where also can be seen at the same time a rich display of Hindu archæological remains.

CLOSING REMARKS.

In the arts, sciences, and letters of ancient Java there is a most extraordinary similarity to those of Egypt, ancient Greece, Persia, Babylon, and south Central America.

In Central America, for instance, and in Peru there once existed a race which built temples in high mountains of

¹ During the restoration of the temples Boro-Budur and Chandi Mendut in 1909 numerous Chinese coins were discovered buried in the dagobas.

an architectural design like those in Java in the Dieng.¹ If this is a mere coincidence, it is the only one of its kind in the world. Again, the statues and images of the gods of Bali, especially in the peculiarity of the faces having beaks instead of noses, are similar to the images of ancient Babylon. To trace, however, all these coincidences and to follow up the links which most certainly exist between all the countries mentioned and Java would be outside the scope of the present book ; and I shall consider myself fortunate if my English readers in Java will be satisfied with my modest endeavours to explain to them and trace the history of a country for which, with its people, Javan and Dutch, I myself have had and always will have an unbounded affection, respect and regard.

¹ From *Adi aeng*, gradually converted into *dih yang*, which means in Sanserit "wonderful."

CHAPTER XIV

THE FRUITS OF JAVA

JAVA has an abundance of fruits, several of which are indigenous to the island. The following is a description of them :—

1. *Pine-apple* (*Bromelia Ananas*).—This fruit, which is known to the natives as *ananas*, grows to a moderate size, but is never so large as a fully-grown ripe West Indian pine-apple. It flourishes, too, wild, so that in Batavia a dozen can sometimes be had for a shilling. The fruit is juicy and well-flavoured.

2. *Orange* (*Citrus Aurantium*), known to the Javans by the name of *jeroek*. It was originally brought from China, and two kinds were planted, the *jeroek jina* and *jeroek japan*. Both are sweet and juicy, but can in no way be compared with the Jaffa orange.

The orange in Java flourishes best in the eastern districts, especially near Bangil, and it is here that the greatest quantities are grown. This can be accounted for by the fact that the Chinese settled here in large numbers about three hundred years ago, at a place called Yortan.

The peel of the Java orange is green, not yellow.

3. *Pumelo*¹ (*Citrus Decumana*).—This is a fruit that goes by the name of *shaddock* in the West Indies, and belongs to the family of the *Aurantiaceæ*, which includes the orange, the citron, the lemon, and the lime. There are two or three kinds of this fruit procurable in Java ; they are well flavoured, but not particularly juicy. The best comes from the Cheribon district, and has a pinkish-coloured

¹ Or pommelo, pompelmoose.

pulp. All the others have a sickly yellow pulp, and the lighter they are in colour the poorer the flavour. The flower of this fruit grows in clusters, and is similar to the orange blossom, but is much larger and of a more penetrating perfume.

4. *Lemon (Citrus Medica)*¹.—This fruit is scarce, but the want is compensated for by an ample supply of limes.

5. *Lime (Citrus Acida)*.—This grows all over Java, and has a flavour entirely its own. By the Dutch it is greatly esteemed and is used plentifully.

6. *Mango (Mangifera Indica)*.—There are several kinds of mangoes in Java, the best kind being grown near Cheribon, where the soil seems to be particularly well adapted for the growing of fruit trees. Java cannot, however, claim to have a mango at all equal to the delicious fruit grown in China and Brazil, for although outwardly there does not appear to be much to choose between them all, in flavour the latter are far superior. This inferiority is generally assigned to the climate being rather too damp.

The particular kind that is in most esteem among the Javans is the *manga wangee*, but having a particularly heavy, penetrating flavour and perfume it is often objected to by Europeans.

On the other hand, the *manga dodol*, *manga oebie*, and the *manga oedang*, while preferred by Europeans, do not find much favour with the natives. Some of the species of the mango are renowned for furnishing a juice of which valuable varnishes are made, especially the celebrated China and Japan lacquers; others, again, contain a poison so volatile that the natives are positively afraid to go near the tree.

7. *Banana (Musa)*.—Of this fruit there are innumerable varieties, but only four are in demand, namely, the *pisang*

¹ Or *Citrus Limonum*; the Java lemon is also said to be *Citrus Javanica*.



CHANDI SEWOE TEMPLE RUINS. (BUILT ABOUT SEVENTH CENTURY.)

ambon, the *pisang radja*, the *pisang soesoe*, and the *pisang rose*.

All these have a pleasant soft flavour, and are particularly agreeable and wholesome fruits. The quantity consumed in Java of this fruit is marvellous, and the demand at times almost exceeds the supply. It is, however, a fruit which will grow anywhere and very quickly, so that the price always remains incredibly cheap.

The Javans have various ways of eating bananas ; some they fry in cocoanut-oil, others they boil, making cakes of them.

One kind of banana, called the *pisang batu* or the *pisang bidjie*, on account of its being full of seeds, is used by the natives as a medicine against fevers. It is said to be very efficacious. A Javan legend says that this banana, which is rather sweet, was once more delicious than all the other species, but that it degenerated owing to the malice of an evil spirit, who to avenge himself on a native pangeran who was a lover of this particular kind filled its pulp with the seeds of the kapok tree (a sort of cotton tree), to which its seeds are as a matter of fact very like.

There is also the *pisang maas* (*Musa Paradisiaca*), so called on account of its golden colour. The leaves of this kind are used daily by the natives to wrap up the provisions which they buy at the market. The fibres of the trunk of this tree serve to make a supple kind of rope, which is used by the natives for the rigging of their coast boats.

8. *Grape* (*Vitis Vinifera*).—This fruit was at one time grown very extensively in the eastern districts. A fear, however, on the part of the Dutch that the cultivation of the vine in Java might interfere injuriously with their wine trade at the Cape of Good Hope led them to discourage it in every way possible, and the cultivation of this fruit died a natural death.

9. *Tamarind* (*Tamarindus Indica*).—The tamarind tree

is a large one in Java, as well known as the stately *jattie-tree*, or the royal and noble *waringin*; once a year it is laden with fruit.

In flavour this fruit is neither sweet nor acid, but a delicious indescribable something between the two. The natives consume it in large quantities and make from it an excellent syrup, which is drunk with water. As a preserve there is nothing to equal it. Strange to say, however, the fruit is scarcely known in Europe.

10. *Melon* (*Cucumis Melo*).—As in all Eastern countries, melons are plentiful. The Europeans, however, leave them severely alone, and during cholera epidemics they are forbidden to be sold at the markets.

11. *Pumpkins* (*Cucurbita Pepo*).—This fruit is also very plentiful, and is generally taken away by sea-faring folk in large quantities on account of its keeping fresh for a longer period than other fruits. Like the melon, however, the Europeans in Java do not eat it.

12. *Guava* (*Psidium*).—This fruit makes a particularly succulent jelly, and its flavour in Java, while possibly not equal to that of its brother in the West Indies, is nevertheless very delightful.

13. *Mangosteen* (*Garcinia Mangostana*¹).—This is the queen of Eastern fruits and the most renowned of them all. In size the fruit is about the same as an ordinary English apple, and it is of a deep-red wine colour; on the top of the shell is a figure of five or six small triangles, which are joined together in a circle, and at the bottom are several hollow green leaves, which are the remains of the blossom.

To eat the fruit the shell must first be taken off; it is rather thick, but a diagonal cutting with a knife pierces it very easily and discloses a beautiful deep crushed-strawberry-coloured pulpy rind inside. Inside this, again, are found five, six, or seven (now and again, but only seldom, four)

¹ Of the family of the *Clusiaceæ*, all of whose species are tropical.

partitions of a pure snow-white colour, lying side by side in circular order, making a ball ; these are eaten.

The flavour of the “ mangies ” is one of those happy mediums between the tart and the sweet ; the one balances and corrects the other, so that the result is a perfect one.

The fruit is very wholesome, but unfortunately is only procurable once a year for about one month or so.

Vinegar is made of the mangosteen, and its rind is used in decoctions against various diseases. The natives use it also to mix with their dyes ; it is said to render them more lasting.

14. *Jamboe* (*Eugenia Malaccensis*).—This fruit is of a bright scarlet colour, and is oval in shape. The largest, which are as a rule the best, are not much bigger than an ordinary English apple. The jamboe is pleasant and cooling, although there is not much flavour about it. Boiled down, an excellent jelly can be made from it.

15. *Jamboe Ayer*.—This is a species of the genus *Eugenia*. Of this fruit there are two sorts of a similar bell-shape, but differing in colour, one being pinkish and the other pure snow-white. In size they somewhat exceed a large cherry, while in taste they can claim neither flavour nor sweetness. The fruit contains in fact nothing but a watery juice, which is slightly acidulated.

16. *Jamboe Ayerbege* (*Eugenia Jambos*).—This species of jamboe has more perfume than taste. It might be a conserve of roses in flavour, while the scent could be the fresh fragrance of this flower.

17. *Jamboe Bol* or *Jamboe Soesoo* (*Jambosa Domestica*).—This is the species of jamboe most preferred by the Javans, who consume it in large quantities before it is even ripe.

18. *Pomegranate* (*Punica Granatum*).—There is nothing to choose between this fruit as found in Java and as found in Europe, any discussion of it is therefore unnecessary.

19. *Durian* (*Durio Zibethinus*).—This tree is the largest

of all the fruit-bearing trees in Java, probably in the world, and is one of the remarkable family of the *Sterculiaceæ*.

Professor Wallace calls it "the king and emperor of fruits."

Linschote in 1599 said, "Its flavour surpasses all the other fruits of the world."

In shape the durian resembles a small melon, but the skin is covered with sharp conical spines, whence its name, for *dure* in Malay signifies "prickle." When it is ripe it divides longitudinally into seven or eight compartments, each of which contains six or seven nuts not quite so large as chestnuts, which are covered with a substance which in colour and consistence very much resembles cream. This is the part that is eaten, and the natives indulge in it very freely. The first impression of the fruit to most Europeans is one of great aversion, on account of its repulsive smell. Those, however, whose noses are able to stand the offensive odour delight in it, and speak of it in terms as high-flown as Professor Wallace.

The pulp of the durian resembles a mixture of cream-custard, sugar, and onions. It is a strong stimulant. The blossoms of the durian tree grow in large clusters.

20. *Nanka Wolanda* (*Anona Muricata*).—The *nanka*, belonging to the family of the *Anonaceæ*, is indigenous to the tropics. It is sometimes called *Sursak*. In appearance it is somewhat like a durian, although its colour is different. In size it is about the same as a melon, and is oblong-shaped.

In some districts it grows, however, to a greater size. The Dutchman Rhumphius relates that he has seen it so large that a man could not easily lift it. This may be so, but I do not know any one that has seen one so large. The very largest known has never been more than twice the size of a melon. The white pulp of this fruit has a strong aromatic taste, but it is one of the most highly-esteemed fruits in Java. A custard is sometimes made of it, and,



COLOSSAL FIGURE IN THE RUINS OF CHANDI SEWU.

taken blindfold, one could be easily led to imagine it was strawberries and cream mashed up together.

21. *Rambutan* (*Nephelium Lappaceum*).—The rambutan is rather like a chestnut with the husk, and, like this, is covered with small soft and pliable points of a dark-red colour. Under the skin, which is thin, is the white glistening pulp of the fruit. Inside this pulp is a soft stone. The edible part is therefore small, but its slightly acid flavour makes it particularly agreeable to some people.

22. *Boewa Bidarra* (*Rhamnus Jujuba*).—This is a round yellow fruit about the size of a gooseberry. In flavour it is like an apple, but it has the astringency of a crab-apple.

23. *Tjampedak* (*Artocarpus Polyphema* : Bread Fruit).—This fruit tree belongs to the order of the *Artocarpeæ*. The fruit is full of seeds, but is very succulent. In shape and appearance it is something like the durian, and, like this fruit, has an overpowering smell, so strong, in fact, as sometimes to cause fainting. Inside, the pulp, which surrounds a number of nuts similar to those of the durian, is very plentiful, and a meal can almost be made out of one fruit.

It may be interesting to observe that the famous *upas* (*Antiaris Toxicaria*), whose poisonous character is so well known, belongs to the same order; and to this order also belongs the *cow-tree* or *palo de vaca* (*Mimusops Elata*) of South America, which yields an abundance of rich, wholesome milk.

24. *Numnum*, or *Namnam* (*Cynometra Cauliflora*).—This resembles a kidney in shape, and is about 3 inches long, the outside being very rough. It is seldom eaten raw, being usually fried in oil to make fritters, of which the natives are fond.

25. *The Catappa* (*Terminalia Catappa*).—This is almost unknown.

26. *The Canare* (*Canarium Commune*).—This is a nut

with kernels somewhat resembling the ordinary almond. The shells are very hard to break, which prevents it being regularly sold, the demand being very limited.

27. *Madja* (*Limonia*).—In this fruit, under a hard, brittle shell, there is a light acid pulp, which cannot be eaten without sugar. It is seldom eaten by Europeans, the flavour even with sugar being more or less unpleasant.

28. *Suntul* (*Trichilia*).—A fruit resembling the *Madja*. Within a thick skin it contains kernels like those of the mangosteen; the taste is acid and astringent.

29. *Salak* (*Zalacca Edulis*).—Sometimes called “the forbidden fruit.” This species belongs to the *Palmaceæ* family, of which Lindley remarks that it is without doubt the most interesting in the vegetable kingdom, as well on account of the majestic aspect of the lowering stems of its members, crowned with foliage still more gigantic, as of the character of grandeur which they impress upon the landscape, of their immense value to mankind as affording nourishment, clothing, and numerous objects of economical importance, and of the prodigious development of their reproductive organs. They are natives of the Torrid Zone, inhabiting either side of the Equator; they seldom range beyond 40° north and south.

The *salak* is the fruit of a prickly palm bush. It is about the size of a very large walnut, and is covered with scales like those of a lizard. Underneath the scales are two or three yellow kernels, in flavour somewhat resembling a strawberry.

30. *Blimbing* (*Averrhoa Bilimbi*),¹ *Blimbing Bessi* (*Averrhoa Carambola*), and *Cheremie* (*Averrhoa Acida*).—These are three species of the same genus, all belonging to the order of *Oxalideæ*. All three, although differing in shape, have more or less the same extremely acid flavour; the *blimbing bessi* is if anything slightly sweeter than the others.

¹ Or *Blimbingum Teres*.



CARVINGS AT BURO BUDUR.

On account of their acidity, the *Averrhoa Bilimbi* and *Averrhoa Acida* are generally pickled, when they are quite pleasant-tasting.

31. *Jamblang* (*Syzygium Jambolana*).—A small dark blue-black fruit like a badly-shaped plum. It is very acid, but when quite ripe has the taste of grapes. The wood of this tree is frequently used for building purposes; it is said that the bark is used for tanning the nets of fishermen, and that the inhabitants of the Philippine Islands chew the leaves when they cannot get tobacco.

32. *Papaya* (*Carica Papaya*).—This is certainly one of the best fruits in Java. It is as large as a melon, and is sometimes green and sometimes yellow, and, like the melon, has a delicious juicy pulp of an excellent flavour. On account of the large quantity of pepsine it contains, it is recommended to persons who suffer from indigestion.

Another species of the genus, the *Carica Digitata*, contains a deadly poison, and is as much dreaded by the natives of Brazil as the *pohon upas* by the Javans.

33. *Lobie Lobie*.—This is a fruit with an acidulated taste, about the size of a small plum.

34. *Caucassan*, or *Doekoe* (*Lansium Domesticum*).—The doekoe is much esteemed by some. Its colour is a sickly yellow and its size a large marble. The skin is very thin; it covers a pulp like that of the rambutan, which, like this fruit, contains a kernel or stone.

Near Batavia and Meester Cornelis great quantities are grown, which always meet with a ready sale.

35. *Boewa Nonna* (*Anona Reticulata*).¹

36. *Cerekiah*, or *Serikaya* (*Anona Squamosa*²).—The trees of these two fruits, belonging to the order *Anonaceæ*, give a beautiful shade, and the Chinese like planting them in their gardens for that purpose.

¹ "Custard-apple."

² "Sweet-sop"; called "custard-apple" by Europeans in India.

There are many seeds in these fruits, and neither has a particularly agreeable taste.

37. *Bonie, or Wonie*.—This fruit resembles the ordinary English currant, and in its various stages is green, yellow, red, and blue-black.

38. *The Sawoe Manilla*.—This fruit has during the last few years been much more appreciated than it was formerly. In appearance it might be mistaken for an ordinary potato. Except for a skin as thin as that of a potato, the whole fruit can be eaten. In flavour it is soft, being neither too sweet nor too acid.

39. In the mountains *Strawberries* are grown; although never attaining the size of those in Europe, they are nevertheless very good indeed.

40. *Moendoe (Xanthochymus Dulcis)*.—This is a fruit just like an apple; it is fleshy, succulent, syncarpous, and many-seeded, and is of a bright orange colour.

41. *Tjoklaad, or Cacao (Theobroma Cacao)*.—The colour of the fruit is a beautiful one just as it is ripe. The rind is very thick and hard, requiring some force to break it. Inside there are cells containing twenty or thirty kernels which is the cacao as it is sold.

42. *Kechape*.—A fruit which in taste resembles a poor peach. It has a thick skin, and contains kernels exactly like those of the mangosteen.

43. There are other fruits one never sees or hears spoken of—the *Kinkit, Boewa Atap, Kellor, Ganderia, Moringa*, and the *Soccum*. The latter is of the same kind as the bread-fruit in the South Sea Islands, but rather inferior.

The quantity of fruit eaten in Java by both Europeans and natives is prodigious; but owing to the abundance grown, the fruit bill, however large the family, barely reaches a pound sterling a month. For the same quantity of even common fruits in London certainly thirty pounds a month would have to be paid.



THE CROWN PRINCE OF JOCKJAKARTA IN PROCESSION.

If I were a traveller in Java, and wished to taste all the fruits I could within a short space of time, I would choose the following :—Mangosteen, pumelo (with the pink pulp), mangoe dodol, rambutan, sawoe manilla, nanka wolanda, papaya, pisang radja, tamarind, and, if my olfactory nerves could stand it, the durian.

CHAPTER XV

THE FLORA OF JAVA

THE flora of Java is, as might be expected, an exceedingly extensive one, and to do it proper justice, even on the scale of this small work, would require a trained botanist.

It is not, however, the intention of the author to attempt a scientific article, or give anything like a complete account of the flora, but merely to make some passing general remarks and enumerate a few of the most beautiful flowering trees and shrubs of the sweet-smelling flowers which most abound.

The forests of Java clothe the land from the savannahs to a height of 7,500 feet ; above this the mountain tops are covered with tropical alpine flora.

The forests contain about 6,000 plant species, which grow mingled together. Of these 6,000 fully 1,500 reach a height of over 20 feet, a large number reach 50 to 75 feet, some reach 100 feet, while there are several which rise to 150 and even 180 feet.

These latter, the giants of the forest, are surrounded and covered with thickly-growing creepers, forming, as it were, a forest above the forest ; this is especially the case when several of these giants grow near to each other.

The *Waringin* tree at the Hôtel des Indes at Batavia, conspicuous to every arrival, gives in size and circumference some idea of what the giants of the forest attain to. I suppose, however, that 120 feet is all one can give to this tree.

The rapidity with which the vegetation of Java grows can



VICTORIA REGIAS IN THE BOTANICAL GARDENS AT BUITENZORG.

be seen if one leaves a plantation for a few years ; the ground becomes overgrown with a thick impenetrable jungle, and trees of 20, 30, even 40 feet come up in two or three years. As an example, a *Eucalyptus* tree planted from a seed in 1874 at the gymnasium for boys and girls at Batavia attained a height of 45 feet by 1877.

Another example of extraordinarily quick growth is given by the *Albizzia* tree, of which there are several hundreds, perhaps thousands, on the Oenarang mountain. A tree of this species after being sown reached about 20 feet within one year, a height of 75 feet within six years, 100 feet within nine years, and 132 feet within seventeen years. These figures are based on an official Government measurement.

The king of the West Java forests is the *Rasamala* (*Altingia Excelsa*), whose trunk, shooting into the air as straight as a pillar, does not throw out a single branch until it reaches a height of 90 to 100 feet. It eventually attains to 160 or 180 feet before it has done growing.

The *Poespa* is another tree which rises to 130 feet ; in the thickness of its trunk, however, it generally surpasses the *Rasamala*.

Among the beautiful flowers the *Rhododendron Javanicum* takes a prominent place with its great violet and orange blossoms. There are, too, the pink and white blossoms of the *Melastoma*, *Ardisia*, *Impatiens* (*I. Balsamina*, "balsamine"), the numerous white flowers of various *Sauraya* species, the glittering white and orange shields of the *Ixora* and *Pavetta*, while shrubs such as those of the *Strobilanthes* genus impart a typical character to the forests, so that their absence when it occurs is noticeable.

The forests are full of orchids growing from the cross branches of the trees. Orchids or orchidaceous plants also occur amongst the ground plants, and some of them,

such as *Phajus* (attaining a height of about $5\frac{1}{2}$ feet), with its large blossoms, *Calanthe* and *Spathoglottis*, are most conspicuous.

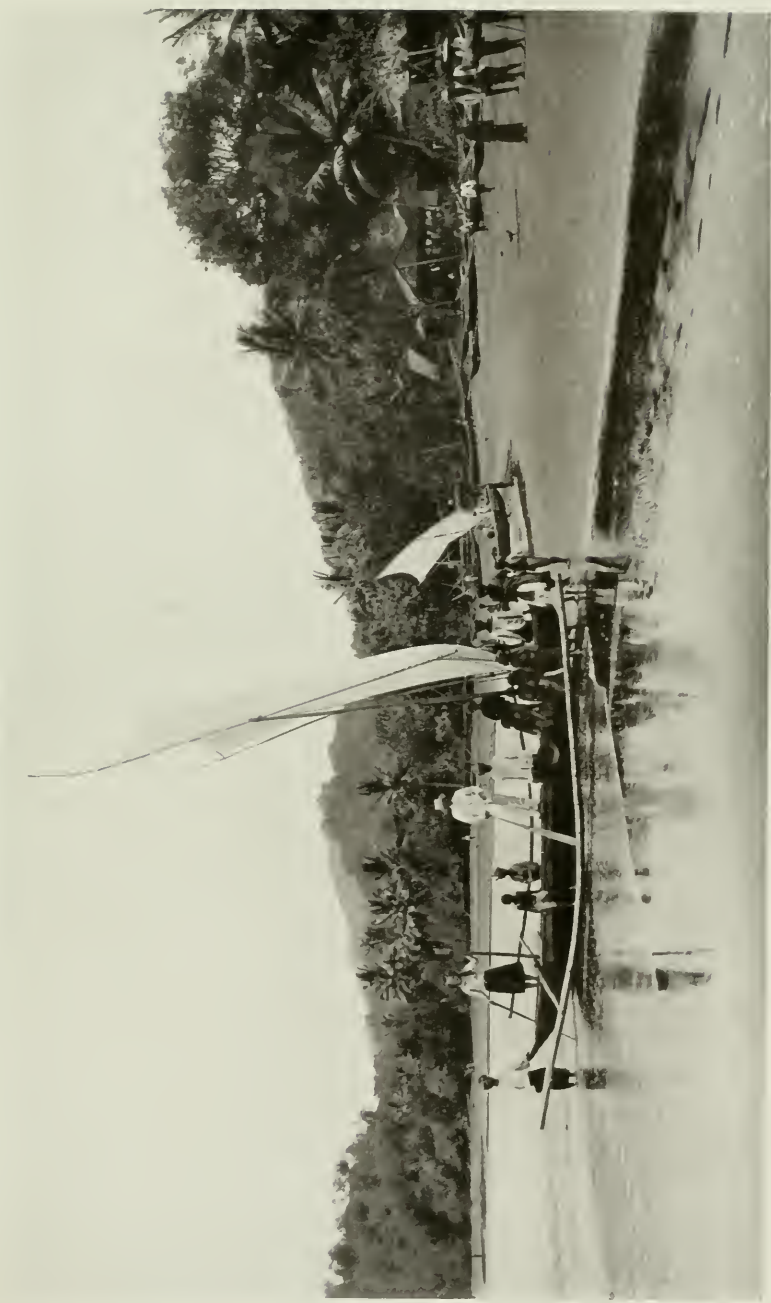
The *Rafflesia Arnoldi* is another flower, the largest in the world, which must be mentioned. It was discovered by Raffles and Arnold in 1818 when travelling through Sumatra. In Java it is only to be found on the island of Noesa-Kembangan. This flower measures across the extremities of the petals 36 inches, and the nectarium is 9 inches across, and as many deep, being able, it is estimated, to hold a gallon and a half of water. The weight of the flower is 15 lbs. The Sumatran name of this extraordinary flower is *Petimun Sikinlili*, or Devil's sini (betel-box). It is a parasite on the lower stems and roots of the *Cissus Angustifolia* of Box. It appears at first in the form of a small round knob, which gradually increases in size. The bud is invested with numerous membranaceous sheaths, which surround it in successive layers and expand as the bud enlarges, until at length they form a sort of cup round its base.

The inside of the cup is of an intense purple and dark yellow, with soft flexible spines; towards the mouth it is marked with spots of the finest white, which contrast strongly with the purple of the surrounding substance. The petals are brick-red.

The flower soon after expansion gives out a smell of decaying animal matter. The fruit never bursts, but the whole plant gradually rots away and the seeds mix with the putrid mass.

Raffles, who was in ecstasy over the discovery of this flower, in writing to the Duchess of Somerset (the grandmother of the present Duke), describes it as the most magnificent flower in the world.

At the markets or *passars* there are sold daily the petals of at least half a dozen strong sweet-smelling flowers.



PLABOAN RATOE, WYNKOOPSIAAI (SOUTH COAST OF JAVA).

A cent (one-fifth of a penny) will buy a whole handful. These are some of them :—

The *Tjempaka* (*Michelia Champaca*).—This flower comes from a tree which grows as large as an apple-tree, and consists of fifteen long narrow petals, which give it the appearance of being double.

Its colour is yellow and much deeper than that of the English jonquil, to which it has some resemblance in smell.

The *Kananga* (*Uvaria Cananga*).—This is a green flower not resembling in the slightest any tree or plant in Europe. It has more the appearance of a bunch of leaves than of a flower. Its perfume, although singular, is very agreeable.

The *Melattie* (*Nyctanthes Sambac*).—This is well known in English houses by the name of “Arabian jessamine.” It grows in Java in abundance, and its fragrance, like that of most Eastern flowers, whilst exquisitely gratifying, has not that overpowering perfume which distinguishes some of the same sorts in Europe.

The *Kombang Karacnassi* (not much known) and *Kombang Tonquin* (*Pergularia Odoratissima*) are small flowers resembling each other in shape and smell. They are highly fragrant, but unlike any English flower.

The *Bonga Tanjong* (*Mimusops Elengi*).—This flower is shaped like a star with seven or eight rays, and is about half an inch in diameter. It is of a yellowish colour, and has a soft agreeable scent.

The *Sundal Malem* (*Polianthes Tuberosa*).—This flower is the same as the English “tube rose”; the Malay name for this signifies “intriguer of the night.”

There are other numerous beautiful trees or shrubs which must also be taken notice of :—

The *Kayoe Poering* (*Codiaeum Variegatum*).—A shrub with a long green leaf with bright yellow veins running down its length. The family to which this belongs, the *Euphorbiaceæ*, possess very important medicinal properties.

The *Amherstia Nobilis*.—This tree was brought to Java in 1851 from Calcutta by a grand-uncle of the author, the Governor-General Rochussen. Scarcely anything can be more strikingly brilliant than these most beautiful scarlet flowers, diversified by yellow spots. The celebrated botanist Wallich gave this flower its name in honour of the Countess Amherst and her daughter, Lady Sarah.

The *Cehwor Meera* (*Tradescantia Discolor*).—A plant which probably originated from America. It has long spiral coriaceous leaves shooting out from its base, deep mauve on the outside and bright green inside. It has a peculiar shaped flower which rises from the centre on a stalk, the top being crowned by a sort of highwayman's hat with two little white flowers rising out of it.

The *Honjeh Lakka* (*Elettaria Speciosa*).—A herbaceous ornamental plant with a large bright red flower rising on a stalk from the centre.

The *Tallas Sabrang* (*Caladium Bicolor*).—As the Latin name denotes, the large leaf is green, with a bright-red centrepiece.

The *Kisokka* (*Saraca Declinata*).—A leguminous plant, which is highly ornamental. It grows in abundance on the mountain called Salak in West Java. The flower is a brilliant yellow and forms huge clusters covering the tree; from each cluster a long bean of a light mauve colour is thrown off; this is the legume.

The *Hantap* (*Sterculia Nobilis*).—A beautiful shrub, which catches the eye on account of the brilliancy of its scarlet flower. The flower yields large black seeds, which the natives eat like nuts.

The *Bayem Meera* (*Amarantus Tricolor*).—A herbaceous plant with a brilliant display of deep-red leaves. It thrives in dry, sandy, and barren spots. It is a native of Japan and China.

The *Tjarlang Poetih* (*Spathiphyllopsis Minahassæ*).—This



PARK OF THE GOVERNOR-GENERAL AT TITICANAS.

plant was discovered by Teysmann, of the botanical gardens at Buitenzorg, when touring in the Molucca Islands off Minahassa. The dazzling whiteness of this lily is very striking against the large green leaf. It now grows almost wild all over Java.

The *Kayoe Meera* (*Poinsettia Pulcherrima*).—This beautiful red flower is a native of Mexico. It grows in the hedges in Middle Java and is very attractive.

The *Plossoh* (*Butea Frondosa*).—This is a tree which grows to a good height. The flowers are a fiery red and, standing out from the sides of a forest-clad mountain, look very fine.

Dr. Junghuhn, in his well-known book (the best and most thorough of its kind existent), says this tree must rank foremost among the physiognomonic plants.

The *Boengoer* (*Lagerstræmia Regiæ*).—Just before the rainy monsoon this tree bursts into all its splendour with its magnificent light-lilac bunches of flowers, hiding, as it were, the green leaves which endeavour here and there to protrude.

Immense forests of this tree, beautiful in the extreme, abound on the east coast of Sumatra, especially in the neighbourhood of Palembang. It is a native of South America.

The *Flamboyant* (*Poinciana Regia*).—This tree comes from Madagascar and is magnificent when in full bloom. It stands very high, and has a striking effect when it bursts suddenly into bloom, becoming a mass of fiery crimson or flame colour, whence its name. It is in full bloom once a year only, just before the rains.

The heat of the climate of Java is so great that no flowers exhale their perfumes during the day, but do so as soon as night comes on and the dew falls; the quiet and peace of the nights in the tropics outside the towns amongst all that is natural cannot be described. In a lover of nature it

arouses a feeling of satisfaction and thankfulness to the Creator for His great gifts to mankind.

The shores of Java are protected by a girdle of forest which is alternately washed and left dry by the ocean. This is composed of one kind of tree, the mangrove. The mangrove belongs to the family of the *Rhizophoraceæ*, all of which are marvellously adapted to maintaining themselves in whatever peculiar place of abode they may happen to be. Their trunks do not touch the mud, sand or slush, but are carried by supporting air roots, which radiate from the trunk on all sides, repeatedly branch off forkwise, and hold the tree fast anchored in the soft mud. In time these mangrove or tidal forests become beach forests.

There are about fifty species of climbing plants in Java, the most beautiful of which is of course the *Bougainvillea*, called after the French navigator, who discovered it on one of the Pacific Islands when making his voyage round the world in 1766. The flowers of this creeper are either a brilliant light lilac or deep red, blue, and lilac mixed, there being two closely-allied species.

As regards the *Orchideæ*, or orchids, in the wild and impenetrable forests and jungles, where the deer, wild pig, and tiger roam, there are orchids in any number to gladden the eye of the botanist. How many different kinds or species there are I am not aware, but of the very commonest sorts there are at least fifteen to twenty. From the indiscriminate way, however, in which they have of late years been taken by the natives, who hawk them round in some places in a basket containing perhaps twenty, thirty, or fifty, at 1 to 5 cents apiece, I am afraid they must be becoming scarcer.



TJIDEUREUM WATERFALL. SOEKABOEMI.

CHAPTER XVI

THE FAUNA OF JAVA.

THE animal kingdom, while worthy of attention, has a great deal in common with other countries in the East; and there is no animal of importance that is not found elsewhere.

QUADRUPEDS.—As to useful or domestic quadrupeds, it may be mentioned that neither the elephant, the rhinoceros, nor the camel exists to-day in Java.

Elephant.—The first-named, however, was found until about 1650. It was of the Ceylon species and very small. At the time of the empire of Majapahit a number were kept in captivity, and were trained for carrying the maharajah on state occasions.

Seeing that elephants are found in Sumatra at the present day in great numbers, there is nothing extraordinary in their having once been found in Java.

Rhinoceros.—The rhinoceros (*R. sondaicus*), which once roamed wild in the island, has within the last five years been exterminated by hunters.

Horse.—While neither the mule nor the ass is found, there is a strong, fleet, and well-made horse, which is imported into Java from the island of Bima and Sumbawa. Its height never exceeds 13 hands.

Buffalo.—The karbau, or water-buffalo, constitutes an important article of food amongst the natives, 300,000 roughly being slaughtered yearly. It is an importation from the Coromandel coast, having been brought to Java by the Hindus. For ploughing the rice plantations it is indispensable, and no doubt it was with this object that it was brought here.

The buffalo supplies a rich and wholesome milk, in which the natives delight. Its ways, however, are strange, for while whole herds are managed by small native boys of seven or eight years, at the sight of a European it becomes offensively inclined, but is quite tractable again at the voice of its small keeper.

This beast has a peculiarly weak cry for an animal of its size ; the tone is sharp and very unlike the lowing of European oxen.

Its pet luxury consists in wallowing in a muddy pool, which it forms for itself in any spot convenient during the rainy season. Here it thoroughly enjoys itself, dexterously throwing the water and slime with its horn over its back and sides when there is not sufficient depth to cover it.

Its blood is of a very high temperature, which may render these frequent baths necessary for the beast's health ; and the mud which forms a crust on its body preserves it to a certain extent from the attacks of insects, which are attracted to its body in countless numbers, so much so that the Javans commiserating the animal frequently light fires for it in the evening in order to smoke its enemies away.

The buffalo, although a stupid animal, has sagacity enough when these fires are lighted to lie down to leeward of them.

Cow.—The cow, or sapi as the natives call it, is also an importation, having been brought in about two thousand years ago from Madagascar.

It still has the large hump, but has degenerated from want of rich pasture.

Sheep.—Sheep do not thrive ; they are an importation from Bengal.

Goat.—The goat is a native, there being the kambing utan in a wild state. The species here have a great deal of the gazelle in appearance. They are generally about 3 feet



THE FRONT VERANDAH LEADING TO THE LIBRARY IN THE AUTHOR'S HOUSE.

in height and 4 feet in length. The horns are about half a foot in length and turned back.

Hog.—The hog is still plentiful in Java in a wild state. There are many species of it, one of the most singular being that in the eastern extremity of the island called babi rusa, or hog-deer, with tusks resembling horns, which turn back with a long curl until they reach the head somewhere near the eyes. Whether there is such a species anywhere else in the world is doubtful. The demand for pork is great amongst the Chinese, who prefer it to any other kind of flesh.

Cat.—The cat is domesticated, but is also to be found in a wild state in the island.

Tiger.—Among beasts of prey the tiger comes foremost. There are numerous kinds: the máchan loreng (*Felis Tigris*), máchan-gógor, máchan-tútul, which is a black leopard, máchan-kómbang, and máchan-kúwuk, which is the tiger-cat.

The largest tigers are found near Blitar and the forests around. It is nearly equal in size to the Bengal tiger, and is very ferocious.

Jackal.—The jackal, or wild dog, is also found. There are several species, which, to give them their native names, are called asu wawar, asu ajag, and asu kiki.

Wild Ox.—The wild ox, or, as it is called, the banteng (*Bos sondaicus* or *Bibos sondaicus*), is gradually dying out, and is very scarce. It is a very fine beast and gives good sport. It abounded formerly near Batang, where the estate called Siloewok Sawangan in the Pekalongan Residency¹ is, but now this animal is only to be found in the south of the Preanger.

Stag.—The stag is still in a wild state, as likewise the deer; numbers of the latter are caught and tamed, some

¹ This estate is still in parts a wild forest, where deer and pig abound. As a proof that banteng formerly existed here, I give a copy of a letter belonging to the late Mr. Edward Watson, one of the original partners of

being fattened for food. The cost of a good-sized deer alive is about £5 sterling.

Bears.—Bears only exist in Sumatra, where they are generally small and black and climb cocoanut-trees with ease to devour the tender part or cabbage.

Musk Cat.—An animal called rasé, very like a cat in appearance and size, runs wild, feeding on fowls and birds. In a certain part of its body is a sort of sack, which contains musk or “dedes.”

Otter.—There is another animal in Java which has been sometimes called an otter. The Javans call it “berangan.” In measurement it is about 60 inches long, standing about 28 inches high, and with a bushy tail about 35 inches long, and front teeth $2\frac{1}{2}$ inches long.

Its head is small and rather tortoise-like, and it has short ears and long moustaches like a seal's. Its bushy skin when dry is like sealskin, and it is so thick that a slash with a knife has little effect on it. It is a ferocious animal, with calm and deliberate actions, and attacks a human being without hesitation if there is any need for doing so. On land it lives on birds and fowl of all kinds, but robs hen-roosts for preference, eating as many as a dozen or so during a night. It is very difficult to catch. If discovered in a tree, it rolls itself into a round ball, and drops like a stone to the ground, bounding off instantly into a thicket. It is, however, in the water that the animal is in its element. The colour of its skin is black. It must not at all be confused with the ordinary otter, as sometimes happens; it is called by this name only for convenience.

Monkeys.—The varieties of the monkey tribe are innumerable. Maclaine, Watson & Co., which I have been privileged to read. It runs as follows :—

“Samarang, 21st December, 1831.

“My dear Watson,—I returned Monday from our shooting excursion which was a very pleasant one. We shot 12 bantengs.

“Yours truly,

“J. McNEILL.”



THE REGENT OF KENDAL, WITH ASSISTANT-RESIDENT ENTIOVEN, PATHIS, WEDONOS, ASST. WEDONOS, DIAKSAS AND COLLECTORS.

able. Among them may be mentioned the muniët, karra, brusiamang (*simia gibbon* of Buffon), and lutong. The orang-utan, or "wild man," does not exist here, unless this term applies non-specifically to a monkey which walks occasionally erect, and bears some resemblance to the human figure, in which case there are numbers in Java.

Some years ago a German professor stated he had unearthed the bones of the missing link in Java. This statement was based on portions of an elongated human skull, discovered many feet below the earth.

If the bones are what they were said to be, Java must have been inhabited thousands of years ago, before the great cataclysm occurred which separated Sumatra, Java, and Australia from the continent of Asia.

Porcupine.—The porcupine exists in Java, but it is quite a small species.

Sloth.—The sloth or loris (*Nycticebus tardigradus*), much smaller than, but similar to, the South American species, has also now and again been seen.¹

Squirrel.—The light-brown squirrel is common. It is called tupei.

Hedgehog.—The hedgehog is also a native of Java. The inhabitants call it peng goling, which means "the animal which rolls itself up."

Bats.—Of bats there is an unexampled variety. The churi-churi is the smallest species, and is called burong tikus, or the "mouse-bird." Next to this come the kalalawar and the kalambit, and there is the kaluwang (*Pteropus edulis*), which is of considerable size.

They hang by thousands in trees, but prefer the inside of the roof of a godown or store-house which is little used. After they have occupied such a place for a few years, the ground is inches thick with a rich nitrogenous manure of some value; and nothing will induce the bats to quit this

¹ The author has seen both these animals.

place, even to firing into them and killing numbers, but the entire removal of the tiles of the roof.

Flying Squirrels (*Galeopithecus volans*), which by means of a membrane extending from the fore-legs to those behind are enabled to take short flights, are also common.

REPTILES.—The cayman of the Dutch, the buaya of the Malays, corresponding to what the English know as the alligator (*Crocodilus biporcatus* of Cuvier), swarms in most of the rivers, and growing to a very large size does a great deal of mischief. It resembles the crocodile of Egypt rather than that of the Ganges or the American alligator.

Small Alligator.—Next to the crocodile is the bewak of the Malays or menyawak of the Javanese. This never exceeds 7 feet in length and is sometimes less. The eggs of this animal, as well as those of the crocodile, are eaten by the natives, and the fat is collected for medical purposes.

Iguana.—The iguana is another animal of the lizard kind about 3 feet in length; it is quite harmless except to poultry, of which it is uncommonly fond.

Gecko.—The toké is a gecko lizard about 10 inches long. It frequents houses, living under the roof, and only coming out when the lights are lit to feed on the numerous insects which, attracted by the light from the open, settle upon the walls. Every now and again it makes a noise descriptive of its name.

Chichak.—Between this and the small house-lizard called the chichak are many gradations in size, chiefly of the grass-lizard kind, which is smooth and glossy. The chichak is from 7 inches downwards, and is the largest reptile that can walk in an inverted position. It will run along the ceiling of a room and in that position seize a cockroach with the utmost facility. This it is enabled to do through the peculiar structure of its feet, which stick as if glued to the smoothest surface. Sometimes, however, on springing too eagerly at a fly it loses its hold and drops to the

floor, and on such an occasion it frequently recovers itself with the loss of its tail. This is done without any apparent pain to the animal, and certainly without any loss of blood. Within a little time the member begins to renew itself, and eventually is quite restored.

Chichaks are produced from eggs the size of the wren's, of which the female carries two at a time, one in the lower and one in the upper part of the abdomen on opposite sides. This animal is always cold to the touch, and yet the transparency of its body enables one to see that its blood has a brisk circulation.

Chameleon.—The chameleon, with its tail, is about $1\frac{1}{2}$ feet long. The colour is green with brown spots. In the woods it is green, not from the reflection of the leaves, but because this is its natural colour. When caught it immediately turns brown, the effect of fear or anger, as men become pale or red. If left then undisturbed, its back soon resumes a deep green, whilst its belly becomes a yellow green, the tail remaining brown. It feeds on flies and grasshoppers.

Frogs.—With animals of the frog kind (*kodok*) the swamps and pools everywhere teem, and their noise upon the approach of rain is tremendous. They furnish a prey to the snakes in Java, as elsewhere.

Snakes.—The cobra di capello, or hooded snake, does not exist, and the largest of the boa kind is the *úlar sáwah* which certainly grows to 15 feet, and I have been credibly informed even to 20 feet. One of 15 feet was killed in a hen-house, where it was devouring the poultry.

There are numerous other varieties, for instance the *úlar lánang*, which is very much dreaded by the natives as poisonous. The Javanese say it ascends trees and suspends itself by the end of its tail and seizes small animals as they pass below. Then there are the *úlar sáwah máchan*, which is so prettily variegated, and the *úlar lámpe*, found near the mouths of rivers and swarming in some districts.

This snake is dreaded by the natives as causing death within twenty-four hours.

There is also the *ular kadut*.

The remarkable stories which now and again come to us regarding the snakes in Sumatra seem incredible; nevertheless, the natives adhere to them. There is a snake, they say, which not only swallows deer, but even the largest buffaloes, and an assistant Resident once told me that travelling through Sumatra he stopped at a village to rest; here he found an old native crying, and on asking the reason he was told that he (the native) had arrived too late to prevent his child of about four or five years being swallowed by a snake.

The stories told are almost beyond belief, but I cannot declare them to be false.

The *ular garang*, or sea snake, is coated with scales, both on the belly and on the tail. The head is about one-third of the body; behind it is the smallest part of the body, which increases in bulk towards the tail, which resembles that of the eel.

TURTLE.—Two varieties of the turtle, the *pényu* and *pényu kombang*, frequent the Java seas. Both are captured for their shell, which is made into spoons, combs, etc. They are excellent eating.

TORTOISE.—There is a land tortoise called *kúro-kúro*, which is very abundantly found in some districts. The natives eat it, but I fancy it is dangerous.

FISHES.—The grampus whale (belonging to the *Delphinidæ*) is well known to fishermen by the names of *pàwus* and *gajah mina*, but I know of no one who has ever seen it in the Java sea, nor have I ever heard of one being thrown up on shore.

The dugong, a sea animal with two large pectoral fins, was called by the early Dutch voyagers “sea-cow.” Owing to this fish having a kind of shaggy hair on its head, and the



STREET SELLERS. JAVA.



FISH MARKET, SAMARANG.

mammæ of the female being prominent under the pectus, sailors in olden days carried to Europe all sorts of tales about the mermaids in the tropical seas.

Of the fish in daily use by the natives, which are abundant, and some of which are excellent eating, there are 34 species in the various rivers, 16 in the sea, and 7 found in stagnant waters. The traveller Valentyn enumerates 500 uncommon kinds of fish found in the waters of the Eastern Islands.

A few of the Java fish may be mentioned here :—

The shark, or hiyu (*Squalus*) ; skate, or ikan pari (*Raia*) ; ikan mua (*Muræna*) ; ikan chanak (*Gymnotus*) ; ikan gajah (*Cepola*) ; ikan karang (*Chætodon*). There are also the ikan krapo, which is a kind of sea-perch, or rock-cod ; ikan marrang, commonly called “leather-fish,” and very palatable ; jinnihin, like a carp ; bawal, or pomfret, not at all bad eating ; balanak, jumpul, and marra, three fish of the mullet kind (*Mugil*) ; ikan lidah, a kind of sole ; ikan bandeng, a kind of mackerel, but with more fine bones ; ikan kakap, similar to the English cod or the Chinese samli ; ikan summa, a river fish resembling the salmon ; ringkis, like the trout and noted for the size of its roe ; ikan bada, rather like whitebait ; and ikan terbang, or flying-fish (*Exocætus*). The goerami (*Osphromenus*) is also a fresh-water fish that must not be forgotten. People who can afford it keep it in tanks on their establishments.

The little sea-horse (*Syngnathus hippocampus*) is commonly found in the seas.

BIRDS.—The variety of birds in Java is very considerable, consisting of over 270 species, and the following list contains but a very small part. To take first the domestic fowls or poultry : there are the common fowl, ayam ; the bébek, or ordinary duck ; the muscovy duck ; pigeons of various species ; the goose, which is common on every establishment ; and the turkey, which is easily

procurable, but, costing about 5s., is not an article of daily use.

The largest bird found around here is the cassowary, which is found on the island of Ceram.

The peacock, or merak (*Pavo*), is very common in large forests, especially in some districts.

The pheasant is unknown in Java, but in Sumatra there is a species of uncommon magnificence and beauty, the *argusiuna*, or argus-pheasant. The plumage of this bird is possibly the richest of all the feathered race, without any gaudiness. It is difficult to keep it alive for any length of time in captivity.

Among the birds of prey the eagle does not find a place; but there are the vulture (*Coracias*), the kite, or alang (*Falco*), and the carrion-crow, or gadak (*Corvus*).

There are several species of the woodpecker and the owl.

The kingfisher (*Alcedo*) is frequently seen in marshy ground; it is called by the natives the boerong buaya, or "alligator bird."

The bird of paradise (boerong supan), one of the most beautiful of all birds, is found in the Molucca Islands and New Guinea, and nowhere else in the world. The name was given them by the Portuguese in the fifteenth century.

There is also the rhinoceros-bird or hornbill (*Buceros*), so called from the little horn which extends half-way down the upper mandible of its large beak and then turns up.

Of the stork kind there are several species, some of fair height and otherwise curious. They frequent the rice-fields in the rainy season. There is the heron (*Ardea*), the snipe (*Scolopax*), the coot or water-hen (*Fulica*), and the plover (*Charadrius*).

The cassowary has already been mentioned.

Sportsmen now and again meet with quail (*Coturnix*), but they must be very scarce.

Of small birds there are the starling (*Sturnus*); the



JAVAN WOMAN AND CHILD.



JAVAN LADY.



swallow (*Hirundo*), one species of which builds the edible nests which are prized so highly by the Chinese, and a description of which will be given later on ; and the mino, or beo, a black bird with yellow gills, which has the faculty of imitating human speech to greater perfection than any other bird.

The Java sparrow, a grey bird with red beak, is of course common. I have been told there is a white species, but have never seen it.

The teal, or belibi, is also common, but for some reason seldom eaten.

Of the parrot kind only two, the bétet, a little green bird, and the selindit, are found in Java ; but in the Moluccas there are a number of varieties of all the colours of the rainbow.

INSECTS.—Java swarms with insects, and I do not suppose that there is anywhere in the world where a greater variety is to be found. To do more, however, than mention a few would seem to be superfluous. There are the cockroach or chingkarek (*Blatta*) ; the cricket or lebah taun (*Gryllus*) ; the bee (*Apis*), whose honey and wax are collected in very considerable quantities in the forest ; the kambing, an insect belonging to the bee family, that bores in timber ; the sumut or ant (*Formica*), which is in multitudes both outside and inside the houses, and a large red ant, which bites badly and frequents kapok trees, where it makes large nests. There are also the sumut poetih ; the termite or white ant (*Termes*), whose destructive qualities are such that it will eat up or destroy the woodwork of a vacant house in a very few years ; the scorpion (*Scorpio*), the sting of which is highly inflammatory and painful, but not dangerous ; and the sipasan, or centipede (*Scolopendra*), which bites venomously.

Further there are the lalat, or common fly (*Musca*), and the alintah, or water-leech (*Hirudo*), which in some

rivers will be found clinging to one's body in a minute or two by the dozen.

The suala tripan, or sea-slug (*Holothuria*), may here be mentioned. By some it is called *bèche-de-mer*, and as an article of food is in great demand by the Chinese, and is exported to that country.

Silkworms were introduced into Java early in the eighteenth century by the Dutch or Chinese ; but nothing seems to have come of the venture, and hardly any information is to be found about its results.

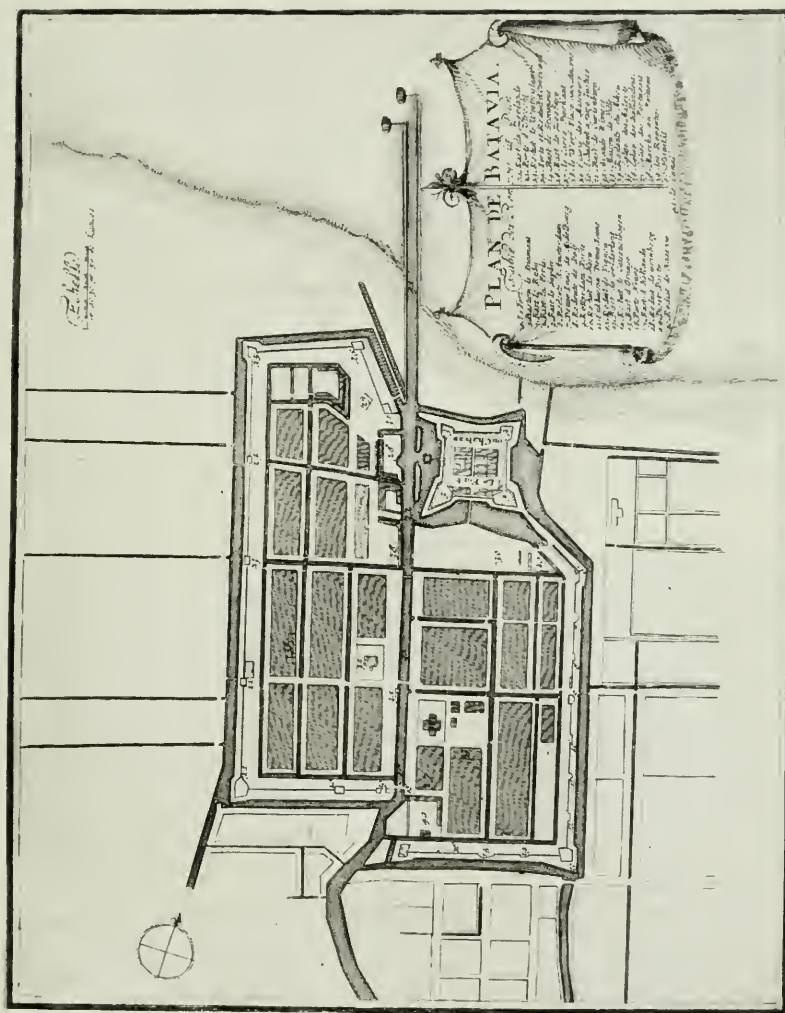
Of butterflies, of which there must be hundreds of varieties, the atlas is the largest ; its chrysalis affords a coarse silk.

I shall only add the *walang-sángit* to this list ; this is an insect which is destructive to the rice while in the ear. Formerly it is said to have destroyed the growth of whole districts in some years and to have caused partial scarcity. The natives attempt to extirpate it by burning the chaff in their fields ; it has a very unpleasant odour about it.¹

PEARLS.—The pearl fisheries of the East Indian Archipelago are of no recent growth and form an important industry.

Ferdinand Magellan, when he made his celebrated voyage, called on the King of Borneo in 1521, who, he relates, “ was the proud possessor of two pearles as it were *henne egges*, and so round that on a plaine table they would not stand firmly.” It is impossible to say what part of Borneo Magellan touched at, but it was probably in the north, as he describes the city as being of “ 3,000 houses and very populous, the natives being tall, subtle, armed with bowes, javelins pointed with iron forkes, quivers with venomd dartes, which poyson to death where they drawe bloud.”

¹ Professor A. R. Wallace writes regarding the “ Relations of Java Fauna to the Asiatic Continent ” in his “ *Island Life* ” ; and also regarding the relation of Java and Borneo in “ *The Geographical Distribution of Animals*,” Vol. I.



OLD PLAN OF BATAVIA, 1693.

He further goes on to say they were "all Mahumetans and will die sooner than taste of lard, neither keepe they any swine. They have many wives, wittie, warie in trading, bolde and couragious. In the midst of their prawes stood a table with silver vessels for their bettele and arecca which they usually are chewing."

All this is sufficient to prove that pearl-fishing was going on in the north of Borneo in the sixteenth century and that the trade was a profitable one.

In 1596 Jan Huygen van Linschoten mentions the pearl fisheries off Borneo; and Fernan Mendez Pinto in 1545 tells us of those that had been carried on for a great length of time off the west coast of Sumatra between Poeloe Tiguos and Poeloe Quenan, and that the pearls were always sold to merchants who came from the Red Sea.

In 1661 the "Dagh Register van het Casteel Batavia" ("The Day-Register of the Castle of Batavia") mentions that the industry in these waters was a very considerable one.

At this time pearl-fishing was quite common round the coast of Batavia and of the islands in the neighbourhood.

Valentyn in his book states that at the Aroe Islands as many as seventy to eighty large ships at a time were sent out to search for pearl; and the business was conducted on a large scale in the same way as was being done in Ceylon.

The people of a Chinese village at Poeloe Weh used to live on the profits of pearl-fishing, the shell being sold to Singapore at 30fl. a picul. They also sent some of it to China, where it found a ready market, the powdered shell, or the inside thereof, forming an important ingredient in the Chinese pharmacopœia. At the beginning of the eighteenth century the natives of the coast desahs began searching for pearl in the "Kinderzee" and off the coast by Tjilatjap. The industry in fact was so profitable that at one time it was carried on all over the archipelago.

Naturally this was observed by the eagle eye of the East India Company, for the Governor-General, Zwardecroon, in 1721 put a surtax of 10 per cent. of the profits on the industry, the profits being probably assessed by the Company itself.

Prices had now reached 80fl. and 100fl. a picul. The best quality of pearl-shell came from the coasts of Tidore and Ternate, and these secured the top price.

From the Aroe Islands fisheries the following figures have been obtained which will give some idea of the production placed on the market :—

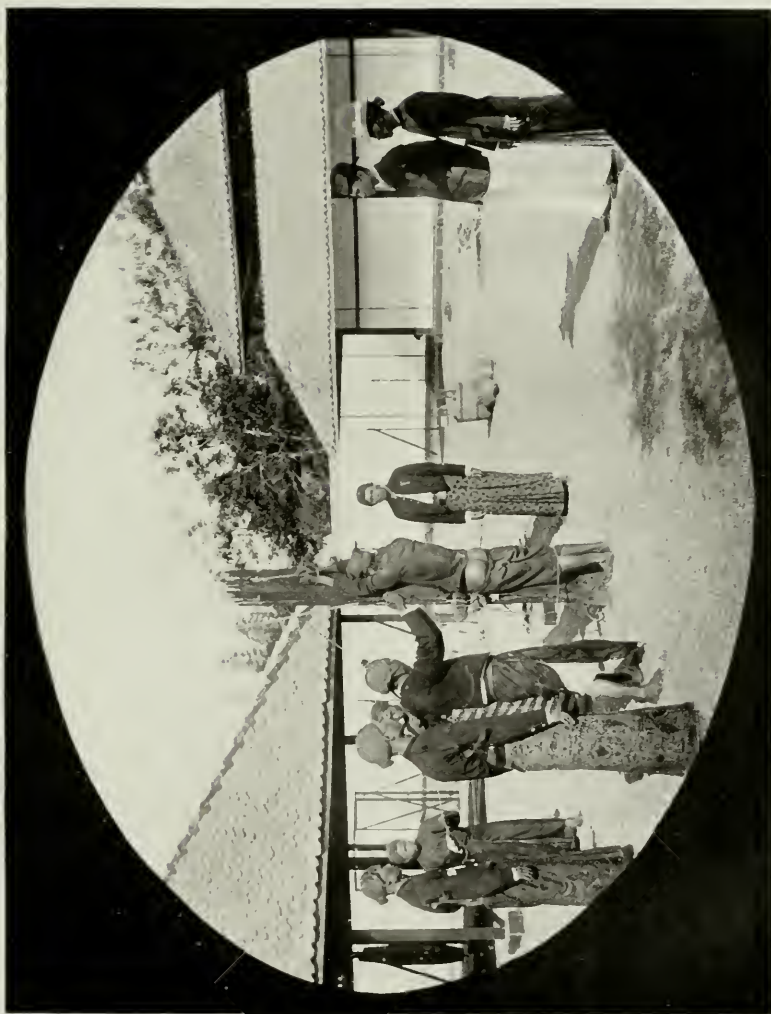
About 1857	..	..	3,500	piculs of pearl-shell every season
„ 1887	..	..	1,330	„ „ „
„ 1892	..	..	1,700	„ „ „
„ 1894	..	..	2,300	„ „ „
„ 1895	..	..	893	„ „ „

This is sufficient to show the importance of the trade, which to-day is still going on under proper regulation and management.

In 1881 the Sultan of Batjan gave a concession to the “ Batjan-Maatschappij ” to fish in his waters ; and in 1896 the “ Nederlandsch Indische Paarschelpvisschery ” (the Netherlands India Pearl-shell Fishing Company) was formed, having a fleet of one schooner and seven luggers, and holding the right to work in the neighbourhood of the Aroe Islands and all around that part of the archipelago.

In 1898 another company was established at Macassar called the “ Visschery Maatschappij Djoempandang,” which had a fleet of one schooner and ten luggers, with the right to fish in the valuable waters around the Timor Archipelago. In ancient times these were considered almost the best of all the waters in this part of the world for pearl-shell.

At Macassar there are regular European dealers in this product who buy it all up and ship it to Singapore or



PUNISHMENT OF A CONVICT AT BLORA.

Europe. The pearls find their way to London, Hamburg, and Amsterdam, and sometimes the catches prove very valuable.

In the islands of the Moluccas pearls of good colour and size can be now and again purchased for a quarter of the price one would have to pay for them in Europe.

CHAPTER XVII

THE MINERALS OF JAVA

Gold.—Gold was not only known to exist, but was also worked in Sumatra and the island of Nias in very ancient times. Research has proved that the neglected diggings found by the Portuguese at the end of the fifteenth century were worked centuries before the Christian era.

The eminent Dutch Professor Kern has given weighty reasons for holding that Sumatra was the gold island (*Suwarnadwipa*) of the *Kathäserit sagara*, and there is much reason for supposing that it was from here that King Solomon drew his gold for the temple.

In more recent times (A.D. 600) the Persians had a colony in West Sumatra, and at the same time, if not before, a colony of Arabs was also there.

It is not unlikely that a number of both these nations were driven from their land when Alexander the Great destroyed the Persian army about B.C. 300, but of this there is no proof.

Until some twenty years ago (1895) there were only native workings in the archipelago, and the large gold mines had been abandoned, as with the primitive means at the disposal of the natives the cuttings on the surface had become exhausted and they were unable to work at a lower level. The Chinese, too, worked in West Borneo, washing out the gold as they did in the early days in California, and they won good returns. Through mere primitive washing, which was slow and tedious, the Chinese of West Borneo in 1848 managed to extract officially 1,348,810fl. worth of gold, or more than £100,000 sterling, while at the same time from

the eastern district they took out 60,280fl., or £5,000. Between the years 1875 and 1880 the official figures were never less than £100,000 a year.

The word "official" is especially used, as the Dutch Government had every reason for supposing that the actual extractions of gold were very much greater.

The Chinese, of course, apart from the tax on every penny-weight of gold, had sounder reasons for not allowing the enormous productions to become known. A number of them had had relatives who had been at California during the time of the rush, and they knew very well what was in store for them if the Europeans came their way.

The first European mining concern in Netherlands India was the Ban Pin San; this was in West Borneo. Being, however, badly managed from the first, it came to grief for want of capital.

In 1895 the Netherlands India Mynbouw Maatschappij and the Mynbouw Maatschappij Martapoera were formed. The first-named had a concession in the island of Celebes and the latter in Borneo. The shares, however, of both, after touching a high point, dropped to nothing. It was the old story of mismanagement and want of knowledge.

That there is gold, however, and in large quantities, on both these concessions is unquestionable, and in the former, I have been assured, nuggets up to 66 grains were found.

The former company has been re-formed and is now worked under the name of "Paleleh," but on account of the smallness of the capital insufficient gold is extracted, a mere £5,000 worth being secured monthly, which barely pays expenses.

Between 1897 and 1900 about forty companies were started with an aggregate capital of close on a million pounds sterling. These were all in Borneo, Sumatra, and Celebes.

The mining engineers were almost exclusively English

and knew their business, but the directors of the concerns were mostly pettifogging Dutch import houses, who had up to this time been dealing in cotton goods and such like. The result was only what might have been expected, and instead of the archipelago becoming a second Witwatersrand the public before many years received a shock from which it has never recovered. Gold-mining, which had become an industry, received a set-back, and a reaction set in.

Capital for even *bona fide* concerns was difficult to procure, and the vitality which had always been so apparent in Java where money was concerned seemed to have ceased.

Prominent, however, from these times stand out the gold mines worked and managed by that splendid German house Erdmann and Sielcken. During the dark days when the gold industry was at its lowest and criticisms of a disagreeable nature were being levelled at the directors of all the gold companies, this firm plodded on, and has to-day mines under its management of which they can reasonably feel proud. There is no other firm in Java that could have done for the mining industry of the East Indies what Erdmann and Sielcken have done, and they deserve unbounded credit for having carried their obligations and their intentions successfully through. Their principal mines are :—

Mine.	Capital. (florins).	Where situate.
Redjang Lebong . . .	2,500,000	Sumatra
Ketahoen . . .	2,500,000	„
Siman . . .	1,875,000	„

At the Redjang Lebong mine traces are being continually met with of very ancient trenches and galleries. The working, however, it is clear, was conducted in a very primitive way. The richest ore was apparently sought out first and



JAVAN LADY.

bruised in pans until it became small. The gold must have then been separated from the gravel by washing.

Redjang Lebong is quite near the town of Benkoelen, of which Raffles was lieutenant-governor for about twelve years. Had it been discovered in those days, the chances are that Sumatra would now have belonged to England.

In early days the way to the mine was over steep mountains and through the densest jungle, but a road has at last been made on which motor cars can run, and the distance, which previously took three weeks to go over, now takes three days.

Since 1903 Redjang Lebong has regularly declared a dividend. These are the figures :—

1903 ..	..	20 per cent.	1908 ..	..	100 per cent.
1904 ..	..	22·9 „	1909 ..	..	85 „
1905 ..	..	32 „	1910 ..	..	90 „
1906 ..	..	52·5 „	1911 ..	..	50 „
1907 ..	..	71 „	1912 ..	..	25 „

Ketahoen paid, as to first dividend, 16 per cent. to the ordinary and 25 per cent. to the preference shareholders. Since these times this mine has somewhat declined and poorer ore has had to be worked through.

Simau, which is the latest of the three, may be safely expected from the good assays to pay very good dividends. In 1912 it declared its first dividend of 20 per cent.

The centres of gold mining are the residency of Benkoelen, in Sumatra, Borneo, and the Celebes.

In Sumatra the gold occurs in three ways: firstly, in quartz lodes, in the old shales, and in granite; secondly, in quartz lodes, which are connected with Post-Tertiary andesites, rhyolites, and other eruptive rocks; thirdly, as the alluvial or river gold.

The mines of Redjang Lebong, Ketahoen, and Simau all have ores belonging to the second group.

In the Celebes the mines of "Paleleh" (late of the Netherlands India Mynbouw Maatschappij) and "Totok" are the last of all the companies started that are still working. The results of the first-named have already been mentioned, and as regards the latter, gold may be said to be plentiful enough there, if only the mine were better furnished with a greater capital. This mine was also worked in ancient times, underground galleries being now and again met with. There was no plan, however, and they ran in all directions. Sometimes their height was fairly considerable, sometimes only a few feet. Sometimes the galleries were horizontal, at others nearly vertical; some ended at 10 metres, others reached 80 metres. All the side walls are covered with the powder of burnt and slaked lime. Wood was apparently piled up against the walls and set alight, and by the heat that was produced the lime became calcined, and it was afterwards slaked by water. This process converted the hard rock into a soft mass, from which the quartz could easily be worked out with pickaxes, or by whatever means the inhabitants had at their disposal. In this manner did the ancients work their gold mines.

There is no doubt that Sumatra and the Celebes are rich in gold; when the time comes for the Borneo mines to be opened up and properly worked they will probably be found the richest of all.

In the neighbourhood of Martapoera gold has been worked by the natives in their primitive way for seven centuries, and the assays are incredibly fine. The country is, however, difficult to travel in and transport is very expensive; had this not been so the gold mine of "Kahayang," for which a concession was granted some years ago, would no doubt have long since paid shareholders handsome dividends.

The output of gold in 1911 from the five largest mines in Netherlands India was as follows :—

Redjang Lebong (Sumatra)	..	..	..	£ stlg.
Ketahoen	..	..	..	353,750
Simau	..	..	..	67,250
Paleleh (Celebes)	..	..	..	108,000
Totok	..	..	..	76,650
Total	..	..	..	56,650
				£662,300

Previous to this the total output was as follows :—

1906	..	..	£ stlg.	1909	..	..	£ stlg.
			392,326				630,335
1907	..	..	487,829	1910	..	..	723,077
1908	..	..	609,657				

Silver.—Silver and gold invariably occur together in the East Indies. In some mines it is in the proportion of 7 to 1, in others only 2 to 1, but on the average 3 to 1.

Below is given a table showing the quantity and value of the gold and silver productions for 1900 to 1907 taken from official figures ; this will give some idea of the rate at which this industry is increasing :—

Year.	Gold.		Silver.	
	Quantity.	Value.	Quantity.	Value.
1900	klgs. 745	fl. 1,195,000	klgs. —	fl. —
1901	1,213	2,014,000	—	—
1902	1,388	2,202,000	—	—
1903	2,131	3,365,000	—	—
1904	1,940	3,200,000	5,762	270,000
1905	2,339	3,827,000	7,730	348,000
1906	2,619	4,117,000	8,422	454,000
1907	3,160	5,056,000	11,135	550,000

Tin.—Tin (*kassiteros*, *stagnum*, later *stannum*) was known in Egypt, Persia, India, China, and Peru several thousand years ago. In the oldest records, and even in the Old

Testament, mention is made of it. In articles dug up from the "bronze period" tin has been frequently discovered.

As to what is the actual meaning of *kassiteros* there is some doubt,¹ but it is supposed that *stagnum* or *stannum* comes from the Celtic word "steann," and originally meant work-ore.

In the time of Herodotus the British Islands were known as the Cassiterides, or Tin Islands, and tin must have been imported from there into Europe overland before the sea way by Gibraltar was known.

Tin in the Dutch East Indies was first discovered by the Dutch at Banka in 1709, 1710, or 1711.

This metal is found not only at Banka, but also at Billiton and Singkep, the three largest islands among a group (in all of which tin exists) which forms, as it were, a prolongation of the Malay Peninsula beyond Singapore.

These islands are built up of old shales, but the age of them is unknown owing to a complete absence of fossils.

The mining of the tin ore is carried on in all three islands in the same way—that is to say, it is farmed out to Chinese "kongsies" or associations (under the supervision of a European staff), who work at fixed prices settled in advance.

In Banka the Government carry on the mining themselves, but at Billiton and Singkep it is done by companies, the Billiton Company and the Singkep Tin Mining Company.

The first company received their charter on condition that they returned five-eighths of their profit to the Government, while the latter works under a contract made with the Sultan of Lingga.

It is noteworthy that Raffles secured the two islands of

¹ See Chapter I.

Banka and Billiton for England by treaty with the Sultan of Palembang, but they were ceded by the British to Holland in 1819, after repeated conferences on the subject between the plenipotentiaries of the two countries. The Dutch knew what they were worth, the English did not.

The tin from Billiton is sold by public auction at Batavia ; Messrs. Maintz & Co., a French firm, are generally the largest buyers, after whom comes the "International Trading Company," of Rotterdam. The Banka tin is sent to Amsterdam and Rotterdam, whilst that from Singkep finds a ready market at Singapore.

The value of the tin may roughly be said to be about fl.93.50 the picul, and the industry is a very important one for the Dutch Treasury.

Tin has been found, too, in Flores, where, according to the natives, it is in far greater quantities than in Banka and Billiton. It is also to be found on the west coast of Sumatra and at Siak.

TABLE SHOWING OUTPUT OF TIN.

Year.	Banca.	Billiton.	Singkep.	Total.
	piculs	piculs	piculs	piculs
Up to 1896 .	6,734,136	1,560,581	49,887	8,344,604
1897 . .	163,541	89,046	10,931	263,518
1898 . .	192,973	93,603	11,144	297,720
1899 . .	185,974	79,572	9,533	275,079
1900 . .	202,728	80,203	12,989	295,920
1901 . .	171,134	74,812	9,978	255,924
1902 . .	171,214	76,234	7,254	254,702
1903 . .	185,692	64,266	4,618	254,576
1904 . .	148,987	71,707	6,007	226,701
1905 . .	145,298	67,386	7,488	220,172
1906 . .	190,031	62,310	6,715	259,056
1907 . .	191,930	67,024	6,619	265,573
1908 . .	203,990	66,491	6,441	277,111
1909 . .	184,826	36,316	7,972	229,114

16.47 piculs = 1 ton.

VALUE OF THE TIN INDUSTRY.

Year.	Net yield of Tin in Banka.	Share of $\frac{1}{2}$ in Profit of Billiton Company.	Total Profit.
	fl.	fl.	fl.
1897 . .	2,983,000	643,000	3,626,000
1898 . .	4,919,000	1,752,000	6,671,000
1899 . .	12,887,000	1,752,000	14,639,000
1900 . .	14,148,000	3,166,000	17,314,000
1901 . .	9,643,000	2,693,000	12,336,000
1902 . .	9,593,000	2,699,000	12,292,000
1903 . .	11,375,000	2,358,000	13,734,000
1904 . .	9,346,000	2,278,000	11,624,000
1905 . .	10,483,000	4,137,000	14,620,000
1906 . .	17,611,000	2,963,000	20,574,000
1907 . .	15,301,000	1,437,000	16,738,000
1908 . .	19,029,000 ¹	1,400,000 ¹	20,429,000 ¹
1909 . .	17,240,000 ¹	800,000 ¹	18,040,000 ¹

Coal.—As early as 1829 coal was discovered in the residencies of Benkoelen and Bantam, and in 1846 Government began working one of the mines at Martapoera, in West Borneo ; but this was soon left in favour of another, which appeared better, at Pengaron, where in 1849 a tunnel-mine was opened, which they called the “Oranje Nassau” mine.

In 1886 the important coalfields at Oembilien, near Padang, in Sumatra, were discovered by the mining engineer W. H. de Greve.

About 1900 several mines were being worked in various places in the archipelago by private concerns who had received concessions from Government.

Up to now the coal found, according to the great authority Dr. R. D. M. Verbeek, all belongs to the Tertiary period.

The coal-seams are sometimes very thick and extensive. The quality of the coal varies. Some of it can be favourably compared with other good qualities, while there is some that burns itself almost immediately away like chaff.

It is from the old Tertiary beds, that is the Eocene strata, that the best kinds are procured ; while in the upper

¹ Approximate.

Tertiary deposits, although fairly thick lignite seams are met with, the coal is of poorer quality.

The coalfields at Bantam, called the Bajah coalfields, have never been worked up till now, owing, no doubt, to the discovery of the Oembilien fields.

These latter fields are near the Singkarak Lake, and are connected with Padang and its harbour, Emmahaven, by a very good railway, which runs through some grand country, circling a large mountain which lies between Padang and Oembilien.

Dr. Verbeek has divided the Oembilien fields into three divisions and estimated the quantity of coal in each as follows :—

(1) The Parambahan coalfield	..	20,000,000 tons
(2) The Singaloet	„	80,000,000 „
(3) (a) The coalfields south of the river Pamoeatan		—
(b) The Soegar coalfield		—
(c) The Soengei Doerian coalfield		93,000,000 „
(d) The coalfields west of Loera Gedang		4,000,000 „
Total		197,000,000 „

The coal here found is of very fair quality. It is shining-black, clean-looking, and quite different to the various Indian sorts. Its burning qualities are good, and it produces but slight ash (0·7 per cent.), and has a specific gravity of 1·23 to 1·25.

The assay of sulphur is also very satisfactory, being only 0·35 to 0·60 per cent.

The calorific effect is 7,000 to 7,400 thermal units.

The coal from the Oembilien mines ignites easily, with a bright flame, does not cake, and gives off little smoke or soot.

There are other Sumatra coalfields. At Indragiri the Tjinako Steenkolen Maatschappy holds a concession, but the output so far has been nothing to speak of; near

Palembang the Exploratie Syndicaat Lematang has a concession which they have been working since 1896, but the output does not amount to a thousand tons a year ; in this district, however, coal is very plentiful.

Besides the foregoing in Sumatra, coalfields have been found at Tapan (near Padang) ; at Atjeh, at the Bay of Tapanoelie (formerly called Tappanooly) ; in the Lampong districts ; and, as already mentioned, at Benkoelen.

Borneo, as every one knows, is rich in coal ; in fact, it may be at once said here that nearly every mineral known finds a place in this island. The Poeloe Laoet Mining Company turns out of their concession about 100,000 tons per annum, and the two concessions " Louise " and " Mathilde," belonging to the Netherlands India Industrial and Trading Company, are doing well.

Coal has also been found at Assahan, near Pengaron, and, as we know, at Martapoera. Here there were up till 1859 two mines being worked, a Government one called " Delft " and a private one called " Julia Hermina." In this year, however, the Dyaks in the district murdered the entire staff and destroyed all the plant, and it has never been considered desirable to reopen here.

At Nanggoelan, near Djockjakarta, a seam 1 metre thick has been found, and at Sedan, near Rembang, the Sedan Mining and Industrial Company holds a concession to work coal.

OUTPUT FROM THE OEMBILIEN COAL MINES.

Year.	Number of Tons.	Year.	Number of Tons.
1892 . .	1,758	1901 . .	198,074
1893 . .	46,075	1902 . .	180,702
1894 . .	72,452	1903 . .	201,292
1895 . .	107,942	1904 . .	207,280
1896 . .	126,284	1905 . .	221,416
1897 . .	142,850	1906 . .	277,097
1898 . .	149,434	1907 . .	300,999
1899 . .	181,325	1908 . .	314,065
1900 . .	196,206	1909 . .	325,000



RESIDENCY ROAD, JOCKJAKARTA.



GOVERNMENT OFFICES AT WATERLOO PLAIN, BATAVIA. (BUILT DURING
THE ENGLISH TIME.)

Petroleum.—Petroleum, or, as it is called by the Javans, *minjak tanah* (the Malay for “oil of the earth”), was spoken of as existing in the Dutch East Indies in 1623 by the traveller Jan Huyghen van Linschoten, who wrote in the itinerary of his voyage as follows regarding Sumatra: “Het heeft eener vurighen Swevelbergh en de affirmeren datter een Fonteyn is die louter en enckel Balsem vloeeyt,” which, literally translated, means that Sumatra “has various sulphur mountains, and, it is stated, springs from which pure and simple balsam flows.”

This is the first mention made which can in any way be considered to refer to petroleum.

In 1863 while Junghuhn (the Dutch scientist) was travelling in Sumatra he came across springs of petroleum in the residency of Benkoelen, near Ipo, between Moko-Moko and the town of Benkoelen, and on his return to Holland he advised the Minister for the Colonies to have a survey made here and in Cheribon.

Just before this in the same year the residencies of Samarang, Sourabaya, Palembang and the island of Madura were pointed out by De Groot, the chief of the Mining Department at Batavia, as the places where oil was to be found.

In the first-named residency he indicated the neighbourhood of Poerwodadi and Goeboek, and also the Kendal district, by Limbangan, Selokaton, and Pelantoengan. In the Sourabaya residency no particular spots were indicated; but in Madura the districts of Pamekasan and Sumenap were indicated, while Bali Boekit and the neighbourhood of the river Lalang were stated to be the most likely places where the oil would be found in Palembang. On the strength of this advice P. Bleeker and W. R. van Hoevell in 1866 endeavoured to start a company to bore for petroleum.

In a circular they issued they represented East Java as

containing the richest fields, and asked the public for the moderate sum of 100,000fl. to start working.

Unfortunately the public had no confidence in the venture, so the scheme fell through.

In 1865 J. S. G. Gramberg made it public that oil was to be found near Palembang in the district of Lematang Ilir and in the district of Benakat south of Moera Enim.

In 1873 the Government gave orders for the Cheribon district to be surveyed for oil, and some boring was done at Madja by a private concern, but there were no results, only "pockets" being found here and there. The same was the case in 1875, when the residency of Sourabaya was surveyed.

Nothing further to speak of was now done until 1887, when an energetic, clever, and far-seeing mining engineer called A. Stoop secured a concession to search for oil, and under the name of a company called "De Dordtsche Maatschappij tot Opsporing en Exploiteeren van Petroleumbronnen op Java" (The Dordtsche Company for Searching for and Exploiting Petroleum Springs in Java) he started work, striking oil quite near Sourabaya on a piece of ground bordered by the Sourabaya, Porrong, and Kali-Mas rivers in 1890. Stoop (a man of no very great pretensions socially or otherwise) found himself, so to say, instantly a millionaire, and an industry was opened which has developed into one of the most important in the country.

In the same year another company was formed, called "De Koninklyke Nederlandsche Maatschappij tot Exploitatie van Petroleumbronnen in Nederlandsch Indië" (The Royal Dutch Company for Working Petroleum Springs in Netherlands India), frequently called for short "De Koninklyke" (The Royal).

This company together with Stoop's have proved the most successful of all those started; and with the control of a large capital by them not only has the Java oil been made to compete successfully with both American and Russian

rivals, but the two companies have placed their products over the whole of Asia and even in Europe.

In 1897 Stoop turned his old company into a new one called "De Dordtsche Petroleum Industrie Maatschappij," and new concessions were applied for.

The principal petroleum fields have been actually found in the residencies of Sourabaya and Rembang in Java, in Palembang and Atjeh in Sumatra, and at Kotei in Borneo. The statements made earlier by the mining engineer De Groot were therefore proved to be entirely correct.

Petroleum is generally found in late Miocene strata, and its occurrence is another confirmation of the anticlinal theory of Hofer and others. The petroleum springs of Java and Madura have been worked from the first with Dutch capital, but the oilfields at Balik Pappan, in the district of Kotei, in Borneo, were originally worked by the Shell Transport and Trading Company, of which the chief director was Sir Marcus Samuel, of London. This company started in August, 1899, with British capital and was highly successful, but the whole concern was nevertheless sold to the "Koninklyke," or "Royal Dutch," in 1908 for reasons never, I believe, publicly stated.

Shafts are generally sunk on the Canadian principle, but the washing method of boring is also now and again employed.

As regards the chemical and physical properties of the oils of the Dutch Indies, it may be said that they partly agree with the Russian and partly with the Pennsylvania oil. The oils of Java and Sumatra possess a low specific gravity and high contents of benzine and lamp oil; on the other hand, the oil of Borneo is heavy and contains a great percentage of residue. Besides lamp oil, benzine, gasoline, lubricating oil, vaseline, paraffin, and asphalt are obtained from the crude petroleum.

At Wonwkromo and Tjepoe the "Dordtsche" has large refineries, while the "Koninklyke" has similar large establishments at Balik Pappan, Pangkalan Brandan, and Bajoeng Lentjir.

At Tandjong Priok, Batavia, and Sourabaya there are large tanks for holding the residue which is supplied on a large scale as fuel to the steamers which call there.

These tanks formerly belonged to the Shell Transport and Trading Company, whose business in Java was managed by the old house of Pitcairn, Syme & Co. ; they now, however, belong to the "Koninklyke."

In 1909 there were no less than sixty-one companies in the East Indies holding concessions from Government to bore and work for oil.

To show how the discovery of oil in Java has affected the Russian and American trade it need only be shown what the imports were before the local petroleum was sold.

Imports in 1889 :—

American	{	Devoes brand	..	..	1,422,623 cases
		Chester	..	..	426,628 "
		Stella	..	..	190,659 "
		Comet	..	..	49,006 "
Russian	..	..	..	..	1,114,139 "
Total					3,203,055 "

In 1902 (after the local oil was on the market) :—

American	{	Devoes	..	..	813,898 cases
		Tiger ¹	..	..	—
Russian	..	..	..	..	33,100 "
Total					846,998 "

¹ The previous year there had been 2,465 cases of this oil imported. It was of poorer quality than Devoes, and therefore sold cheaper, so that it could compete with the local oils. It was, however, found altogether too poor.

PRODUCTION OF PETROLEUM (IN CASES) FROM THE
"DORDTSCH E PETROLEUM MAATSCHAPPIJ."

Year.	Number of Cases.	Year.	Number of Cases.
1899 . .	8,000	1899 . .	1,642,780
1890 . .	27,760	1900 . .	1,649,129
1891 . .	79,179	1901 . .	1,664,284
1892 . .	247,839	1902 . .	1,535,127
1893 . .	276,062	1903 . .	1,702,222
1894 . .	452,728	1904 . .	1,990,605
1895 . .	779,239	1905 . .	2,005,899
1896 . .	1,206,105	1906 . .	1,994,664
1897 . .	1,494,976	1907 . .	2,083,522
1898 . .	1,490,338	1908 . .	2,139,493

PRODUCTION OF LOCAL PETROLEUM.

Year.	Number of Tons.	Year.	Number of Tons.
1903 . .	870,000	1907 . .	1,328,000
1904 . .	1,049,000	1908 . .	1,255,000
1905 . .	1,200,000	1909 . .	1,300,000
1906 . .	1,300,000		

YEARLY PRODUCTION OF PETROLEUM BY THE VARIOUS
CENTRES (in round numbers).

Name of Concession.	Name of District.	Tons.
Panolan	Rembang	25,000
Tjinawoen	"	48,000
XII. Desahs	Sourabaya	15,000
Made	"	20,000
Moera Enim	Palembang	112,000
Karang Ringin	"	14,000
Bandjarsari	"	21,000
Babat I. . . .	"	15,000
Soeban Djerigi	"	105,000
Lematang	"	25,000
Telaga Said	East Coast of Sumatra . .	10,000
Boeloe Telang	"	135,000
Peureula	Atjeh	230,000
Moera	South East Borneo . .	80,000
Tarakan I. and II. . . .	"	30,000

Diamonds.—Diamonds are found in the districts of Martapoera and Pontianak, in Borneo. Before the arrival of the Europeans in the East Indies, it is said they were fairly plentiful, and there is no reason for doubting the statements. In fact it is generally admitted that at the end of the eighteenth century one million guilders' worth of diamonds were being found yearly. The quality of the diamonds is good, and if a proper exploration was made it is generally expected that they would be found in handsomely paying quantities.

The difficulty, however, in the Dutch East Indies is the question of capital, and until the English or Americans open their purses things will go on much as they are doing at the present moment and large industries remain undeveloped.

The largest diamond found in recent times was at Goenoeng Lawak, Martapoera ; it weighed 77 carats. It is said, however, that the natives have found still bigger ones ; but these would of course be hidden away by the native princes, in case jealous eyes might covet them.

Platinum.—Platinum is found at Martapoera, in Borneo, and there is no doubt that large quantities are obtainable.

The same old complaint, however, of want of capital prevents this industry from being worked properly. Nowadays the natives extract the metal in small quantities.

Copper.—Copper is to be found all over the archipelago.

In Java it occurs in the Preanger districts, but it is at Madioen that the greatest quantities are found.

In Sumatra, in the valley of Paninghan, on the west coast, it is said to be plentiful.

The island of Timor was known to the ancients as being very rich in copper, but no attempt appears ever to have been made to work it.

This mineral is also to be found near Gorontalo, in the island of Celebes, as also in Banca.

In Western Borneo massive copper occurs in alluvial soil,

which at the same time contains gold. At the gold mine of "Soemalata" the gold ore was for some time melted in furnaces, yielding a quantity of copper; the results, however, were not altogether satisfactory, so this method was stopped.

Although the mineral exists everywhere, it seems to be nowhere in very large quantities; as no regular mining, however, has ever been undertaken, this statement cannot be made with perfect certainty.

Sulphur.—Where there are volcanoes there are also sulphur and sulphur springs to be found.

On the Papandayan volcano, near Garoet, in the Preanger, there is a very good establishment where various mineral baths can be taken; these baths are frequented by those suffering from rheumatism and by dyspeptics. The air, too, around there is so pure that it might be also recommended for consumptives.

Sulphur itself in massive form is worked by the natives in the various craters, but the industry is of no importance.

Marble.—Marble of the Tertiary age is to be found in the islands of Timor and Sumatra, but of too soft a quality to be of any use in building.

It is also to be found in the residency of Kediri.

A concession granted at Wadjak has been worked, and by Belgian and Dutch experts the marble has been stated to be hard and firm and quite equal to the best qualities of Italian, Belgian, and French marble. This is the more strange as it belongs also to the Tertiary period.

The concession worked here by the company called "De Wadjak Mynontginning Maatschappij van Toeloeng Agoong" (The Wadjak Mine-working Company of Toeloeng Agoong) was granted to R. D. van Rietschoten in 1890 for seventy-five years. The production in 1896 was about 50 cubic metres, and, according to an estimate roughly made and based on Italian calculations, there is enough

marble at Wadjak for eighteen thousand years, allowing even the generous quantity of 60,000 cubic metres a year to be taken away.

Manganese Ores.—These are known to exist in boundless quantities in Sumatra, Banca, and Java, but various concessions granted have never been energetically worked.

H. W. van Dalfsen, who now lives at Bandoeng and is a member of the Municipal Council there, held a concession for some years in the residency of Djokjakarta. His shipments annually to Liverpool amounted to at least 12,000 tons, but they were stopped suddenly, probably for the usual reason.

It is said that the sands on the south coast of Java, washed by the Indian Ocean, are rich in all sorts of ores. They appear, however, all to have been given out in concessions; but so far no work has been started on them.

Lead Ores.—These ores are to be found in the islands of Flores, Lombok, Ceram, Sumatra, and Borneo, but chiefly in the last two.

In Borneo there has been a company working for some years, “De Mynbouw Maatschappij Boekit Pondok” (The Boekit Pondok Mining Company); it has not, however, been very successful, want of capital being the chief reason for this.

Iodine.—Springs of iodine have been found in the residency of Sourabaya. In 1907, 28,600 kilogrammes of iodine of copper were obtained; in 1908, 45,800, and in 1909 about 50,000.

Other Minerals.—Amongst other minerals which are abundant may be mentioned flint, chalcedony, hyalite, common jasper, jasper agate, obsidian, and porphyry.

The existence of mercury in the low lands of Demak has been proved, but it is only distributed in minute particles throughout the clayey ground of the *sawahs* bounding one of the principal rivers of that district, so that it has never been considered that there are indications of a mine being there.

CHAPTER XVIII

THE INDUSTRIES OF JAVA

Sugar.—When sugar was first grown in Java is a question easier to ask than to answer.

We know from the Greeks that the sugar-cane was growing luxuriantly on the banks of the Ganges in B.C. 327, and it is also known to have been thriving in China as early as B.C. 250.

It has been stated that the sugar-cane (*Saccharum officinarum*), which most probably was imported from India or China, was growing in Java in the year A.D. 1, but upon what grounds the statement is based I fail to see. That a very early date, however, has to be given to the introduction of its culture into Java is certain, but the exact determination of this date has not yet been made.

Already in the twelfth and thirteenth centuries the Chinese were doing a sugar trade in Java, and when the Dutch arrived in 1600 the culture of the article was passing out of the hands of the native planters into those of their more experienced Mongolian friends. The sugar in these early days was, as might be expected, of a very poor kind, resembling a cake of dirty-looking, black-brown sand; it was, moreover, not only made from cane, but expressed from various species of palms as well. The consumption of it, however, was fully equal to the supply, which probably amounted in Jacatra to some 4,000 to 5,000 piculs.

In 1602 the energetic Chinese had not only several sugar-mills—primitive, no doubt, but still fulfilling their purpose—at Jacatra, but arak factories also.

After the firm establishment of the Dutch power at

Jacatra in 1619, the East India Company decided to take the industry under its care, and gave out land on loan to Chinese and their own countrymen to plant with cane, the sugar of which was to be delivered to the company at a fixed price. By 1650 the Company had 20 mills in working near Batavia, and owing to the fairly favourable terms given and the consideration shown by the Company to the planters, the number by 1710 had risen to 130. Sugar planting, moreover, in the island had become more general, for fabricks at this time were opened in Bantam, Japara, Cheribon, and East Java.

In writing of the history of the sugar industry of Java one can divide it practically into four periods.

Firstly, from 1619 to 1830—the industry under a state of compulsory delivery of the sugar to the Dutch East India Company (or, when it ceased, to the Dutch East India Government).

Secondly, 1830 to 1879—the culture system in force most of the time, by which the natives were forced to grow cane and to deliver it to the fabricks, in return for a nominal price fixed by Government, which included cost of transport and a sum of 54 cents paid for every picul of sugar (which had to be returned to the local officials); the sugar delivered to Government at a fixed price, which could be raised or lowered as it suited them.

Thirdly, 1879 to 1890—gradual taking over of the industry from the hands of the Government by free planters.

Fourthly, 1890 to 1892—the industry entirely free to sell its sugar in the open market, and all Government control as to compulsory deliveries and other vexatious regulations at an end.

Such, then, is the general outline of the sugar industry in Java.

A memorandum made by some private individual at



SUGAR-CANE FIELD.



NATIVE STREET RESTAURANT, JAVA.

Batavia in 1710 is interesting and noteworthy and reads as follows :—

“ Sugar is by far the chief produce of the province of Jacatra. and although Cheribon, on the north-east coast of Java, annually produces considerable quantities of it, they cannot rival Jacatra in this respect ; and no wonder, for the culture of it was early cherished by the higher powers in Jacatra. The cultivators of the sugar-cane enjoy many exemptions of pecuniary imposts, and they have been encouraged by every means, not only by the Government of Batavia, but likewise by positive orders from the Chamber of Seventeen in Holland, under date 20th of June, 1710.”

Notwithstanding all this and the “ positive orders,” the sugar-mills, for reasons easily assignable, began to decrease, so that by December, 1750, their number had fallen to 77, of which only 66 were in a condition to work. These were at Batavia, but there were still seven working at Bantam, 80 at Cheribon and 13 in East Java, or say 105 altogether.

This decrease was probably due to the old East India Company endeavouring to squeeze out more than a due profit and thus, as usual, choking the trade. But it may, however, in part have been due to a year of over-production, and thereby with diminished profits. In any case, we know that each of these factories was now limited to making 300 piculs of sugar. Before this they were probably making on an average 350 piculs each. The first productions can therefore be reliably given :—

						Total.
1650	..	20	sugar mills making	350	piculs each	.. 7,000
1710	..	131	„ „	350	„ „	.. 45,850
1745	..	65	„ „	300	„ „	.. 19,500
1750	..	77	„ „	300	„ „	.. 23,100

The first refinery, or so-called refinery, was erected in 1750.

In 1757 the number of mills again increased to about

82; this was probably due to the Company becoming a little less arbitrary. But by 1779 the number had once more fallen to 55, and of these 24 now belonged to Europeans.

The only mill remaining to-day from these times is Kedawong (Kawisredjo), in the residency of Pasoeroean, which was erected in 1780. It is owned by Mr. N. M. Lebret. The administrator is Mr. T. C. M. Hanegraat. All these mills now produced about 80,000 piculs per annum.

When the Governor-General Jacob Mossel came to Batavia he wrote a brochure entitled "Observations on the Sugar Works in the Neighbourhood of Batavia," dated the 31st December, 1750. It reads as follows :

"His Excellency Governor-General Mossel has made a calculation what profit these 77¹ sugar mills in the province of Jacatra might annually yield to their proprietors or lessees; he reckons that a yearly quantity of ten million pounds weight of sugar might be produced by them, which he took at 4 rix Rix d.
dollars per picul, is 320,000
and an equal quantity of molasses, from which afterwards either an inferior sugar is made or arrack
distilled at 1 rix dollar per picul 80,000
Together 400,000."

This sum is equal to upwards of £87,000 sterling, or nearly £1,200 for each sugar mill.

A short account of the sugar industry in these days—the middle of the eighteenth century—may be interesting to some to show how things have since changed.

The sugar-cane was planted between September and April, and stood twelve to fifteen months in the ground

¹ This was at Batavia, so together with 7 at Bantam, 8 at Cheribon, and 13 in East Java, we reach 105, as in our statement above of the sugar mills working.

before it was cut, the length of period depending on the poorness or richness of the soil. If the soil was rich and adaptable to the cultivation of sugar the cane was cut four times, but if the ground was poor it was cut less often, whilst in some it was only cut once.

The sugar works at Batavia were not so well or so solidly constructed as those in the West Indies at this period.

The cane was bruised between two rollers, which it had to pass through twice before all the juice was expressed. The sugar mills, however, at the West Indies in 1750 had three rollers, so that the quantity of cane that could be pressed per day was double that which could be treated in Java. On the other hand, more power was required for working these rollers, as we see from the fact that in Java one buffalo, or at the most two, could work the mill, while in the West Indies relays of four horses at a time were required.

The juice was twice boiled and afterwards put into large pots, upon which a layer of clay, diluted with water and kneaded into paste, was laid, and it continued in this state for about twenty days. During this time the clay was once or twice renewed, and by this operation the sugar acquired a tolerable degree of whiteness. It was then set in the drying place, which was a shed covered with *atap* (thatch), where it remained until it was perfectly dry; when the sugar-mill was in good working condition and there was no want of coolies or of buffaloes, about 15,000 canes were bruised every twenty-four hours. These yielded from ten to eleven pots, each containing 50 lbs. weight of sugar of the first and second qualities, 12 lbs. of the third, and from 16 to 20 lbs. of molasses.

The Governor-General Mossel calculated that all the canes which the 67 sugar mills annually consumed covered 4,600 *morgen*, 9,200 acres of land, adding to which the same quantity of land for pasture ground for the buffaloes and

10,000 *morgen* for wood for fuel, the whole extent of ground, he concluded, wanted for the prosecution of the manufacture of sugar, with the said number of mills, would but amount to 20,000 *morgen*, or 40,000 acres, which was "but a small part of the province of Jacatra north of the mountains."

The first quality of the sugar thus manufactured differed only from the second and third through its greater whiteness.

The first sort was exported to Europe, the second was sent to the west of British India, and the third, which was the brownest, to Japan. There was still another sort which was "very brown" "and much less dry"; it was called "*dispens* sugar," because it was delivered by the *dispensiers* or purveyors from the provision warehouses of the Company to be used on board of their ships.

In 1778 14,700 piculs of sugar, the production of Jacatra, were sold in Holland at 4 stivers per pound.

The regulation of the production by the Company at Batavia continued, one may say, until the arrival of Daendels in 1808, by which time, as we know, the Dutch East India Company had uttered its last gasp, notwithstanding all its monopolies, squeezes, careful management, and continued inquiries and examinations by high-placed officials from Europe.

In 1777 the production was ordered by the Company to be fixed at 64,000 piculs, in 1779 at 80,000 piculs, in 1784 at 84,000 piculs, and in 1808 Daendels demanded 95,000 piculs, but he did not get them. These productions, owing to a constantly increasing demand, had at last become more or less compulsory, each mill being obliged to deliver a certain quantity to the Company at any price the latter liked to name, and care was taken to keep this price always very much on the right side. In consideration of this compulsory delivery the Company granted advances to the Chinese and European cultivators to enable them to work their mills.



STREET IN SAMARANG.

By this arrangement the monopoly might be considered complete.

Owing to the various restrictions and practical monopoly, the cultivation and manufacture of sugar was never prosecuted with vigour, nor suitably encouraged as it might have been, at Jacatra.

Now and again various plans for improvement were suggested, but owing to the narrowed unhealthy principles upon which the old Dutch East India Company worked nothing ever came of them.

The last plan before the Company went into bankruptcy was presented to the Governor-General Van der Parra in the year 1774 by the Resident of Japara, Van der Beke. This contained several very good proposals, but, like its predecessors, it was never taken any notice of.

At this time it seems no encouragement was given at Batavia for the importation of sugar from other parts of Java, even when the demand called for it. On the contrary, private merchants who were now springing up were obliged to pay an import duty of 1 rupee a picul, which was felt so heavily that the object of the Company was attained and no sugar entered the port of Batavia.

It would seem that this duty was laid expressly with the object of favouring the subsidised sugar-mills in the Jacatra and Preanger provinces, since it would discourage the manufacture of sugar in other parts of Java—from which there was no direct communication with Europe—and would therefore give no outlet for the consumption other than local. It is said that this was the reason why no trouble was taken to make the “Java sugar”¹ equal in quality to that of Jacatra, the latter being much more substantial and better granulated. In 1789 the Fabrick Klampok was erected in the Banjoemas, being the first in this district. The owners of these are now the Netherlands Trading Company, whilst the administrator is Mr. W. A. Knipers.

¹ That is, the sugar not manufactured in Batavia.

Between 1808 and 1811 Daendels stopped the compulsory deliveries and made an end to all advances. Both measures, as may readily be imagined, had a most injurious effect, especially where the industry was so completely manacled and regulated by the Company, whose first interests were their own and the industry itself only came after.

This sudden stoppage of a system which had been going on for so long, while in principle correct, was a serious blow—the industry had long ago fallen into a condition of moral decay—and few, if any, cared to risk any capital in it. The result can therefore be imagined when the advances were suddenly stopped and those outstanding suddenly withdrawn. To nearly all the sugar-mills then working this meant bankruptcy, and of the fifty-five that then existed near Batavia not one is working to-day.

In 1826 under du Bus de Gisignies, the commissioner-general, the advance system was once more re-established, but under entirely different conditions. The advances were given to help an industry which it was confidently expected would repay the Government for having assisted it in its infancy, and were therefore made economic reasons.

The result was soon apparent, for the production rose from 19,795 piculs in 1826 to 108,640 piculs in 1830.

It seemed as if the industry was at last likely to run a regular and normal course, and it is probable that it would have done so had not the Governor-General Van den Bosch, introduced his great “culture system,” which brought the interference of the Government once more into importance. Under these new arrangements thirty contract sugar-mills opened.¹

By 1833 20,000 bouws, or not quite 40,000 acres, were under cultivation for sugar, and the production had risen to 266,109 piculs.

¹ See note 11 at the end of this account of the sugar-industry.

The cultivation in Japara, which was as old as any in Java, but which for several years had struggled under adverse circumstances and indifferent Chinese management, now revived and the Fabricks Besito, Klaling, Langsee, Pakkies, Petjangaan (1835) and Taudjong Modjo sprung up (1837) presently on the sites of the old plantations.

These fabricks in early days were all financed or managed by McNeill & Co., of Samarang.

The new system had its good and its bad points, but there were more of the latter. For while the Government gave a decided impulse to the industry by a fairly liberal scale of advances, it took away with one hand what it had given with the other, for the selling price of the compulsory deliveries was artificially forced down by Government regulations. This was especially the case at the beginning of the new system in 1830. In a year or two, however, the Government, seeing its policy was suicidal, decided to grant new concessions to those who would supply the sugar by tender to the Government. The concessions, on the other hand, were given to the highest tenderer. We see the result of this by the number of fabricks (as mentioned) opened in 1832.¹

The tenderers were mostly Englishmen, and for Tjomal, for instance, Robert Addison and Gillian MacLaine² tendered, the former securing the concession by a difference of a few hundred guilders only.

The system, however, more and more showed its evils. Percentages were paid on profits to state officials and local native chiefs alike, who calculated on a private income from this source. A forced reduction in the price paid to the growers of the cane meant a consequent decrease of profit, which caused further pressure to be put on an already willing

¹ In 1838 there were 58 fabricks working by water-power and 10 still using buffalo-power.

² John Macneill put in the tender at Pekalongan.

and yielding population, and the difference was squeezed out of their hard-earned wage.

Despite, however, these various disadvantages and the continual disputes with the Government on one side, the local officials on the other, everything might have gone well and eventually order out of chaos have evolved, if only any reliance could have been put on the actions of the central Government, which never seemed to know what line they wished to follow.

Sometimes their policy was a strictly fiscal one, at others ultra-fiscal ; sometimes they threw unbearable burdens on the population, and then they would go to the opposite extreme and be over-humane.

As a case in point, the new model contract (already mentioned) which Government brought out in 1836, and under which the population were no longer forced to sow the cane, cut it and transport it (the latter free of cost) to the fabricks on Government's account, was altered in 1838, 1839, 1841, 1846, 1847, and 1851.

This new model contract was certainly a step in the right direction, as the administrators of the fabricks were now free to manage everything themselves from the planting of the bibit to the delivery of the sugar.

The restrictions, however, were still so great that there were needed a great many more concessions before the cultivation assumed a healthy tone. Opposing interests among the planters and the Government, due for the most part to a false and unjust economic basis, had still to be conciliated.

In 1854 and in 1863 the Government made some important alterations in the regulations for compulsory deliveries, but it was not until 1870 that it was fully realised that matters could not continue in the way they were going without ruining the industry. The Government, therefore, decided, after long consideration of the matter, to



NATIVE *BAMI*-SELLER IN JAVA.



NATIVE CIGARETTE-SELLERS IN JAVA.

change the culture system and leave the planter or producer independent from every Government restriction. This was a very important measure, but an impossible one to carry out at one stroke. The new law promulgated in 1870 provided that from 1879 one-thirteenth of the land planted by contract for the Government should be given up each year. It was therefore not until 1892 that the cultivation system finally disappeared.

In 1879 35 fabricks on private lands were working, whilst there were 30 on Government ground ; besides this 40 fabricks were already at work as entirely free undertakings under the provisions of the new Act of 1870.

The industry was at last established on a healthy basis, and notwithstanding the crisis of 1884, which brought down the price of sugar to nearly half of what it previously had been and caused temporary financial embarrassment to some of the fabricks, it has progressed regularly. The best lands, which had up to now been reserved for the factories of the cultivation system, at last became free, which gave a powerful impetus to private initiative, and capital began to be sunk freely in the culture now that it was felt that Government was seriously intent on supporting and strengthening it. The banking and credit system developed, so that manufacturers were enabled to raise the means for ordering new and up-to-date machinery and thus to place their fabricks on the strongest basis for competition in the world's supply. Engineering firms, such as George Fletcher & Co., of Derby, and others, sent out their representatives to Java—to give technical advice.

In 1877—79 the average production was about 60 to 70 piculs a bouw, although there were some fabricks which did not make more than 40 piculs. On the other hand, there were one or two which made as much as 100 piculs a bouw.

When we consider that in 1839 the production was only

20 piculs a bouw, progress during the forty years had certainly taken place, but not as much as was needed.

In 1850 Mr. J. M. Gonsalves began his trials with the black Cheribon cane, and in 1853 centrifugals were introduced (the first being at the sugar fabrick at Waroe), which were a great improvement on the old system for separating the strop from the granulated sugar. By 1856 54 of the 95 contract fabricks were using vacuum pans, which is certainly curious, seeing that the first vacuum pan reached Java in 1836, or twenty years earlier, being imported by one of the Etty's and going to Sembul.

If we compare this slow progress with the rapid progress made after 1879, we see distinctly the result of emancipation from the clutches of the Government.

This development was marvellous, and there was a general feeling of increased strength and power which caused everything to move quickly in a way quite unusual where Dutch planters, producers, or associations are concerned. In a word the great stability of the culture was felt, and this created unbounded confidence and caused a rush for shares in sugar fabricks or any concern connected with them. The following list of events after the new law was promulgated is a proof of the above remarks :—

1782. According to Humbolt black cane, *i.e.*, Cheribon cane, brought to the French islands from Java.

1835. Planting in Bantam and Rembang given up.

1850. J. Gonsalves plants Cheribon canes.

1873. The first double evaporating plant introduced by Baron Sloet at the sugar fabrick of Poerwodadie.

1875. The first triple evaporating plant introduced.

1876. The carbonating installation brought in by Mr. Averbeck.

1877. 857 steam boilers being used in the fabricks. Mr. Millard introduced the Reynoso¹ system, which did away with the older boiling system.

¹ Called after Don Alvaro Reynoso, a professor in Cuba.



COFFEE-SELLER.



JAVAN LADY.

1878. 943 steam boilers being used.

1879. The free culture increases by leaps and bounds.

1886. The proposals made by Jonkheen van der Wyck in 1860 to establish experimental stations at last carried out by the opening of two, one at Samarang and the other at Kagok, Pekalongan.

1887. Experimental station established at Paseroean.

1889. First sugar congress at Samarang and establishment of a syndicate, which, under Mr. S. Jacob, Mr. J. W. Ramaer, and S. C. van Musschenbroek, has proved such a great support to the sugar producers.

Up to the present day the progress, as already stated, had been regular and well maintained, only two events happening to menace temporarily the industry : these were the sugar crisis already referred to in 1884 and the sereh disease. Of the former it may be observed that the price, which before 1884 was 14—15 fl., suddenly dropped to 10 fl., and continued to drop until 1902, the price this year touching the unparalleled figure of 4·50 fl. for American assortment (or what generally goes by the name of muscovadoes).

The alarm amongst planters was great, for it appeared to them that a bottomless market threatened destruction. The evil, however, was more or less rectified by the Brussels Convention of 1904, which caused the price to rise to 5 fl. and 5·50 fl. and eventually in 1905 to 8 fl., while even 9 fl. was paid for the whole crops of Kremboong¹ and Toelangen. In this year the well-known French sugar speculators Crozier and Jaluzot made the huge operations in an endeavour to corner the market, which ended in their failure for untold millions. This again brought progress down with a run. Since this time, however, the market has kept on a more or less even basis, prices ranging roughly from 7 fl. to 8 fl. for American, with an increasing price for Channel assortment—that is, Nos. 16 to 20, Dutch standard, and superior, or white sugar.

¹ These sugar-mills belonged to Mr. E. Rose.

The crisis, however, had its good side, in that it showed planters the necessity for manufacturing their sugar at the cheapest possible figure. The lesson was well learnt, and the results have been successful.

With regard to the second catastrophe, if such it may be termed, it may be said that on the sereh disease first showing its head in the Cheribon district in 1883 no really serious attention was paid to it by other than local manufacturers. The disease, however, soon assumed greater proportions, spreading from the west of Java to the east, and threatened to destroy the whole industry.

Radical measures were necessary, and these having proved beneficial, it may reasonably be held that the misfortune, which carried heavy pecuniary losses, has really proved of considerable advantage to the cultivation in general, for the sugar-cane which has been shown to be a carrier of contagion is scientifically treated and more care is taken in the selection of the *bibit* (cuttings); this has eradicated the disease from Java.

In 1896 the first actual reciprocity between fabrick and fabrick came about, and the proper incentive was given by producers themselves to the industry, being viewed as a whole instead of on an individualistic basis; the result of this has been far greater than might even have been expected, and the recording in collective statements of the results of the chemical analytic control has proved of immense value. In 1898 there was a revolution in the conditions under which the sugar was sold, and the introduction of arbitration upon the polarisation of the sugar was first initiated.

Amongst those in the foremost rank of men who have assisted towards the improvement of Java's most important industry must be mentioned Soltwedel (who died in December, 1889), H. C. Prinsen Geerlings, Wilhelm Kruger,

F. C. Went, Van Breda de Haan, and J. J. Hazewinkel, besides one or two others.

NOTES.

1. SUGAR FACTORIES IN JAVA ON THE ARRIVAL OF THE DUTCH AT JACATRA (before the establishment of the East India Company).

Place.	Year.	Number of Factories.
Jacatra . . .	1596 . . .	2 or 3

2. SUGAR PRODUCTION IN JAVA.

Before the Dutch East India Company's Rule.

Jacatra Factories.

Year 1596 $\pm$ 1,000—2,000 piculs

Dutch East India Company's Period.

Jacatra Factories.

Year 1602 $\pm$ 3,000 piculs

Batavia Factories.

Year 1650 7,000 piculs

Batavia and Preanger Factories.

Year 1710	..	45,850 piculs	Year 1777	..	64,000 piculs
„ 1745	..	19,500 „	„ 1779	..	80,000 „
„ 1750	..	23,100 „	„ 1784	..	84,000 „

Java a Crown Colony of Holland.

Batavia and Preanger Factories.

Year 1800 $\pm$ 16,000 piculs
 „ 1808 $\pm$ 10,000 „

Java Factories altogether.

Year 1808 95,000 piculs

Java under the British.

Java Factories altogether.

Year 1811 $\pm$ 13,000¹ piculs

¹ According to John Crawford, Resident of Jogya Kerta, 1811—12.

Java.

Year 1816 ± 60,000 piculs¹

3. SUGAR FACTORIES IN JAVA DURING THE DUTCH EAST INDIA COMPANY'S PERIOD.

Place.	Year.	Number of Factories.
Jacatra	1602	4 or 5
"	1619	6 or 7
Batavia	1650	20
Batavia and Preanger	1710	131
Bantam	"	7
Cheribon	"	8
Japara	"	2
East Java	"	13
Batavia and Preanger	1745	65
Bantam	"	7
Cheribon	"	8
Japara	"	2
East Java	"	13
Batavia and Preanger	1750	77
Bantam	"	7
Cheribon	"	8
Japara	"	2
East Java	"	13
Batavia and Preanger	1757	82
Other places	"	30
Batavia and Preanger	1779	55 ²
Other places	"	35

4. SUGAR FACTORIES IN JAVA DURING THE PERIOD WHEN IT HAS BEEN A CROWN COLONY OF HOLLAND.

Year.	Number of Factories.	Year.	Number of Factories.
1830	30	1902	179
1838	68	1905	175
1856	95	1908	178
1868	97	1909	181
1879	105	1910	184
1893	192	1911	188
1896	187	1912	190
1899	102		

¹ According to Sir Stamford Raffles.² Of which 24 belonged to Europeans, 26 to Chinese, and 5 to the East India Company.

5. SUGAR PRODUCTION IN JAVA SINCE 1817.

Java Mills.

Year.	Piculs.	Year.	Piculs.
1817 . .	14,000	1825. . .	17,000
1818 . .	17,000	1826. . .	19,795
1819 . .	15,000	1830. . .	108,640
1820 . .	14,000	1856. . .	422,531
1821 . .	15,000	1860. . .	± 500,000
1822 . .	15,000	1865. . .	± 750,000
1823 . .	15,500	1870. . .	± 1,000,000
1824 . .	16,000		

(Since the Emancipation of the Factories.)

Year.	Tons.	Year.	Tons.
1875 . .	193,634 ¹	1894. . .	484,260
1876 . .	237,870	1895. . .	537,690
1877 . .	245,814	1896. . .	490,061
1878 . .	224,689	1897. . .	548,611
1879 . .	233,362	1898. . .	683,032
1880 . .	218,179	1899. . .	730,842
1881 . .	279,707	1900. . .	710,150
1882 . .	292,005	1901. . .	766,238
1883 . .	324,764	1902. . .	848,263
1884 . .	394,247	1903. . .	883,020
1885 . .	380,046	1904. . .	1,064,935
1886 . .	356,022	1905. . .	1,028,357
1887 . .	375,784	1906. . .	1,046,691
1888 . .	355,334	1907. . .	1,210,167
1889 . .	332,997	1908. . .	1,241,885
1890 . .	399,999	1909. . .	1,248,094
1891 . .	406,000	1910. . .	1,278,420
1892 . .	422,000	1911. . .	1,406,372
1893 . .	479,660		

6. LIST SHOWING FREE OWNERS OF SUGAR FABRICKS IN JAPARA IN 1842—1843.

Date of Government Resolution.	Name of Owner.
20th December, 1842 . .	M. A. van Amstel
26th " " . .	P. E. Savard
" " " . .	H. J. Netscher
	J. G. Frederiksz
2nd February, 1843 . .	G. P. E. Vroom
	C. H. Frederiksz

The fabricks in Japara were Trangkil, Klaling, Petjangaan, Pakkies, Taudjong Modjo, Langsee.

¹ 1,252,812 piculs.

7. STATEMENT SHOWING THE QUANTITY OF SUGAR WHICH GOVERNMENT CONTRACTED FOR IN THE RESIDENCY OF SOURABAYA IN 1832.

Name of Manufacturer.	Number of Piculs contracted to deliver.	Number of Piculs actually delivered.	Number of Piculs too short.	Amount in Guilders too short in Advances.
J. E. Banck . . .	30,000	8,848½	21,151½	fl. 95,559-53
M. von Franquemont	1,000	343½	656½	2,873-63
Han Kok Tie . . .	2,500	2,500	—	—
Notto di Poero . .	2,000	2,000	—	—
Soemo di Werio . .	3,000	1,270	1,730	11,756-25
Total . . .	38,500	14,962	23,538	fl. 110,189-41

8. AREA OF SUGAR PLANTED IN JAVA (ACRES).

1907.	1908.	1909.	1910.	1911.
280,479	289,744	301,134	324,607	335,968

PRODUCTION PER ACRE (TONS).

1907.	1908.	1909.	1910.	1911.
4-31	4-28	4-13	3-94	4-18

9. EXPORTS OF SUGAR FROM JAVA FOR THE YEARS 1909—1911.

Country.	1909.	1910.	1911.
	Tons.	Tons.	Tons.
British India . . .	339,707	445,466	437,162
Port Said (for orders) . .	184,493	154,744	413,215
China	213,544	229,911	161,838
Japan	96,503	112,199	61,376
United Kingdom (direct) .	4,789	67,430	55,718
Continent of Europe . . .	22,126	33,004	26,083
British Columbia	11,977	30,146	24,821
Egypt	19,699	13,000	18,400
United States (direct) . .	8,758	36,817	7,938
Australia	81,769	23,171	6,228
Other countries	19,914	13,231	61,332
Total	1,003,279	1,159,119	1,274,111



KANDJENG GOESTI PANGARAN ADIPATI BEHL. (LIEUTENANT-COLONEL ON THE STAFF.)

The following are particulars of chartered tonnage employed in carrying sugar, etc., during the years 1909—1911 :—

—	1909.	1910.	1911.
	Tonnage.	Tonnage.	Tonnage.
Steam	1,299,253	1,458,877	1,493,188
Sailing	6,469	10,998	3,394
Total	1,305,722	1,469,875	1,496,582

The following figures show the different flags which have shared the sugar-carrying trade during those three years :—

—	1909.	1910.	1911.
	Tonnage.	Tonnage.	Tonnage.
British	576,771	712,824	758,032
Dutch	495,348	540,272	555,791
German	166,632	145,214	142,233
Japanese	38,907	45,818	19,239
Norwegian	11,112	7,619	16,712
Swedish	4,649	5,831	1,181

10. TRANSLATION OF AN ARTICLE¹ REGARDING THE ACTION OF AN ENGLISHMAN WHICH HAD A GREAT INFLUENCE ON THE SUGAR INDUSTRY OF THE ISLAND OF JAVA.

The First Steam Kettles for the Sugar Manufacturers in Java.

“The English sugar fabricant Charles Etty, who was in the district of Probolinggo, Residency Bezukie, informed the Government that he was willing at his own cost to make trials with steam kettles similar to what were being used in English colonies, as he was sure that the quality of the sugar would be greatly improved thereby, provided the Government would advance him 20,000 fl. for the purchase of same. He anticipated, moreover, that the quality would be such as to do entirely away with the necessity of the sugar having to be further refined. With reference hereto the Government, by a resolution dated 20th October, 1834, informed Charles Etty that if he was quite

¹ See “Bijdragen tot de Kennis van het Landelyk Stelsel of Java,” by Deventer.

willing to order the kettles for himself from Europe that a temporary loan would be granted him, returnable in two years in sugar. In May, 1836, the steam kettles only arrived on the East Coast of Java for Charles Etty, accompanied by an English engineer." ¹

11. VAN DEN BOSCH'S CULTURE SYSTEM AND THE CONTRACTS UNDER IT.

The contracts were granted as follows :—

William Dennison, Cheribon district.

Tau Kiem Lien (Captain Chinaman, Cheribon), Cheribon district (sugar estate called Tjiledoek, which later on J. M. Gonsalves bought).

Tan Teang Thay (Chinese merchant at Cheribon), Cheribon district.

Tan Hong Yan (Captain Chinaman, Samarang), Pekalingan district.

Alexander Loudon (formerly in British Govt. Service, Java), Pekalingan: sugar estate called Doro.

Robert Addison, Pekalingan.

Thomas B. Hofland, Probolingo.

Charles Etty, Probolingo, sugar estate called Oembul.

Donald Maclellan, Probolingo, sugar estate called Oembul.

C. Vos, ditto.

De Bregaea, ditto.

Han So Kiein, ditto.

Oei King Hong, ditto.

Han Swie Hien, ditto.

Kwee Yong Hoo, ditto.

Kwee Ing Hiang, ditto.

B. F. W. Fisscher, Tegal.

H. Van den Bosch, ditto.

Peter Jessen, ditto.

J. E. Banck (merchant at Sourabaya), Sourabaya.

Felix Hall, Samarang, sugar fabrick Poegoe.

Tan Hong Yan (Captain Chinaman, Samarang), Samarang, Serondal.

Tjoa Tjau Sing, Japara.

Tan Koen Goean, ditto.

Oei King Tjan, ditto.

¹ Probably Booth by name.

Sie Jiem, Japara.

Tau Tian Lioe, ditto.

Oei Tong Hai, ditto.

Sie Toe, ditto.

Sie Ing Goan, ditto.

Banjoepoetih was already working in 1829. The following fabricks which still exist were opened in 1830 :—

Gending, Padjarakan, Gayam, Phaeton, Oembul, and Wino-langen. These last two fabricks were erected by Captain Charles Etty, who was joined in 1832 by his brother, Matthew Walter Etty, and in 1834 by his son, Charles Etty.

In 1831 several more fabricks were opened, but only Mingiran remains to-day. In 1832 a number more were erected ; of these there remain to-day Winongan, Soekoredjo, Toelangan, Djombang, Poerwodadie and Sindanglaut. Pleret, which was erected in 1832 by the Englishman John Davidson, became later the property of Dr. Heyn, W. K. van der Eb, and Assistant-Resident Jonkheer H. A. C. Smissaert through their respective wives, who were all daughters of John Davidson.

Tjomal, which was one of the contract fabricks, was erected by Robert Addison, a brother of George Augustus Addison, Assistant-Secretary to the British Government from 1811 to 1815. Under the superintendence of S. C. van Musschenbroek it proved itself to be one of the best sugar fabricks in Java.

The old sugar fabrick of Poegoe, which was the original of the Kendal fabricks, was started on a small and primitive scale about 1825 by an Englishman named Felix Hall, who came from Singapore and hired ground here. He built himself in 1828 a large and costly house of wood on the Singapore plan, but in 1835 made everything over to Alexander Loudon. The former now went to Batavia and opened a merchant's house there called Hall & Co. in 1835, which he closed again in 1838. One of his sons later became the original owner of the tea estate Tjiwangie, in the Preanger, and another became shipping clerk in the house of Maclaine and Watson, where he served for thirty-five years up to 1890 ; he then lived at Soekaboemi until his death in 1899.

Prosper Hippolyte André van den Broek was certainly one of the most remarkable men who have come to Java within recent times. A Frenchman by birth, he was the son of a school-master, for which calling he was also intended, when he was sent

to Algiers at the time of the war in some position in the commissariat department. Later, on the advice of the Minister for the Colonies at Paris, he sailed for Java. This must have been somewhere about 1830—1832. He was a man of fine presence and manners and great enterprise, and soon procured employment in Java, some say in Government service, as assistant inspector of sugar fabricks. Be this as it may, during a tour he came to Kendal, where he afterwards settled.

It was not long before P. H. A. van den Broek's credit was large and his income princely, although the fabricks were not paying (in fact never paid until 1905). He went yearly for the winter to the South of France or to Italy, and on one of these trips he bought with his Java credit the small estate of Brenan, the name of which he assumed, being known thereafter as "van den Broek de Brenan."

He died about 1890, with a share (which he left to his children) of one third in three sugar fabricks (see below). On the 10th February, 1851, he had married Sophia Josephina Regina Le Leu.

P. H. A. van den Broek was known as one of the most popular, liberal, and large-hearted gentlemen that ever came to Java, and he was fortunate in having good friends to support him. The first of his name and family to come to Java was Pieter van den Broek, who arrived about 1770 and became an "onder koopman" or junior merchant in the East India Company in 1774. P. H. A. van den Broek had four sons—Jean, Edward, Charles, and Francis.

Jean was employed in Maclaine, Watson & Co. from 1887 until 1897, when he became a broker in the Batavia firm of Dunlop and Kolff. He married a Miss Miesegaes, daughter of one of the partners of Maclaine, Watson & Co., and died in 1912.

Edward was until 1905 administrator of the "Gemoe" sugar fabrick. He then went to a sugar mill in Egypt.

Francis (now dead) was for some years administrator of "Poegoe" and afterwards superintendent of the Kendal mills. Charles lived in Holland, and is now dead.

The Kendal sugar mills, under Edward van den Broek, J. C. Soeters, J. Nassau, and H. Sayers, have become among the most successful in Java.

The well-known Captain van den Broek of Batavia, the owner of a sailing ship, was said to be a younger brother of the foregoing Prosper Hippolyte André. The story goes that on his last trip



PANAMA HAT-MAKING.



MAKERS OF BATIK STAMPS.

to Japan, at the end of the thirties, he married a Japanese lady from Nagasaki. With her he lived at Batavia until the end of his days. Two of the captain's children became well known in Java, a son called Simon, who did a small insurance business at Sourabaya, and a daughter who married that very highly respected gentleman Jean Pierre Jannette Walen, who was born on the 19th May, 1831. J. P. J. Walen came to Java in 1854 to the Netherlands Trading Company, but left this in 1858 to join Tiedman and van Kerchem, in which firm his elder brother, Daniel, was also partner. Daniel Walen left Java in February, 1875. The firm of Tiedman and van Kerchem was opened on the 1st January, 1853. J. P. J. Walen holds the orders of the Netherlands Lion and Oranje Nassau.

Of the Kendal mills, of which P. H. A. van den Broek became the owner later, Poegoe was the first started by Felix Hall, an Englishman, who borrowed money from the Government and built himself a fabrick.

Tjipiring was erected by C. J. Daendels, the Samarang merchant, in 1833, and Gemoe by van Heel in 1835. In 1835—1836 Poegoe and Gemoe were owned by Alexander Loudon, De Sturler, and Verbeek. In 1840 P. H. A. van den Broek was the owner of Tjipiring and shortly afterwards bought Poegoe and Gemoe as well. Before leaving the fabrick of Tjipiring the wife of C. J. Daendels scratched her name with a diamond on a window pane. It is still to be seen : *Marie Daendels*, 1840.

Karang Soewoeng was the first Cheribon mill to open, dating back to 1830. It was started by an Englishman named William Dennison, who came to Java in 1815.

After practising for three or four years as a doctor at Batavia he went to Cheribon and began planting sugar-cane.

He remained in Java until 1840 and retired with a fair fortune.

Besito was started in 1853 by Jhr. Lawick van Pabst, who sold it to Jhr. H. A. C. Smislaert in 1839 for 207,000 fl.

The largest fabricks in Java nowadays are Djatiroto and Poerworedjo.

Coffee.—Whilst there is still a doubt as to when the sugar-cane was planted for the first time in Java, there certainly is none as regards coffee; when the Dutch arrived in the island under Houtman in 1596 it was entirely unknown.

The coffee plant seems to have been indigenous to Kaffa, a district in the south of Abyssinia, whence it gradually spread to Persia and Arabia. The first Dutchman to discover the shrub was a certain Pieter van den Broecke, who visited Mocha in 1616. In the beginning of the seventeenth century coffee plants were brought from Mocha to the coast of Malabar, and the Dutch commander or governor there, Adriaan van Ommen, had these planted out successfully. In 1696 van Ommen received pressing instructions from the Burgermaster of Amsterdam, Nicholaas Witsen, to send some of the young plants to Java, which was done in the same year. On their arrival these were planted out on the estate of Kedawoeng close to Tangerang, some five miles from Batavia, and the property and country seat of the Governor-General, Willem van Outshoorn. By a curious coincidence, therefore, the oldest sugar estate and the first coffee estate bear one and the same name, Kedawoeng.

The coffee plants on van Outshoorn's estate were just beginning to flourish when a flood destroyed them all.

A second shipment of plants from Malabar in 1700 proved more successful, and Governor-General Joan van Hoorn, when he came into office in 1704, immediately did all he could to push on and assist the industry by encouraging all planters to go in for coffee in preference to pepper.

Young shrubs were soon growing on the lands of Bidara Tjina, Cornelis, Palmerah, Kampong Melayoe, and on the estate of Soekaboemi near Batavia (which once belonged to M. C. Kirkpatrick, of the Hongkong and Shanghai Bank, and after him to a merchant named Malcolm Bean.¹

Quite close to this last-named estate was Soedimarah, which also early in the eighteenth century was planted with coffee trees.²

¹ The house there was called Balmoral Lodge.

² This estate was bought in 1833 by Captain William Purvis, who came to Java in 1816, and was from 1820 to 1824 in the service of the mercantile house at Batavia called Van der Kaa, Haste & Co., being master of their

In 1706 the first shipment of coffee grown in the neighbourhood of Batavia, together with one small plant, was sent by way of a compliment to the directors of the Dutch East India Company at Amsterdam.

The shipment was a trifling one—only a few pounds ; and the small plant, which was nursed all the way home like a baby, was of no intrinsic value, but was the beginning of one of the greatest industries Java ever had.

It might also be interesting to observe that to this one small plant, cultivated and multiplied in the Botanical Gardens of Amsterdam, South America and the West

ship trading in the Eastern Seas, and called the *Baron van der Capellen*. (In 1824 this vessel was bought by the Batavia firm of Westermann de Nys & Co., by whom it was enlarged, and ran between coast ports until 1833.) In 1825 Captain Purvis went to Padang, and in 1827 he bought a cutter of about 60 tons, which he called the *Padang*, and ran her to the adjacent islands (under command of R. Willborn) and back for pepper. He soon began to make money, and in 1829 had sufficient to purchase a brig of about 160 tons which he called the *Norfolk*. He placed her in charge of Captain J. Golbie. Purvis was now doing a good merchant's business with profit. In 1832 or 1833 he returned to Batavia and bought the estate of Soedimara, where he is said to have died and was buried. One son carried on the Padang business, and another looked after the estate and lived there until about 1869, when he left for Europe. He returned, however, to Java in 1889, and died at Batavia in 1890 or 1891. He was buried, I believe, at the Tanah Abang Cemetery, and was the last male representative of the family. In 1890 Mr. Purvis had still two daughters living, one of whom married a man residing on one of the small Pacific islands, the other was also married and lived in London. This estate is now owned by Mrs. Lorrain, the wife of the late manager of the Borneo Company of Batavia. It came into her possession through her husband taking over the mortgages. Years before this, owing to coffee prices dropping, the estate had been in the hands of the banks.

It is at present managed by Denis Mulder, a brother to Mrs. Lorrain, and Mr. Ramage, the present manager of the Borneo Company of Batavia. I understand he is the son of J. Mulder, who came to Batavia in 1824, or else of Professor G. J. Mulder, unless they are one and the same person.

There was a Purvis in Singapore in 1822, who, according to one source, was a brother of William.

Towards the end of the eighteenth century Buitenzorg, Pondok Gedeh, Soekaboemi, Djasinga, Roempien, and Bandoeng (which was owned by a Dutchman called C. Swaluwe) were planted with coffee. There were many others planted besides the foregoing.

Indies owe all the wealth which they have obtained through the growing of coffee.

The results of this one small plant had, however, greater and further-reaching consequences, for it was South America, by its enormous supplies of Brazilian coffees thrown on the markets of the world, which eventually ruined all the planters of Java and practically annihilated the trade here.

The first consignment of coffee made by the Dutch East India Company to Amsterdam was made in 1711, and a bill of lading was signed for 894 lbs. weight. This was sold for the equivalent of about 1s. 9d. per pound at public auction.

The price was very satisfactory, as it was considerably above the invoice value, even with the addition of the charges, which no doubt were exorbitantly high. The directors of the Company therefore wrote a letter to the Governor-General Abraham van Riebeeck expressing their gratification at the shipment and urged upon him the necessity of forcing on the shipments of coffee by vigorous planting. No greater incentive to the Company was necessary than a sight of the account sale, and the wishes of the board of directors were immediately complied with.

Coffee by now was not only being planted around Jacatra, but also in the Preanger and Cheribon.

The native regents had had contracts forced on them to deliver certain quantities of coffee each year to the Company, and were more or less left free with regard to the cultivation of the plant; only that to safeguard its interests, and to make fairly sure of the coffee coming in, the Company insisted on the regents seeing that their people grew coffee and kept their gardens in a clean and proper state, sending inspectors round once a year at plucking time to see if their instructions were being carried out, and woe betide the wretched regent and his people if this was not being done!

It was only in the Preanger districts, where no doubt the Dutch quickly saw the tractability of a peaceful, calm and

loving race, living in a climate incomparable throughout the world, that more stringent instructions were brought into force. The regents had received the orders that each *tjatjar*¹ had to plant, keep and look after three hundred trees, which number was increased gradually until it reached one thousand for each.

In 1729 Governor-General Diederik Durven issued a “*besluit*” (order in council) by which “each *tjatjar* must plant ten trees more.”

It is thus that the coffee burden was originally laid on the inhabitants of Java; and it was made infinitely heavier by the fact that however hard the native might work, he was paid no more than an actual living wage by his regent, who received payment himself for all the coffee delivered to the Company, and for his trouble in supervision, etc., deducted his own portion.

The result was that after the Company had first squeezed all they could by fictitious weights, and the regent had his commission, there frequently remained nothing over for the poor planter.

As might be expected from all this planting, the time came when there was too much of it, and prices fell. Artificial means had therefore to be found to keep them up, and the production had to be limited. This rigid monopoly was kept up until the arrival of Daendels in 1808, when the cultivation of coffee received great encouragement all over Java. The measures of this great man—for such he certainly was despite his faults—gave a tremendous impetus to the industry, and Europeans flocked to Soeracarta and Djockjakarta to hire plantations from the *pangerans* who had already commenced planting coffee a few years before and were now prepared to hire out their lands to Europeans, from whom they were more sure of getting their money than from the penurious native planter. At the end of the

¹ A *tjatjar* is a family, calculated to consist of six persons.

chapter on the " Towns of Java " two lists are given which will show the great number of Europeans who hired estates from the native princes.

There is no sadder tale than that of the forced coffee culture in the Preanger. A Government of colonial monopolists, eager only for profit and absolutely indifferent as to how it was derived, sometimes subjected the natives to distresses and privations too terrible to recite. Many perished by famine owing to the heavy demands made upon them by the officials of the East India Company, being deprived of the time needed for planting their rice. Numbers fled to the uttermost ends of the Preanger into the mountain tops, and even into the Banjoemas, where they eked out a miserable existence. During all this time the Company's representative was calculated by Raffles to have been receiving an income one way and the other of from 80,000 to 100,000 dollars (say £25,000) a year, at the expense of the authorities by whom he was employed and of the natives whom he oppressed and squeezed. Daendels rectified this when he arrived.

From some old manuscripts I have taken the following :—

" A fourth production of the island is coffee, the plantations of it are peculiarly confined to the provinces of Cheribon and Jacatra. The tree *coffea* which produces this berry was introduced into Java by the Dutch, who greatly encouraged the cultivation of it among the Javanese.

" It is so much multiplied that in 1768 Jacatra furnished 4,465,500 lbs. (roughly 32,830 piculs) weight to the Company, who paid 4 rix dollars per picul, being equal to about 14s. 5d. sterling per cwt."

Another old manuscript gives the following information :—

" Coffee is likewise a product yielding much profit to Java, and great advantage to the Company. The cultivation of it is performed in the same manner as in the West India Islands. Jacatra and Cheribon are the two districts where it is most



ROAD TO TIBODAS.

vigorously prosecuted, though the article is equally grown on the north-eastern coast. Java, where it is not indigenous, is indebted for this production to the Governor-General who procured the coffee plant from Mocha, and after paying a very high price for what was first produced, 15 rix dollars per picul, he continued to encourage the cultivation of it by all means in his power. His endeavours were so well seconded by his successors that in the year 1753, 1,200,000 lbs. weight of coffee (roughly 8,823 piculs) were furnished by Cheribon at the rate of $2\frac{11\frac{2}{1000}}{1000}$ stivers per pound, and full as much from Jacatra and the Preanger lands at $\frac{5}{16}$ stivers per pound; and in the sequel that quantity grew so large, that in the year 1768 the quantity of 4,465,000 lbs. weight of coffee was delivered to the Company from Jacatra and the Preanger lands at the reduced rate of 4 rix dollars per picul of 125 lbs. : 14s. 5d. per cwt.; although the native cultivator must deliver 160 lbs. for a picul, which excess in the weight is an emolument partly accruing to the commissary of inland affairs, and partly to the administrators in the warehouses.

“But the reason why Jacatra appears to furnish so large a proportion of coffee is that a considerable quantity of this produce, which is grown in the parts of the province of Cheribon nearest to Jacatra, come down through the last mentioned country to Batavia: the income of the commissary for inland affairs is hereby greatly enhanced, and it is pretended that it is more convenient to the natives.”

During Daendels' term of office the cultivation of coffee was by order of the Government increased by the natives throughout Java by at least forty-five to fifty millions of trees. At the same time, the cultivation and the conditions of the industry were entirely reorganised. Contracts were still, however, made with the regents, but in far more favourable terms than before, under the East India Company.

When Sir Stamford Raffles became Governor of Java in 1811, one of the first things he did was to declare the cultivation of coffee free in common with that of all other products in Bantam, Cheribon, and all the eastern districts, while arrangements were made for extending the same provision throughout the Batavia and Preanger residencies.

Raffles, however, to assist the regents of the Preanger and others, agreed that, until a sufficient number of mercantile houses existed at Batavia, the Government should still buy all the free coffee and store it in their godowns or store-houses at the different centres, namely, Buitenzorg, Tji Kan, Karang-Sambang, and Indramayre.

Another action of Raffles' was that during the British occupation it was decided for the first time to free the Government from all the difficulties and annoyances arising from the working and controlling of their gardens by leasing them for a period of not less than three years to the highest bidders.

During the British occupation also eleven millions more of young shrubs were planted out in new gardens.

After the restoration of Java to Holland, the system initiated by Raffles of leasing the Government coffee gardens was greatly extended, and a not inconsiderable number were handed over to the *desahs* (native villages) at prices varying from one-third to one-half of the crop, payable either in money or in coffee, according to circumstances. The balance of the crops belonged to the cultivators, who could sell it to Government or others as best suited them. A further assistance was given in that advances from the Government treasury could always be secured when required on the growing or blossoming crop.

Sometimes it happened that a *desah* did not wish to renew the lease, in which case the Government again became the cultivators of the garden.

The industry was now in a flourishing condition, everything was working smoothly, and the cultivation grew. This state of affairs only continued, however, so long as prices remained sufficiently high, for as soon as Government lowered these prices and prohibited the establishment of private stores in the interior, through which last measure the sale of the products by the natives to the private merchants (who happened to be during 1812—1830 for the

great part British and American) was placed at a great disadvantage, the flourishing time of the industry came to an end. The aversion of the *desahs* to renewing their leases in 1823 was only overcome by Government issuing a direct order, so that the cultivation of coffee was free in name only.

In 1829 a commission was appointed to inquire into the reason why the native population objected to planting coffee under these changed conditions, and Pieter Merkus, who was later on Governor-General from 1841 to 1844, but at this time was a member of the Raad of India (Council of Netherlands East India) searched fully into the matter. After a long and thorough examination he was forced to arrive, much to the chagrin of the Governor-General and his Government, at the conclusion that the native population did not object and never had objected to the planting of coffee, but did not like being forced to it and being then insufficiently paid for their labour. The old tactics of the Dutch East India Company were in fact in a modified and less evident manner still being employed.

On the 8th August, 1832, as a result of Merkus's investigations, a new "*besluit*" (order in council) was issued which stated that the crops of all the coffee trees which were not cultivated on behalf of the Government, but which were subject to the payment of the land tax, with the exception of those from private estates, had to be delivered and sold to the Government, who agreed to pay for them the full market price, less two-fifths for the land tax, cost of transport and freight to Holland. It was decided also that the market price should be fixed yearly by the Netherlands Trading Company.

It was through this "*besluit*" that the Netherlands Indian Government monopoly of coffee with forced delivery was firmly established.

When Governor-General Sloet van de Beele was in office from 1861 to 1866 a decree was issued abolishing all forced

cultivation for Government except those of coffee and sugar. In the latter case, as we know, this system was abolished in 1890—1892, still leaving, therefore, coffee.

It is a strange thing, but the Dutch have never been able to tear themselves away from old ingrained ideas and customs.

In ordinary matters a more intelligent and highly educated race does not exist, while in all commercial matters they show narrowness and a desire to squeeze out more profit than there is actually to be got, even to the extent sometimes of killing the goose that lays the golden egg. This is the more perceptible when one comes to examine their methods, which are frequently antiquated and out of date, and although in the management of sugar estates and such like success has crowned their efforts, it has not been so much because of their efforts as on account of the great prosperity Java enjoys from its rich soil, and that because a few among the Dutch had a broader experience, which has benefited the whole country.

Thus we still see to the present day the remains of the old Government monopoly, which is dying hard.

From the figures below it will be observed that while the Government tenaciously cling to their old estates, there is a greatly decreasing income from this source.

A negligent and in some cases inferior local official is the only caretaker for these estates, and unless immediate steps are taken by placing over them technically fitted men (administrators of adjoining private estates, for instance) they will gradually die out, which in the main they are already fast doing.

These estates are looked after by the Department of Agriculture, but, clever and eminently experienced as the chief of the department is, I fear this is not sufficient.

The loss of income to the Netherlands Indian Government, were their estates to cease producing, would be a serious one.

Until 1875 *Coffea Arabica* was practically the only variety



CLOTH-PRINTING.

cultivated in Netherlands India. The shrubs grew at any height up to 4,000 feet, but seemed to thrive best when between 1,500 and 3,000 feet.

In 1875 a new species called *Coffea Liberica* was introduced from Liberia, on the West Coast of Africa. This variety from the level of the sea up to 1,500 feet has more or less entirely replaced the *Coffea Arabica*. *Coffea robusta*, too, is now being tried with favourable results.

Until one has reached an altitude of 2,500 or 3,000 feet all the coffee trees require shade in order to enable them to develop properly.

The dadap-tree (*Erythrina hypaphorus*), the albiaccia (*Albizzia stipulata* and *Albizzia moluccana*) are amongst those which are principally used for that purpose.

The coffee industry has, of course, fallen considerably in recent years, and it no longer receives the attention that it did even fifteen years ago. This is due to the huge crops of Santos and elsewhere in Brazil having brought down prices to nearly a half of what they formerly were.

At the same time properly managed estates can still make fairly satisfactory profits.

It may be observed that the entire production can be considered as being exported.

Coffee was first planted in Sumatra and Celebes in 1818.

LIST OF PRIVATE COFFEE ESTATES, 1910—1911.

West Java.

Residency of Bantam	..	..	..	..	5
Residency of Batavia :					
Buitenzorg ..	..	..	..	20	} 23
Krawang ..	..	..	..	3	
Residency of Preanger :					
Soekaboemi ..	..	..	..	17	} 34
Bandoeng ..	..	..	..	10	
Tjandjore ..	..	..	..	5	
Limbangan ..	..	..	..	2	
Total	..	..			62

Central Java.

Residency of Samarang	..	..	..	..	24
„ Soerakarta	..	..	..	..	26
„ Kedoe ..	..	..	..	..	2
„ Pekalongan	..	..	..	..	9
„ Madioen	..	..	..	..	3
Total					64

East Java.

Residency of Sourabaya	..	..	..	..	5
„ Kediri ..	..	..	..	..	52
„ Pasoeroean	..	..	..	..	62
„ Probolingó	..	..	..	..	12
„ Bezoekie	..	..	..	..	39
Total					170
Grand total					296

INCOME FROM GOVERNMENT ESTATES.

Year.		Pounds sterling.	Guilders (Dutch currency).	—
1903	. .	698,789	8,385,589	Actual result
1904	. .	682,907	8,194,881	„ „
1905	. .	631,684	7,580,210	„ „
1906	. .	319,055	3,828,663	„ „
1907	. .	489,747	5,876,964	Estimated result
1908	. .	285,541	3,426,493	„ „
1909	. .	243,464	2,921,564	„ „
1910	. .	240,000	2,870,000	„ „

PRODUCTION OF GOVERNMENT COFFEE, SHOWING RISE AND FALL.

Year.	Production of Government Crops, Java, in Piculs.	Year.	Production of Government Crops, Java, in Piculs.
1827 . .	399,557 ¹	1870 . .	986,034
1828 . .	416,171	1871 . .	445,550
1829 . .	281,661	1872 . .	986,000
1830 . .	288,742	1873 . .	773,900
1831 . .	299,086	1874 . .	1,032,000
1832 . .	314,173	1875 . .	493,400
1833 . .	366,100	1876 . .	1,266,200
1834 . .	431,700	1877 . .	875,400
1835 . .	358,000	1878 . .	853,000
1836 . .	575,606	1879 . .	1,267,167
1837 . .	588,582	1880 . .	558,280
1838 . .	538,800	1881 . .	1,007,613
1839 . .	905,200	1882 . .	1,024,868
1840 . .	688,700	1883 . .	1,072,492
1841 . .	853,300	1884 . .	1,011,787
1842 . .	951,000	1885 . .	499,909
1843 . .	1,023,100	1886 . .	816,932
1844 . .	948,800	1887 . .	254,491
1845 . .	631,800	1888 . .	564,600
1846 . .	872,000	1889 . .	583,458
1847 . .	766,000	1890 . .	95,800
1848 . .	853,100	1891 . .	382,518
1849 . .	455,200	1892 . .	692,696
1850 . .	966,100	1893 . .	68,999
1851 . .	1,061,000	1894 . .	363,927
1852 . .	873,166	1895 . .	319,955
1853 . .	682,953	1896 . .	264,880
1854 . .	1,065,100	1897 . .	134,064
1855 . .	1,146,300	1898 . .	80,000
1856 . .	749,800	1899 . .	118,000
1857 . .	893,800	1900 . .	208,427
1858 . .	895,200	1901 . .	108,834
1859 . .	734,600	1902 . .	220,572
1860 . .	987,600	1903 . .	297,100
1861 . .	895,667	1904 . .	65,158
1862 . .	658,100	1905 . .	57,931
1863 . .	1,112,304	1906 . .	169,422
1864 . .	433,200	1907 . .	43,857
1865 . .	941,100	1908 . .	82,135
1866 . .	1,087,400	1909 . .	22,340
1867 . .	880,700	1910 . .	38,145
1868 . .	588,616	1911 . .	21,440
1869 . .	962,800		

¹ 1 ton = 16.47 piculs.

PRODUCTION OF COFFEE FROM PRIVATELY-OWNED
ESTATES.

Year.			Tons.	Year.			Tons.
1891	.	.	21,250	1902	.	.	25,299
1892	.	.	21,286	1903	.	.	22,980
1893	.	.	9,700	1904	.	.	15,311
1894	.	.	25,000	1905	.	.	21,395
1895	.	.	20,000	1906	.	.	17,078
1896	.	.	18,000	1907	.	.	8,570
1897	.	.	26,400	1908	.	.	13,751
1898	.	.	22,100	1909	.	.	11,296
1899	.	.	15,000	1910	.	.	11,076
1900	.	.	20,255	1911	.	.	10,380
1901	.	.	17,806				

Tea.—Tea, which by the Chinese is called *Theh* and by the Japanese *Tsjaa*, became known to the former in A.D. 350. A legend, however, of a priest called Darma, a son of Kasinwo, an Indian king who had migrated to China, says it was discovered in the year 519. This Darma is described as a holy and religious person, a sort of pope in the Indies and the twenty-eighth successor to the holy see after *Saka*, the founder of Eastern paganism, and born B.C. 1028. Darma, after a long and weary journey, is said to have fallen asleep, and on waking refreshed himself with the leaves of the plant that grew before him (whether fresh or boiled the legend does not say) and thereby found out their virtue.

In Guigon's work called "Le Thé" a statement is made that Confucius (B.C. 500) in one of his works refers to tea as known at the time of Noah.

On the other hand, Wells Williams, a missionary, who later on became secretary of the American Legation at Peking, in a book he wrote in 1857 called "The Middle Kingdom," which claimed some notoriety, states that tea was first introduced into China in the year A.D. 350, as stated above.

Tea was exported from China to all the neighbouring

countries as early as A.D. 800, but when it was for the first time brought to Java I have not been able to trace.

That a trade, however, was done in the article as early as 1667 by the Dutch East India Company is proved by the fact that a shipment was made then to Holland for the first time.

The quantity of the invoice was 5,108 lbs., and it was taxed at 1 fl. per lb. On its arrival the directors of the East India Company had not the slightest idea of its purpose, and did not know what to do with this very strange and peculiar-looking dried-up leaf. This shipment was not, however, grown in Java, but belonged to a parcel imported into Java by a Chinese merchant.

The first mention there is of tea being grown in Java is by Dr. Valentyn, the great Dutch historian, who in 1691 visited the garden of the Governor-General J. Champhins (died 1695), which was situated outside the Nieuwpoort (Newgate) at Batavia. Here he saw "*allerlei zeldzame gewasschen, jonge thee boomkens nit China als aalbessen boomkens*," which translated means: "There were all kinds of rare plants, young tea shrubs from China about as large as currant trees."

From this it is pretty sure that no attempt—anyhow on the part of the East India Company—had been made in earnest up to this date to plant this shrub in Java, otherwise we may take it that Valentyn would have said so.

In a letter from the directors in Holland to the Company, dated the 15th March, 1728, mention is made of the great profits being made by Europeans in China from the trade in tea, and it is suggested that an attempt should be made to plant the shrub in Java.

This letter was answered in December of the same year to the effect that a special endeavour would be made to follow their wishes, and that a prize would be offered by the Company for the first pound of tea plucked and manufactured in Java.

The matter seems, however, for the time to have died a natural death, and during the Company's rule no further effort was made to carry out the suggestions of the directors.

This was no doubt due to the difficulties of obtaining tea seed and the skilled men to prepare it when plucked.

During the time of the English in Java no mention is even made of tea, and up to 1822 no further steps were taken to start its culture.

In 1820 the Government, which had taken into its employ as inspector of agriculture a French botanist, Diard (who from 1819 to 1820, together with another Frenchman, Duvaucel, had been in Raffles' employ at Bencoolen), suddenly decided not to confine itself any longer to the industries only of coffee, sugar, indigo, and rice, but to undertake "kapas"¹ and other cultures. Diard, who had a salary attached to his position of 500fl. a month (£500 a year), now took into his service to assist him a half-caste from British India called Maurevert, who received a salary of 200fl. a month (£200 a year).

It seems that in 1822, 1823 and 1824 tea seeds were ordered by Diard from China, but each time the shipments arrived spoilt.

In 1825 Diard drew up some special instructions regarding the treatment of tea seeds on their journey, but these do not appear to have been followed.

Shortly after the English had annexed Assam, and Major Robert Bruce in 1825 had discovered the tea plant growing wild there, the British Government decided at once to start tea-growing in India by importing young plants from China. The idea then occurred to a certain Dr. von Siebold, a Dutchman, who was in Japan, to send tea seeds to Java. It seems that he had an open order to send rare or useful plants to Java when he could secure them.

Siebold was physician to the Dutch agent at Nagasaki,

¹ Java cotton.

and the shipment of seeds he made on his own initiative in 1826 was planted out successfully in the Botanical Gardens at Buitenzorg towards the end of this year. A small portion, however, was sent to *Limbangan*, near Garoet, and planted there by the English horticulturist Kent.

By July, 1827, there were about 1,500 tea plants at Buitenzorg and Limbangan in splendid condition.

Thus was the industry established in Java.

On the 27th September, 1827, the expert tea-taster of the Netherlands Trading Company, Amsterdam, J. J. L. L. Jacobson, arrived at Batavia, and began immediately to take an active part in tea-growing. The same year the Trading Company sent him to Canton with a salary of 10,000fl. a year, and du Bus de Gisignies, the commissioner-general in Java, invited him to make a study of the planting and preparation of tea.

Between 1828 and 1833 he made repeated trips backwards and forwards to Canton, always bringing back with him tea seeds or tea plants, which were planted in various parts of the Preanger.

On his return voyage in 1832 he brought with him one experienced Chinese tea-planter, four tea-preparers, and seven workmen. This he did because it was at last clearly recognised that no one in charge of the plantations knew anything about the manufacture of tea, nor was there a single Chinaman in the island who could even prepare a pound.

The industry began now to make strides, and in 1835 16,434 lbs. of dry tea were produced by the various plantations, and by 1841 this had increased to 208,659 lbs. These productions continued to grow up till 1859, when 2,065,496 lbs. were produced.

After this for a number of years a steady decrease is to be seen. The reasons for this are not difficult to find. When in 1833 the Government opened their plantations, as is usual

with a new culture, special care was taken of them, and accounts were scrupulously kept; by 1859, however, the estates under the direction of the Government proved to be less and less profitable owing to the slovenly way they were looked after and the increasing cost of the management. Government inspectors sent to the various estates to find out the cause of this could discover nothing to complain of. This, indeed, is no surprising thing, for they were from the time they arrived to their departure treated so royally that they had no opportunity to find out. In the end, like the other cultures the Government undertook, the tea monopoly was given up.

All the plantations were now farmed out as private enterprises, the last Government plantation, Djatinangor, and Tji Kadjan being leased out in 1865.

This state of affairs lasted until 1870, when by a new "*besluit*" the Government let out lands on a lease of seventy-five years against an indemnification, varying from 1*fl.* to 5*fl.* a *bouw*, say 1*s.* to 5*s.* an acre.

From this time onwards the tea trade has gone steadily forward, until to-day it is a factor in the world's supply.

The Assam variety, *Thea Assamica*, is that one most in cultivation in Java, having practically replaced the China sort, or *Thea Chinensis*.

The first Assam hybrid reached Java in 1878. Later pure seeds were imported from Assam, Jaipur, Bazaloni, and Manipur, which flourished in Java, and the production to the *bouw* increased sensibly.

The flavour of Java tea, which seems more to depend on altitude than local conditions or soil, etc., whilst lacking the strength of the Indian teas or the softness of some of the China "*chops*," is delicately fine, and a purer or more wholesome tea is not to be found anywhere.

In the preparation the most perfect methods are employed,

whilst the hygienic handling of it leaves nothing to be desired.

DATES IN THE HISTORY OF TEA IN JAVA.

1822. First tea seeds arrive from China mouldy and dead.

1826. Tea seeds from Japan arrive and planted at Buitenzorg and Garoet.

1828. Seeds planted at Wanajasa and Tjisoeroepan.

1829. Jacobson, who arrived in Java 1827, goes to Canton and returns with tea-planters from China to Java. Failure of tea-planting at Salatiga.—Java tea exhibited at Batavia.

1830. First tea factory at Wanajasa (Krawang).

1832. Jacobson appointed "inspector of tea."—Diard plants tea at Tjitjeroek.—Tea planted at Bodjonegara.

1834. Tea-planting started at Cheribon, Pekalongan, and Banjoemas. Beginning of the trade in tea.

1835. Tjioemboeloeit and Radja Mendala started, also Tegal and Bagelen.

1836. Tji-Kadjan.

1837. Beginning of tea-planting at Samarang, Japara, Sourabaya and Besoei Kadoe.

1840. Tea-planting begun at Djati Nangor.—Three factories started at Tji Kadjan.

1841. The Chinaman A. Hoei starts at Bagelen.

1842. Contract made with P. G. Stuten (Buitenzorg) and J. D. Peters (Krawang Sinaga).

1843. Contracts made with T. Reigers (Bantam), L. Weber (Bogoli), Tan Soei Tiong (Preanger), A. J. C. Steenstra Toussaint (Preanger), W. A. Baron Baud (Preanger), L. M. H. Kulen Kamp Lemmers (Cheribon), H. J. van Daalen (Cheribon), and J. T. Helmrich (Sourabaya).

1844. Contracts with E. Grandisson (Bantam), G. P. Servatius (Preanger), J. M. Beer (Samarang), and G. L. J. van der Hucht (Parakan Salak : joint contractor).—Withdrawal of contracts from Besoei and Madioen.—S. D. Schiff appointed Inspector of Tea.

1845. Contract with Hugh Hope Loudon (Preanger).

1846. Arrangement regarding Tji Kopo with A. J. D. Steenstra Toussaint and G. L. J. van der Hucht.

1848. Withdrawal of Government from tea-planting in Pekalongan and Banjoemas.—Jacobson returns to Holland.—J. G. Otten becomes administrator of Meester Cornelis.—Export duty on tea to Holland in Dutch ships given up.

1857. H. Hope Loudon sells Tji Kadjang to Jonkheer A. Gevers.

1861. Tji Kadjang bought by Baron W. A. Baud.

1862. Parakan Salak given in hire by Government.

1863. Tjioemboeloeit and Sinagar given in hire by Government.

LIST SHOWING NUMBER OF TEA SHRUBS PLANTED IN 1842, AND WHERE.

Name of Residency.	Shrubs.	Name of Residency.	Shrubs.
Bantam . .	200,000	Sourabaya . .	200,000
Preanger . .	3,000,000	Bezoeki . .	216,000
Krawang . .	800,000	Madioen . .	288,000
Cheribon . .	1,376,000	Kadu . .	800,000
Tegal . .	921,000	Bagelen }	2,546,000
Pekalongan . .	600,000	Wanosobo }	
Samarang . .	785,000	Banjoemas . .	1,560,000

TEA DEBTORS TO GOVERNMENT.

	Due to Government for Gardens and Buildings.	Due to Government for Advance of Capital.
	fl.	fl.
Mr. W. A. Baron Baud	5,090.12	31,250
B. B. Crone	4,310.26	Nothing
Hugh Hope Loudon	61,875	21,458.40
G. L. J. van der Hucht	4,472.89	31,250
G. P. Servatius	30,000	32,500
E. Grandisson	4,583.40	62,500
H. J. van Daalen	6,666.80	55,833.40
J. M. Beer	17,500	45,000



WOOD WORKER.



STAMPING CLOTHS.

200,000

200,000

951

TEA PLANTED ON PRIVATE ESTATES, 1842 TO 1857.

Estate.	Owner.	Length of Contract.	Number of Bouws.	Number of Tree Shrubs in 1846.	Number of Amster- dam Pounds in 1846.	Piculs for each half Dutch Pound.	
						For 1st, 2nd, 3rd, and 4th Quality.	Average.
(1) Pondok Gedee (Buitenzorg).	P. C. Stuten, pen- sioned major.	May, 1842, to May, 1857.	50	360,000	19,500	90 (before 1845, 100)	90
(2) do.	Li Engli (before Schrant).	1845 to 1852	75	550,000	10,660	90	90
(3) Tji Koppo (Buitenzorg).	J. D. Steenstra Tous- saint, late town doctor at Sama- rang, and G. L. J. van der Hucht, late ship's captain (formerly P. C. Stuten).	1844 to 1859	50	400,000	7,490	90	90
(4) Pamanoean (Krawang).	J. D. Peters (pen- sioned lieutenant- colonel).	Not stated	300	2,050,000	8,643	160 80 80 40	80
			475	3,360,000	46,293		

CONTRACTORS OF GOVERNMENT ESTATES.

Where.	Contractor's Name.	Length of Contract.	Number of Bouwa.	How many Bouwa. Planted in 1846.	Product 1846, Dutch Pounds.	Number of Shrubs in 1846.	Number of Shrubs that may be Planted.	Income calculated, one Dutch Pound to 10 Shrubs.	Price for 1st, 2nd, 3rd, and 4th Quality.	
									Present Preparation.	Preparation for European Market.
									Each half Dutch Pound.	
(1) Preanger .	Mr. A. W. Baud.	1844—1863	300	162	37,000	1,296,000	2,400,000	£ 40,000	160, 80, 80, 40	185, 105, 105, 65
(2) " "	B. B. Crone (formerly Tan Soci Tong).	1843—1860	300	250	82,925	1,440,000	1,728,000	172,800	170, 85, 85, 42½	195, 110, 110, 67½
(3) " "	H. H. Loudon.	1845—1864	400	337	114,350	1,163,758	1,381,000	138,100	150, 75, 75, 37½	170, 95, 95, 57½
(4) " "	G. L. J. van der Hucht (formerly Steenstra Toussaint).	1843—1862	300	300	42,000	1,650,000	1,652,000	165,000	160, 80, 80, 40	
(5) " "	G. P. Servatius.	1844—1863	300	157	30,416	910,000	1,740,000	174,000	150, 75, 75, 37½	Still to be arranged.
(6) Bantam .	E. Grandison.	1844—1863	300	150	7,648	738,785	1,478,000	147,800	do.	
(7) Cheribon .	H. J. van Daalen.	1843—1862	300	300	52,560	1,560,000	1,560,000	156,000	do.	
(8) Samarang.	J. M. Beer.	1844—1863	300	226	33,080	1,017,000	1,350,000	135,000	do.	

PRODUCTION DURING THE PERIOD OF THE GOVERNMENT
MONOPOLY.

Year.	lbs.	Year.	lbs.
1835 . .	16,433	1853 . .	1,317,668
1841 . .	208,659	1854 . .	1,547,668
1842 . .	324,758	1855 . .	1,480,576
1843 . .	415,021	1856 . .	1,890,322
1844 . .	649,210	1857 . .	1,735,630
1845 . .	814,161	1858 . .	2,060,104
1846 . .	927,957	1859 . .	2,065,496
1847 . .	913,634	1860 . .	2,010,630
1848 . .	940,306	1861 . .	1,947,289
1849 . .	961,081	1862 . .	1,610,714
1850 . .	825,021	1863 . .	1,272,232
1851 . .	967,238	1864 . .	790,655
1852 . .	1,050,495		

TEA EXPORTS.

Country.	1908.	1909.	1910.	1911.
	lbs.	lbs.	lbs.	lbs.
Netherlands . .	20,059,252	20,357,000	18,804,300	22,649,400
United Kingdom . .	12,629,117	12,285,360	13,074,800	15,501,500
Russia . .	1,294,546	1,337,350	106,500	2,005,300
Singapore (by trans-shipment to Russia or China) . .	2,061,162	970,880	3,973,700	3,237,600
Australia . .	335,095	701,080	2,229,800	5,578,600
Canada and America .	—	—	193,400	403,800
Other countries .	200,364	997,330	2,256,700	—
Total . .	36,579,536	36,679,000	40,639,200	50,518,500

Tobacco.—The use of tobacco for smoking was discovered by the Indians in America, although it has been said that the Chinese knew of it long before 1492.

This may be, but in Japan it was not known until between 1573 and 1591, when the Portuguese introduced it into Japan together with the pepper plant.

It was not introduced into England until 1586, when Sir Walter Raleigh had some tobacco brought from Virginia,

where he had seen the Indians smoking it. The craving for the drug, like all things new, spread, and in 1612 an Englishman, John Rolfe, went to Virginia as a tobacco-planter, and Virginia and Carolina were soon known as the two tobacco countries. In 1619, 20,000 lbs. were exported to England, and in 1620, 900,000 lbs.

There were still, however, some attempts to stop smoking, and James I. of England set himself against it.

Amongst the laws of Jacatra the following is found in this relation :—

“Reglement voor die van de groote taeffel binnen t' casteel Batavia van 3 Nov. 1640 werd verboden dat ook niemant aldaer taback sal mogen drincken noch by daege, nochte by nachte.”

The translation of which is that no one may drink tobacco by day or night.

Tobacco belongs to the family *Solanaceæ* and the group *Nicotianinæ*.

In Java and Sumatra the same plant *Nicotiana rustica* is found, but the difference in the climate and soil are such that the plant in Java is infinitely inferior to that in Sumatra, and as a cigar wrapper the Sumatra leaf has attained to the highest rank in the market.

The Sumatra tobacco has a thin silky-looking leaf of excellent colour and quality, which despite all that the planters in Java have tried they have never been able to equal, far less surpass. Java tobacco planters have had, therefore, to content themselves with a lower range of prices. On the other hand, Java tobacco has, notwithstanding its inability to rival the Sumatra plant, taken a very prominent place in the European market, and, being less expensive to prepare and maintaining a uniform quality, has procured prices yielding magnificent profits to the planters, the result being that exports have largely grown.

The seed of the Sumatra tobacco came originally from

Java, but the planting there is done by Chinese coolies imported from Amoy and Swatow, who are more intelligent than the Malay coolies employed in Java ; this may also have something to do with the quality.

The value of the Sumatra and Java tobacco crop is about eight millions sterling yearly, and it is all shipped to Amsterdam and Rotterdam, where it is sold for cash to the highest bidders.

There are six large tobacco companies in Sumatra, one of which, the United Langkat Plantation Company, Limited, is English, with a capital of £225,438 and an area of 23,344 bouws.

The largest company there is the Deli Maatschappij, which has a capital of £667,000 and an area of 108,021 bouws.

Cinchona.—The history of cinchona carries us back no further than 1638, and as far as Java is concerned only to 1854.

The story goes that in 1638 the Countess del Chinchon, wife of the Viceroy of Peru, was lying dangerously ill in the palace of Lima with a fever which would not leave her, and that the Spanish doctor as a last resource dosed her with a powder made from Peruvian bark, which was given him by the magistrate of the district of Loxa, Don Juan Lopez de Canizares, who maintained that he himself had been cured from fever by this remedy. It seems that the virtue of this bark was well known in the Kina districts to the ancient Incas, although it was charily used and almost feared as a poison, doubtless on account of its action on weak hearts.

The countess became speedily well after a dose or two of the "bitter powder," and on her return to Spain took a quantity of it with her, thus introducing it into Europe.

Her advertisement, if such we may call it, was of such effect that the demand far exceeded the supply, and although

the Spaniards sent out repeated demands to Peru to ship it to Spain in large quantities, their wishes could not be fulfilled.

From time to time, however, shipments were made, but they decreased in quantity rapidly, and in 1847 journeys of ten or even twelve days had to be made into the wild jungle to search for it.

It had already long become apparent to the medical celebrities of the early nineteenth century that unless means were taken to reproduce cinchona the source of its supply would soon become exhausted, a possibility looked upon with some dread.

In 1818 Dr. Ainslie (no doubt he who was Resident of Djockjakarta during the English time, 1815) was one of the first to suggest that an attempt should be made to plant cinchona in India and the East Indies; and Dr. J. Forbes Boyle in 1839 brought the matter again before the authorities. There, however, it rested. A few years later Dr. Falconer reopened the matter once more with the British Government, but it was not until 1852 that it was at last induced to write to the British consuls in South America requesting them to ship with as little delay as possible both seeds and plants.

As far as Java is concerned a Dutch doctor, Blume by name, proposed in 1829 that it should be planted at once in the island, but no notice was apparently taken of his suggestion until the medical world was again aroused in 1849 by the English botanists Weddell and Karsten's accounts published far and wide of the destruction of the kina forests in South America by cinchona-hunters.

At this time quinine had become the only known remedy for fever.

The seeds collected by Weddell in South America were first sent to Professor Houlet, of the Botanical Gardens at Paris, and from here a few were sent to Hardy at Hammah

in Algeria. The latter were already growing well, when a sirocco killed them all. Seeds were also sent by Weddell to London, and in 1853 six plants were sent from here to Calcutta, but the sea air killed them on the way.

In 1852 the Dutch Government sent Dr. Hasskarl to South America for seeds, but he had considerable difficulty in getting any, and it was not until the very end of 1854 that he arrived at Batavia with seeds and 500 young plants. These were planted out at Tjibodas, on the mountain of Gedeh. This was the first step towards an industry which has become quite an important one in Java.

To go back, however, a little. In 1848 a certain Charles Ledger, seeing an opportunity of making money for himself, began travelling in the wilds of South America in search of the famed Peruvian bark. He spent fifteen years in the dense jungles, and the records of these expeditions, in which many lives were unfortunately lost, make a romance among romances, and no better reading is to be found than Markham's and Ledger's accounts of them.

In 1865 Charles Ledger handed over a large quantity of seed to his brother George for sale, and this on the 17th October was handed over to the Dutch minister of the colonies and sent to Java. It seems that George Ledger's intention had been to sell them to Sir William Hooker, of Kew Gardens, or to Clements Markham, but the former had died and the latter gone to India.

The shipment was an important one, and was on arrival immediately planted in the nurseries of the Botanical Gardens at Buitenzorg.

Near Bandoeng there is still a plantation cultivated from these original seeds. It is from this plantation that all the kina trees of Java have sprung.

By 1886 the area on private account had reached nearly 40,000 bouws, and the number of trees 30,000,000, of which about 14,000,000 were of the *Cinchona Succirubra*

species, while the area of the land planted by Government was about 3,500 bouws, or 1,778 acres. The statistics of the Government estates were then as follows :—

Plants in the Nurseries.

	Number.		Number.
<i>C. Ledgeriana</i>	. 1,433,000		<i>C. Succirubra</i> . 675,000

Plants in the Open.

	Number		Number.
<i>C. Ledgeriana</i>	. 826,700		<i>C. Lancifolia</i> . 8,000
<i>C. Calisaya</i> and			<i>C. Officinalis</i> . . 225,000
<i>C. Haskarlana</i>	. 56,000		<i>C. Succirubra</i> and
			<i>C. Caloptera</i> . 573,000

The export was 1,833,028 lbs. Since then the industry has made great strides, although in 1893—1894 a number of estates ceased cultivation of cinchona on account of its no longer being remunerative. This had come about through the production having become greatly in excess of the consumption.

The Java planters in the main, and especially those that were able to pass through the crisis, benefited, however, by this in the long run ; it weeded out a great number of plantations the world over, and thus brought the consumption more into agreement with the supply.

In 1886 the export was 1,833,028 lbs., in 1909 it was 17,639,849 lbs., and this notwithstanding the large increase in the export of the sulphate of quinine. Privately-sown cinchona is increasing slowly but surely, but the amount of Government-sown cinchona is decreasing.

In 1896 the cinchona of Java was about two-thirds of the world's supply. Up to this time the entire export had been shipped regularly to Holland, where it was sold at public auction. The large quinine manufactories, mostly



CHINESE *BAMI*-SELLER IN JAVA.



SUGAR-CANE FIELD.

situated in Germany, supplied themselves with the raw material in the Dutch market, and needless to say a combine kept prices at such a low level as to render the cultivation of cinchona, even in Java where labour is so cheap, unprofitable. Moreover, what made these low prices the more objectionable was the fact that planters knew that large dividends had been made from these quinine factories, a part of which should rightly have found its way into their own pockets.

In order to counterbalance the influence of this ring, planters in Java decided to establish a manufactory of their own for quinine.

The Bandoeng Quinine Factory was established at Bandoeng in 1896 with a capital of 700,000fl., and is now making over one million ounces a year.

The bark which is there treated comes alike from Government and from private estates, and there is no difference in the price paid.

The quinine so manufactured is the finest in the world, and its treatment from the time the bark is received at the factory until it is packed and shipped is everything that even the most fastidious could wish.

The owner (or practical owner) of the company is Mr. C. W. Baron van Heeckeren, who is the director of the Samarangsche Administratië Maatschappij (Samarang Administration Company), in whose hands the management of the quinine factory now is, with S. Camphuis as technical director at Bandoeng.

From a financial point of view the company has been successful. All the old machinery has been renewed and the factory is quite up to date, being the largest establishment of its kind in the world.

Dividends have been paid as follows:—In 1907, 9 per cent.; in 1908, 10 per cent.; in 1909, 10 per cent.; in 1910, 10 per cent.; in 1911, 10 per cent.

Exports of sulphate of quinine in 1898 (the date of the first official exports) were 468,800 ozs., but in 1909 they had already reached 1,244,800 ozs., in 1910 1,533,200 ozs., and in 1911 2,665,300 ozs.

Pepper.—This article of produce (the *Piper nigrum*, of the family of *Piperaceæ*) from almost time immemorial was exported from Bantam and the coast of Sumatra in small prahoes (lighters) to Malacca, from whence it was brought in vessels of 20 or 30 tons burden to Point de Galle (the ancient city of Tarshish). From Galle it was conveyed by way of Egypt to Rome, where there was a ready market for it. In the time of Pliny it was quite common, although dear, and the greatness of Venice is due to its early pepper trade with the East Indies.

It was the desire to visit these pepper countries, which no doubt were wrapped up in fabulous tales, that caused the Italians Marco Polo in 1290 and Nicolo Conti in 1449 to make their long journeys through the East.

The pepper trade continued through Malacca and Galle until the direct trade was introduced by the Portuguese in 1498; and it was this trade that was mainly responsible for the rush of Portuguese, English, Dutch, Spanish, and French to the East. The same aim of monopoly was in the minds of them all.

The magnitude of the trade in pepper can be gauged when it is borne in mind that even as late as 1720 it amounted to 30 per cent. of the whole of the Dutch East India Company's business in the East.

This is not to be wondered at when one takes into account the fact that for centuries it had been the custom at Bantam for every inhabitant, man or woman, as soon as he or she reached the age of 16 years, to become responsible for 500 lines of pepper. What the length of these lines was—how many bushes each denoted—does not appear.

The following is an old account of pepper in the seventeenth century :—

“This spice is produced from a plant of the vine kind, which twines its tendrils round poles or trees like ivy or hops.

“The pepper-corns grow in bunches close to each other. They are first green, but afterwards turn black. When dried they are separated from the dust, and partly from the outward membranous coat, by means of a kind of winnow called a harp and then laid up in the warehouses of Bantam.

“This winnow or harp is an oblong frame with a bottom of iron wire closely twisted so that the pepper-corns cannot pass through it ; this is set sloping, and the ungarbled pepper rolling along it frees itself from most of its impurities. The empire of Bantam with its dependencies at Lampon [Lampong] yield annually to the Dutch East India Company more than six millions of pounds of this spice. This pepper is esteemed the next best to that which comes from the coast of Malabar. That from Palembang, of which a very considerable quantity is delivered to the Company as well as that of Borneo, is of a much inferior quality. The price for which the King of Bantam is obliged to sell all the pepper produced in his dominions is fixed at six rix dollars or fourteen gilders, and eight stivers per picul of one hundred and twenty five pounds, nearly two pence half-penny per pound.

“It has been the opinion of many that the white pepper is the fruit of a plant distinct from what which produces the black : this, however, is not the case ; they are both the same production, but the white is manufactured by being laid in lime, which takes off its outer coat, and renders it whitish. This is done before the pepper is perfectly dry.”

The account goes on to say :

“Turmeric [*i.e.*, *Curcuma*], long pepper [*i.e.*, *Piper longum*], and cubebs [*i.e.*, *Piper cubeba*] are also productions of Java, but the collection and exportation of these two articles is not of great importance. The last is most in demand by the Indians at Surat.”

The great unstability of market prices has ruined the pepper industry, and from being, as we saw above, the

most important industry in Java, it has dwindled down to being a side article dealt in by the few.

EXPORTS OF PEPPER FROM JAVA (DUTCH EAST INDIA COMPANY'S PERIOD).

Year.	From Bantam.	Year.	From Bantam.
	piculs.		piculs.
1687 . . .	25,000	1726—1774. . .	35,000 *
1688—1722 . . .	27,000 *	1781 . . .	33,000
1723 . . .	39,000	1782 . . .	13,500
1724 . . .	57,000	1783—1787. . .	16,500 *
1725 . . .	33,000		

* Yearly average.

As a fine, the Sultan of Bantam in 1751 was forced to deliver 37,500 piculs to the Dutch East India Company.¹ In 1778, 500,000 lbs. were sold in Holland at 17 stivers. In 1796, after a slight flicker the trade came to an end entirely, owing to the plantations being destroyed by the Sultan.

The trade in Sumatra now passed entirely into the hands of the English and Americans.

RECEIPTS OF PEPPER AT BATAVIA AND THE ISLAND OF ONRUST.

(From an Old Memorandum).

From.	Year.	Kind.	Quantity.
			lbs.
Bantam and Lampong . . .	1776—1777 {	Black	3,714,000
		White	15,000
Borneo	do. {	Black	1,117,375
		White	16,250
Palembang	do.	Black	497,507
West Coast of Sumatra . . .	do.	do.	1,119,436
Province of Jacatra . . .	do.	do.	1,900

Rubber.—Rubber is an industry of, comparatively speaking, recent date in the East. Before 1875 it was unknown

¹ I saw this in an old book.

in Ceylon, and six years ago it was not seriously thought of in Java.

It was only in 1876 that 2,000 seedlings of *Hevea Brasiliensis* were dispatched from Kew Gardens in the steamship *Duke of Devonshire* to Peradeniya, in Ceylon. These seedlings had been raised from seeds collected by Mr. H. A. Wickham, who in the sixties succeeded in finding 70,000 in the Cirangalo of the Rio Tapajos.

Mr. Wickham, who was an Englishman, had been engaged for some years in Brazil, and on laying his views before the India Office whilst on leave in Europe was commissioned by the Government to secure some seeds. On his return to Brazil, and whilst he was working there in 1876 on his estate, it appears that an English steamship, the *Amazonas* (of the Inman Line), Captain Murray, arrived on the Amazon. It happened to be just about the time when the *Hevea Brasiliensis* was ripening, and the idea suddenly occurred to him that this chance of carrying out the wishes of the India Office and supplying it with seeds for India was a good one. Mr. Wickham, who was a man of action, has described for future generations what he did on this occasion. The following is a *précis* in his own words:—

“Then occurred one of those chances such as a man has to take on the top-tide or lose for ever. The startling news came down the river that our fine ship the *Amazonas* had been abandoned and left on the Captain's hands after having been stripped by the two gentleman supercargoes (our late hospitable entertainers), and that without so much as a stick of cargo for return voyage to Liverpool. I determined to plunge for it. I knew that Captain Murray must be in a fix, so I wrote to him boldly chartering the ship on behalf of the Government of India, and I appointed to meet him at the junction of the Tapajos and Amazon rivers by a certain date. There was no time to lose. Working with as many Tapiijo Indians as I could get together at short notice, I daily ranged the forest, and packed on our backs in Indian pannier baskets as heavy loads of seeds as we could march down under.”

The steamer was met, and sailed down to Para, where her papers were duly countersigned by the English Consul, Mr. Green.

With the precious seeds on board she now crossed the Atlantic, arriving in England in June.

The seeds were immediately planted out, and shortly afterwards the young seedlings which had thriven were dispatched to Ceylon and Burma.

Seeds from Ceylon were sent to Buitenzorg in 1887, but 1904 is generally considered to be the date when the culture took serious dimensions in Java. In this year about 8,000 bouws were planted with rubber in Java and Sumatra.

Most of the estates are planted with the *Hevea Brasiliensis*, but a good many also with the indigenous rubber tree, *Ficus elastica* (Rambong). This tree grows to enormous dimensions, and appears to thrive far better than the *Hevea*, but its size militates against it, very few finding room to the *bouw*. In the long run, however, in Java and Sumatra, it may be that the "*Ficus*" will prove the better of the two. All the Government officials advised planting the indigenous tree rather than the imported Brazilian.

Java and Sumatra are ideal lands for rubber, climate, humidity, rainfall, and temperature being all in its favour. The monthly rainfall in West Java varies from 200 to 300 millimetres in the dry months to 800 in the rainy months, the yearly average being about 4,500 millimetres. In East Java it is less.

The average humidity is about 80, and the temperature is equable through the small range of 87° Fahrenheit to 90° or 91°.

The high temperature and abundant rainfall combined are sufficient to account for the heavy vegetation, a vegetation so rich and luxuriant that no country in the world, with the exception perhaps of some portions of South America, can equal it.

The home of the *Hevea Brasiliensis* is Brazil,¹ that of the *Ficus elastica* Java. Given the conditions in Java, can there be any doubt that the rubber industry here is bound to be a success? There is, moreover, a further factor that raises Java in this relation above all other countries.

In the Malay States and in Ceylon there is one unending complaint of the want of labour, a want that will grow with time rather than lessen, and in fact will sooner or later prove a serious menace to the industry in these countries.

In Java no such thing is possible, as there is a population of willing labourers amounting to over 32,000,000, and this in an area hardly greater than England, Scotland and Wales. Owing, moreover, to the supply of labour being so plentiful, the pay is ridiculously small, and there is no comparison between what is paid in Java and what is paid in Ceylon and the Malay States.

Coolies in Java are paid about 4*d.* to 5*d.* a day at most, according to the district where they may happen to be.

For this sum they will work from sunrise to sunset, with a small break in the middle of the day when the heat is at its greatest, and wholly under the supervision of a native *mandoer* or headman (whose pay is about 6*d.* a day), carrying out the work as ordered by the European or controller in charge in an unexampled manner.

Taking all these factors into consideration, it is scarcely to be wondered at if planters are optimistic, for not only are prospects in this part of the world now gratifying, but the outlook is far rosier than most imagine.

To mention more than a few of the rubber companies of Netherlands India would be impossible; for whilst only a limited number are publicly advertised, there are not less

¹ Whose tropical climate is very similar to that of Java.

than a hundred estates in Java with rubber planted on them, though not specially called rubber estates owing to the fact that for the time they are relying for their dividends upon their tea, coffee, or cocoa productions.

The acreage under rubber cultivation in Java in 1912 was as follows :—

Residency.	Number of Estates.	Cultivated Bouws.
Bantam . . .	11	3,067
Batavia . . .	13	3,709
Preanger . . .	13	6,386
Cheribon . . .	4	1,550
Tegal . . .	1	100
Samarang . . .	16	3,406
Soerabaya . . .	3	692
Paseroean . . .	41	11,700
Bezoekie . . .	25	8,753
Banjoemas . . .	8	3,162
Kediri . . .	12	2,925
Soerakartu . . .	10	3,580
Total		49,030 ¹

¹ Equal to, say, 85,000 acres. Of the above 25,550 bouws (44,712 acres) are *Hevea*. In addition, there are the Government plantations, comprising 19,170 acres of *Rambong*, 2,400 acres *Hevea* (together with 800 acres at Tjipetir and 130 acres of *Castilloa*). Altogether in Java there are about 108,000 acres of rubber, of which approximately 47,000 acres are *Hevea Brasiliensis*.

<i>Hevea</i>	47,000 acres.
<i>Ficus</i>	30,000 „
<i>Castilloa, Manihot</i>	31,000 „
Total	108,000 „

If to this one adds 80,000 acres of *Hevea* for Sumatra, we have for the three islands of Borneo, Java, and Sumatra a total of 140,000 acres of *Hevea*, or 200,000 acres of rubber of all kinds.

English companies operating in Sumatra own approximately 35,668 acres of Para rubber and 75 acres of *Ficus elastica*, and it may be assumed they possess about half the total acreage under Para rubber in that country. The activity is mainly in the residencies of Serdang, Langkat, and Assalian.



FINE ART WEAVERS.



MAKING PANAMA HATS.

Nearly all these estates are producing rubber of a superior quality.

Exports from Java during 1910 amounted to 156,700 lbs., in 1911 to 982,600 lbs.

LIST OF SOME OF THE RUBBER ESTATES IN NETHERLANDS INDIA.

(Founded up to 1909 and owned by British Companies.)

Name of Company.	Date of Formation.	Capital.	Number of Shares.	Issue Value.
		£		£
Anglo-Sumatra Rubber Co., Ltd. .	1907	90,000	90,000	1
Nirmala Co., Ltd. .	1909	180,000	180,000	1 ¹
Bandar Sumatra Rubber Co., Ltd. .	1909	100,000	100,000	1
Bandjarsarie Rubber Co., Ltd. .	1908	50,000	50,000	1
Borneo Rubber and Trading Co., Ltd. .	1906	130,000	130,000	1
British Sumatra Rubber Estates, Ltd.	1908	130,000	130,000	1
Glen Beroie Rubber Co., Ltd. .	1908	35,000	35,000	1
		fl.		fl.
Hevea Rubber Co., Ltd.	—	200,000	2,000	100
		£		£
Java Rubber Plantations, Ltd. . .	1907	35,000	35,000	1
Java Rubber and Produce Co., Ltd. .	1906	50,000	50,000	1
Java United Plantations, Ltd. . .	1909	200,000	200,000	1
Kali Selogiri Syndicate, Ltd. . . .	1907	25,000	25,000	1
Langkat Sumatra and Rubber Co., Ltd.	1908	75,000	75,000	1
Sabang Rubber Estates, Ltd. . . .	1909	65,000	65,000	1
Sergon Co., Ltd.	1907	22,000	22,000	1
Serdang Central Plantations, Ltd. .	1909	60,000	60,000	1
Simo Rubber Estates, Ltd.	1907	35,000	35,000	1
Simpang Sumatra Rubber Co., Ltd. .	1909	60,000	60,000	1
Sumatra Consolidated Rubber Estates, Ltd.	1909	75,000	75,000	1
Sumatra Deli Rubber Estates, Ltd. .	1907	240,000	240,000	1
Sumatra Para Rubber Plantations, Ltd.	1907	100,000	100,000	1
Sumatra Proprietary Rubber Plantations, Ltd.	1909	100,000	100,000	1
Siongei Kara Rubber Estates, Ltd. .	1909	56,000	56,000	1
Taudjong Rubber Co., Ltd.	1907	100,000	100,000	1
United Langkat Plantations Co., Ltd. .	1889	450,000	450,000	1
United Serdang Rubber Plantations, Ltd.	1907	200,000	200,000	1
United Sumatra Rubber Estates, Ltd. .	1908	85,000	85,000	1

(See also Tjiliwoeng Java Plantations, Ltd., in next list.)

¹ Only 130,000 shares issued ; 21,635 acres.

(Founded after 1909.)

Name of Company.	Date of Registration.	Authorised Capital.	Amount Issued.	Issue Value.
Asahan (Sumatra) Rubber Estates, Ltd.	3rd March, 1910	£ 250,000	172,500 shares	£1 each, fully pd.
Anglo-Java Rubber and Produce Co., Ltd.	15th Feb., 1911	500,000	400,000 ordinary shares . £85,000 7 per cent. first mortgage convertible debentures (part of an authorised issue of £100,000), fully paid, in debentures of £50 each ; 85,000 shares are reserved against the option to convert the debentures issued.	£1 each, fully pd., £50 bonds.
Ankala Tea and Rubber Co., Ltd.	19th April, 1911	150,000	100,000 shares	£1 each, fully pd.
Bah Lias Tobacco and Rubber Estate, Ltd.	13th March, 1911	300,000	200,000 shares. Option granted over unissued shares at par up to 31st Oct., 1915.	£1 each, 17s. 6d. pd.
Batu Rata (Sumatra Rubber Plantations, Ltd.)	1st Nov., 1910	120,000	27,500 shares (vendors) . . . 60,000 shares (subscribers) . . The vendors or their nominees have the option to subscribe at par for 21,000 of the unissued shares on or before 31st Dec., 1915.	£1 each, fully pd. £1 each, fully pd.
Bila (Sumatra) Rubber Lands, Ltd.	18th May, 1910	200,000	70,000 shares (vendors) . . .	£1 each, fully pd.
Badak Rubber Estate, Ltd.	7th April, 1910	120,000	87,500 shares (subscribers) . .	£1 each, 17s. 6d. pd.
Bajoe Kidool Rubber and Produce Co., Ltd.	19th April, 1911	300,000	150,000 shares. There is an option over 50,000 shares at par up to 31st March, 1915.	£1 each, 15s. pd. £1 each, 17s. 6d. pd.
Bantam (Java) Rubber Estates, Ltd.	24th May, 1910	165,000	61,000 shares (vendors) . . . 89,000 shares (subscribers) . .	£1 each, fully pd. £1 each, fully pd.

Bantardawa Rubber Estates, Ltd.	26th May, 1910	150,000	33,334 shares (vendors)	£1 each, fully pd.
Bara (Java) Estates, Ltd.	29th Jan., 1910	70,000	71,666 shares (subscribers)	£1 each, 17s. 6d. pd.
			25,000 shares (vendors)	£1 each, fully pd.
			38,000 shares (ordinary)	£1 each, fully pd.
			£13,800 7 per cent. debentures of £50 each (part of £14,000 authorised) ; on or before 31st Dec., 1915, debenture-holders have the option to apply for, and, upon payment in full of £25 fully-paid bond, to have allotted to them at par 25 shares, while the debentures will be redeemed at par on 31st Dec., 1921.	£50 bonds.
Besoeki Plantations, Ltd.	2nd Nov., 1909	100,000	33,333 shares (vendors)	£1 each, fully pd.
Central Sunatra Rubber Estates, Ltd.	5th Feb., 1910	180,000	66,667 shares (ordinary)	£1 each, fully pd.
Daejon (Java) Rubber Estates, Ltd.	7th April, 1910	55,000	108,750 shares	£1 each, 18s. pd.
			430,000 shares	2s. each, fully pd.
			£7,000 first mortgage participating and convertible debentures issued in 1912, bearing interest at 6 per cent. and further be entitled to 20 per cent. of net profits commencing 1st July, 1912.	Bonds of £5, £10, and £50.
Djasinga Rubber and Produce Co., Ltd.	16th June, 1910	500,000	400,000 shares	£1 each, 12s. pd.
Djember Rubber Estates, Ltd.	18th Feb., 1910	100,000	25,000 shares (vendors)	£1 each, fully pd.
			70,000 shares (subscribers)	£1 each, fully pd.
Eastern Sumatra Rubber Estates, Ltd.	13th April, 1910	150,000	165,000 shares (vendors)	2s. each, fully pd.
			1,050,000 shares (subscribers)	2s. each, 1s. 6d. pd.
			25,000 shares (vendors)	£1 each, fully pd.
East Java Rubber Co., Ltd.	3rd March, 1910	80,000	45,000 shares (subscribers)	£1 each, fully pd.
			£10,000 per cent. convertible first mortgage debentures (part of £15,000 authorised in July, 1912) ; convertible at holder's option on 30th June and 31st Dec. in each year till 31st Dec., 1915, into equivalent amount of shares.	£25 each, fully pd.

LIST OF SOME OF THE BRITISH RUBBER COMPANIES IN NETHERLANDS INDIA—*continued*.

Name of Company.	Date of Registration.	Authorised Capital.	Amount Issued.	Issue Value.
Insulinde (Sumatra) Rubber and Tobacco Estates, Ltd.	26th April, 1910	£ 100,000	13,000 shares (vendors) . . . 67,000 shares (subscribers) . . . Capital reduced in 1913 to £60,000 in 80,000 shares of 10s. (issued) and 20,000 shares of £1 (not issued).	£1 each, fully pd. £1 each, fully pd.
Kwaloe Rubber Estates, Ltd..	15th Feb., 1910	150,000	110,000 shares . . .	£1 each, 17s. 6d. pd.
Kati Glagah (Java) Rubber and Produce Co., Ltd.	26th Feb., 1910	65,000	15,000 shares (vendors) . . .	£1 each, fully pd.
Kasintoe Rubber Estates, Ltd.	15th March, 1910	120,000	650,000 shares . . .	2s. each, fully pd.
Kawie (Java) Rubber Estates, Ltd.	12th Feb., 1910	75,000	110,000 shares. 10,000 shares have been set aside for options to the vendors 232 6 per cent. debentures of 500 guilders each issued in Java.	£1 each, fully pd.
Kebonso Rubber Estates, Ltd.	31st May, 1910	120,000	68,000 shares (ordinary) . . .	£1 each, fully pd.
Langkapoera (Sumatra) Rubber Estates, Ltd.	16th March, 1910	85,000	12,500 shares (vendors) . . . 92,500 shares (subscribers) . . . 7,500 shares, ordinary (vendors) . . . 56,000 shares, ordinary (subscribers) . . . £15,000 7½ per cent. convertible first mortgage debenture stock.	£1 each, fully pd. £1 each, 15s. pd. £1 each, fully pd. £1 each, fully pd. £10 each, 50 per cent. pd.
Laras (Sumatra) Rubber Estates, Ltd.	1st March, 1910	80,000	65,000 shares (subscribers) . . . 10,000 shares (vendors) . . .	£1 each, fully pd. £1 each, credited as fully pd.
Mendaris (Sumatra) Rubber and Produce Estates, Ltd. .	19th April, 1911	300,000	200,000 shares . . .	£1 each, fully pd.

Malang Rubber Estates, Ltd..	10th March, 1910	65,000	50,000 shares (vendors)	2s. each, fully pd.
Marawan (Java) Rubber Plantations, Ltd.	23rd May, 1910	55,000	550,000 shares (subscribers)	2s. each, fully pd.
Northern Tjiliwoeng Plantations, Ltd.	25th Nov., 1910	120,000	73,750 shares (vendors)	2s. each, fully pd.
Petoeng Java, Rubber Estates, Ltd.	9th March, 1910	70,000	300,000 shares (subscribers)	2s. each, fully pd.
Rim (Malacca) Rubber Estates, Ltd.	28th Jan., 1910	135,000 vendors. 90,000	80,000 shares	£1 each, 15s. pd.
Siak (Sumatra) Rubber Estates, Ltd.	15th Jan., 1910	75,000	465,000 shares	2s. each, fully pd.
Soember Cijoe Rubber Estates, Ltd.	3rd June, 1910	85,000	30,462 shares	2s. each, fully pd.
Tamiang Rubber Estates, Ltd.	Sept., 1909	120,000	17,000 shares (vendors)	£1 each, fully pd.
Tanah Datar Rubber Estates, Ltd.	14th Feb., 1912	65,000	50,000 shares (ordinary)	£1 each, fully pd.
Tangoel Rubber Estates, Ltd..	23rd Feb., 1910	85,000	£17,000 7 per cent. first mortgage debenture stock.	Multiples of £1 stock.
Telogoredjo United Plantations, Ltd.	16th March, 1910	150,000	15,750 shares (vendors)	£1 each, fully pd.
Tjiliwoeng Java Plantations, Ltd.	28th Oct., 1908	100,000	49,250 shares (subscribers)	£1 each, fully pd.
Waverley Rubber and Produce Estates of Java, Ltd.	3rd May, 1910	100,000	125,000 shares (vendors)	2s. each, fully pd.
Wampoe Tobacco and Rubber Estates, Ltd.	21st July, 1910	200,000	600,000 shares (subscribers)	2s. each, fully pd.
Way-Halim (Sumatra) Rubber and Coffee Estates, Ltd.	26th April, 1910	120,000	45,000 shares (vendors)	£1 each, fully pd.
			39,000 shares (subscribers)	£1 each, fully pd.
			£36,000 6 per cent. convertible debentures	Bonds.
			22,750 shares	£1 each, fully pd.
			21,607 shares	£1 each, 7s. 6d. pd.
			75,000 shares	£1 each, fully pd.
			2,000 shares (vendors)	£1 each, fully pd.
			133,000 shares (subscribers)	£1 each, fully pd.
			58,500 shares (ordinary)	£1 each, fully pd.
			20,000 shares (6 per cent. preference)	£1 each, fully pd.
			20,000 shares (6 per cent. preference)	£1 each, 15s. pd.
			80,000 shares	£1 each, fully pd.
			150,000 shares (subscribers). There is an option over 50,000 shares, at par, up to 31st Oct., 1914.	£1 each, 17s. 6d. pd.
			250,000 shares (vendors)	£1 each, fully pd.
			847,966 shares (subscribers)	£1 each, fully pd.

Kapok.—There are not many people who have heard of Kapok, yet as an article of commerce in Java it is important and the industry employs thousands of natives.

The kapok or randoe tree (*Eriodendron anfractuosum*), from the family *Malvaceæ*, is indigenous to South America, but how or when it came to Java is a riddle.

Kapok is an article used for filling mattresses, and in Holland, Australia, and New Zealand nothing else is used nowadays. Its soft flexible and downy character makes it for such purposes infinitely preferable to anything else of its kind.

The article was first exported from Samarang to Holland about 1869—1870 by the firm of Macneill & Co., and since then the export has assumed large figures, 100,000 bales being shipped yearly.

A third of this quantity, or, roughly, 30,000 bales, finds its way to Holland, another 30,000 bales go to Australia and New Zealand, about 15,000 bales go over the Pacific to America, and the rest is divided between Singapore and the neighbouring ports.

The largest and finest kapok estate in Java is Siloewok Sawangan, between Pekalongan and Samarang. Here about 6,000 piculs, or 12,000 bales, are harvested yearly. The quality also is superior, and a higher price is usually paid for it than for other sorts.

Most of the kapok is grown in the Japara district, but important amounts are also to be secured in the eastern districts.

Among the finest sorts of kapok in the East Indies is that which comes from the island of Madura, but the quantity is unfortunately not large.

Kapok is an article with a great future before it, and when the conservatism of the English manufacturers of mattresses, bolsters, pillows, sofas, etc., can be broken down and proper trials are made with this product, the



GOVERNOR'S PALACE, SAMARANG. (BUILT BY SIR THOMAS STAMFORD RAFFLES, 1811.)

export from Java will eventually become double what it is now.

Kapok Seeds.—Of some interest in the kapok trade is the by-product, kapok seeds. These seeds come out of the same pod as the kapok, and until some ten years ago were thrown away. Since then they have been for the most part exported to the various oil-making factories at Marseilles and Liverpool, which press out a crude sort of oil from them.

The trade, however, is not entirely dependent on these two outlets, as there are oil factories in the island which are always open to pay good prices for the article when Europe is unable to do so. These concerns, owned by Chinese, after extracting the oil, sell the residue in the form of a sort of beancake to the sugar estates, which make good use of it as manure, containing as it does 4 per cent. of nitrogen. This, of course, does not compare with the Bengal beancake, which contains 7 per cent. of nitrogen, so that a lower price is paid for the Java cake.

Cocoa.—The cocoa tree (*Theobroma cacao*) is indigenous to the forests of Central America, and was cultivated most likely before the European era by the ancient Mexicans, a Mongolian race which found its way to Mexico probably by the Behring Straits before the channel which now divides America from Asia existed.

In more recent times there are numerous legends and accounts of ceremonial occasions associated with *cacao* in Mexico. These are related by Quatzalcault, Montezuma Herrera (the conqueror of Mexico), Rozière, Gallais, Humboldt, and several others.

According to Herrera, who is the first European to write about “cacao” or “cocoa,” the fruits were highly prized by the Mexicans, and only the lords and bravest warriors had the right to eat them.

It was considered a royal fruit, and they called the tree

cacao-quahintl, whence its name to-day. The seeds were used together with maize and sugar.

In trading they served as money, each seed having its value, according to its size and quality.

The bitterness was overcome when it was eaten by an admixture of sundry spices, such as vanilla or cinnamon.

It was sometimes compounded into a sort of chocolate, and in this form probably became known to the early Spaniards, who introduced it into Spain, Italy, and France.

By 1727 the cocoa-tree was planted in most of the West Indian Islands—St. Lucia, St. Kitt's, Nevis, Bahamas, Surinam, Montserrat, Trinidad, Grenada, Jamaica, Dominica and St. Vincent.

According to a memorandum which I have read, *Theobroma cacao* was introduced into the East Indies as early as the seventeenth century.

The area under cultivation ¹ in Java is, roughly speaking, 10,000 bouws. There are about 500 trees to a bouw, so that the number of trees existing in Java cannot be less than five million.

The cultivation of cocoa in Java has never fulfilled the great expectations which were once formed about it. It is very sensible to climate and soil and will not grow everywhere. Its aptitude also for contracting diseases which cause the fruit to rot before it is ripe has caused such severe losses that planters have sometimes become disgusted, and have uprooted and discarded the cocoa tree altogether from their estates.

Several planters have, moreover, been ruined by the

¹ One of the finest cocoa estates in Java is Djatiroengoe, the owner of which, Mr. Henry McGillavry, has made a name in the cocoa industry through a hybrid which is planted on all the estates, having been first cultivated by him. This goes by the name of "Djatiroengoe cacao."

Tlogo, near, is owned by the Lorch family, whose progenitor in Java, Captain L. F. C. Lorch, came to the island in 1816, and of whom particulars are given in Chapter XI. The administrator of this estate is Mr. Sudkamp

helopeltis destroying their entire crops. Notwithstanding all this, however, good prices have caused the exports to grow. The export statistics are curious reading, and are illustrative of the vicissitudes of planting; although nowadays means have been at last found to counteract this pest, unless particular care is yearly taken to guard against it the *helopeltis* will assuredly attack the trees.

Maize.—The cultivation of maize (*Zea mays*), or djagoeng of the natives, can scarcely be looked upon as an industry, although it is true that in some parts of Java, particularly in one or two of the mountainous districts, it has completely taken the place of rice. The article is said to have been introduced by the Hindus A.D. 372 (see Chronological Tables).

Maize grows so easily and requires so little, if any, attention, that it commends itself to the inhabitants, who soon get used to its flavour, which is entirely different to that of rice.

The seed is put into the ground and left; the soil and climate do the rest. The maize cobs when ripe are quickly gleaned, and the nourishing stalks supply an excellent food for the cattle. When the cobs have been demolished, without any further tilling or ploughing of the ground the seed is again sown; the same routine occurs as before within a few months. Unlike rice, maize requires very little watering, although on properly drained ground it can stand a good deal of rain.

Cotton.—Cotton (*Gossypium herbaceum*) is grown in only one or two districts in Java. When it was introduced I have not found, but it was before the Dutch came to Java. It is to be seen in Demak and Grobogon (both in the residency of Samarang).

In the early days of the East India Company the article seems to have been of more importance than it is now.

Here is an account of it in 1769 :—

“ Cotton yarn is an important object of trade which Java furnishes to the Company. It is spun by the Javanese from the cotton produced in great plenty in the interior parts. The province of Jacatra yielded in the year 1768 no more than 133 piculs, or 16,225 pounds, which was 1875 pounds less than ought to have been delivered by the Indians, according to the quota imposed upon them, but this deficiency was occasioned by a season of uncommon drought, by which the cotton crop had been materially injured.”

“ It is cultivated in almost every part of the island by the natives. The kingdom of Bantam, however, is excepted, where little of it is found, so that the yarn which is spun of it in the province of Cheribon and other parts yields a considerable degree of gain on being clandestinely imported into Bantam.

“ The Company, to whom the greater part of it is delivered, pay for it, according to its qualities, 45, 35, 24, and less rix dollars per picul of 125 pounds, equal to the respective rates of $17\frac{1}{2}d.$, $13\frac{1}{2}d.$, and $9\frac{5}{14}d.$ sterling per pound. Jacatra and the Preanger lands furnished in the year 1753 the quantity of about 200 piculs or 25,000 pounds of cotton yarn, and (as mentioned) in 1768 only 133 piculs. The greater part of the cotton yarn is sent to Holland.

“ Attempts have been made to introduce the manufacture of cotton cloths as an article of trade for the Company and to supersede part of their large importations of the article from Hindostan, but hitherto with very little success.”

In 1778 cotton yarn, “ the production of the colony of Jaccatra,” was sold in Holland to the value of 20,000*fl.*

I have never come across any statistics of cotton production, and I doubt if there have ever been any published.

The consumption is purely local, and the natives employ it for weaving cloths for themselves, from which durable jackets, etc., are made.

Rice.—The oldest record of rice (*Oryza sativa*) is from B.C. 2800, when the Chinese Emperor Chi Nung performed a ceremony, which was done yearly, of planting some rice plants with his own hands.

In India, contrary to expectations, no mention is made

of rice in the ancient vedas until B.C. 1000, but it by no means follows that it was not known before this.

As to Java, philological investigations have conclusively been able to prove that the oldest aboriginal inhabitants cultivated rice in irrigated fields divided into terraces centuries before the Christian era.

Tradition and legend carried down from this period states that the rice industry was originally introduced by the Hindus, but there is naturally some doubt as to this, for, as stated in Chapter I., all the technical terms employed in the culture are other than Sanscrit, unlike what is found in the case of the various Hindu introductions into Java. It might have been introduced by the Malays, but they came to Java too late. It is more likely, therefore, to have been introduced by some race who had learnt it from the Chinese. What race, therefore, could this be but an Indonesian one?

In any case the Hindu dominion in Java cannot have had anything but a favourable influence on the cultivation of rice, and the old patriarchal *desah* (village) ownership of tracts, which were divided amongst the *tjatjars* (families), who again subdivided them individually, was a powerful factor working towards the solidarity of the community, which had thus one common interest.

This communal ownership was certainly introduced from India, being the counterpart of the old tribal customs of the ancient Aryans, by which the owners of the soil were the lords of the land.

The curious thing about rice is that, as we have said, of all the names belonging to it (there is one for every state of it) not a single one can be traced to a Sanscritic origin such as would have been expected had the Hindus introduced it.

For instance, it is *padi*, *pari*, or *pare* when it is growing in the *sawahs* (rice-fields); *gaba* when the first husk is

removed ; husked it becomes *bras* ; *charroop*, when cleaned for boiling, and *nasi* when boiled. The grain of the year before is called *oossay* and the rice sprouts before transplantation *bunnee*. None of these terms belong to the Sanscrit.

Rice was brought to Europe shortly after Alexander the Great made his descent into India in B.C. 327, but neither in the Old Testament nor in the New is the word for it found ; in the Talmud here and there mention is made of it.

Theophrastus speaks of rice under the name of *oryze* or *oryza*, and after this it is repeatedly met with in Greek and Roman literature. At the time of the birth of Christ it had already become an important article of commerce in the Roman Empire.

The result of traditions, which have become an integral part in the life of the Javanese, is such that from the laws of their ancestors they will allow no departure.

Rice culture has here become a sort of superstition, and the ancient law of the Hindus that each *desah* and each *tjatjar* must plant so much is, whenever possible, rigidly adhered to. The Javanese say it is their duty to grow rice, even though under certain conditions it might be of greater advantage to them to grow some other plant. It is just the same in the Pacific islands, where the natives are under moral obligations to plant ten cocoanut trees each before they die.

The rice-fields are tilled as in the days of the Hindus and the implements are the same, and this notwithstanding that the Dutch officials have for years endeavoured to bring in a more rational method, which would enable the Javans to harvest larger crops and make the work easier. No demonstrations, no advice, and no instructions have the slightest effect upon the conservatism of this race, who maintain that for so many thousand years the present

system has been in vogue, and that so far it has done well. Why, therefore, they ask, should it not continue to be well, and what proof is there that the new methods in the long run will prove more efficient? To alter these ancient customs would entail, therefore, such a gigantic task, besides possibly—nay, probably—causing a rising amongst the inhabitants, that the Dutch after ripe consideration have decided to leave well alone.

The harvests on the whole are not bad, even in the poorest districts, whilst in the richest—the Kedoe, for instance—three crops yearly are in the ground. Where, indeed, in the world is there such a soil?

Here the Javan “puts into the soil” what he wishes to grow in his own primitive way, and Dame Nature does the rest. In many instances he tills not, nor even sows, yet his food-plant grows and thrives.

Manuring or maintaining and nourishing the soil may be unknown, and yet the plants flourish.

The result of all this is that what with the climate and the soil the Javan is a born husbandman.

In the days of the old Dutch East India Company the following account is given of rice; it might have been written to-day, or it could have been written B.C. 1000, for everything was the same then as now:—

“*Oryza* or rice is the second product of Java,¹ and is collected in large quantities, especially in the empire of Java proper. It grows chiefly in fenny ground. After it has been sown and has shot up above two or three hand breadths above the ground, it is transplanted by little bundles of six or more plants, in rows; then by damming up the many rivulets which abound in this country, the rice is inundated in the rainy season, and kept under water till the stalks have attained sufficient strength, when the land is drained by opening the dams, and it is soon dried by the great heat of the sun.

¹ Really it was the first, but the East India Company, not having penetrated yet into the interior of Java, was not aware of this.

“ At the time of the rice harvest the fields have much the same appearance as our wheat and barley fields, and afford an equally rich scene of golden uniformity. The sickle is not used in reaping rice, but instead of it a small knife, with which the stalk is cut about a foot under the ear, this is done one by one, and they are then bound into sheaves, the tenth of which is the reward of the mower. Java has been called the granary of the East, on account of the immense quantity of rice which it produces ; the other islands in this neighbourhood yield little or none, except Celebes, where enough is grown to provide Amboyna with this staff of life.”

Rice is sown everywhere in Java ; there is not a district without it. It is the staff of life, and is to the Javans what wheat is to us. If the rice crop failed, there would be a famine to-morrow. Enough, however, cannot nowadays be grown for the huge population, and shiploads have therefore to be imported yearly.

The higher grades of rice, such as that which comes from the crack estates of “Indramayoe West” and “Kandanghaner,” are sold for the European market, where the demand for such qualities at handsome prices is invariably found.

Indigo.—From very ancient times the use of indigo (*Indigofera tinctoria*) was known in Asia, and in the days when Rome was at her height it was imported under the name of *pigmentum indicum*. It was introduced into Java by the Hindus, and was spoken of by Marco Polo when he visited Java in the thirteenth century as “endego.” From this it is possible that the name “indigo” arose. In Tamil the indigo plant goes by the name of *averie*, the dye by that of *neelum*. In Sanscrit the indigo plant is called *vishashodami* and the dye *nili* or *nilini*, which means “dark blue,” and from this the Portuguese made “anil” and the English “aniline.”

Among the Malays the indigo plant is called *taroem*, among the Javans *tom* ; whilst the dye among both goes by the Sanscrit word *nila*, or *nili*.

Indigo was imported into Holland already in the sixteenth century; the import was probably from British India.

From Holland the art of indigo dyeing spread to England, France and Germany. Up to this time in all these countries “woad” or “weede” (*Isatis tinctoria*) had been in common use. This was known in the days of the Picts and Scots, and old history tells us how the Romans found the ancient Britons painted with “woad.” It was a dye extracted from leaves.

At the time of Queen Elizabeth an attempt was made to introduce indigo into England, but she endeavoured to prevent it, in which attitude she was followed by the Regensburger Ryksdag, of Germany, in 1594. In France a law was passed in 1609 that anyone caught using indigo should be punished by death. To such an extent, indeed, did the agitation against indigo proceed that the dyers of Neurenberg had yearly to take an oath that they would only use “woad” when dyeing.

Indigo was called the “devil’s dye.”

By 1631 a change, however, had taken place, and the Dutch East India Company was able to place three shiploads of a value of half a million guilders.

In 1737 the use of indigo in France was permitted.

The following is a short account of indigo during the Company’s time :—

“Indigo, although not an original production of Java, has been cultivated with tolerable success since the Company has been established at Jacatra, insomuch that whereas formerly that article was obliged to be sent for from the empire of the Great Mogul, and special *firman*s were obtained with some difficulty for that purpose, that trade has now been abandoned in Hindostan, and instead of being purchasers, the Company have been able to be sellers of a considerable quantity of the article. The Company pay for the first quality thirty stivers per pound and in proportion for the second and third qualities; the indigo is

sorted upon its delivery at Batavia by a person specially appointed for that purpose.

“ In the year 1768 Jacatra furnished 2,875 pounds of indigo, though the inhabitants have been assessed at the quantity of 6,125 pounds.”

Owing to the manufacture of the synthetic article, indigo-growing is diminishing every year, the land being turned into tobacco or sugar plantations.

There is still a fair quantity used locally by the native dyeing industry, but there is no future for this plant, and its cultivation in Java will soon be reduced to a minimum.

From an export of 2,260,804 lbs. in 1886, which rose to 3,310,417 lbs. in 1891, the export has dropped to 218,383 lbs.

CHAPTER XIX

MISCELLANEOUS

PART I

Inhabitants :—Complexion—Manners—Marriages—Titles and Rank—Dwellings—Native Palaces—Furniture—Dress—Meals—Fermented Liquors—Siri or Betel—Opium. Religion—Lontjar Leaves and Hindu Records—The Arabian Nights. Language. Poetry. Music. Painting. Arithmetic. Astronomy. Architecture and Sculpture. Games. Sports. Festivals. Amusements and Entertainments. Dancing. Ceremonies of the Court—Regalia—Processions—Pomp.

INHABITANTS.—The inhabitants of Java at the present day seem more or less to owe their origin to the same stock as do the inhabitants of most of the islands in the East Indian Archipelago with the exception of New Guinea.

This is borne out by the striking likenesses in person, feature, language, and customs which prevail, all denoting in an unmistakable way that the original population, whatever its source, was one stock, notwithstanding the special peculiarities which now and again distinguish the different nations and communities into which it is at present distributed. Such peculiarities are due entirely to long separation, local circumstances, the intercourse with foreign traders, and to emigrants and settlers from almost all quarters of the globe. This race is commonly called Malay, and the stocks which formed it are Tartar and Hindu.

At what period these elements mixed and spread their numerous and wide-spreading branches over the neighbouring countries it is difficult to state ; but there is no doubt that the Malay Peninsula was populated by Hindus, who had penetrated as far east as Cochin China and ruled over

great empires in Cambodja several hundred years before the Christian era.

The Malay race now resembles very closely the population one meets with between Siam and Manchuria, and it is astonishing how very like the Chinese traders in Java who adopt the local costume are to the Malays ; they can hardly be distinguished from them, especially when the pigtail is cut off. On the other hand, numbers of natives in Java, if closely studied, have a physiognomy closely resembling that of the Chinese. The Malay people may be distinguished by a short, rather squat, robust, fleshy build, and by features entirely different from those of a European. The face is somewhat lozenge-shaped, the forehead and chin being sharpened, while the cheek bones are decidedly broad. The eyebrows, or superciliary ridges, project very little, and the eyes are narrowish and placed rather obliquely in the head, the outward corners being the highest. The nose is small, but has not, like the negro, the appearance of being flattened, and the apertures of the nostrils, which in the European are linear and parallel, in the Malay are nearly circular and divergent, for, the *septum narium* being much thicker towards the face, they are entirely out of the parallel. The mouth is in general well shaped ; the hair is harsh, lank, and deep black.

In general, however, the inhabitants of Java are somewhat darker than the tribes of the neighbouring islands, especially the inhabitants of the middle and eastern districts, who have more delicate features and bear a distinct impression of Indian colonisation, and a deeper admixture of Hindu blood, than in those of the western or Sunda districts.¹

¹ It seems almost as if another race were growing up in Java, namely, a Dutch-Malay type, for the numbers of mixed parentage are increasing yearly. The line of demarcation is very strongly drawn in the British colonies between full-blooded Europeans and half-castes, but not so in the Dutch East Indies. This is a mistake for which the Dutch will probably suffer one day. Every child lawfully acknowledged by a Dutchman has



A CLUB-HOUSE IN JAVA.



CONCORDIA CLUB, BATAVIA. (THE FIRST MILITARY CLUB OF JAVA.)

Complexion.—In complexion the Javans, as well as the other Eastern islanders, may be considered rather as a yellow than as a copper-coloured or black race. Their standard of beauty in this respect is a virgin-gold colour, except in some districts in the mountainous parts of the country, where a ruddier tinge is occasioned by a harsher and colder climate. They lack, however, that degree of red requisite to give them a copper hue. Even those that live in the highest districts in the Dieng or Tenger Mountains do not obtain the deep hue of the Negro or Hindu, or the clear bloom of the European.

In Middle Java around Matarem the natives or real Javans are distinctly happy, good-looking and more regular-featured, while their complexions are generally far clearer than their relations in other parts of the island. This is of course what might be expected, seeing that this was the seat of Hinduism for nearly fifteen hundred years.

Manners.—The manners of the Javans are easy, courteous, and respectful, even to timidity, thus denoting high birth. They have a great sense of propriety, and are never rude or abrupt.

In their deportment they are pliant and graceful, the people of position and refinement carrying with them an air of fashion, and receiving the gaze of the curious without being at all disconcerted. In their utterance they are circumspect and slow, pondering over what they say before speaking, though they are by no means deficient in animation when this is called for.

In Middle Java especially, where the courts of the native princes are, the politeness and courtesy of the inhabitants are very noteworthy. The countenance is mild, placid,

as full and complete rights as a Dutchman, and even if the child is not legally acknowledged it makes no difference to him. Important Government positions nowadays are sometimes held by these half-castes.

open and thoughtful, and easily expresses respect, gaiety, earnestness, indifference, anxiety, or bashfulness.

Marriages.—Marriage among the Malays is a matter of light importance, and separations take place on the slightest grounds, while new connections are formed with equal frivolity and caprice ; but in whatever light morality may view this practice, and however detrimental it would be to a population in a different state of society by leaving the children of the marriage so dissolved to neglect and want, it has no such consequences in Java.

Considering the age at which marriages are contracted, the choice of the parties cannot be always expected to be considerate or judicious. It may be observed, also, that the women, although they do not appear old at twenty, certainly lose that influence over their husbands which depends upon their beauty and personal attractions sooner than they do in colder climates.

In addition to this, there is little if any moral restraints among any class of the community, and the religious maxims and the indulgences practised by the Mahometan priesthood in regulating matrimonial sanctions have no tendency to produce constancy or to repress inclination, even allowing that such were possible in a tropical country with an enervating climate such as Java. Dissolutions of marriage are therefore of daily occurrence, and are obtained, one might say, without any grounds, but as children are always valuable, and as there is scarcely any trouble in rearing or providing for them, no change of mate in either party, however often it may occur, leads to their abandonment or neglect. Indeed, the ease of supporting the children, which renders the practice less detrimental to an increase of population, may be one of the principal reasons why it is generally followed and so little checked.

No professed prostitution nor promiscuous intercourse is the consequence of this weakness of the nuptial tie. The

tie is rather brittle than loose ; it is easily dissolved, but while it remains it generally, although not always, ensures fidelity.

Owing to the ease of obtaining matrimonial separations which allows a successive change of wives, the desire of possessing more than one at a time is not as a rule found in Java among the lower inhabitants. Polygamy is of course permitted, as in all other Mahometan countries, by religion and law, and all the sovereigns, princes and regents of the country practise it. The sultans are allowed four wives, the regents two, but besides this they may, according to custom, keep as many concubines as they please, and they all of them have harems of ten to fifty comely young maidens who are constantly replaced as soon as their looks begin to fade or their lord begins to weary of them. In these harems young half-caste girls—that is to say, of a Dutch father and a native mother—are frequently taken up and on the whole generally well treated. It also happens that the Chinese now and again present the sultan or prince, as the case may be, with a young Chinese girl brought down with considerable care from China and remarkable for her beauty. In return for this some benefit or other is expected to be granted to those of their race who are locally situated. Care, however, is taken beforehand to inquire whether such a gift is welcome, which it usually is.¹

The number of children born from these marriages or connections is extraordinary, and is said frequently to reach well over a hundred, and has even been known to exceed two hundred, the father in all cases of any such marriage being undoubtedly the same. One of the regents of Tuban was the father of certainly sixty-eight, and another one hundred and twenty.

This appropriation of numerous women as wives or

¹ The late Pangeran Adipati (the Crown Prince) of Jokjakerta's second wife was Chinese.

concubines is partly the result of the political power of the native authorities over the lower classes.

Formerly, in Bantam, polygamy is said to have been almost a blessing, there being, according to an old report, ten women to one man. One might be almost led to conclude that here was a case particularly favourable to polygamy, and that such an institution was an arrangement by Nature intended for the multiplication of the species rather than an abuse contributing to lessen it.

It is, however, still a question whether this report is entirely correct.

Titles.—The sovereign, who is nowadays called either Susuhunan (Susunan, Sunan) or Sultan, is the fountain of honour, the source of all distinction and the highest dignity in the land.

His family are called Pangerans (Princes) and his queens Ratus. The heir apparent, commonly called the Crown Prince, is the Pangeran Adipate and the prime minister is Raden Adipati. Governors of provinces, called by the Dutch Regents, are styled Bopatis, Tumungungs or Angabeis, and rank as nobility.

All the inferior chiefs, including those termed Radens, Mantris, Demangs, Luras, and others, except the heads of villages, termed Kuwus, Bukuls, Pating'gis (who are elected by the common people out of their own number for the performance of specific duties), may be considered as *petite noblesse*.

In judicial affairs the Jaksa is the chief (although the Panghulu or High Priest is actually higher in rank), and his assistant is called Paliwara and the officers of his court Kerta. These titles date to the days of Majapahit, if not further back.

On the establishment of the Mahometan religion, in ANNO JAVAN 1400, a new gradation of rank and order of titles was introduced by the Sultan of Demak as follows :—

The sovereign, instead of being called Ratu,¹ as in the Hindu time, took the name of Susuhunan or Sultan, and the queen was called Ratu. The title of Panambahan was conferred as the highest in rank next to the sovereign and above the princes of the blood, who were now termed Pangeran or Pangeran Aria. The princesses born of the queen were termed Ratu, and the daughters of concubines Raden Ayu. The sons of the princes were called Raden Mas until they were married, when they were termed Raden only; their daughters before marriage were called Raden Ajeng, and after marriage Raden Ayu.

When a Bopati, or governor of a province, is appointed he is furnished with a piagam² or letters patent, fixing his rank and the assignment of lands conferred upon him; also with a bawat or stick, similar to that of the payung, or umbrella, in length about 8 feet, with which it is his duty to measure the sawah or rice-fields.

When a chief of the rank of Mantri is appointed, he is furnished with a kris-handle and with a mat, which is intended to be carried behind him when he moves about, as well for use as to show his rank.

Rank.—The gradations of rank among the Javans is marked by the dress and by the manner of putting on the kris, but a more definite line is drawn by the payung or umbrella, which is subject to the following regulation, handed down from time immemorial:—

1. The sovereign alone is entitled to the golden payung.³
2. The ratu, or queen, and the members of the royal family to the yellow payung.
3. The family of the ratu and the family of the sovereign by his concubines to the white payung.

¹ Sometimes also Datu, Raja, Maharaja, Bitara.

² Sometimes called piagem.

³ It was assumed by the European Governor (Resident) or his representative, until Governor-General van Heutz in 1907 put an end to this practice.

4. The bopatis and tumung'gungs to the green payung, edged and mounted with gold.

5. The ang'ebais, rang'gas, mantris, etc., to the red payung.

6. The heads of villages and other petty officers to the dark payung.

The full titles of the susuhunan are—Paku Buvana,¹ Senapati Ingalaga,² Ngabdoerrahman,³ Sajidin,⁴ Panatagama,⁵ and of his rightful wives, Ratu⁶ with the honorary name of Kantjana⁷ or Kantjana Woengoe,⁸ Mas,⁹ Bendara,¹⁰ Sepoeih,¹¹ Anem,¹² Madu Retna,¹³ Ageng.¹⁴

The full titles of the sultan are—Amangku Buvana,¹⁵ Senapati Ingalaga,² Ngabdoerrahman,³ Sajidin,⁴ Panatagama,⁵ Kalipatoellah.¹⁶

It will be seen that the titles of both the susuhunan and the sultan are nearly the same, although according to the former, not only is that of susuhunan slightly above that of sultan, but Paku Buvana is also greater than Amangku Buvana; nor does the addition of Kalipatoellah to the latter improve the position. The sultan, however, thinks otherwise; hence there is a rivalry.

¹ "Axis of the Universe."

² "The Commander-in-Chief."

³ Really, Abd-ar-Rahman (Arabic), meaning "Servant of the Merciful," that is, of Allah.

⁴ Really, Shah-i-din (Persian), "Head of Religion."

⁵ "Regulator of Religion."

⁶ According to Javan history the first wife who bore the title of Ratu was Ratu Kalinjamat, the daughter of the third Sultan of Demak.

⁷ "Gold."

⁸ "Mauve Gold." These two titles (7) and (8) stand on a much higher plane than the following.

⁹ "Gold."

¹⁰ "Mistress."

¹¹ "The Old."

¹² "The Young."

¹³ The Sanscrit for Madhu, "honey," and Ratna, "jewel."

¹⁴ "The Great."

¹⁵ "The Person who has the Axis of the World on his Knees."

¹⁶ Really, Chalifat Allah (Arabic), meaning "Representative of Allah."



THE MILITARY AND CIVIL HOSPITAL AT TJILATJAP.



THE CROWN PRINCE OF JOCKJAKARTA IN PROCESSION WITH THE ASSISTANT-RESIDENT.

Sometimes the first wife of the susuhunan is called Ratu Paku Buvana, but the first wife of the sultan is never called Ratu Amangku Buvana, but Ratu Sultan. The wives of the regents or bopatis are called Raden Ajoe or Ayu.

I may here remark that the whole population of Java and Madura, from the susuhunan and the sultan down to the lowest, is given in quite a remarkable manner to etiquette and personal politeness and courtesy towards rank. This characteristic is not only to be seen in the higher ranks, but also in the lower, unlike what one finds in Europe or America among the people of the lower classes. In a word, one has to do in Java with a people of extremely high rank and derived from a very high-bred race. Of course, in the coast ports, where the natives have been brought more in contact with Europeans, their manners have suffered slightly, and they have become rather more free when dealing with European civilians.

Dwellings.—The cottage or hut of the common man costs at its first construction from 2 to 6 rupees, say, 3s. to 10s., and is built on the ground. The sides or walls are made of bambus, flattened and plaited together, and the roof is either thatched with long grass, with the leaves of the nipa, or with a kind of bambu sirap. The form and size of these cottages, as well as the materials employed, depend of course to a certain extent on the circumstance of the individual, and whilst in some cases plaster of a sort adorns the inner walls in order to keep out wind and weather, the construction is so slight as scarcely to be a protection against either. In the eastern districts, where a greater scarcity is felt of the requisite materials than in the western, wood is more frequently used than bambu, and the interior as well as the front verandah are raised 2 feet from the ground.

Windows are never made, not being necessary. The

light is admitted by the door alone. This deficiency is not an inconvenience in a climate where all domestic operations can be and are performed in the open air, and where shade from the sun rather than shelter from the weather, except during the rainy season, is required.

The women perform their usual occupation of spinning or weaving in the front of their houses, where they are protected from the rays of a vertical sun by an extended projection of the pitch of the roof. Their household duties are also slight, and mainly consist in boiling rice and having the daily dried fish and chillies ready for their master when he returns from his agricultural labours, which last generally from 7 in the morning until mid-day.

The houses of the regents are distinctly more imposing in appearance, and are built mainly of wood or bricks and plaster, and contain generally six or seven rooms, besides out-quarters for the attendants. In front there is usually a covered assembly hall, broad and capacious in size, with supports and beams of thick wood, called the mendopo or bangsal, that is, meeting-place.

Such a habitation costs roughly about £1,000, but if the political importance of the regent happens to be rather great, it may cost as much as seven or eight times that amount. The floorings of these buildings at the present time are as a rule made of elegant European tiles, and it is not an uncommon thing, to please some fad of a regent, or in return for valuable and confidential service on some special occasion, for the Dutch Government to show their appreciation by giving a special new flooring in some more expensive pattern than the one hitherto in use.

The Chinese live either in wooden shanties, like the common natives, or in brick buildings, according to their means. The elders or rich ones among them, however—and there are many—live in magnificent palatial mansions,

which have cost from £10,000 to £20,000, and in a few instances considerably more.¹

Native Palaces.—The dwelling or palace of the sultan or susuhunan is distinguished by the names Kadaton or Kraton, being contractions, the former probably from Ka-datu-nan and the latter from Ka-ratu-nan, “the place of the Datu or Ratu” (prince). Those of the regents or bopatis are styled Dalam.

The kraton, or palace of the prince, is an extensive square, surrounded by one or more high walls, without which there is a moat or deep ditch. In the front is a large open square sometimes covered with grass, called the alun alun. On the walls of the kraton, which are several feet thick and therefore can be considered as the rampart of a citadel, are cannon, and inside are numerous spaces divided up by thick walls forming squares and compartments, each having its own particular designation and answering some specific purpose existing in bygone ages.

Separate quarters are assigned within these walls to the royal family, and to all those who may be considered by birth or otherwise as attached to the person of the sovereign, or to that of the princes.

In the centre of the alun alun are always two waringen trees, which have been considered as a mark or sign of the royal residence from the time of the Hindu colonisation.

¹ One of the many mansions of the rich Samarang Chinese merchant Major Oei Tiong Ham at Gegadjie (his daughter Angelina married the Englishman B. Caulfield Stoker, late manager of Messrs. Burt, Myrtle & Co., Java, but now living in London, and working at the head of his father-in-law's business) is said to have cost not less than £40,000, but this probably included the laying out of magnificent and wonderful pleasure-gardens, such as one reads of in Marco Polo's travels. The palace, however, of the Captain Chinaman of Pasoeroean, the owner of the sugar fabrick Pleret (formerly in the possession of the Smissaert, van der Eb, and Heyn families), is estimated to have cost the equivalent of at least £50,000 to £60,000 sterling, and may actually have cost very much more. The floorings, galleries, terraces, etc., throughout are of the most superb white marble.

On one side of the alun alun the Mahometan mosque invariably stands.

The alun alun and waringen trees are also customary wherever there is a regent or nobleman residing. They are not limited to sovereigns only, and are a sign of nobility. The alun alun, I suppose, corresponds to our village green, being the place where the community congregate on high days or public holidays, that is, religious festival days in the Mahometan calendar.

Furniture.—The furniture of the huts of the lower orders is very simple, and consists of but few articles. Their bed, as with the Sumatrans, is a fine mat with a number of pillows, and has generally some part in coloured cloths extended over the head in the form of a canopy. They use neither tables nor chairs, but their meals are served up on large brass or wooden waiters, with smaller vessels of brass or chinaware for the different kinds of food. They sit cross-legged, and, in common with other Mahometans, only use the right hand at their meals. They usually take up their food between the fingers and thumb and throw it into the mouth.

In the dwellings of the higher classes the articles of furniture are more numerous and expensive. Raised beds, with many pillows piled one above the other, and mats and carpets are common in all ; and many of the rooms of the chiefs are furnished with looking-glasses, chairs, tables, etc. Most of these were at first introduced for the accommodation of European visitors, but are now gradually becoming luxuries, in which the chiefs take delight, and being the luxuries of the present generation they will be the necessities of the next.

They are very partial to illuminations, and, on days of festivity, ornament the gardens by their dwellings with much taste and design by working the young shoots of the coconut, the bambu, and various flowers in festoons and other contrivances.

The canopy over the table, bed, or other place selected for any particular purpose is universal.

This canopy is generally of chintz, which in olden days came from Western India.

In all the provinces the chiefs have rooms fitted up in the European style for the accommodation of the officers of Government, and none of them hesitates to sit down at table with his visitor and join in the entertainment.

Dress.—The natives of Java are in general better clothed than those of India. In the mountainous districts warm clothing is indispensable. Formerly they were clothed from the produce of their own soil and labour, but in more recent times they have willingly taken their dress, or the material to make it, from foreign countries, and the looms of Manchester are kept busy for them. Previous to the introduction of Dutch and English products, blue cloth and chintzes were extensive articles of import from Bengal, even to the days almost of Majapahit, when a trade was carried on with the Coromandel coast by small vessels of 15, 20, or 30 tons.

The chiefs consume considerable quantities of broadcloths, velvet, and other fabrics in the jackets, pantaloons, and other articles of dress they now wear.

Although the general character of the native costume is preserved, the tendency is to adopt many of the more convenient parts of the European dress. Under the institutions of the country a particular kind of dress is assigned to each rank, and there are some patterns of cloth the use of which is prohibited, except to the royal family. These sumptuary laws have become, however, more or less obsolete.

There are also distinctions of rank expressed by the different modes of wearing the kris.

The principal article of dress common to all classes in the archipelago is the *sarong*, which has been described as not unlike a Scotchman's plaid in appearance, being a piece of

cloth with allegorical designs on it about 6 or 8 feet long and 3 or 4 feet wide sewed together at the ends, forming, as some writers have described it, a wide sack without a bottom or top. The sarong is either worn slung over the shoulders as a sash or tucked round the waist and descending to the ankles, so as to enclose the legs like a petticoat.

The patterns in use among the Malays and Bugis are universally tartan, but besides these the Javans pride themselves on a great variety of others, the common people only wearing the tartan pattern, while others prefer the Java *batek* or painted cloths. On occasions of state they wear instead of a sarong a cloth termed *dodot*, which is made either of cotton or silk, but generally of the latter, and is much larger. This is worn in the same way, but from its size and the manner of its being tucked up it falls in a kind of drapery which is peculiar to Java.

The men of the lowest class generally wear a pair of coarse short drawers reaching towards the knee, with the *sarong* or *jarit* (worn as the ordinary clothing of the country, which differs from the foregoing sarong in not being united at the ends) folded round the waist and descending below the knees like a short petticoat. This cloth sarong is, however, tucked up when the labourer is at work, but loosened and allowed to descend to its full length in the presence of and before addressing a superior.

It is fastened round the waist by a narrow waistband or belt called a *sabuk*.

Some Javans also wear a jacket called *kalambi*, rather like what is known as the Eton jacket without its point at the back. Especially is this the case with the native attendants on Europeans and in Government or mercantile offices.

A handkerchief is always folded round the head. With the Malays this handkerchief is generally of the tartan pattern, but among the Javans it is of the *batak* cloth, and put on more in the manner of a turban than is the handker-



RESIDENT'S HOUSE, PEKALONGAN.



ASSISTANT-RESIDENT'S HOUSE AT TJILATJAP.

chief of a Malay, the crown of the head being covered with it and the ends tucked in. The kris, except in the case of the Javans, is less worn nowadays than formerly, but when worn it is suspended at the back half above and half below the waist, at an angle of 45 degrees.

The women wear the sarong tucked round their loins, but folded somewhat differently from that worn by the men.

The waistband or girdle by which it is fastened they term *udat*.

Round the body, passing barely above the breasts, close under the arms and descending to the waistband, is rolled a tight body cloth termed *kemban*.¹ The women wear nothing on their heads, although the belles sometimes carry a sweet-smelling flower in their hair, a camellia perhaps, or something equally pungent.

A man's dress costs him 5 or 6 rupees at the most (10s.), and a woman's only slightly more.

The children of the lower orders go naked until near the age of puberty, which is earlier in the tropics than elsewhere.

In the court or full dress the shoulders, arms, and body down to the waist are entirely bare. This is of course only in the case of the men, the women having only the shoulders, arms, and a portion of the body bare, the *kemban* being rigidly drawn tight over the breasts as low as possible without actually showing them.

The higher orders and the regents nowadays assume European clothes when moving in public, consisting of white drill pantaloons and a closed-up patrol jacket of the same material. The sultan and susuhunan on state occasions frequently adorn themselves in the Dutch general's uniform, and wear the medals and orders they have earned for good conduct.

Since the loss of the Makota, or golden crown of Majapahit, the principal diamond of which has sometimes been said to

¹ Nowadays this is hardly in use outside the kraton.

have been as large as a pigeon's egg, both the susuhunan and sultan on public occasions, when they have to meet the European authorities without the reception being a state one, wear a velvet hat or cap of a particular fashion somewhat differing at each court. That of the susuhunan resembles what is called the Madura hat in consequence of its being still worn by the Madura family, and that of the sultan has a golden garuda¹ affixed at the back and two wings of gold extending from behind the ears.

They both wear breeches, stockings, shoes and buckles after the European fashion.

The *jamang* or golden plate, which was worn over the forehead, as well as a variety of golden ornaments worn round the neck and arms, which formerly made up the most splendid part of the costume, are now disused except at marriages, when an endeavour is made to exhibit the ancient costume of the country in all its brilliant gorgeousness and uniqueness.

The following picture of a Javan beauty, taken from one of the most popular poems of the country, will serve to place before the reader the standard of female elegance and perfection in the island, and to convey an accurate idea of the personal decorations on nuptial occasions and in dances. It will at the same time afford a representation of what may be considered to have formed the full dress of a female of distinction before the introduction of Mahometanism.

The extravagant genius of Eastern poetry can paint such fantastic images as none other can. The poem strangely reminds one of the "Songs of Solomon," so much so that either of the compositions might be ascribed to the author of the other.

"Her face was fair and bright as the moon, and it expressed all that was lovely.

"The beauty of Raden Putri far excelled even that of the

¹ The ancient mythological sacred bird of the Hindus of Java.

widadari Dewi Rati : she shone bright even in the dark, and she was without defect or blemish.

" So clear and striking was her brightness, that it flashed to the sky as she was gazed at : the lustre of the sun was even dimmed in her presence, for she seemed to have stolen from him his refulgence.

" So much did she excel in beauty, that it is impossible to describe it.

" Her shape and form were nothing wanting, and her hair when loosened hung down to her feet, waving in dark curls : the short front hairs were turned with regularity as a fringe, her forehead resembling the chendana stone.

" Her eyebrows were like two leaves of the imbo tree ; the outer angle of the eye acute, and slightly extended : the ball of the eye full, and the upper eyelash slightly curling upwards.

" Tears seemed floating in her eye, but started not.

" Her nose was sharp, and pointed : her teeth black as the kombang : her lips the colour of the newly-cut mangustin shell.

" Her teeth regular and brilliant ; her cheeks in shape like the fruit of the duren : the lower part of the cheek slightly protruding.

" Her ears in beauty like the gianti flowers, and her neck like unto the young and graceful gadung leaf.

" Her shoulders even, like the balance of golden scales, her chest open and full, her breasts like ivory, perfectly round and inclining to each other.

" Her arms ductile as a bow, her fingers long and pliant, and tapering like thorns of the forest.

" Her nails like pearls, her skin bright yellow, her waist formed like the patram, when drawn from its sheath ; her hips as the reversed limas leaf.

" Like unto the puduk flower when hanging down its head, was the shape of her leg ; her foot flat with the ground ; her gait gentle and majestic like that of the elephant.

" Thus beautiful in person she was clothed with a chindi patola of a green colour, fastened round the waist with a golden hilut or cestus : her outer garment being of the mega mendung, dark clouded pattern.

" Her kembangan [upper garment] was of the pattern jing'gomosi edged with lace of gold : on her finger she wore a ring, the production of the sea, and her ear-rings were of the pattern noto brongto.

" On the front of the ear-studs were displayed the beauties of

the segara munchar pattern [emeralds encircled by rubies and diamonds], and she bound up her hair in the first fashion, fastening it with the glung [knot] bobokoran, and decorating it with the green champaka flower, and also with the gambir, melati and minor flowers, and in the centre of it she fixed a golden pin, with a red jewel on the top, and a golden flower ornamented with emeralds.

“ Her necklace was composed of seven kinds of precious stones, and most brilliant to behold ; and she was highly perfumed, without it being possible to discover from whence the scent was produced.¹

“ Her jamang [tiara or head ornament] was the fashion sodo saler and richly chased, her bracelets were of the pattern glangkana, and suited the jamang.

“ Thus was the beauty of her person heightened and adorned by the splendour of her dress.”

Meals.—The Javans have two meals in the day, one just before noon and one between 7 and 8 o'clock in the evening. The former, which is the principal meal, corresponds with the European dinner, and is called mangan-awan, or “ day meal ” ; the latter is termed mangan wenge, or “ evening meal.” They have no regular meal corresponding with the European breakfast ; but those who go abroad early in the morning usually partake of a basin of coffee and some rice cakes before they leave their homes, or purchase something of the kind at one of the numerous warongs (stalls) which line the public roads and are to the common people as so many coffee or eating-houses would be to the European. Rice, coffee, cakes, boiled rice, soups, ready-dressed meats and vegetables are at all times exposed in these warongs. What is thus taken by the Javans in the morning to break their fast is considered as a whet only and is termed *sarap*.

The Javans eat their meals off the ground. A mat kept for the purpose is laid on the floor (which, when the meal is over, is again carefully rolled up, with the same regularity

Women in the East used sometimes to drink strong-smelling scents, which exuded later on from the pores of their body.

as the tablecloth in Europe), and a plate of rice being served up to each person present, the whole family or party sit down to partake of the meal in a social manner.

A principal dish, containing the sambel, jangan, or other more highly seasoned preparation, is then handed round or placed in the centre of the company, from which each person adds what he thinks proper to the allowance of rice before him.

Water is the principal and almost exclusive beverage, and, among people of condition, it is invariably boiled first and generally drunk warm. Some are in the habit of flavouring the water with cinnamon and other spices, but tea when it can be procured is drunk by all classes at intervals during the day.

There are no natives in Java who cannot obtain their kati or $1\frac{1}{4}$ lbs. of rice a day, with perhaps a little dried fish, salt, and leaves. Where rice is less abundant its place is supplied by maize or Indian corn, or from the variety of beans which are cultivated. Even should a family from one cause or another be driven into the woods, they would still be able to obtain a bare subsistence from the numerous nutritious roots, shoots, and leaves with which the forests abound.

Famine is therefore practically unknown ; and although now and again partial failures of the rice crop may occur, it is seldom so extensive as to be generally felt by the whole community.

Fermented Liquors.—Generally speaking the Javans and Malays are sober peoples. Two kinds of fermented liquor are, however, prepared by the Javans called *badek* and *brom*, the former from rice, the latter almost exclusively from ketan or glutinous rice.

Arrack is prepared by the Chinese, who drink of it on occasions of festivals and at parties.

Siri or Betel.—The chewing of betel-leaf (*siri*) and the areka-nut (*pinang*), as well as of tobacco (*tambako*) and

gambir, is common to all classes. The siri and pinang are used much in the same manner as by the natives of India.

These stimulants are considered nearly as essential to comfort as salt is among Europeans.

The commonest labourer contrives to procure at least tobacco and generally siri, and if he cannot afford a siri-box, a small supply will be usually found in the corner of his handkerchief. Every petty chief and his wife have their siri-box, that of the man being termed *epok* and that of the woman *chepuri*. As in the case of the Sultan of Jogjakerta, these siri-boxes are sometimes of solid gold and bejewelled with rare workmanship; they are then considered as family heirlooms. Cardamoms and cloves make up part of the articles in the siri-box of a person of condition and quality.

Opium.—The use of opium has struck in certain districts rather deeply into the habits of the natives, but not nearly so much as might have been expected; and although its effects are generally held to degrade the character, enervate the energies, and influence the morals, it is seldom one meets in Java with a native who has reached such a stage. The Chinese, however, freely use opium, and among them various degrees of deterioration from its malignant influence may be found.

Opium is either eaten in its crude state as *manta* or smoked as *chandu*.

RELIGION, I.—The religion professed by the inhabitants of the country is Mahometanism, but this is accompanied by many superstitions, beliefs, and observances coming from the religion of their idolatrous ancestors. In the inland districts the natives have no abstract ideas on religion, and can indeed form no ideas but such as arise immediately from the gross observations of their senses. The tenets, however, of Mahomet are in general strictly observed, sometimes indeed the native not knowing the reason why.



THE HOUSE OF THE PUBLIC NOTARY OF REMBANG, WITH THE NOTARY,
JHR. J. W. H. SMISSAERT, STANDING IN THE FRONT.



CLUB AT PASOEROEAN.

The mosques or places of prayer are dispersed all over the country, and there is no town of any importance whatever that has not one. They are mostly built of wood, and have neither outward show nor interior ornament to recommend them to the curiosity of strangers. Near Cheribon are still to be seen the remains, fairly preserved, of a very handsome mausoleum, with the mosque belonging to it, erected by the first Susuhunan of Cheribon five hundred years ago. In the interior, and formerly outside, stand various old China blue vases and plates, presented to the Mahometan prince by the captain Chinaman whose daughter was taken into his harem. A junk-load of such blue was presented, in token, it is said, of high consideration, but more likely with a view to securing greater favour for himself and his countrymen.

This mosque and mausoleum may rank among the most curious and magnificent of Mahometan antiquities in Java. It is called Astana, or the Palace of the Susuhunan Gunung Jati (" Monarch of the Mountain Djati Trees ").

It is a vast semicircular space or amphitheatre, seemingly cut out of a rock, " the mountain of the djati trees," and divided into five areas or courts, each rising above the other and communicating with one another by steps.

The front is guarded by a row of palisadoes ; beyond these is a wall about 5 feet high, faced with little white and painted Chinese tiles, in the middle of which seven steps lead up to the first court, the largest and broadest of the five. It is 100 feet in front ; on the wall are ranged nine superb and inconceivably large china vases with flowers ; two large trees grow on the left of this area. Another wall exactly similar to the first divides this from the second court ; at the foot of this wall stand, or did stand, on the right hand seven and on the left six large and beautiful china vases with flowers. The ascent to the second court is by five steps ; and upon the wall are placed, on each side,

four similar large china vases ; eight trees are planted in this court. The vases are so disposed that each one stands between two trees, except on the left side, where the irregularity is observable of two trees standing together. In this court are the remains of the handsome Javan houses intended for the reception of the princes or great men who might come upon a pilgrimage to this sacred place. Four china vases with flowers are also placed in the upper part of this court at the foot of the third wall.

A neatly-paved path leads quite across the second court to the entrance of the third, which is through a handsome gate and up four steps ; but this court, which is much smaller than the other two and is guarded by a similar wall, has nothing in it. No Christians are allowed to go higher than this place, although the Governor-General Daendels forcibly penetrated as far as the fifth and even the last court. There is no wall before the fourth, but merely an ascent by five steps cut in the rock ; here is a magnificent Moorish temple or mosque, with three roofs one above the other, all decreasing in size upwards ; and the area is planted with trees on each side of the mosque. The ascent from this to the last and smallest of the courts is probably likewise by steps, but they are hidden by the mosque and trees in the fourth. This farthest and most elevated area seems to be only eight or nine paces broad on each side, but it runs some way back in a semicircular shape ; in it is seen only the tomb itself of the holy man. This, by reason of the great height and distance, cannot be accurately described ; it seems, however, to be a handsome and lofty structure, with a large arched gate and some pretence to a profusion of gilding.

It is necessary to observe that the whole is formed on a slope, so that each court has a considerable acclivity before reaching the entrance of the next ; this renders the site of the tomb very elevated. The entrances are all

closed by small railed trees. The tomb and the buildings appertaining to it are kept in very indifferent repair and are falling fast to ruin.

Before the introduction of Mahometanism and the construction of these mosques, the Javans worshipped at the stone temples erected all over the island by the Hindus, and a priesthood was maintained with an elaborate system and on an unheard-of scale. There is perhaps no place in the world more suitable than this land of perfect perpetual summer for a priesthood to assume dimensions out of all proportion to the need. The delight of the genial climate to themselves—for they all lived in the mountains or cool districts—and the superb beauty of the country, with its thirty-five volcanoes dedicated by them to the god Siva, must have induced them to coerce the Hindu rulers in Hindustan into sending pilgrims and colonists to reside here and build temples. Their hold on the people must also have been great, for they kept away (being in a bounteous country and soil) the evil effects of famine and drought so frequent in their own land; but in the end, from Middle Java, with all their supernatural power, they did not keep away disease, which was possibly an importation.

The Hindu priesthood of Java must at one time have counted many thousands, and it is these men, who were for the most part exceedingly clever, whom present generations have to thank for the poems and literature of various kinds which they have left behind them.

Lontar Leaves and Hindu Records.—These literary remains were written on lontar leaf, the leaf of the lontar palm. It is soaked in water for two weeks, after which it is dried; the leaf is then folded in two and is written upon on both sides with a sharp pointed knife, that is to say the characters are scratched on the leaf; in order to make the writing more distinct, the leaf is sprinkled over with the

dust obtained from the kemiri fruit, burnt and reduced to powder.

Leaves thus treated are never eaten by insects, and last several hundreds of years. When the leaf was getting old, the priest copied the records before destroying them. In later years, however, when Buddhism was beginning to decay in Java, the lontar records were not duplicated; thus the greater part of the extremely valuable ancient literature of Java, which contained a fund of information about early times, was lost.

In Bali there are still among the Hindu priests books full of lontar leaves held together by a piece of twine run through a hole in each leaf and then fastened to two little pieces of wood on the outer sides to keep the whole firmly together.

Arabian Nights.—Most of the three higher castes in this island, as well as the well-to-do Sudra tribe, are acquainted with the Kawi or Sanscrit literature, and Wajang, or theatrical performances, have not a little to do with this. There are also frequent readings and songs from the fascinating Kawi legends; and it is said that the famous “Thousand-and-One Nights” was written in no other place than in this very island.

That they are not of Arabian origin, but a translation from an Indian work, has been conclusively proved by the researches made by von Schlegel, and the “Tantri-Kamendaka,”¹ which is written in pure Kawi, teems with

¹ Here we also have the account of a prince Praboe Sri dara Patra, who at the height of his power, and surrounded by grandeur, still failed to find any gratification excepting in women, and every day he insisted upon having a fresh and beautiful girl brought to him. To save her father, Patih Bande S'warya, who had incurred the prince's anger by being unable after some years to find him any fresh victims, Dijah Tantri, his lovely daughter, offered to go and share the prince's bed herself. When he began to overwhelm her with caresses, she was clever enough to free herself from his amorous embraces and coaxed him into listening to a short tale. She succeeded in so fascinating him that he could think of nothing else, and at

moral fables which remind one at every turn of the stories out of the "Thousand-and-One Nights." It is worth noticing, too, that just at that period numbers of Arabian missionaries were making constant voyages to the Indian Archipelago. Balinese literature is rich in works in Kawi of great value on matters historical, philosophical, judicial, religious, poetical, and humorous ; in fact to a great degree it may be considered as the product of the old Buddhist priesthood of Java, which fled to Bali five hundred years ago before the Mahometan whirlwind had stripped their religion of all its beauty, elegance, and pomp.

That in this hurried flight thousands of lontar records must have been lost it is hardly necessary to observe, but it is also likely that thousands were also lost when the entire populace of Middle Java deserted the Brambanan, Borobudur, Tjandi Mendut, and other temples, as it were, in a single night. Such importable and unnecessary accessories as archives would naturally be left behind. These when rediscovered, if they ever were, would through age have become valueless.

RELIGION, II.—Buddhism is an idolatrous worship of gods ; at the same time it is a religion with more in it than is generally thought, and its tenets or creed are in themselves faultless.

It is the chief religion in Asia beyond the Ganges, and in China, Japan and Ceylon, and originated with Gautama Siddhartha, the Sakya Muni Siva, generally termed Buddha or "the Enlightened," a prince of Kapahvastu, in Central India, who is said to have been born B.C. 623 and to have died B.C. 543. This prince is said about B.C. 594 to have

last he fell asleep out of sheer weariness. Thus it was the next night, when the prince conceded to her the privilege to continue her story, and so was it a third and fourth and so on, till at last all her charming tales (which are contained in the manuscript), her beauty, and her cleverness made her so indispensable to the prince that he was quite cured of any desire ever to see any one else.

become disgusted with the behaviour of the Brahmins,¹ whose loathsome ways he abhorred. He therefore retired from the world, and then came forth anew and preached his religion; this enjoined strict morality, and forbade killing, stealing, adultery, lying, drunkenness, and every shade of those vices, whilst he declared charity or love to be the source of all virtues. The broad outline of Buddha's teaching is more easy for comprehension in the four following dogmas:—

1. Existence is sorrow.
2. Desire for existence is the cause of sorrow.
3. The cessation of sorrow is effected by the eradication of desire.
4. The way of living which leads to the extinction of sorrow is the practice of the right faith, right resolve, right speech, right action, right effort, right recollectedness, right meditation according to the example of Buddha.

This is the religion that penetrated the whole of India and the East Indies in the tenth century, as recorded in the ancient Vedas, or sacred books of the Hindus written in Sanscrit.²

Buddhism at one time in Java may have inclined slightly towards Jainism, which is an offshoot of Brahminism, differing in that it recognises a divine personal Ruler of all, and so politically leaning towards Buddhism. Its followers believe, however, that the world has been in existence from all eternity, not having been created, and that it will last for ever.³

¹ Brahmins derive their name from Bramah, one of the three beings whom, according to the theology, God created, and with whose assistance he founded the world.

² "Veda" means knowledge. The earliest Veda is said to be B.C. 600, although an ancient work of the Brahmins, the "Manava Dharma Sastra," was compiled in B.C. 1300 from works of still greater antiquity.

³ The Jains are a Hindu religious sect living in India at the present day.

No doubt the Javans were ripe for the Mahometan religion when it came, and probably had long ago expressed in silence the prayer of the great Mexican sovereign Nezahualcoyotl, as recorded by the Spanish historian¹:—

“Truly the gods which I adore, idols of stone and wood, speak not nor feel; neither could they fashion the beauty of the heavens, the sun, the moon, and the stars, nor yet the earth, and the streams, the trees, and the plants which beautify it. Some powerful, hidden and unknown God must be the creator of the universe, and He alone can console me in my affliction, or still the bitter anguish of this heart.”

LANGUAGE.—The extensive prevalence of the Java language and its connection with the languages of continental India were not overlooked by those intelligent Europeans who visited these islands at an early period. We find Valentyn² quoting the authority of Flacourt, who published his work in 1661, and of the Portuguese João de Barros for conclusions with regard to the extent of Javan commerce in remote ages, drawn from the resemblance traced between the languages of Java and those of Madagascar and Ambon. The Javans, this author observes,

“must doubtless have visited Coromandel and Malabar, for the high, or court, language is, in three parts out of four, derived from the Sanscrit or Brahminical language. Many Malabar words also enter into the composition, and it is besides composed in a great measure from the Dekan, which is the ancient language of India, in the same manner as the Sanscrit is the sacred language.”

The native populations of Java, Madura and Bali are most intimately connected with each other in every respect, they use exactly the same written character, and it appears that one generic language prevails throughout these islands. Of this generic language, however, there are four dialects,

¹ See Prescott's "Mexico."

² Volume IV., Book II., Chapter I.

differing so materially from each other as to be generally considered separate languages. It is, however, rather by an admixture of other languages than by mere difference of dialect that they are distinguished.

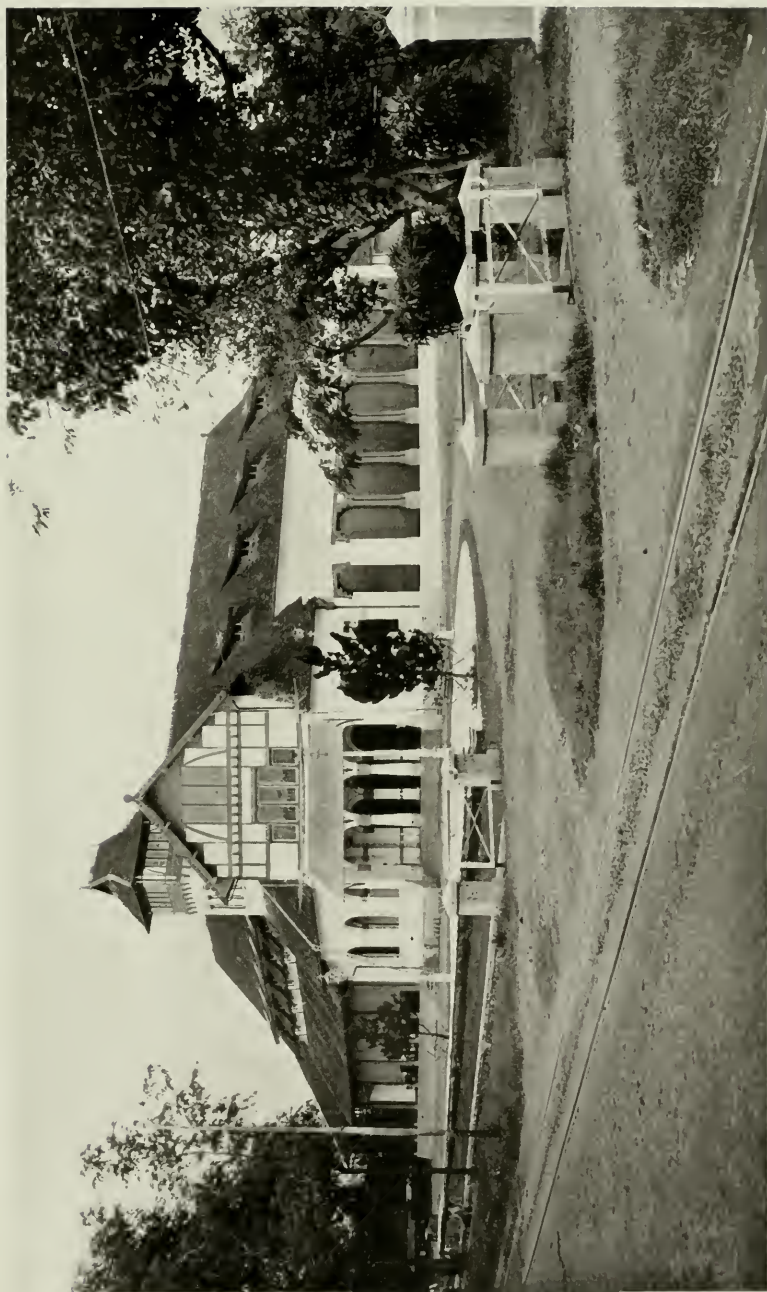
These dialects or languages are the Sunda, spoken by the inhabitants of the mountainous districts of Java west of Tegal; the Jawa or Javan, which is the general language of Java east of Cheribon and throughout the districts lying on the north coast of the island; the Madura and the Bali, being the dialects or languages belonging to these islands respectively.

How far these dialects or languages are radically the same and justify the opinion that one generic language prevails through this area may be seen by an inspection of the vocabularies given in Sir Stamford Raffles' "History of Java." The Lampung language is also there added on account of the nearness of that part of Sumatra to Java and of the intimate political connection which at all times has subsisted between these peoples, and in order to enable the reader to compare all these languages with the principal language of the archipelago the Malayan language is taken into account.

Such words only are given as are used in conversation and in ordinary epistolary composition; but the inhabitants of these islands also have a classical language altogether distinct from the ordinary language of the country; this is to them what the Sanscrit is to the Pracrit language of Hindustan, and what the Pali is to the Burman and Siamese.

This language is termed Kawi.¹ A comparison between the vocabularies of the Sanscrit, the Pali, and the Kawi languages will show conclusively how nearly they are allied and that all three are from one common or generic language.

¹ The term "Kawi" is borrowed from the Sanscrit.



NEW CLUB, SAMARANG. (BUILT 1909.)

In Kawi nine out of ten words are Sanscrit or of Sanscrit origin.¹

Unlike the Malayan, the Javan language owes nothing to the Arabic, except perhaps a few terms introduced in later years connected with government, religion, and science, which have been admitted together with the religion and laws of Mahomet. In general, however, the language as well as the ancient institutions of the country have been little affected by the conversion. The Javan language was abundantly copious before the introduction of Arabic literature, and had few or no deficiencies to be supplied. This is a token of an antiquity greater than is generally acknowledged, and of a high state of civilisation which can only have been the result of long ages.

The Javan language illustrates in some degree the present character of the people. It is rich and refined; it abounds in synonyms and nice distinctions; it is varied and easily made to bend and suit itself to every occasion; it is in a high degree expressive of great power or servility; it is melodious and very pleasant to the ear; in fact, the general character of this language is in every way indicative of an early advanced state of civilisation, which had already reached maturity at a time when most people imagine it was but beginning.

In the ordinary Malayan language used in Java numerous Portuguese words are to be met with. These are mostly for every-day articles of food, etc., introduced into Java by the first Portuguese. The Malayan language used in Java is divided into an aristocratic dialect and a popular dialect. The former is used by the native officials and regents amongst

¹ If the civilisation of the present-day Javans was derived, as it undoubtedly was, from an earlier system, so, it may be observed, is their language. Kawi, or old Javan, is derived from Sanscrit, and how long it took to transform this into Kawi is difficult even to surmise. It must, however, have taken many centuries. Stones inscribed in the Kawi language as old as A.D. 400 have been found in the archipelago.

themselves, and the latter by the coolie or working classes. In the commercial circles the popular dialect is used when speaking to servants.

The Javan alphabet is derived from the Devanâg'ari.¹

POETRY.—Among the numerous literary and poetical compositions left behind by the old Hindu Priests in the Kawi language is the Brata Yudha, or "Holy War," or rather the "War of Woe," a very celebrated epic poem, composed, some say, by Puseda, a learned Pandita, in the year 1079. Others, however, maintain it was composed in 706 of the Javan era (A.D. 781), while the empire of Mendang Kamulan was at the height of its glory, and the temples of Brambanan were served by a number of clever men, several of whom were capable of composing such a production.

The Javans say that the scene of the exploits which this poem records was laid in Java and Madura. There are numberless other productions, all worthy of attention, but requiring a special knowledge of the language of the country and of the customs of the people to fully appreciate.

MUSIC.—The Javan musical instruments are numerous and peculiar, being generally unlike those found in other countries.

The oldest of all is the angklung, a rude instrument made of bambu. This instrument is formed of five or nine tubes of bambu, cut at the end after the manner of the barrels of an organ. These, which are of graduated lengths from about 20 to 8 inches, are placed in a frame, in such a manner as to move to a certain extent from their position and to vibrate on the frame being shaken. A troop of from ten to fifty mountaineers, each with an angklung and accompanied by one or two others with a small drum played with the open hand, as in Hindustan, now and again performs on occasions of festivity in the western part

¹ Devanâg'ari means literally "town-script of the gods." These characters are those most widely understood by Hindu scholars, and those in which Sanscrit works are usually printed, unless they are printed in Roman letters, as sometimes occurs.

of the island, and the sound is peculiar but rather pleasing, although quite unlike that of any other instrument. According to the Javans this instrument is of great antiquity, and was discovered by the accidental admission of air into a bambu tube used for carrying water,¹ which was left hanging on a tree, the angklung being the first improvement upon this Æolian music.

The principal instruments among the Javans are those which make up the gamelan. There are several varieties of gamelan; the most perfect of all is, however, the gamelan salindro. There is also the gamelan pelog, the instruments of which are larger and louder than the others. The bonang or kromo has usually fourteen notes. The gamelans pelog and bonang are the ones employed in wayang performances.

One gamelan is called mang'gang, from its resembling the croaking of frogs. The gamelan srunen is used in processions of state and in war, being properly speaking the martial music of the country, in which, besides the ordinary instruments, a particular gong and trumpets of peculiarly weird and strange tone are introduced, rather reminding one of the Chinese cylindrical trumpets, which are supposed to be similar to the trumpets used when the Israelites marched round the city of Jericho and the walls are stated to have fallen.

Outside all comparison with any of the other gamelans, not including the gamelan salindro, which is the finest which can be used by any ordinary person, is the gamelan sekaten, which resembles the pelog, except that the instruments are still larger and louder.

This beautiful set of instruments is restricted to the use of the sovereign, and seldom played except on great occasions, such as during the eight days of the festival of Mulut, or at the wedding of the Pangeran, Adipati and the like.

The gamelan belonging to the Sultan of Jockjakarta is of great antiquity, and the sounds of the instruments have

¹ Still a common method of carrying water.

become mellow through age. To hear a performance on these rare occasions is worth a great deal, and once heard, the tones continually reverberate in the head, and one's remembrance of them is delightful and pleasing. In the early days in Java when the monarch was displeased or failed to find any gratification in anything else, it is said he was generally brought round by the soothing and stately sounds of the gamelan.

The annexed plate will afford a better idea of the form of the instruments composing a gamelan set.

Most of the gamelan instruments resemble the staccato or harmonica, and the sound is produced by the stroke of a hammer, which must be manipulated in a certain way to enable the correct tone to be played.

To such a scientific pitch has this risen among the Javans, that the art of playing each particular instrument, especially in the case of the musicians for the gamelans of the sovereign, is taught from father to son, and handed down in certain families.

The gong is usually 3 feet in diameter. In the *gènder* the plates are thin metal, and suspended by strings. The *bonang*, *kenong* and *ketok* are metal, and are suspended by tightened cords to favour the vibration. The *kecher*, shown on the plate, corresponds with the cymbal. The hammers with which the larger instruments are struck are wound round at the end with cloth in order to soften the sound. The drum is struck, as in Hindustan, with the open hand and fingers only. The *chatempung* is a stringed instrument with from ten to fifteen wires, which are sounded with the finger after the manner of the Welsh harp.

The *gambang kayu* has wooden plates sixteen or seventeen in number ; the *gambang gangsa*, of which there are several in each band, has metal plates.

All these instruments make up the gamelan band. The person who leads this band performs upon the *rebab*, an



GAMELAN PELOG.

instrument which, having a neck and two strings pitched by pegs, is capable of producing perfect intonation and a variety of sounds, through the strings being shortened by the pressure of the finger. This bandmaster receives from 500 to 1,200 rupees a year.

The Javans do not commit their music to writing, but nevertheless have a selection of more than a hundred national airs, which have been preserved for centuries, by ear alone.

The cost of a complete gamelan is from 3,000 to 6,000 guilders (£250 to £500) new, but there are several that have cost considerably more, while such gamelans as are possessed by the Sultan of Jockjakarta or the Susuhunan of Surakarta are absolutely priceless.

Raffles, when he returned to England in 1816, took with him a native of Java, called Raden Rana Dipura, who could play several of the gamelan instruments, and performed before an eminent composer several of the Java national melodies ; these were all found strangely to resemble the oldest music of Scotland, the distinctive character of both as well as of the Indian music in general being determined by the want of the fourth and seventh of the key and of all the semitones.

This remarkable coincidence ¹ is also to be noticed in the Grecian music, which fact strangely conforms with the idea that the ancient inhabitants of Java and of Greece have something in common.²

The Javans have a string instrument called trawangsa, not at all unlike a guitar, which is played whilst some old bard recites the traditions of the great empires of Pajajaran and Majapahit. There is also a wind instrument in the nature of a flute, but some feet in length, with a proportionate diameter ; it is sometimes introduced in the gamelans, but this is not usual in Java, though in Bali it is general.

¹ It can scarcely be actual coincidence.

² There was a race of people in Greece called Javan.

PAINTING.—There is a tradition among the Javans that the art of painting and drawing was once successfully cultivated by them, and a period is assigned to its loss. At the present day, however, there are no signs that any proficiency in this art was ever attained by them, and the efforts of their painters do not show any great genius. In the second half of the nineteenth century a well-known Javan painter settled at Batavia called Raden Saleh, who showed signs of wonderful talent, but he was an exception and stood more or less alone.

There is every reason to suppose, however—their eye being correct, their hand steady and having a sense of beauty and effect—that with due encouragement the Javans would not be found less ingenious than other nations in a similar state of civilisation.

ARITHMETIC.—The Javans compute without putting down figures in writing, and in this process, although slow, they are wonderfully correct. The common people, from an entire ignorance of arithmetic, use stones or grains of rice to assist them. Unlike the Chinese the Javans have no method for calculations peculiar to themselves.

ASTRONOMY.—The little astronomy the Javans know at the present day and the terms employed indicate that the system they once learned, and possibly scientifically excelled in, was derived from the continent of India.

The seasons are determined by them in reference to some ancient system, which they no longer understand perfectly. The days of the week are expressed by Hindu terms. Thus :—

	Hindu.	Javan.
Sunday . . .	Rowi . . .	Diti
Monday . . .	Soma . . .	Soma
Tuesday . . .	Mangala . . .	Ang'gara
Wednesday . . .	Budha . . .	Budha
Thursday . . .	Vrihaspati . . .	Raspati
Friday . . .	Sukra . . .	Sukra
Saturday . . .	Sani . . .	Sanischara.

The Arabic terms are employed to express the months.

ARCHITECTURE AND SCULPTURE.—The magnificent temples still to be seen in Java in a more or less perfect state bear witness to the high degree of perfection in architecture and sculpture which once existed in the island.

The art of sculpture is now entirely forgotten, and nothing greater is undertaken by the Javans of the present day than the building of the kratons for their sovereigns or the dalams for their bopatis.

GAMES.—The Javans play several games of skill, among which are the following :—

1. *Chatur* (chess). The pieces are named the ratu, or king ; the pateh, or minister, corresponding with the queen ; two prahu or vessels, corresponding with castles ; two mantri, corresponding with bishops ; two jaran, or horses, corresponding with knights ; and the bidak, or pawns. These are arranged on the board as in the English game, except that the kings are placed on the left hand of the queens, opposite to the adversary's queen.

2. *Dandaman* (draughts) is very much like the Indian game, although it has more pieces. As in chess, the Javans are very skilful in this game.

3. *Machanan* is a game in which the two principal pieces represent tigers,¹ one led by each party, and there are twenty-three pieces representing cows. The tiger which destroys the greatest number of cows is accounted the winner.

4. *Malin'gan* is played with eighteen pieces on squares. The object to be attained is to surround your adversary's pieces.

5. *Telaga Tari*. This is said to be the most ancient of all the Javan games. Three or four people play it, and it consists in guessing the number of beans enclosed within the hand. The beans in the hand are taken from a small

¹ Machan means tiger.

heap lying on the ground, the exact number of which is known. With lightning rapidity the guesser glances at the ground and immediately replies, being, if an adept, more often right than wrong. The one who guesses right most often is accounted the winner.

6. *Dadu* (dice). This game was introduced by the Chinese, and is frequently played.

7. *Card-playing* is fairly common among certain classes, but is not a national game, having been brought into the country by the Chinese.

8. *Layang'an* (kites). The flying of kites at certain periods of the year is very commonly practised by the Javans, who excel at it; but they have not reached the stage that is general among the Japanese kite-fliers.

9. *Keplek* is a kind of pitch-and-toss played by the coolie or porter class, with four whitened farthings marked on one side.

SPORTS.—In Bali and in certain districts of the west and south coast of Java the stag and wild buffalo (*banteng*) are hunted by the bopatis, who invariably succeed in securing good bags. The stag is pursued on horseback with dogs, and is killed with a spear, or if only wounded, dispatched with a cutlass or *klewang*.

When a hunt is organised the inhabitants, who are passionately addicted to it, join their chief, and employ the best horses they can procure for the purpose.

The wild buffalo is hunted on foot and dispatched by European arms of precision; in former days it was secured by the aid of the bow and arrow, and the sinews of the back legs were cut with heavy *klewangs* at the first opportunity to retard its progress.

A favourite form of diversion formerly among the Javans was the *watang* (tilts and tournaments), which was now and again exhibited on the alun alun in front of the kraton or palace.

The trappings and housings of the horses were extremely rich, and the riders performed their feats with considerable skill.

The favourite diversion of the Javan sovereigns is combats between wild beasts. When a tiger and a buffalo are to fight for the amusement of the court they are brought upon the field of combat in large cages.

The field is surrounded by a body of Javans four deep with levelled pikes, in order that, if the animals endeavour to break through, they may be killed immediately ; this, however, is not so easily done, and many of these poor wretches are torn in pieces or dreadfully wounded by the enraged animals.

When everything is in readiness the cage of the buffalo is first opened at the top and his back is rubbed with certain leaves, which have the singular property of occasioning an intolerable degree of pain, and from the use to which they are put have been called buffalo leaves by Europeans ; by the Javans they are called kamadu. They sting like nettles, but much more violently, and so as to cause an inflammation on the skin. On every vein they have sharp pointed prickles, which are transparent and contain a fluid that occasions the irritation.

Thurnberg says it is a species of nettle before unknown, to which he has given the name of *Urtica stimulans*.

The door of the cage is then opened and fire is thrown to make the beast leave it, which he does generally by running out backwards.

As soon as the tiger perceives the buffalo he springs upon him ; his huge opponent stands awaiting him, with his horns upon the ground ; if the buffalo succeeds in catching and throwing him into the air and the tiger recovers from his fall, he generally loses every wish to renew the combat, but if the tiger succeeds in avoiding this attempt by the buffalo, he springs upon him and, seizing him in the neck or other

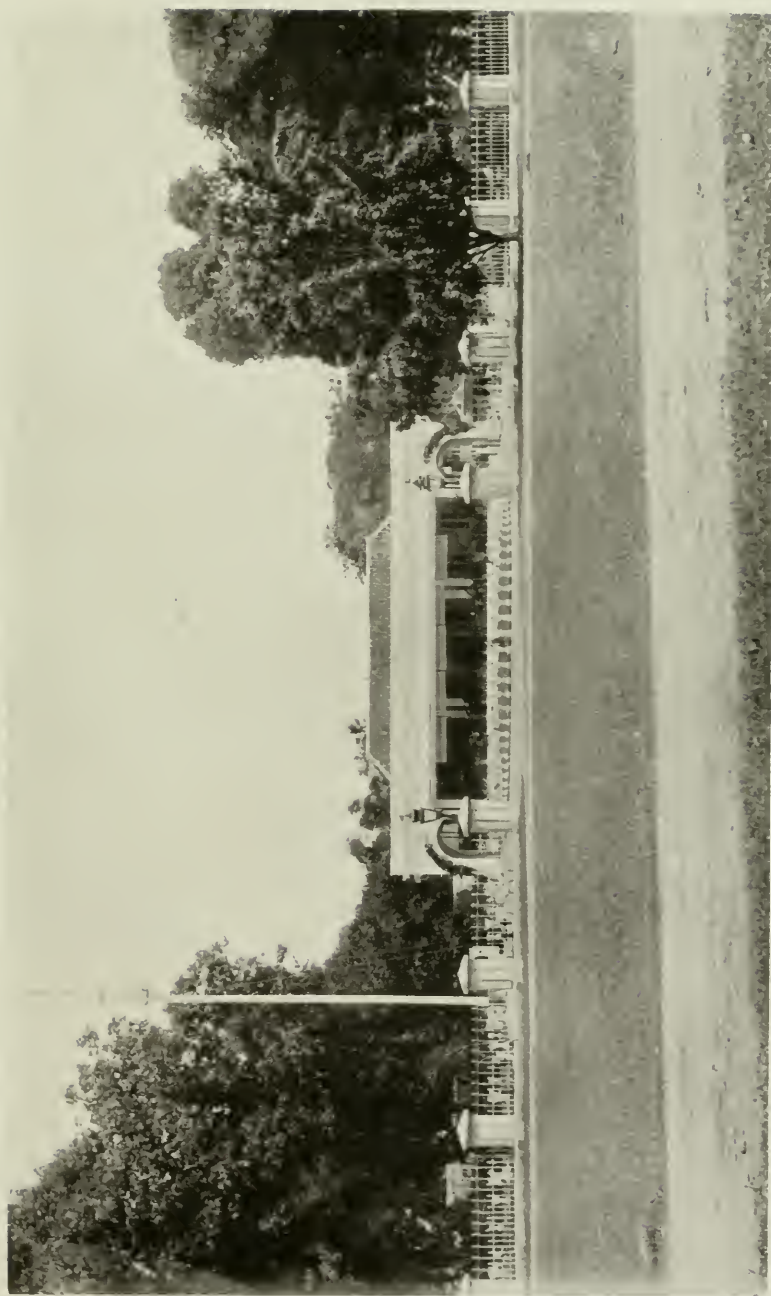
parts, tears his flesh from his bones. In most cases, however, the buffalo has the better of it.

The Javans who have to perform the dangerous office of making these animals leave their cages may not, when they have done so, notwithstanding that they are in great danger of being torn to pieces by the enraged beasts, leave the open space before they have saluted their sovereign several times and his majesty has given them a signal to depart, which he delays until the very last moment. They then retire slowly—for they are not permitted to walk fast—to the circle and mingle with the other Javans.

Until the arrival of the English, and possibly even for some time afterwards, criminals condemned to death were made to fight tigers. In such cases the man was rubbed with borri, or turmeric, and had a yellow piece of cloth round him; a kris was then given to him, and he was conducted to the field of combat.

The tiger, who had for a long time been kept fasting, fell upon the man with the greatest fury, and generally struck him down at once with his paw; now and again, however, the wretch was fortunate enough to wound the animal sufficiently to make it quit him. The sovereign would then order him to attack the tiger, and the man frequently succeeded in killing his ferocious antagonist. It availed him nothing, however, for he still by command of the sultan suffered death.

An officer in the old East India Company's service, who had long been stationed at the courts of the Javan emperors, once witnessed a most extraordinary occurrence of this kind. A Javan who had been condemned to be torn in pieces by tigers, and for that purpose had been thrown down from the top into a large cage in which several were confined, fortunately fell exactly upon the largest and fiercest of them, across whose back he sat astride, without the animal doing him any harm—on the contrary, it appeared intimidated—



GOVERNMENT HOUSE, CHERRIBON.

while the others, awed by the unusual posture and appearance which he made, dared not attempt to destroy him. He could not however, avoid the punishment of death to which he had been condemned, for the sultan commanded him to be shot dead in the cage, an order that was immediately carried out.

Although the bare relation of the facts excites certain feelings of horror in the mind of the reader, it must be observed that the concourse of spectators, of which a good proportion are Europeans, which are drawn together to witness a combat can no more stamp the general character of the people with barbarity than the crowds which formerly were always present to witness public executions in Europe.

Bull-fighting is another so-called sport practised among the people of Madura. It is, however, unlike the bull-fighting of Spain, for neither men nor horses are employed, but the bulls are directed against one another.

Ram and hog fight. A fight between these two animals is not uncommon in some parts of the island, being displayed on the alun alun before an extensive ring formed from the population. A small stand is raised on one corner of the space to which the ram can retreat when in danger, and from whence he can take advantage of a favourable moment to attack his antagonist. Now and again dogs are let in to assist in the amusements, which makes the fight a sort of rough-and-tumble.

Spearing the tiger, or rampog, is a favourite and national spectacle still to be seen at the old Hindu settlement of Blitar.

The manner of catching these animals is a very simple one. A tethered goat is killed and let to be partially eaten, the remainder of the carcase being left as bait ; for it is a known fact that the tiger will always return again when hungry to the meal he has left unfinished. The trap is a simple contrivance, but answers the purpose remarkably well,

perhaps better than many more elaborate and expensive ones.

The ground chosen is hollowed out for a length of 10 or 15 feet and a width of about a yard. On the two sides are posts firmly planted close to each other, the roof, which is convex, consisting of poles tied like those of a raft. At one end is an opening, at the other a cage, almost impervious to light, in which a kid or bleating lamb is confined for the night. The opening or entrance shuts with a heavy sliding door, attached by a rope to the end of a ponderous beam. This beam rests on the top of a pole, and its opposite end is kept down by a large stone connected with a spring in the interior of the trap, which is no sooner touched than the weight flies up, causing the door to fall and preventing the exit of the intruder. In this trap the animal is kept some time until the rampog, whenever this is to be held. There are special men who not only have the reputation of being experts in tiger-trapping, but are supposed by the Javans themselves to possess some particular and peculiar charm inherited from their parents, or given to them for a special purpose in this world.

That it is a fact that these men do possess some gift out of the ordinary is clear to anyone who has attended a rampog.

When the amusement is about to begin a large concourse of Javans collect upon the alun alun and a hollow square of spearmen four deep is formed, in the centre of which are placed the tigers in the small separate cages, or rather traps, which have the appearance when lying on the ground of elongated coffins.

Two or three of the tiger experts stand near the cages, and at a given signal from the bopati, or regent, place plaited leaves in front of the cage to supply the place of the wooden door. These leaves are then at another signal set fire to and the door drawn up. Then the men, still waiting

for a signal from the regent, retreat, bowing at a slow and dangerous pace to the sounds of the gamelan. As the tiger feels the fire, he rushes out and is received by the spearmen on their weapons. When he has made several such rushes on the spears, the regent directs the experts to dispatch the animal, which has grown weary and weak through its numerous spear-wounds.

This the men do with great coolness and intrepidity, never failing to pierce their animal. It is of course not unheard of for the tiger to escape, but this seldom happens, and when it does someone is severely punished.

When one tiger has been dispatched, the next in turn is let loose until they are all finished, unless, as it now and again happens, there are so many that the regent grows weary before they have all been accounted for, in which case the poor brutes are killed in their traps.

Cock-fighting (aduh jagu) is the commonest of all the Javan diversions, and even when these animals are not kept for the purpose, several large and well-bred cocks under spacious cages, or rather baskets, are constantly found arranged at certain distances around their compounds. When a fight takes place considerable bets are laid on the result.

It is probable that the Javans have adopted this amusement from the Chinese, although there are some authorities who consider it likely that the Chinese themselves carried it to their country after seeing it in Java.

On the establishment of the British power, cock-fighting and gaming were officially (but only officially) prohibited.

Previous to this it was a productive source of revenue to the Dutch.

Quail-fighting (aduhgamar) is now not nearly so prevalent as formerly. This is not uninteresting and furnishes some diversion.

Cricket-fighting (aduh jangkrik). The common people

frequently watch a pre-arranged fight between two crickets and bet upon the issue.

These little insects are confined in small bambu cages, and afford some amusement.

FESTIVALS.—The Javans have three kinds of festivals or feasts—the *grebeg*,¹ or religious festivals; the *banchaki* or *nealamati*, so called from the Arabic *salamat* (blessing) held on the celebration of a birth, marriage or circumcision, and distorted by the Javans into the term “*salamatan*”; and the *sedekah*, appointed in honour of the dead and for the celebration of their memory.

AMUSEMENTS AND ENTERTAINMENTS.—The Javans have two kinds of dramatic entertainments—the *topeng*, wherein the characters are represented by men, who, except when performing before the sovereign, wear masks, and the *wayang*, in which they are represented by shadows.

The subject of the *topeng* is generally the adventures of the great Javan hero Panji, whilst the *wayangs*, or scenic shadows, are generally descriptive of the earliest history of the island down to the destruction of the famous Hindu empire of Majapahit. The periods of history are distinguished by the terms *wayang purwa*, *wayang gedog*, and *wayang klitik*.

DANCING.—The Javans excel, according to Eastern ideas, in dancing; it consists in graceful attitudes of the body, slow movement of the arms, the twisting of the legs, and a distinct motion of the head, abdomen, hands and fingers.

Of the dancing girls who exhibit at public entertainments, the first in rank and the most skilful in their profession are the young princesses or concubines of the sovereigns and hereditary crown princes. They alone are allowed to perform the *s'rimpi*, a figure-dance distinguished by an unusual degree of grace and decorum.

The dancers are decorated according to the ancient

¹ Sometimes spelt “*garebeg*.”

costume of the country, and nearly all in the same manner as a Javan bride. The *tapih*, or petticoat, is of silk of different colours, often green, stamped with golden flowers, and hanging in the most graceful manner, a part of it falling between the feet and serving as a short train, which in the course of the dance is frequently thrown aside by a quicker motion of the foot. The *udat*, or waistband, is of the *chindi* pattern, and on these occasions the *'mer* or cestus is worn, composed of plates of gold highly ornamented with diamonds at the clasp in front. The body is enclosed in a kind of corset (*pemakak*) passing above the breasts and under the arms, and confining the waist in the very narrowest possible limits. The ends of the *sembong* or sash fall gracefully on each side on the back of the hip and reach the ground. Sometimes, indeed, this graceful appendage to the dress is brought from the back to a point between the breasts, whence, being fastened in a rosette, the ends flow towards the ground in front of the person, the usual bending attitude during the dance causing them to hang away from the rest of the apparel. The triple necklace, richly-chased armlets, bracelets, and tiara are of gold studded with precious stones, and the hair is gracefully ornamented with buds of white and sweet-scented flowers. On the fingers they generally display brilliant rings, and the face, neck, shoulders, arms and breasts, which remain uncovered, are tinged by a delicate shade of yellow powder. The music is slow, and the performance is on the *gamelan salendro*; verses from the romances of *Panji*, descriptive of the attire and beauty of the wives and concubines of that hero, are chanted as a prelude to the entertainment and during its performance. When the *s'rimpi* perform they glide forth from their chambers across the courts into the centre of the gilded audience-hall, led by two elderly matrons, who are their caretakers, teachers and their admonishers if the sultan desires their punishment. These old women, after having

as it were introduced them, crawl away out of sight, and the s'rimpi sit on the marble floor before the sovereign, all exactly in the same position, with their legs tucked under them and motionless. At a signal to begin, given by one of the princes, they slowly close their hands to the sound of the music, and, raising them to the forehead, bend in reverential awe, and, gradually extending their arms and swaying in exact unison with each other from side to side, assume an erect posture.

The dancers are in age from ten to fourteen; when they reach the latter age, they are generally replaced by a younger girl, who has meantime been in training for some years. The birth of a child puts an end to their performances at once and removes them from the profession.

They are the choicest beauties of Java, selected for the royal bed.

Throughout the whole performance their eyes are directed modestly to the ground, and their body and limbs are by slow movements thrown into every graceful attitude that the most flexible form is capable of. In the figures of the dance they occasionally approach and recede from each other, and sometimes cross to the opposite side.

It frequently happens that the delicate corset by falling too low exposes more of the body than is correct. On such occasion one of the trusty matrons always in attendance and watching with piercing glances for any slight mistakes, raises it again without interrupting the dance or embarrassing the movements of the dancer.

At the conclusion of the dance the dancers gradually place themselves on the ground in the same manner as before its beginning, and after closing their hands and raising them to their forehead in token of respect, remain seated with a downcast look and captivating modesty, until the signal is given to the matrons to relieve them by others,

when they again glide into the same apartment from which they came.

The bedaya, who perform a figure dance by eight persons, are in some respect to the nobles what the s'rimpi are to the sovereign. They are dressed nearly in the same manner as the s'rimpi, though not so richly or expensively.

The common dancing girls of the country are called rông'-geng, and are of easy virtue, so much so that the title rông'geng and prostitute are synonymous.

They make a profession of their art, and hire themselves to perform privately or in public to Javans, Chinese, or Europeans for a certain fee arranged beforehand with one of the male members of the troupe, who knows their price. The party travel within circumscribed limits from town to town or village to village, performing everywhere as they go along, sometimes without engagement, and collecting payment from each onlooker, who perhaps gives a cent or two.

There are also posture-dances for men ; among these are the *gambuh*, with a shield on one arm, and the *niuira*, with a bow and arrow. The men are naked to the waist and covered with yellow powder. They contort their body into all sorts of postures to the sound of the gamelan.

CEREMONIES OF THE COURT.—A stranger cannot fail to be struck with the extreme deference and respect towards their superiors which characterises the Javans—a respect denoting, if anything does, the antiquity of the race and the culture reached in ancient times. Respect for rank, for experience, for parents and old age, are the great features of their character, clearly proving that the tenets prescribed by the Christian Bible are knowingly or unknowingly not lost upon them.

The excess, however, to which deference towards rank is carried deserves more particular remark, whether we consider it as illustrative of the nature of the government and

the quiet and orderly disposition of the people or endeavour to trace in the early periods of their history the causes which may have contributed to the existing constitution of society among them.

The respect shown towards higher rank in Java is such that no individual, whatever his condition, can stand in the presence of a superior, neither can he address him in the same language in which he is spoken to. Not even the heir-apparent or the members of the royal family can stand in the presence of the sovereign, and the same restriction applies to the family of each subordinate chief.

Were this mark of respect confined to the royal family alone, it might perhaps find a parallel in other Eastern countries where it is usual for the subject to prostrate himself before the sovereign ; but in Java the nature of the government is such that each delegated authority exacts the same marks of obeisance, so that from the common labourer upwards no one dares to stand in the presence of a superior. Thus when a native chief moves abroad it is usual for all the people of inferior rank among whom he passes to lower their bodies to the ground till they actually sit on their heels and to remain in this posture until he is gone by.

The same rule is observed within doors, and instead of an assembly rising on the entrance of a great man as in Europe, it sinks to the ground, and remains so during his presence.

This humiliating posture is called "dodok," and may be rendered in English by the term "squatting." The practice is submitted to with the utmost cheerfulness by the people ; it is considered a very ancient custom, and respected accordingly.¹

Having thus seen the nature and extent of the general deference paid to a superior in Java, the reader will be

¹ This is the ancient and patriarchal respect to their chief, which dates from the time of the Hindu rule, when the people acknowledged their ruler as their only intermediary with the celestial power.

prepared in some degree for the still further humiliations which are expected from a subject on public occasions.

No one approaches his sovereign or immediate chief, no child approaches his father, without sumbah (that is obeisance), closing his hands and raising them to his forehead in token of respect. On public or festival days it is usual for the inferior chiefs not, as in Europe, to kiss the hand, but to kiss the knee, the instep, or the sole of the foot, according to the relative distance of rank between the parties.

Regalia.—The royal seat is a large stool or bench of gold, with a velvet cushion; it is called “dampar,” and attends the sovereign wherever he may go.

Among the regalia (upachara), which are always carried in procession when the sovereign moves abroad and are arranged behind him while seated on the dampar, are the following golden figures:—The hasti or gaja (of an elephant), the harda walika or nanagan (of a snake), the jajawen santing (of a bull), the sangsam (of a deer), and the sawung galing (of a cock); each is of a size to be borne in the hand. These, with the kutuk and chapuri for tobacco and siri, the pakachohan, or golden spitting pot, and a variety of golden salvers, bowls, etc., distinguished by their respective names and for various purposes, have descended as pusakas, or heir-looms, in the royal family, and are esteemed with the highest degree of veneration.

Processions.—Formerly, when the sultan or susuhunan moved abroad in state, he was attended by numerous spearmen (wahos), the duty of eight of whom was to attend the figures of the sacred elephant and bull, etc., near which were also led four horses, highly caparisoned. The royal payung or state umbrella was carried in front of the procession on these occasions, on which, too, were invariably carried four trunks or boxes (brokoh), each borne by two men, containing the clothes of the sovereign, caparison for his horses, his personal arms, implements, provisions, and in

short everything required for an establishment. This rule was also observed whenever the sovereign moved out of the palace. His mat (*lante*) was likewise borne in procession, together with two saddle-horses for his use when necessary.

On more ordinary occasions nowadays, however, the wahos and all the other paraphernalia do not attend the sovereign, but he is accompanied when abroad by a considerable body of native cavalry (consisting of headmen) and, since the arrival of the Europeans, by a body of life guards. The sovereign, instead of riding, moreover, drives in a highly-caparisoned carriage and four, with a brilliantly liveried European coachman and footmen; it is in appearance much like the Lord Mayor of London's carriage on the 9th of November, but far more gorgeous. The *payung* is of course always present.

Pomp.—The ceremonies and state of the native courts have lost much of their true character from the admission of European customs introduced by the Dutch after the Javan war in 1825.

Salutes are regulated after the European style, and the Javans have availed themselves of many European customs to render the ceremonies more striking. Thus both the *susuhunan* and sultan are furnished with large gilt carriages, after the fashion, so to speak, of that used by the Lord Mayor of London. The *adat* (custom) is that when the sovereign drinks wine with the Dutch Governor-General, the rest of the company are offered white wine while they alone drink red, and a flourish of trumpets sounds as the glasses approach their lips. This same custom is followed when two *bopatis* sup together, they being supplied with the red wine and the rest with the white, and this *adat* goes the whole way down the roll of chieftains.

The chiefs of provinces, and the petty chiefs in their gradation below them, keep up as much of the form and ceremony of the chief court as is consistent with their



FRONT OF THE AUTHOR'S HOME IN JAVA.

relative rank and means ; and in their turn exact from their vassals the same degree of respect which the sovereign exacts from them.

It may be observed that few people in this world are more attached to state pomp and show than the Javans. In general, the decorations employed and the forms observed are simple and at the same time imposing, calculated to impress the stranger with a high idea of the taste, correctness, and yet love of splendour of this people. The ornaments of state, or regalia, are well wrought in gold ; the royal shield is richly inlaid with precious stones, and the royal kris is hung in a belt, which with the sheath is one blaze of diamonds.

In processions when the Dutch Governor-General is to be received, each side of the road for miles is lined with spear-men in various apparel and standing in warlike attitudes. Streamers are flying, and the music of the gamelan is playing on every side. There are, too, payungs, or umbrellas, of three tiers of silk, richly fringed and ornamented with gold, placed at intervals, and nothing is omitted which can add to the appearance of state and pomp. Among the ensigns displayed on these occasions are the Monkey Flag of Arjuna and a variety of other devices taken from the poems of antiquity. Triumphal arches of bambu are also erected at the entrance of the principal villages ; and the taste and variety displayed has often been remarked as betokening a refinement beyond that which their present state of civilisation might seem to indicate.

At state banquets the sovereign is waited upon only by his bopatis, but in private women are the only attendants upon his royal person, and no male is permitted to approach the royal apartments upon any excuse whatever under pain (formerly) of instant execution.

PART II

Climate. Health. Births, Marriages, and Deaths at Batavia. Population. Census-taking—How the Rajah of Lombok took the Census.

CLIMATE.—The idea that the heat of Java must be utterly unbearable is not so absurd, for the sun here is twice a year vertically overhead, and its rays shoot down almost in a perpendicular line. The fact, however, is that the climate of Java, unlike that of other Eastern lands—India, China, etc.—is not at all unbearable; on the contrary it is agreeable, and, except in the towns on the north coast, is in no way oppressively hot or exhausting like it is in Hindustan. This may be accounted for by Nature coming to the assistance of the country, through daily giving refreshing land breezes from the cool mountains and sea-breezes from the Indian Ocean.

As the rising and the setting of the sun are likewise always nearly at the same hour, and scarcely differ more than a few minutes throughout the year, the long nights cool the air so much that in the morning for an hour or two before daybreak it may be said to be rather cold than warm, especially for those people who have resided in the tropics for any length of time.

From July to November at coast towns the thermometer is usually in the hottest part of the day—that is, between 12 o'clock and 2 o'clock—84° and 91° Fahrenheit, although now and again it touches 93°. The greatest degree of coolness in the morning on the coast is about 75° or 76°, but in the interior the temperature goes down very much lower.¹

The barometer undergoes little or no variation, and

¹ On the tops of the mountains 27° has been registered, with ice as thick as a dollar.



BATIKKERS.

stands for the whole year at 29·10 inches, according to daily observations.

The warmth of the air decreases greatly on approaching the mountains. At Buitenzorg, the country seat of the Governor-General, about thirty-five miles from Batavia and at the foot of the volcano Salak, the cold is so great for a short while in the morning that thick clothes are needed. The climate here is very healthy and refreshing, the air, especially in the morning and evening, being really chilly, and invalids who have suffered from fevers soon recuperate here after a stay even of only three or four days, and this in a land which lies directly under the Equator.

The land and the sea breezes blow almost every day without exception. The sea-breeze, which in the east monsoon is generally between E.N.E. and N.W., begins to blow about 11 or 12 o'clock in the forenoon. It increases gradually in the afternoon till evening, and then dies imperceptibly away till about 8 or 9 o'clock, when there is perfect calm.

The land-breeze begins at midnight or just before, and continues until an hour or two after sunrise, when there is generally again a calm, till the sea-breeze comes on at its accustomed hour.

The year is divided into two seasons, one of which is called the east monsoon, or dry season, and the other the west monsoon, or rainy season.

The east, or good, monsoon begins in the months of April and May, and ends in the latter end of September or the beginning of October. The trade winds during this time blow about four or five leagues off shore, and through the whole of the Indian seas to the south of the Line from the S.E. to E.S.E., at times, however, running as far as S.S.E. with fine dry weather and a clear sky. It was no doubt during this season that the ancients came down to Java in their little boats.

The west, or bad, monsoon generally begins in November or early in December. The wind often blows with great violence and is accompanied by heavy torrents of rain, which render the season very unhealthy and a time of the greatest mortality. The same winds are likewise found to prevail everywhere to the south of the Line. They continue till the latter end of February or the beginning of March, and are very variable till April, in which month the easterly winds begin to blow; hence these months, as likewise October and part of November, are frequently termed the "shifting months," and the times of the breaking up of the monsoons are esteemed the most unhealthy of all.

It is to be noted that when the westerly winds blow as far as nine or ten degrees south of the Line, the opposite takes place at the same time, and to the same distance, to the north of it, and *vice versâ*. This alternation is beneficial to navigators.

Thunderstorms are very frequent, and of tremendous energy while they last; they, however, seldom do more than ordinary damage.

HEALTH.—The general inference which has been drawn by professional men is that Java is not an unhealthy country, but may even be classed as having a healthy climate; and that from the evenness of its temperature Europeans on the hill stations, such as Soekaboemi, Bandoeng, Tosari, Garoet, Sindanglya,¹ etc., may attain to a greater age than they would in Europe if only careful of themselves by attending to one or two of the maxims for diet and hygiene needed in all tropical countries. The greatest proof, however, of the healthfulness of the country and of its not being unfavourable to man is given by the figures of the native and Eurasian population, which are increasing at a great rate. At the same time, however, it must be admitted that

¹ Soekaboemi, 1,600 feet; Bandoeng, 2,000 feet; Tosari, 6,000 feet Garoet, 3,000 feet; Sindanglya, 3,483 feet above sea level.

there are spots upon the island which are decidedly unhealthy. These are to be found along the low swampy marshes of the northern coast, which are mostly recent encroachments upon the sea ; the principal of such places is Jacatra or old Batavia. The climate of this city in olden days was undoubtedly truly designated as the " Store-house of Disease " and the " White Man's Grave." The old East India Company was, however, responsible for a great deal of this unhealthiness, and the accounts of the sanitary arrangements of the city during the seventeenth and eighteenth centuries make the reader surprised that any individual after a few months' residence here should have survived at all.

An intelligent traveller in the eighteenth century when describing the beauties of the town observed that " the European settlers at Batavia commonly appear wan, weak and languid as if labouring with disease or death. Their place of residence, indeed, is situated in the midst of swamps and stagnated pools, whence they are every morning saluted with a congregation of foul and pestilential vapours." These pools received all the filth of the town, and naturally as time went on disease increased in strength rather than diminished.

That Batavia was ¹ undoubtedly the unhealthiest recorded town in the world is unfortunately too well proved by the writings of visitors who have survived its perils, and by the records of the Dutch East India Company itself, which has been accused of the crime of maintaining a monopoly at the expense of loss of life resulting from the confinement of the European population within the narrow limits of an unhealthy city surrounded by walls,² so that it could never free itself of its unhealthy vapours, even allowing that this

¹ But is no longer.

² Daendels destroyed these walls when he arrived and moved the inhabitants further inland.

was desired, which some maintain was not the case. Raynal¹ states that between the years 1714 and 1776 eighty-seven thousand soldiers and sailors perished in the hospitals (so called) of old Batavia, and from Table II. here annexed of the deaths inside the old Castle (*oude Casteel*), or just outside the walls, from the year 1730 until 1752 a total is reached (which were it not beyond all controversy would be considered incredible) of more than a million souls in twenty-two years.

From the moment, however, at the beginning of the nineteenth century, when the walls of the city were demolished, the drawbridges let down, and free egress and ingress permitted, the population began to migrate to a more healthy spot; they had not to go more than one or two miles before they found themselves in a different climate.

Necessity probably determined the choice of this spot for the European capital, but a perseverance in the policy of confining the European population within its walls after so many direful warnings of its unhealthiness cannot but lead to the inference, as Sir Stamford Raffles justly observes, "that either the monopoly of the trade was considered a greater object to the nation than the lives of the inhabitants or that the more liberal views of the Government were defeated by the weakness or corruption of its agents."

For young men going out to a commercial life in Java, where they will have to work in an office in one of the great seaport towns, Batavia, Samarang or Sourabaya, there is nothing to fear, if only they are bodily and constitutionally sound to start with. The conditions of office life will be found more agreeable here than in England and the work far more interesting. The health, provided proper attention is paid to a sensible diet, of fish, fowl, just-ripe fruit (neither unripe nor over-ripe) and vegetables, and not much meat nor alcoholic liquors, will certainly not suffer in the least in

¹ Raynal, Vol. I., p. 293.



A VERANDAH IN JAVA.

the first ten years or even longer, but on the contrary. Exercise in the afternoon only, when the sun is going down, should be taken in moderation ; walking or golf are the best forms. Early to rest (say 10 o'clock) and early up in the morning (say 6 o'clock) are benefits, but not absolute essentials for the health, but the more sleep one gets the better. Eat to excess, however, drink as many do, and keep late hours, and you will be promptly punished by a fever, dysentery, or some other even worse disease. Every five or six years or so a holiday to Europe is beneficial for the nervous system, and perhaps in some cases for the constitution. After a twenty-five years' experience of the Far East, I have come to the conclusion that twenty-one or twenty-two years of age is the earliest and also the best time to be sent to the East Indies. A young man has then time to become acclimatised. His first two or three years are those when he needs to exercise the greatest caution over his health. To go to the East Indies for the first time after the age of thirty is too late.

The seaport towns of Java are usually scourged annually from the months of July to January with cholera, while typhoid fever and small-pox are generally rampant. The first two are contracted from the water, which Europeans should never drink unboiled. This is a golden rule.

BIRTHS, MARRIAGES, DEATHS AT BATAVIA.—The annexed documents, so far as they can be relied on, afford evidence of a mortality in Batavia, as compared with the number of inhabitants, that was perhaps never exemplified in any other quarter of the world.

Table No. I. was drawn out with as much exactness as the original lists and registers still existing would admit of.

In explanation, it is necessary to observe that when the British captured the island of Java in August, 1811, part of the most valuable papers were lost or destroyed, and amongst

them the register in which was stated the Chinese population and the number of their deaths and marriages annually, which is the reason why no mention is made of them.

The specific lists kept in the different hospitals were likewise lost ; this is to be particularly lamented, because they would have shown how many of the European deaths were of inhabitants, military persons, strangers, or sailors and marines from the ships of the different nations lying in the old Batavia roads ; they all sent their sick into the hospitals of Batavia for better or for worse, who when dead—and once inside the hospital they invariably died—were included in the number of European deaths.

Table No. II. was discovered among the records of the Dutch East India Company after the conquest of Java in 1811, and is entitled to reliance.

Table No. III. is from the Dutch official registers of the births, marriages, and deaths in the Residency of Batavia, which included the town, suburbs, and neighbourhood.

¹ By Mr. Alexander London.

TABLE I.

NUMBER OF BIRTHS, MARRIAGES AND DEATHS AT BATAVIA
FROM 1700 UNTIL 1813, COMPRISING EUROPEANS OR THEIR
SERVANTS AND NATIVE GOVERNMENT EMPLOYEES, BUT
NOT CHINESE OR OTHER NATIVES.

(As far as could be ascertained from the registers, etc., after
the conquest of Java in 1811.)

Year.	Marriages.		Births.		Deaths.	
	Euro- peans.	Half- castes and other Christians.	Euro- peans' Children.	Those of Half- castes and other Christians.	Europeans, Half-castes, etc.	Natives or Slaves, etc.
1700 . .	74	134	119	565	697	975
1701 . .	65	126	76	341	736	815
1702 . .	76	120	83	616	1,088	1,336
1703 . .	72	133	190	443	856	931
1704 . .	74	144	96	466	442	1,148
1705 . .	55	133	100	441	688	1,800
1706 . .	79	127	84	447	841	1,839
1707 . .	60	116	88	471	655	1,371
1708 . .	49	134	87	638	651	1,481
1709 . .	64	138	82	575	804	1,828
1710 . .	41	152	108	628	684	1,313
1711 . .	63	154	110	555	766	1,487
1712 . .	60	141	110	595	684	1,278
1713 . .	56	154	747		599	1,022
1714 . .	60	150	703		608	1,085
1715 . .	43	159	759		567	1,074
1716 . .	37	129	688		606	1,207
1717 . .	41	147	578		716	1,322
1718 . .	—	—	663			
1719 . .	59	154	631		857	1,869
1720 . .	68	148	529		977	1,685
1721 . .	53	80	467		772	1,210
1722 . .	61	132	649		193	813
1723 . .	43	119	610		985	1,597
1724 . .	34	172	781		934	1,755
1725 . .	60	150	637		958	2,085
In the reformed churches, and since 1746 in the Lutheran Church.						
1726 . .	58	118	616		994	487
1727 . .	—	—	740			
1728 . .	50	155	648		768	590
1729 . .	52	135	736		754	500

TABLE I.—(contd.).

Year.	Marriages.		Births.	Deaths.	
	Euro- peans.	Half- castes and other Christians.	Europeans' Children, with those of Half- castes and other Christians.	Europeans, Half-castes, etc.	Natives or Slaves, etc.
			In the reformed churches, and since 1746 in the Lutheran Church.		
1730 . .	45	167	763	857	1,800
1731 . .	45	128	783	886	1,066
1732 . .	55	142	625	1,003	689
1733 . .	—	—	554		
1734 . .					
1735 . .	65	166	561	240	667
1736 . .	48	—	727		
1737 . .	48	133	572	1,966	705
1738 . .	49	133	448	2,002	919
1739 . .	51	179	658	1,068	668
1740 . .	47	90	518	1,317	338
1741 . .	52	124	670	1,278	406
1742 . .	47	118	602	1,286	547
1743 . .	84	119	639	1,526	682
1744 . .	—	—	673		
1745 . .	60	117	592	1,965	1,062
1746 . .	—	—	574		
1747 . .	—	—	670		
1748 . .	—	—	627		
1749 . .	39	115	705	1,662	556
1750 . .	63	105	571	2,229	569
1751 . .	38	84	550	2,189	592
1752 . .	135		600	1,858	562
1753 . .	132		457	1,789	1,542
1754 . .	136		553	1,729	617
1755 . .	146		484	2,532	630
1756 . .	143		410	1,729	547
1757 . .	137		465	1,557	561
1758 . .	128		468	1,781	1,082
1759 . .	97		437	1,451	636
1760 . .	124		450	1,403	1,064
1761 . .	—		387	1,110	980
1762 . .	—		471		
1763 . .	112		435	2,001	1,134
1764 . .	131		297	1,907	585
1765 . .	—		357		
1766 . .	—		356		
1767 . .	—		306		
1768 . .	93		329	1,933	537
1769 . .	124		369	1,869	667
1770 . .	126		302	2,871	2,672

TABLE I.—(*contd.*).

Year.	Marriages.	Births.	Deaths.	
	Europeans, Half-castes and other Christians.	Europeans' Children, with those of Half-castes and other Christians.	Europeans, Half-castes, etc.	Natives or Slaves, etc.
		In the reformed churches, and since 1746 in the Lutheran Church.		
1771 . .	93	245	2,425	622
1772 . .	108	301	2,437	2,256
1773 . .	98	284	2,029	534
1774 . .	97	295	2,452	866
1775 . .	214	307	2,997	3,007
1776 . .	100	303	3,055	1,199
1777 . .	98	277	1,394	2,031
1778 . .	104	253	1,804	2,131
1779 . .	82	290	1,524	1,717
1780 . .	113	259	1,418	1,435
1781 . .	—	272		
1782 . .	75	260	733	1,692
1783 . .	—	292		
1784 . .	81	279	1,439	1,669
1785 . .	—	243		
1786 . .	—	238		
1787 . .	58	230	1,939	1,278
1788 . .	—	284		
1789 . .	—	236		
1790 . .	69	220	2,379	1,672
1791 . .	48	216	2,228	1,590
1792 . .	59	171	1,990	1,131
1793 . .	48	149	1,805	1,030
1794 . .	—	215		
1795 . .	92	183	1,121	953
1796 . .	67	173		
1797 . .	52	210	215	930
1798 . .	68	173	280	675
1799 . .	—	236		
1800 . .	68	169	106	1,168
1801 . .	32	169		
1802 . .	—	207		
1803 . .	58	182	263	2,356
1804 . .	—	190	255	
1805 . .	83	164		
1806 . .	50	171		
1807 . .	56	186	—	2,549
1808 . .	—	151		
1809 . .	—	131		
1810 . .	—	167		
1811 . .	—	136		
1812 . .	—	115		
1813 . .	—	138		

TABLE II.

NUMBERS OF DEATHS OF ALL NATIONALITIES, EUROPEAN, NATIVE, AND CHINESE, IN THE OLD CASTLE (OUDE CASTEEL) OF BATAVIA OR IN THE SUB-DISTRICT KNOWN AS JACATRA, OUTSIDE THE CITY WALLS, FROM 1730 TO 1752.

(Translated from a document discovered among the Records of the Dutch East India Company after the conquest of Java in 1811).

Months.	1730	1731	1732	1733	1734	1735	1736	1737	1738	1739	1740	1741
January	3,962	3,699	4,359	4,205	3,830	3,732	4,110	4,066	3,784	4,039	3,851	4,010
February	3,786	3,705	4,047	4,261	3,963	3,775	3,909	4,093	3,572	4,017	3,747	3,842
March	3,827	3,827	4,046	3,989	3,914	3,830	3,815	3,707	3,570	3,900	3,758	3,893
April	3,860	3,833	4,060	3,948	3,725	3,757	3,778	3,561	3,718	3,759	3,878	3,824
May	3,862	3,711	4,066	3,747	3,711	3,780	3,778	3,485	3,717	3,885	4,090	3,958
June	3,836	3,788	4,191	3,840	3,550	3,968	3,699	3,358	4,018	3,985	4,424	4,057
July	4,208	4,480	4,515	3,885	3,772	4,141	4,063	3,257	4,045	4,066	4,536	4,136
August	4,403	4,427	4,758	3,805	4,294	4,041	4,078	3,400	3,771	4,273	4,321	3,764
September	4,403	4,916	5,314	3,805	4,038	4,058	4,260	2,501	4,110	4,053	4,538	4,093
October	4,290	4,512	4,912	4,143	4,227	4,030	4,110	4,054	4,293	4,139	4,514	3,888
November	3,665	4,412	4,314	3,906	4,025	3,966	3,811	4,057	4,030	4,189	4,224	3,760
December	3,733	4,430	4,305	3,864	4,021	3,962	4,080	4,061	4,158	4,084	4,083	3,712
Total	48,450	49,840	52,917	47,745	48,145	47,050	47,503	43,709	46,786	48,598	49,964	46,943

Months.	1742	1743	1744	1745	1746	1747	1748	1749	1750	1751	1752
January	2,849	3,744	4,114	3,952	3,479	4,414	4,459	4,870	4,546	4,543	3,923
February	3,731	3,659	3,974	3,765	3,491	4,389	4,322	4,452	4,352	4,128	3,941
March	3,780	3,999	3,982	3,912	3,459	4,305	4,796	4,332	4,417	4,163	4,272
April	3,811	3,407	3,730	3,230	3,273	4,159	4,689	4,505	4,619	4,170	4,116
May	3,835	3,418	3,790	3,290	3,435	4,599	4,693	4,425	5,227	3,967	4,466
June	3,665	4,448	3,808	3,327	3,650	4,698	5,103	4,580	5,072	4,967	4,285
July	3,915	3,822	3,847	3,855	3,750	5,355	4,469	4,355	5,277	6,904	4,359
August	3,976	3,927	3,961	3,736	4,210	4,946	4,355	4,174	5,134	5,566	4,514
September	3,546	3,611	3,914	4,197	4,110	5,016	5,634	4,782	5,699	5,699	
October	3,537	3,793	3,914	3,632	4,214	3,928	5,109	4,984	4,580	5,344	
November	3,646	3,852	4,140	3,486	4,483	4,567	5,140	4,537	4,526	4,612	
December	4,021	4,011	4,064	3,326	4,874	4,693	4,864	4,893	4,508	4,533	
Total	42,662	45,136	47,661	43,008	47,828	54,298	57,006	54,515	57,130	58,605	33,876

TABLE III.

NUMBERS OF BIRTHS, MARRIAGES, AND DEATHS OF EUROPEANS
AT BATAVIA FROM THE OLD REGISTERS, 1816 TO 1847.

From 1816 to 1828.

Year.	Births.	Marriages.	Deaths.
1816 . .	31	30	222
1817 . .	219	58	500
1818 . .	178	64	612
1819 . .	194	68	601
1820 . .	165	77	726
1821 . .	233	82	1,137*
1822 . .	126	76	659
1823 . .	96	93	595
1824 . .	55	22	725
1825 . .	179	52	547
1826 . .	169	44	454
1827 . .	158	56	396
1828 . .	212	44	348
Total .	2,015	766	7,522

* The large number of deaths during the year 1821 is on account of an epidemic of cholera morbus.

Births between 1829 and 1836.

Months.	1829	1830	1831	1832	1833	1834	1835	1836	Total.
January . .	15	12	14	20	15	7	9	9	101
February . .	21	14	12	6	9	16	15	14	107
March . .	20	9	9	19	15	12	16	19	119
April . .	13	16	6	20	10	16	12	18	111
May . .	14	11	12	12	13	11	17	26	116
June . .	15	9	15	15	16	20	13	17	120
July . .	13	8	6	12	13	10	17	15	94
August . .	36	13	12	18	16	12	16	25	148
September . .	30	16	16	15	22	15	15	12	141
October . .	29	24	21	21	29	16	19	6	156
November . .	16	24	17	18	10	13	20	13	131
December . .	16	17	14	12	18	11	19	25	132
Total .	238	173	154	188	177	159	188	199	1,476

Specification of Last Figures.

Year.	Legitimate Children.	Acknowledged Children (European Father, Native Mother).	Illegitimate Children.	Adopted Children.	Foundlings.	Total.
1829	149	74	15	—	—	238
1830	120	46	3	4	—	173
1831	106	39	7	2	—	154
1832	123	29	17	19	—	188
1833	126	25	21	5	—	177
1834	113	23	22	1	—	159
1835	138	29	18	2	1	188
1836	141	47	8	3	—	199
Total .	1,016	312	111	36	1	1,476

Marriages between 1829 and 1836.

Months.	1829	1830	1831	1832	1833	1834	1835	1836	Total.
January .	—	3	3	4	4	1	5	2	22
February .	1	3	4	3	3	2	5	3	24
March .	4	1	3	7	3	3	3	5	29
April .	6	3	1	8	4	5	5	5	37
May .	6	2	5	6	6	5	7	5	42
June .	2	6	3	6	3	6	—	4	30
July .	2	2	7	5	5	5	6	2	34
August .	2	2	4	2	3	8	1	4	26
September .	5	5	7	3	2	3	4	2	31
October .	1	6	2	6	7	1	2	3	28
November .	1	2	7	5	4	7	1	2	29
December .	4	3	1	3	4	3	4	1	23
Total .	34	38	47	58	48	49	43	38	355

Specification of last Figures.

Year.	Number of Pairs of which the Men belonged to.		Total.
	Civilians.	Army.	
1829. . .	26	8	34
1830. . .	28	10	38
1831. . .	36	11	47
1832. . .	46	12	58
1833. . .	37	11	48
1834. . .	41	8	49
1835. . .	34	9	43
1836. . .	35	3	38
Total . .	283	72	355

Deaths between 1829 and 1836.

Months.	1829	1830	1831	1832	1833	1834	1835	1836	Total.
January . .	34	46	59	34	38	42	48	36	337
February . .	33	40	58	31	35	26	32	30	285
March . . .	39	42	36	24	38	25	38	13	255
April . . .	32	45	33	27	28	13	38	21	237
May	33	58	50	41	22	22	36	24	286
June	58	42	44	34	36	30	29	21	294
July	60	61	46	32	34	31	39	33	336
August . . .	57	56	29	37	35	39	44	49	346
September .	50	43	50	34	31	32	57	29	326
October . .	52	60	22	40	40	51	13	30	308
November . .	49	76	36	35	36	80	23	31	366
December . .	48	66	32	50	43	75	34	28	376
Total . . .	545	635	495	419	416	466	431	345	3,752

Specification of last Figures.

Year.	Males.				Females.		Still-born.	Un-known.	Total.
	Civilians.	Army.	Sailors.	Younger than 16 Years.	Older than 16 Years.	Younger than 16 Years.			
1829 .	87	255	38	54	59	43	5	4	545
1830 .	106	343	29	49	59	39	9	1	635
1831 .	104	180	50	50	54	46	11	-	495
1832 .	74	158	53	44	50	24	15	1	419
1833 .	85	101	73	44	66	35	12	-	416
1834 .	78	118	99	51	63	44	13	-	466
1835 .	82	122	72	44	58	46	7	-	431
1836 .	56	111	44	34	66	27	7	-	345
Total	672	1,388	458	370	475	304	79	6	3,752

Births between 1837 and 1846.

Months.	1837	1838	1839	1840	1841	1842	1843	1844	1845	1846	Total.
January .	16	9	10	13	17	12	18	17	15	12	139
February .	11	9	9	19	13	16	5	13	18	16	129
March .	13	15	18	17	17	13	13	23	15	12	156
April .	19	18	14	14	14	11	13	12	13	17	145
May .	26	15	25	15	11	21	19	26	11	13	182
June .	10	19	9	10	21	19	11	17	21	13	156
July .	17	10	18	16	12	15	15	13	14	14	144
August .	10	20	27	22	17	19	17	14	20	17	183
September	14	15	16	17	28	17	14	14	15	14	164
October .	16	10	19	21	18	16	8	15	23	19	165
November	17	10	19	14	13	21	16	18	17	17	162
December	18	20	13	21	18	17	13	11	26	14	171
Total .	193	170	197	199	199	197	162	193	208	178	1,896

Specification of last Figures.

Year.	Legitimate Children.	Acknowledged Children (European Father, Native Mother).	Illegitimate Children.	Adopted Children.	Found-ings.	Total.
1837	124	62	5	1	1	193
1838	117	49	3	1	—	170
1839	127	60	7	3	—	197
1840	142	49	5	3	—	199
1841	126	71	1	1	—	199
1842	123	65	7	2	—	197
1843	113	46	2	1	—	162
1844	132	53	5	3	—	193
1845	142	56	7	3	—	208
1846	109	55	9	5	—	178
Total .	1,255	566	51	23	1	1,896

Marriages between 1837 and 1846.

Months.	1837	1838	1839	1840	1841	1842	1843	1844	1845	1846	Total.
January .	4	2	5	5	2	7	2	8	5	3	43
February .	2	2	4	4	1	4	3	8	2	6	36
March .	1	5	3	2	4	7	5	3	4	2	36
April .	3	7	2	5	5	1	3	1	2	5	34
May .	1	1	2	3	4	1	2	3	5	1	23
June .	3	4	1	5	6	4	3	1	2	5	34
July .	3	4	3	3	3	1	5	8	3	1	34
August .	4	4	6	5	—	—	3	2	5	2	31
September	6	2	11	5	3	1	4	1	9	5	47
October .	4	4	2	5	2	3	2	6	3	4	35
November	5	5	3	3	4	7	3	2	4	3	39
December	5	6	1	7	4	4	5	6	7	2	47
Total .	41	46	43	52	38	40	40	49	51	39	439

Specification of last Figures.

Year.	Of these Pairs the Men were :		Total.
	Civilians.	Army.	
1837. . .	37	4	41
1838. . .	41	5	46
1839. . .	40	3	43
1840. . .	44	8	52
1841. . .	29	9	38
1842. . .	31	9	40
1843. . .	33	7	40
1844. . .	38	11	49
1845. . .	41	10	51
1846. . .	31	8	39
Total .	365	74	439

Deaths between 1837 and 1846.

Months.	1837	1838	1839	1840	1841	1842	1843	1844	1845	1846	Total.
January .	32	63	42	35	38	53	27	33	45	41	409
February .	24	34	17	31	29	49	33	25	41	24	307
March .	22	53	21	26	40	30	29	17	28	25	291
April .	36	41	30	25	37	27	17	18	29	25	285
May .	46	48	31	40	41	22	29	37	26	26	346
June .	28	60	26	17	35	25	21	44	31	19	306
July .	42	38	42	32	21	35	33	43	35	16	337
August .	41	46	32	28	27	45	23	30	17	27	316
September	41	28	51	44	36	39	32	18	26	22	337
October .	52	32	39	31	46	38	30	33	35	32	368
November	59	29	33	36	48	38	38	24	24	31	360
December	45	42	34	28	55	37	42	27	45	50	405
Total .	468	514	398	373	453	438	354	349	382	338	4,067

Specification of last Figures.

Year.	Males.				Females.		Still-born.	Un-known.	Total.
	Civilians.	Army.	Sailors.	Younger than 16 Years.	Older than 16 Years.	Younger than 16 Years.			
1837 .	75	116	87	60	64	62	4	-	468
1838 .	85	123	94	66	76	59	10	1	514
1839 .	80	102	100	29	46	36	5	-	398
1840 .	70	89	92	38	38	35	11	-	373
1841 .	69	98	142	54	38	39	12	1	453
1842 .	71	92	140	47	32	45	11	-	438
1843 .	59	113	52	41	39	41	9	-	354
1844 .	66	98	62	33	49	31	10	-	349
1845 .	75	114	56	33	57	39	8	-	382
1846 .	65	99	53	39	49	23	10	-	338
Total	715	1,044	878	440	488	410	90	2	4,067

Births, Deaths and Marriages in 1847.

Month.	Births.	Marriages.	Deaths.
January . .	19	5	44
February . .	9	6	16
March . . .	14	6	19
April . . .	8	2	19
May . . .	13	1	20
June . . .	15	0	23
July . . .	14	4	25
August . . .	13	4	28
September . .	21	4	18
October . . .	23	7	29
November . .	15	5	16
December . .	16	6	15
Total .	180	50	272

<i>Births specified—</i>		<i>Deaths specified—</i>	
Legitimate children	. 138	Civilians (men)	. . 48
Acknowledged children	. 33	Army	. . . 59
Illegitimate children	. 6	Navy	. . . 55
Adopted children	. 3	Less than 18 years old	. 22
Total	. . . 180	Total	. . . 184

POPULATION.—When the Hindu Rajah of Majapahit was ruling his mighty empire, and the people had not yet abandoned the temples in Mid Java, it has been computed that the population of the island may have been any number between one and three and a half millions.

It has also been suggested that the soil in the middle and eastern districts, being generally considered superior to that in the western, together with greater facilities being afforded by them for commerce, may account for this part of Java having been originally selected as the chief seat of the Hindu Government, and consequently for the denser population¹ which, according to old Chinese records, existed here.

When the Dutch East India Company first established itself in Java the island was divided into three large empires—Bantam, Jacatra, and the empire of the *Susuhunan*, which last was the most extensive, and comprehended fully two-thirds of the whole island, Cheribon being feudatory to it, and consequently the former empire of Pajajaran (Bogoh) and the Preanger districts likewise, since they were under the Sultan of Cheribon. This was altered later and the island became split up into five states or empires, which altogether contained 123 provinces or governments, among which the kingdom of Bantam was considered as but one.

Each province or government consisted of a certain number of *tjatjars*, or families, the number of which throughout the whole of Java, including Bantam, was, in the year 1717, 651,080.

¹ There was a dense population in the year 700 in Kediri, Sourabaya, and Paseroean.

Calculating these upon an average throughout Java to consist of one man, two women, and two children, the total is as follows :—

<i>First State.</i> —In the kingdom of Bantam, exclusive of the city of Bantam				5,000 families, or 25,000 persons.
<i>Second State.</i> —In Jacatra, exclusive of Batavia				19,390 „ 96,950 „
<i>Third State.</i> —In Cheribon and its dependencies, Soemedang, Bandoeng, etc.				63,120 „ 315,600 „
<i>Fourth State.</i> —In the countries belonging to the Emperor of Mataram or the Susuhunan				483,570 „ 2,417,850 „
<i>Fifth State.</i> —In the country of Balam-bowang (or Banjoewangie)				50,000 „ 250,000 „
In the island of Madura				30,000 „ 150,000 „
Total				3,255,400 „

According to a statement of the population in 1738, this had decreased to one and a half million, which in 1777 had still further fallen to 972,084, there being only 152,014 *tjatjars* in Java and 10,000 in Madura.¹

The *tjatjar* in this instance, however, was taken at six souls, instead of, as in 1717, at five souls.

This amazing instance of the decrease of a population in sixty years from more than three millions to less than one is a proof of the destructive agency of war under an Eastern despot, who would not accept defeat at the hands of his European conquerors.

This, however, was not the only cause, the Dutch East India Company being in some measure responsible. The forced services and forced deliveries which existed wherever the Dutch influence could be felt contributed to impoverish and thereby depopulate the country. The drains also on the

¹ It is doubtful if this is quite correct, some records giving the population in 1777 at nearly three times the above figure ; and this is possibly, even probably, the correct total.

surrounding districts, to supply the place of the multitudes who perished in the unhealthy climate of Batavia, must have been enormous ; and if to these is added the checks to population which were set up in Bantam, the Preanger regencies, and Cheribon through the forced pepper and coffee cultivation, it is not necessary to seek much further. Table I. shows the European and native population of Batavia from 1700 to 1793. Such were the effects of this desolating monopoly system and selfish policy that the population of the province of Banjoewangie, which in 1750 is said to have amounted to upwards of 80,000 souls, was by the time of the arrival of the British reduced to 8,000. Bad government, a policy which secured neither person nor property, and was selfish, jealous, vexatious and tyrannical, were the causes helping towards the depopulation.

Since this time, however, the Dutch have learnt their lesson, so that out of evil has actually come good ; and the wise and beneficent rule with which they have administered their East Indian colonies since 1816 has been the means of the population increasing itself to six times the number where it stood at the time when the English Government ruled the island, a statement which may well seem astonishing.

The total population of Java and Madura in 1815 appears from Table II. below to have amounted to 4,615,270, of which about four and a half millions may be considered as the indigenous population of the country and the rest as foreign settlers. In this table wandering persons found along the coast in the different capitals are not included, neither is the nautical population, roughly estimated at 30,000 souls ; so that the whole population may be taken at the time of the English to have been not much less than five millions. The table has been further divided up into districts (see Table III.), with the natives and the Chinese separated.



THE PRADJOERIT CORPS OF THE SULTAN OF JOCKJAKARTA.

The Chinese at this period numbered 94,441 ; since then, however, they have so increased that at the taking of the last census in 1905 their total had reached 295,193 excluding those in the outlying islands, who numbered a further 268,256.

Another Table marked IV. shows the total European population in Java in 1813 to have numbered 3,811. In 1905 the total had reached 64,917, and at the present day it may be taken at over 70,000 persons.

In addition to this there are fully 16,000 Europeans in the dependencies.

To return, however, to the population of the country : a wise government from the time that the British were in Java and the absence of drains on life through insurrections, tyranny, or the blighting effects of the coffee monopoly have caused the people to settle down comfortably and their numbers to be on the increase ever since.

The agricultural life, in which the mass of the people are engaged, is in Java, as in every other country, the most favourable to health. It not only favours the longevity of the existing race, but conduces to its more rapid renewal by leading to early marriages and a numerous progeny. The term of life in Java is not much shorter than in the best climates in Europe.

A very considerable number of persons of both sexes attain the advanced age of seventy or eighty, and some even live to one hundred and upwards ; nearly the same proportion survive forty and fifty as in so-called genial climates.

While life is thus healthy and prolonged, there are no restraints upon the formation of family connections through scarcity, or the labour of supporting children. Both sexes arrive at maturity very early, and the customs of the country, as well as the nature of the climate, impel them to marry young. The males marry at fifteen or sixteen, and the females at twelve or thirteen years of age, though

frequently the females form connections at nine or ten, even at seven and eight, infancy and marriage almost going together.

The conveniences which the married couple require are few and easily procured. The impulse of nature is seldom checked by the experience of present deficiencies or the fear of future poverty. Subsistence is procured without difficulty, and comforts are not wanting. Children which are for a very short period a burden to their parents become early the means of assistance and the source of wealth. To the peasant who tills his field with his own hands, and who has more land than he can bring into cultivation, they grow up into a species of property, a real treasure ; while during their infancy and the season of helplessness they take little from the fruits of his industry beyond a bare subsistence. Their education costs little or nothing, scarcely any clothing is required, his hut needs no enlargement, and no beds are used. Many of them die in infancy from the small-pox, but never from scanty food or criminal neglect by the parents. The women of all classes suckle their children, but not the wives of the *bopatıs* and of the sovereigns, who employ nurses.

Though women soon arrive at maturity and enter early into the married state, they continue to bear children to an advanced age ; and it is no uncommon thing to see a grandmother still making additions to her family. Large families such as occur among the higher classes in England are, however, rare. Though the women bear in some cases thirteen or fourteen children, this is rather the exception than the rule. Miscarriages among the women are not frequent, and when they occur the cause is generally found to have been over-straining or the performance of oppressive work in the field during pregnancy.

As the labour of the women is nearly as productive as that of the men, female children become as much objects of

solicitude with their parents as male. They are nursed with the same care and viewed with the same pride and tenderness.

If a girl happens to be a beauty her future is made, for she will become the wife of one of the chiefs as soon as she reaches the age of puberty. In no class of Java society are children of either sex considered as an encumbrance or an addition to the family as a misfortune ; marriage is therefore almost universal. An unmarried man past twenty is never or seldom met with, and an old maid is considered a curiosity. Neither custom, law, nor religion enjoins celibacy on the priesthood or any others of the community, and by none of them is it practised. If a man has not one wife, he has two, and if not two, three and so on, according to his means of subsistence ; a wife need not cost him more than 3 rupees, or 5s. a month.

Although no strictness of principle nor strong sense of moral restraint prevails in the intercourse of sexes, prostitution is not common except in the capitals and coast ports, where it is very prevalent. Most little towns, however, have a brothel or two, and promiscuous indulgence is very common everywhere.

As the Javans are a quiet domestic people, little given to adventure, disinclined to foreign enterprise, not easily roused to violence or bloodshed, and little disposed to irregularities of any kind, but few, if any, families are left destitute in consequence of hazards incurred in crimes committed by their natural protectors. The character of blood-thirsty revenge, which has been attributed to all the inhabitants of the Indian archipelago, by no means belongs to the people of Java, and though in all cases where justice is badly administered or absolutely perverted people may be expected to enforce their rights or redress their grievances rather by their own action than by an appeal to the magistrate, comparatively few lives are lost in the island by personal affrays or private feuds.

Such are a few of the circumstances that would appear to have encouraged an increase of population in Java.

Just before the much-condemned but nevertheless very wise system introduced into Java in 1831, and called the "cultuur systeem" (culture system), the population of Java was fixed by census in 1826 at 5,500,000 souls. In 1850 this number was 9,500,000, an increase of 73 per cent. in twenty-four years. As time went on, however, and the common people felt more secure, the beneficial effect of the system increased their means of support and the state of their domestic affairs improved; thus the population continued to increase until it seemed as if the limit had been reached in 1865, which was five years before the system came to an end. In this year the census showed a total of 14,168,416, an increase of very nearly 50 per cent. in fifteen years. It has been proved, however, that there is no limit to the numbers in a race situated in a country where the soil is fertile, the climate is almost all that can be desired, and the government wise and thoughtful.

In 1879 the population was 19,000,000 and in 1894 25,000,000.

Table V. shows the total population of Java and Madura on the 31st December, 1905, to be 30,098,010, and Table VI. shows the result of the census in the dependencies at the same time.

The population is still growing steadily, and at the present rate will double itself in about twenty-six years. This will place a serious and difficult problem before the Dutch.

At present the number of persons is more than 500 to the square mile; and there is a limit to what even Java, the finest tropical island in the world, can support.

The population of Batavia, including the suburbs, Jacatra and Molenvliet, at the beginning of the century was estimated at 160,000 inhabitants. The Chinese alone were 100,000; the natives, Armenians, Persians, Arabs, and

Europeans made up the rest. The latter were scarcely 1,200 to 1,500, in the service of the Company and private merchants. A few of these merchants slept in the old town above their storehouses, in which work was begun at 6 o'clock in the morning, business being transacted until 10 or 11, when the merchant returned to his country-house, if he had one, at Molenvliet. He went backwards and forwards in a carriage on account of the heat and the length of the journey.

Table IV. shows that the European population of Batavia and its suburbs, *Jacatra*, *Molenvliet*, *Weltevreden*, *Tanahbang*, *Passar Senen*, and *Cramat*, in 1813 had risen to 2,299 persons. This excluded, however, the British officers and soldiers making up the garrisons at Weltevreden and Meester Cornelis. At the present day the European population of Batavia, calculated in the same way, amounts roughly to 12,000 persons.

TABLE I.

LIST SHOWING THE POPULATION OF BATAVIA, EUROPEANS AND NATIVES, FROM 1700 TO 1793.

(As far as could be ascertained from the registers after the conquest of Java by the English in 1811.)

Year.	Within the Walls.		In the Suburbs.		Total.
	Europeans.	Europeans and Natives.	Europeans.	Europeans and Natives.	
1700 . .	1,785	20,072	215	32,478	52,550
1701 . .	1,715	19,084	321	48,972	68,056
1702 . .	1,755	19,683	309	45,452	65,135
1703 . .	1,835	18,580	534	47,123	65,703
1704 . .	1,898	22,150	470	49,351	71,501
1705 . .	1,771	19,752	—	—	19,752
1706 . .	1,923	21,899	417	49,483	71,382
1707 . .	1,826	21,632	411	47,026	68,658
1708 . .	1,769	20,922	402	54,628	75,550
1709 . .	1,681	20,600	412	55,581	76,181
1710 . .	1,716	20,850	368	58,761	79,611

TABLE I.—(contd.).

Year.	Within the Walls.		In the Suburbs.		Total.
	Europeans.	Europeans and Natives.	Europeans.	Europeans and Natives.	
1711 . .	1,723	21,517	341	57,843	79,360
1712 . .	1,656	21,538	448	65,865	87,403
1713 . .	1,566	19,007	503	69,110	88,117
1714 . .	1,644	19,758	553	66,092	85,850
1715 . .	1,663	22,242	411	64,657	86,899
1716 . .	1,516	18,947	446	60,236	79,183
1717 . .	1,443	18,965	290	59,831	78,796
1718 . .	—	—	—	—	—
1719 . .	1,409	19,411	308	68,082	87,493
1720 . .	1,610	21,156	361	67,792	88,948
1721 . .	1,477	20,520	387	67,044	87,564
1722 . .	695	11,252	417	67,339	78,591
1723 . .	1,606	23,716	363	66,079	89,795
1724 . .	1,562	23,428	341	62,966	86,394
1725 . .	1,615	23,752	332	72,218	95,970
	Within the Walls and Immediate Suburbs.		In the Vicinity and Environs.		
1726 . .	1,452	22,814	304	76,893	99,707
1727 . .	—	—	—	—	—
1728 . .	1,538	15,343	289	73,141	88,484
1729 . .	1,389	20,677	232	81,977	102,654
1730 . .	1,330	20,429	209	80,756	101,185
1731 . .	1,431	22,658	241	82,204	104,682
1732 . .	1,445	22,646	211	83,602	106,248
1733 . .	—	—	—	—	—
1734 . .	—	—	—	—	—
1735 . .	1,338	20,587	224	74,367	94,954
1736 . .	—	—	—	—	—
1737 . .	1,317	19,612	266	67,170	86,782
1738 . .	1,350	11,212	212	64,090	75,302
1739 . .	1,286	18,502	272	68,229	86,731
1740 . .	1,420	14,141	269	72,506	86,647
1741 . .	1,388	13,977	287	47,583	61,560
1742 . .	—	—	259	56,882	56,882
1743 . .	1,481	14,609	321	55,023	69,632
1744 . .	—	—	—	—	—
1745 . .	1,517	14,926	278	67,254	82,180
1746 . .	1,597	13,852	242	68,785	82,637
1747 . .	1,525	13,854	240	73,163	87,017
1748 . .	—	—	—	—	—
1749 . .	1,541	14,050	318	77,008	91,058
1750 . .	1,520	14,278	313	80,597	94,875
1751 . .	1,439	13,874	336	78,259	92,133
1752 . .	1,513	14,596	311	75,152	89,748
1753 . .	1,651	15,710	325	76,611	92,321
1754 . .	1,575	15,891	358	93,375	109,266

MISCELLANEOUS

1059

TABLE I.—(contd.).

Year.	Within the Town and all the Suburbs.		In the Vicinity and Environs.		Total.
	Europeans.	Europeans and Natives.	Europeans.	Europeans and Natives.	
1755 . .	1,599	16,466	369	95,938	112,404
1756 . .	1,604	15,925	310	96,702	112,627
1757 . .	1,629	16,356	373	103,443	119,799
1758 . .	1,560	16,855	447	106,151	123,006
1759 . .	1,634	16,785	410	109,393	126,178
1760 . .	1,572	16,942	377	111,273	128,215
1761 . .	1,499	16,298	305	113,280	129,578
1762 . .	—	—	—	—	—
1763 . .	1,507	16,282	447	113,009	129,291
1764 . .	—	16,008	413	117,207	133,215
1765 . .	—	—	—	—	—
1766 . .	—	—	—	—	—
1767 . .	—	—	—	—	—
1768 . .	1,642	15,256	273	108,507	123,763
1769 . .	1,271	15,430	389	114,750	130,180
1770 . .	1,183	13,192	328	123,869	137,061
1771 . .	1,105	12,233	300	121,380	133,613
1772 . .	1,011	12,743	348	112,346	125,089
1773 . .	1,061	13,473	342	107,500	120,973
1774 . .	933	12,134	367	108,215	120,349
1775 . .	1,165	13,512	328	125,635	139,147
1776 . .	—	—	276	131,895	131,895
1777 . .	896	10,661	279	140,332	150,993
1778 . .	1,137	12,206	238	136,532	147,738
1779 . .	—	—	302	160,986	160,986
1780 . .	747	13,651	278	129,943	143,594
1781 . .	—	—	—	—	—
1782 . .	664	9,517	276	127,039	136,556
1783 . .	—	—	—	—	—
1784 . .	695	10,422	336	129,506	139,928
1785 . .	—	—	—	—	—
1786 . .	—	—	—	—	—
1787 . .	574	9,910	375	133,151	143,061
1788 . .	—	—	—	—	—
1789 . .	—	—	—	—	—
1790 . .	—	—	—	—	—
1791 . .	325	6,367	450	120,352	126,719
1792 . .	254	8,121	282	119,297	127,418
1793 . .	254	8,121	282	119,297	127,418

TABLE II.

TOTAL POPULATION OF JAVA AND MADURA IN 1815, INCLUSIVE
OF EUROPEANS, SLAVES AND ITINERANTS.

Slaves	27,142
Europeans	3,811
Total	30,953
Total as per list	4,615,270
Besides itinerants not included, roughly estimated at	30,000
Total	4,676,223

Or $\pm$ 100 to square mile.

TABLE III.

POPULATION IN THE VARIOUS DISTRICTS IN JAVA AND MADURA,
1815.

	Natives.	Chinese.	Total.
Bantam	230,976	628	231,604
Batavia	279,621	52,394	332,015
Buitenzorg	73,679	2,633	76,312
Preanger	243,268	180	243,448
Cheribon	213,658	2,343	216,001
Tegal	175,446	2,004	177,450
Pecalongan	113,396	2,046	115,442
Samarang	305,910	1,700	307,610
Kedoe	196,171	1,139	197,310
Grobogan	66,109	403	66,512
Japara and Joana	101,000	2,290	103,290
Rembang	154,639	3,891	158,530
Grésik	115,078	364	115,442
Sourabaya	152,025	2,047	154,072
Pasoeroean	107,752	1,070	108,822
Probolingo	102,927	1,430	104,357
Banjoewangie	8,554	319	8,873
Surakarta	970,292	2,435	972,727
Djockjakarta	683,005	2,202	685,207
Madura	205,744	12,923	218,667
Total	4,499,250	94,441	4,593,691

TABLE IV.

EUROPEAN POPULATION IN VARIOUS DISTRICTS IN JAVA IN 1813.

Batavia (Suburbs)	.	.	.	.	.	.	371
City of Batavia	.	.	.	.	.	.	1,928
Preanger	.	.	.	.	.	.	34
Krawang	.	.	.	.	.	.	14
Kandanghauer	.	.	.	.	.	.	6
Indramayoe	.	.	.	.	.	.	18
Tegal	.	.	.	.	.	.	176
Pecalongan	.	.	.	.	.	.	154
Samarang	.	.	.	.	.	.	96
Japara	.	.	.	.	.	.	151
Joana	.	.	.	.	.	.	50
Lasem and Rembang	.	.	.	.	.	.	179
Tuban	.	.	.	.	.	.	1
Sedayoe	.	.	.	.	.	.	4
Gresik	.	.	.	.	.	.	208
Pasoeroean	.	.	.	.	.	.	321
Total							3,811

NOTE.—This was not a complete table.

(For Tables V. and VI. see pp. 1062—63.)

CENSUS-TAKING.—In early years there was considerable difficulty in ensuring that the native chiefs took the census with sufficient care, and not by their usual method of counting the *tjatjars*; the following story is related of how the Rajah of Lombok, an island quite near Java, took it.¹

How the Rajah of Lombok took the Census.—The Rajah of Lombok was a very wise man and he showed his wisdom greatly in the way he took the census. The chief revenue of the rajah was derived from a head-tax of rice, a small measure being paid annually by every man, woman, and child in the island. There is no doubt that every one paid this tax, for it was a very light one, and the land was fertile and the people well off; but it had to pass through many hands before it reached the Government warehouse. When

¹ The story, which I believe is perfectly true, is taken from Professor A. R. Wallace's "Malay Archipelago."

TABLE V.
TERRITORY AND POPULATION, JAVA AND MADURA.

Residencias.	Area in Square Geo- graphi- cal Miles.	Europeans.			Chinese.			Arabs.			Other Eastern Nations.			Natives.			Total Population on 31st December, 1905.
		Sex.		Total.	Sex.		Total.	Sex.		Total.	Sex.		Total.	Sex.		Total.	
		Men.	Women.		Men.	Women.		Men.	Women.		Men.	Women.					
Bantam	1,436	291	246	537	1,800	1,355	3,155	35	47	82	32	43	75	438,065	453,476	891,541	895,390
Batavia	2,417	7,062	6,743	13,805	49,417	43,103	92,520	1,509	1,263	2,772	179	98	277	980,195	1,019,783	1,999,978	2,109,352
Preanger - Regentschap- pen.	3,710	2,931	2,300	5,231	5,577	3,819	9,396	69	55	124	51	3	54	1,298,116	1,383,846	2,681,962	2,696,767
Ceribon	1,233	677	510	1,187	11,927	10,741	22,668	1,500	1,205	2,705	130	42	172	813,634	863,639	1,682,273	1,709,005
Pecalongan	1,008	1,075	842	1,917	8,779	7,985	16,764	1,199	912	2,111	22	24	46	972,730	996,720	1,969,450	1,990,286
Samarang	1,488	4,572	4,262	8,834	17,149	15,575	32,724	442	412	854	518	501	1,019	1,254,285	1,317,207	2,571,492	2,614,923
Rembang	1,352	668	462	1,130	8,643	9,195	17,838	326	307	633	—	—	—	726,872	750,325	1,477,197	1,496,798
Sourabaya	1,081	5,486	5,114	10,600	15,471	11,175	26,646	1,888	1,844	3,732	213	154	367	1,174,113	1,221,505	2,395,618	2,436,963
Paseroean	1,594	2,779	2,628	5,407	7,215	5,983	13,198	1,068	858	1,926	38	47	85	978,100	1,023,454	2,001,554	2,022,170
Besoeki	1,845	1,076	713	1,789	1,761	1,305	3,066	1,016	924	1,940	37	7	44	482,690	482,946	965,636	972,475
Ranjoernas	1,010	556	525	1,081	3,646	3,196	6,842	22	26	48	34	14	48	728,208	749,902	1,478,110	1,486,129
Kedoe.	992	1,331	956	2,287	7,133	6,085	13,218	99	82	181	7	3	10	1,543,587	1,579,400	3,122,987	3,138,683
Djoekjakarta	565	1,045	1,297	2,342	2,417	2,949	5,366	59	38	97	52	34	86	543,515	567,209	1,110,814	1,118,705
Soerakarta	1,129	1,755	1,580	3,335	6,013	4,958	10,971	199	138	337	282	135	417	777,051	800,945	1,577,996	1,593,056
Nadoen	1,068	982	848	1,830	2,512	2,257	4,769	14	6	20	35	22	57	667,266	675,530	1,342,796	1,349,472
Kediri.	1,273	1,081	1,314	2,395	6,857	6,110	12,967	—	—	—	4	—	4	884,954	873,625	1,758,579	1,774,545
Madoera	983	323	289	612	1,553	1,532	3,085	777	809	1,586	38	43	81	720,462	767,463	1,487,925	1,493,289
Total	23,884	34,288	30,629	64,919	157,870	137,323	295,193	10,222	8,926	19,148	1,672	1,170	2,842	14,588,843	15,127,065	29,715,908	30,098,010

TABLE VI.

TERRITORY AND POPULATION, OUTLYING POSSESSIONS.

Residencies.	Area in Square Geo-graphical Miles.	Europeans.			Chinese.			Arabs.			Other Eastern Nations.			Natives.			Total Natives according to Note of 1900.
		Sex.		Total.	Sex.		Total.	Sex.		Total.	Sex.		Total.	Sex.		Total.	
		Men.	Women.		Men.	Women.		Men.	Women.		Men.	Women.		Men.	Women.		
Padangsche beneden-landen	3,221	918	994	1,912	3,937	2,761	6,698	134	78	212	617	504	1,121	200,273	193,215	393,488	354,653
Padangsche bovenlan-den	4,096	541	470	1,011	1,036	533	1,569	17	5	22	196	149	345	448,482	902,093	832,968	832,968
Tapaoeli	7,035	219	217	436	934	673	1,607	28	18	46	156	117	273	204,192	410,939	321,309	321,309
Benkoelen	4,439	233	125	358	1,748	588	2,336	14	10	24	35	1	36	98,240	201,515	161,185	161,185
Lampoungsche Districts	5,333	92	54	146	878	308	1,186	60	43	103	2	1	3	75,192	155,080	141,364	141,364
Paicembang (Djambi)	25,267	414	264	678	7,404	1,844	9,248	1,241	1,712	2,953	143	75	216	384,520	783,259	792,340 (a)	792,340
Oostkust van Sumatra	16,089	1,703	964	2,667	92,646	6,590	99,236	81	8	89	10,715	4,769	15,484	247,873	203,068	450,941	306,035
Atyeh and Onderhoorig-beden	9,060	418	343	761	7,594	981	8,575	97	4	101	986	275	1,261	292,379	279,098	571,477	104,451
Riouw and Onderhoorig-beden	7,704	134	87	221	15,892	2,599	18,491	4	1	5	165	19	184	46,350	46,905	93,315 (a)	71,904
Banka and Onderhoorig-beden	2,104	109	148	317	32,062	11,661	43,723	145	116	261	28	7	35	35,703	35,150	70,853	65,900
Rilliton	879	53	136	176	1,756	766	2,522	12	4	16	3	—	3	16,430	17,751	34,181	36,868
Westerafd. van Borneo	26,369	180	194	374	20,513	8,335	48,348	716	626	1,342	331	202	533	201,933	198,399	400,332	369,499
Zuider- and Oosterafd. van Borneo	74,123	543	465	1,008	4,715	2,459	7,174	966	833	1,799	186	27	213	375,735	396,797	772,532 (a)	707,411
Celebes and Onderh.	23,333	782	790	1,572	3,446	2,210	5,656	222	166	388	95	26	121	205,616	202,146	407,762	446,915
Nenado	10,431	676	588	1,264	3,792	2,414	6,206	468	351	819	47	7	54	212,502	215,561	428,063	423,616
Ambona	9,346	1,085	1,147	2,232	1,083	270	1,353	459	416	875	62	16	78	149,221	145,245	294,466 (a)	271,484
Fernate and Onderh.	83,065	219	278	497	587	310	906	211	157	368	12	4	12	56,127	50,505	106,632	135,770
Zuid Nieuw Guinea	25	10	35	45	44	11	55	—	—	—	4	—	4	258	135	393	—
Timor and Onderh.	8,364	125	124	249	909	651	1,560	200	113	313	8	1	9	157,621	148,848	306,469	—
Ball and Lombok	1,911	72	47	119	1,284	523	1,807	359	345	704	107	36	143	262,714	258,048	520,762 (a)	1,130,762
Total	323,375	8,631	7,362	15,993	211,260	50,996	268,256	5,434	5,006	10,440	13,898	6,230	20,128	3,702,995	3,601,557	7,304,552	—

(a) On closer calculation the totals were found to be as given under this column, only however in the case of those marked "(a)."

the harvest was over the villagers brought their rice to the *kapala kampong*, or head of the village, and no doubt he had sometimes compassion on the poor or sick and passed over their short measure, and sometimes was obliged to grant a favour to those who had complaints against him ; and then he must keep up his dignity by having his granaries better filled than his neighbours, and so the rice he took to the *waidono* that was over his district was generally a good deal less than it should have been. And all the *waidonos* had, of course, to take care of themselves, for they were all in debt, and it was so easy to take a little of the Government rice, and there would still be plenty for the rajah. Moreover, if they did not look after themselves, who would ? And the *gustis* or princes who received the rice from the *waidonos* helped themselves likewise, and so when the harvest was all over and the rice tribute was all brought in the quantity was found to be less each year than the one before.

Sickness in one district, and fevers in another, and failure of the crops in a third were of course alleged as the cause of this falling off, but when the rajah went to hunt at the foot of the great *gunung* (mountain), or went to visit a *gusti*, on the other side of the island, he always saw the villages full of people, all looking well-fed and happy. And he noticed that the *kris* of his chiefs and officers were getting handsomer and handsomer ; and those that were of yellow wood were changed for ivory, and those of ivory were changed for gold, and diamonds and emeralds sparkled on many of them ; and he knew very well which way the tribute rice went. But as he could not prove it, he kept silence, and resolved in his own heart some day to have a census taken, so that he might know the number of his people and not be cheated out of more rice than was just and reasonable.

But the difficulty was how to get this census. He could not go himself into every village and every house and count



THE CRATER OF THE BROMO.

all the people ; and if he ordered it to be done by the regular officers they would quickly understand what it was for, and the census would be sure to agree exactly with the quantity of rice he got last year. It was evident, therefore, that to answer his purpose no one must suspect why the census was taken, and to make sure of this no one must know that there was any census taken at all. This was a very hard problem, and the rajah thought and thought as hard as a Malay rajah can be expected to think, but could not solve it ; and so he was very unhappy, and did nothing but smoke and chew betel-nut with his favourite wives and eat scarcely anything ; and even when he went to the cock-fight he did not seem to care whether his best birds won or lost. For several days he remained in this sad state, and all the court were afraid some evil eye had bewitched the rajah ; and an unfortunate Irish captain who had come into port for a cargo of rice, and who squinted dreadfully, was very near being krissed, but being first brought to the royal presence was graciously ordered to go on board and remain there while his ship remained in port.

One morning, however, after about a week's continuance of this unaccountable melancholy, which the rajah had simulated very well, a welcome change took place, for the rajah sent to call together all the chiefs and priests and princes who were then in Matarem, his capital city ; and when they were all assembled in anxious expectation he then addressed them.

“ For many days my heart has been very sick and I knew not why, but now the trouble is cleared away, for I have dreamed a dream. Last night the spirit of the *Gunung Api*, the great fire mountain, appeared to me, and told me that I must go up to the top of the mountain. All of you may come with me to near the top, but then I must go up alone, and the great spirit will again appear to me and will tell me what is of great importance to me and to you and

to all the people of this island. Now go all of you and make this known throughout the land, and let every village furnish men to make a clear road for us to go through the forest and up the great burning mountain."

So the news was spread over the whole island that the rajah must go to meet the great spirit on the top of the mountain. And the people all marvelled, for they knew that the wisdom of their rajah was exceeding great; moreover, he was blessed with many wives and concubines and was a good man. And every village sent forth its men, and they cleared away the jungle and made bridges over the mountain streams and smoothed the rough places for the rajah's passage. And when they came to the steep and craggy rocks of the mountain they sought out the best paths, sometimes along the bed of a torrent, sometimes along narrow ledges of the black rocks, and in one place cutting down a tall tree so as to bridge across a chasm, in another constructing ladders to mount the smooth face of a precipice. The chiefs who superintended the work fixed upon the length of each day's journey beforehand according to the nature of the road, and chose pleasant places by the banks of clear streams and in the neighbourhood of shady trees, where they built sheds and huts of bambu well thatched with the leaves of palm trees, in which the rajah and his attendants might eat and sleep at the close of each day. And when all was ready the princes and priests and chief men came again to the rajah, to tell him what had been done and to ask him when he would go up to the mountain. And he fixed a day and ordered every man of rank and authority to accompany him, to do honour to the great spirit who had bid him undertake the journey, and to show how willingly they obeyed his commands. And then there was much preparation throughout the whole island. The best cattle were killed and the meat salted and sun-dried; and abundance of red peppers and sweet potatoes were

gathered, and the tall pinang trees were climbed for the spicy betel-nut, the sirih leaf was tied up in bundles, and every man filled his tobacco pouch and lime box to the brim, so that he might not want any of the materials for chewing the refreshing betel during the journey, and the stores of provisions were sent on a day in advance. And on the day before that appointed for starting all the chiefs both great and small came to Matarem, the abode of the king, with their horses and their servants, and the bearers of their sirih boxes and their sleeping mats and their provisions, and they encamped under the tall *waringin* trees that border all the roads about Matarem, and with blazing fires frightened away the ghosts and evil spirits that nightly haunt the gloomy avenues.

In the morning a great procession was formed to conduct the rajah to the mountain. And the royal princes and relations of the rajah mounted their black horses, whose tails swept the ground ; they used no saddle or stirrups, but sat upon a cloth of gay colours ; the bits were of silver and the bridles of many-coloured cords. The less important people were on small strong horses of various colours, well suited to a mountain journey, and all (even the rajah) were bare-legged to above the knee, wearing only the gay-coloured cotton waist-cloth, a silk or cotton jacket, and a large handkerchief tastefully folded round the head. Every one was attended by one or two servants bearing his sirih and betel boxes, who were also mounted on ponies ; and great numbers more had gone on in advance or waited to bring up the rear. The men in authority were numbered by hundreds and their followers by thousands, and all the island wondered what great thing would come of it.

For the first two days they went along good roads, and through many villages which were kept clean and had bright cloths hung out at the windows ; and all the people, when the rajah came, squatted down upon the ground in respect

and every man riding got off his horse and squatted down also "for the greatness of the rajah was very great, and the spirits were in communication with him." At every village many joined the procession. At the place where they stopped for the night the people had placed stakes along each side of the roads in front of the houses.

These were split cross-wise at the top, and in the cleft were fastened little clay lamps, and between them were stuck the green leaves of palm trees, which, dripping with the evening dew, gleamed prettily with the many twinkling lights. And few went to sleep that night till the morning hours, for every house held a knot of eager talkers, and much betel-nut was consumed, and endless were the conjectures what would come of it.

On the second day they left the last village behind them and entered the wild country that surrounds the great mountain, and rested in the huts that had been prepared for them on the banks of a stream of cold and sparkling water.

And the rajah's hunters, armed with long and heavy guns, went in search of deer and wild bulls in the surrounding woods, and brought home the meat of both in the early morning and sent it on in advance to prepare the mid-day meal. On the third day they advanced as far as the horses would go and encamped at the foot of high rocks, among which narrow pathways only could be found to reach the mountain-top. And on the fourth morning when the rajah set out he was accompanied only by a small party of priests and princes with their immediate attendants; and they toiled wearily up the rugged way, and sometimes were carried by their servants, till they passed up above the great trees, and then among the thorny bushes, and above them again into the black and burnt rock of the highest part of the mountain.

And when they were near the summit the rajah ordered them all to halt, while alone he went to meet the great

spirit on the very peak of the mountain. So he went on with the two boys only, who carried his sirih and betel, and soon reached the top of the mountain among great rocks, in the edge of the great gulf whence issue forth continually smoke and vapour. And the rajah asked for sirih, and told the boys to sit down under a rock and look down the mountain and not to move till he returned to them. And as they were tired, and the sun was warm and pleasant, and the rock sheltered them from the wind and cold, the boys fell aselep.

And the rajah went a little way on under another rock, and he was tired, and the sun was warm and pleasant, and the rock sheltered him from the wind and cold, and he too fell asleep.

And those who were waiting for the rajah thought him a long time on the top of the mountain and thought the great spirit must have much to say, or might perhaps want to keep him on the mountain always, or perhaps he had missed his way in coming down again. And they were debating whether they should go and search for him, when they saw him coming down with the two boys. And when he met them he looked very grave, but said nothing ; and then all descended together and the procession returned as it had come ; and the rajah went to his palace, and the chiefs to their villages, and the people to their houses, to tell their wives and children all that had happened, and to wonder yet again what it all portended, and what would come of it.

And the people wondered all the more when their rajah spoke not. But three days afterwards the rajah summoned the priests and the princes and the chief men of Matarem to hear what the great spirit had told him on the top of the mountain, and when they were all assembled and the betel and sirih had been handed all round, he told them what had happened. On the top of the mountain he had fallen into a trance, and the great spirit had

appeared to him with a face like burnished gold, and had said, "Oh, Rajah! much plague and sickness and fevers are coming upon all the earth, upon men, and upon horses, upon boys, and upon cattle; but as you and your people have obeyed me, and have come up to my great mountain, I will teach you how you and all the people of Lombok may escape this plague." And all waited anxiously to hear how they were to be saved from so great and fearful a calamity. And after a short silence the rajah spoke again, and told them that the great spirit had commanded that twelve sacred *kris* should be made, and that to make them every village and every district must send a bundle of needles, a needle for every head in the village. And when any grievous disease appeared in any village one of the sacred *kris* should be sent there, and if every house in that village had sent the right number of needles the disease would immediately cease; but if the number of needles sent had not been exact, the *kris* would have no virtue.

So the princes and chiefs sent to all their villages and communicated the wonderful news; and the people rejoiced and were exceeding glad, for their rajah was a righteous man and knew how to deal with the spirits.

And all made haste to collect the needles with the greatest accuracy, for they feared that if but one were wanting the whole village would suffer. So one by one the head men of the villages brought in their bundles of needles; those who were near Matarem came first, and those who were far off came last; and the rajah received them with his own hands and put them away carefully in an inner chamber, in a camphor-wood chest whose hinges and clasps were of silver; and on every bundle was marked the name of the village and the district from whence it came, so that it might be known that all had heard and obeyed the commands of the great spirit.

And when it was quite certain that every village had sent in its bundle, the rajah divided the needles into twelve equal parts, and ordered the best steel worker in Matarem to bring his forge and his bellows and his hammers to the palace and to make the twelve *kris* under the rajah's eye, and in the sight of all men who chose to see it. And when they were finished they were wrapped up in new silk and put away carefully until they might be wanted.

Now the journey to the mountain was in the East monsoon when no rain falls in Lombok ; and soon after the *kris* were made it was the time of the rice harvest and the chiefs of districts and villages brought in their tax to the rajah according to the number of heads in their villages. And to those that wanted but little of the amount the rajah said nothing ; but when those came who brought only half or a fourth part of what was strictly due, he said to them mildly, " The needles which you sent from your village were many more than came from such a one's village, yet your tribute is less than his ; go back and see who it is that has not paid the tax." And the next year the produce of the tax increased greatly, for they feared that the rajah might justly kill those who a second time kept back the right tribute. And so the rajah waxed very rich and increased the number of his soldiers, and his wives, and his concubines. And to his wives he gave golden jewels, and bought fine black horses from the white-skinned Hollanders and made great feasts when his children were born or were married ; and none of the rajahs or sultans among the Malays were so great or so powerful as the Rajah of Lombok.

And the twelve sacred *kris* had great virtue, and when any sickness appeared in a village one of them was sent for : and sometimes the sickness went away and then the sacred *kris* was taken back with great honour and the head men of the village came to tell the rajah of its miraculous power and to thank him. And sometimes the sickness would not go

away; and then everybody was convinced that there had been a mistake in the number of needles sent from that village, and therefore the sacred *kris* had no effect and had to be taken back again by the head men with heavy hearts, but still with all honour, for was not the fault their own?

PART III.

Crime. Punishments. Valley of Death—Vegetable Poisons. Edible Birds' Nests. Shells. Piracy. Slavery. Chinese in Java. Harbours. Mountains and Volcanoes—Eruptions. Meteorites. Rivers. Lakes. Irrigation. Roads. Railways and Tramways. Post. Telegraphs. Telephones. Shipping.

CRIME.—Crime among the Javans of the present day is not commoner than among other Asiatic nations. On the whole the Javans may be considered a peaceful people, and not given to violence or bloodshed; in fact, among themselves, and ruled by good *hopatis*, they are little disposed to irregularities, and there is no race more easily managed and controlled.

If one looks back, however, at the “Day Register” of the old Castle of Batavia (“Dagh Register van de Oude Kasteel”), one is struck by the amount of crime that was rampant at this time; scarcely a day passed without one or more natives having to be punished by the Dutch with strangulation, or with what appears to have been just as common, torture. The crimes, however, appear to have been frequently trivial, and it is probable that there was actually no more crime among the natives then than now, but that the Dutch, ever fearing an insurrection, which with their small numbers would have been difficult to deal with, ruled with a rod of iron, punishing among the natives every little dereliction of duty as a crime.

Incidentally it may be remarked that crime among the Dutch themselves at this period seems to have been very frequent. This is, however, scarcely a matter for wonder when we bear in mind the fact that on account of the unhealthy climate of old Batavia the better classes among the Dutch refused to proceed there.

The class which went was the riff-raff of Amsterdam and

Rotterdam, bankrupts, ne'er-do-wells, swindlers, and rogues and vagabonds—men that could never do well anywhere, mere fortune-hunters, whose sole object was money and gain, and whose greed, avarice, and lust were notorious.

These were the men who served in the various positions in the old East India Company, and lined their pockets at the expense of the shareholders. Among such a class is it a wonder if there was a large percentage of crime? The higher officials, too, were actuated by the same principles of gain as the lower, and one and all seemingly had but a single idea in coming to Batavia in these days, namely, to get rich in the shortest time, if possible honestly—but to get rich.

PUNISHMENTS.—Punishments among the Javans, as among all Asiatic nations, were formerly cruel and abominable beyond conception, and the refinement of torture and the pain inflicted upon the poor sufferer reached a degree scarcely imaginable.

The victim was impaled, crucified, or mutilated—it might be emasculated first—or his legs and arms broken. He was perhaps pounded to a jelly in a rice block, or he would be pierced with *krisses* and the wounds rubbed with sugar in order to entice the ants to make festering wounds and cause gangrene.

Sometimes the culprit was stood upright on his head and then sliced down the middle. All these punishments and many more besides, equally severe, fell upon those Javans who had committed some crime or had incurred the wrath of their sovereign or his *bopati*.

In matters of punishment, however, the Dutch in the early days at Batavia were in no whit behind the Javans, and to be crucified, burnt by hot irons, dismembered, flogged to death, or broken on the wheel were some of the lighter punishments the “board of schepenen” (or aldermen) inflicted upon white man and black alike.



ROAD-WATERING IN JAVA.



THE DONAN AT TJILATJAP.

Their most terrible punishment, however, was impalement.

In the year 1769 there was an execution of this kind at Batavia of a Macassar slave who had murdered his master. The criminal was led in the morning to the place of execution, the grass plot or plain, and laid upon his belly, being held down by four men.

The executioner made a transverse incision at the lower part of the body as far as the os sacrum ; he then introduced the sharp point of the spike, which was about 6 feet long and made of polished iron, into the wound so that it passed between the backbone and the skin. Two men drove it forcibly up along the spine, while the executioner held the end and gave it a proper direction till it came out between the neck and shoulders. The lower end was next put into a wooden post and riveted fast, and the sufferer was lifted up thus impaled and the post stuck in the ground.

At the top of the post, about 10 feet from the ground, there was a kind of bench, upon which the body rested. The insensibility or fortitude of the miserable sufferer was incredible. He did not utter the least complaint, except when the spike was riveted into the pillar ; the hammering and shaking occasioned by it seemed to be intolerable to him, and he then bellowed out for pain ; and likewise again when he was lifted up and set upon the ground.

He sat in this dreadful situation till death put an end to his torments, which fortunately occurred the next day about 3 o'clock in the afternoon. He owed this speedy termination of his misery to a light shower of rain, which continued for about an hour, and he gave up the ghost half an hour afterwards.

There have been instances at Batavia of criminals who have been impaled in the dry season, and have remained alive for eight or more days without any food or drink,

which is prevented being given to them by a guard stationed at the place of execution for that purpose.

None of the vital parts are injured by the impalement, which made the punishment the more cruel and intolerable, but as soon as any water gets into the wound it mortifies and occasions gangrene, which directly attacks the vital parts and brings on almost immediate death.

This miserable sufferer continually complained of the intolerable thirst which is peculiarly incident to this terrible punishment.

The criminals are exposed during the whole day to the burning rays of the sun, and are unceasingly tormented by numerous stinging insects.

About three hours before he died he was in conversation with the bystanders, relating to them the manner in which he had murdered his good master and expressing his repentance for the crime he had committed.

This he did with great composure, yet an instant afterwards he burst out in the most bitter complaints of unquenchable thirst and raved for drink, but no one was allowed to alleviate by a single drop of water his excruciating torments.

The Dutch East India Company always asserted that without this cruel punishment they were unable to restrain a treacherous race, with no moral principles, from the perpetration of the greatest crimes.

It may be granted that they thought so, but had a better class of Dutchmen ruled over Batavia during the seventeenth and eighteenth centuries such tortures would never have been found a necessity.

These terrible punishments and mutilations went on until the time of Sir Stamford Raffles, for even Governor-General Daendels, although he improved a great many institutions in the island, failed to modify the code for criminal punishment. Daendels on the whole, and taking

into consideration the time in which he lived, was as far as this matter was concerned the hardest governor there has ever been, and the punishment which followed the slightest disobedience or dereliction of duty, or the failure to carry out a given task set by the government or himself, in the required time, met with swift and speedy death. His policy was immediate punishment, and in carrying this out it has sometimes been questioned whether he always punished the right man, so short and cursory was the court-martial ; in fact it was a case with him of "rather hang the wrong fellow than no fellow."

In the proclamation of Lord Minto, done at Molenvliet on the 11th September, 1811, one of the clauses reads :—

"The modifications of the Dutch law now to be adopted are the following.

"First. Neither torture nor mutilation shall make part of any sentence to be pronounced against criminals." Etc., etc.

The following is a small extract I have taken from the punishment register of the "Dagh Register" of the "Oude Kasteel" of Batavia :—

BEFORE THE COURT OF JUSTICE, WHICH SAT IN THE OLD CASTLE
OF BATAVIA DURING MARCH, 1670.

[Translation.]

"*Louis*, from Bengal, slave of Mr. William Mouray, for sundry impertinencies, to be imprisoned, branded, flogged, and, at the discretion of his owner, shackled.

"*Claes Josua Cuhl*, from Otterdorp, corporal, for making trouble, to be hung up three times and imprisoned in chains for eight months.

"*Matthys de Jonge*, from Dort, soldier, for making trouble, to be hung up three times and imprisoned in chains for a year.

"*Hendrick Balckman*, from Wesel, soldier ; *Jan Vorsten*, from Hamburg, soldier ; *Jan Jansen Lyndrayer*, woodcutter, for being absent, to be well flogged three times and imprisoned in chains for six months.

“ *Pieter*, from Batavia, for being twice absent, to be flogged three times and imprisoned in chains for three years.

“ *Jan Bocksteert*, soldier, for sundries, to be flogged three times and imprisoned in chains for three years.

“ *Bastiaen Jochums*, for sundries, to be tortured and imprisoned — in chains for a year.

.”

IN MAY, 1670.

“ *Sangady*, from Padang, for sundries, to be strangled.

“ *Mey Intchie*, for sundries, to be burnt, and sent to the Cape for ten years.

.”

IN JULY, 1670.

“ *Remeus Rogers*, for sundries, to be tortured and imprisoned for a year in chains.

“ *Francis*, from Bengal, slave of Hendrick Levendig, for sundries, to be tortured, hung up, branded and imprisoned for three years in chains with the meanest work.

“ *Dirck Jacobs*, soldier, for being twice absent, to be flogged twice and imprisoned for five years in chains.

“ *Lauren Jacobse Muts*, of Rotterdam, for manslaughter, to be brought to his death by the sword being drawn across his body.

“ *Moeda*, of Macassar, to be tortured, branded, and imprisoned for twenty-five years in chains, with the meanest work.

“ *Ma Banjar*, female, slave of the Chinaman Eencko, because she ran away, to be tortured and kept in chains for two years, according to the wishes of her owner.

“ *Jacob Bastiense*, of Rotterdam, quartermaster, for manslaughter, to be brought to his death with the sword.”

VALLEY OF DEATH.—It was in 1773, at the time an English doctor named C. H. was living at Batavia,¹ and issued a treatise on vegetable poison, that the so-called imaginative Dr. Foersch, a surgeon to the Dutch East India Company stationed at Samarang, startled the whole world and made

¹ In vain have I searched for his full name.

the blood grow cold with his description of the *Gunúng Upas*.¹ He described himself as standing in horror on a blasted plain, covered with skeletons, with but one other object, a deadly *upas* tree, in sight. It has been said that Foerch discovered this valley on the volcano *Papandayang*, but as there is nothing answering to it on this mountain, and since it is very far from Samarang, it is unlikely that this is the place he referred to.

Near Samarang, however, or at least not more than two days' journey, is the mountain *Dieng*, and a visit here will prove that however much Dr. Foerch exaggerated and varnished his tale—and it is not absolutely proved that he did so—there does exist on this mountain, which was the seat of a Hindu empire with a holy city for more than one thousand years,² a valley of death, or a dangerous and poisonous zone. Into this valley, but only in the very early hours of the day, and under the special guardianship of a European who lives near, the traveller can go, but if there is the slightest chance of a breeze rising all living persons must leave it instantly.³

This bare and desolate place stands in the midst of reservoirs of poisonous gases fatal to the human system, and if, as may have been the case in earlier years, a *bohon upas* (upas tree) stood alone in the valley—and these trees are to be found in various places in the island—there is nothing more likely than that criminals condemned to death were sent there to fetch some of the upas poison and never returned. The improbability, therefore, of Foerch finding skeletons there is perhaps not so ridiculous and absurd as Dr. Horsfield, who only visited the *Papandayang*, and others have tried to make out.

The *bohon upas* (*Antiaris toxicaria*) is common in the east

¹ The "Mountain of the Upas Tree."

² See Chapter on "Antiquities."

³ The Author has never been in the valley himself, but knows persons who have been.

of Java, in the residency or province of Banjoewangie (formerly called Balembouang). The tree looks like an elm, and grows to the height of about 30 to 40 feet. The leaves are alternate, oval, and rough to the touch. The flowers are diœcious and axillary. The male is formed of a round receptacle sprinkled with stamina; the female has two pistils. The fruit is round and contains a kernel. On breaking a branch of the tree a milky juice runs out from it and immediately condenses itself; this is the famous poison. Mixed with the blood it kills almost instantaneously, although the Javans eat the animals killed by means of this poison without feeling any ill effect from it. That the atmosphere of the tree is mortal is unfounded, but the story that it is so was held to be true by the natives for many years. It seems that this idea arose through some of the former sovereigns of Java, finding the number of their brothers and their large families raised through polygamy an embarrassment, banished them with other state criminals to marshy and unhealthy districts situated on the southern coast of the island.¹ As the greater part of these exiles soon perished, the people imagined that they were killed by the exhalations of the *bohun upas*.

Vegetable Poisons.—The interesting report of the English surgeon called C. H. on the poison is here given in full :—

“ In the year 1774 I was stationed at Batavia as a surgeon in the service of the Dutch East India Company. During my residence there I received several different accounts of the *bohun upas*, and the violent effects of its poison. They all seemed incredible to me, but raised my curiosity in so high a degree, that I resolved to investigate this subject thoroughly and to trust only to my own observations. In consequence of this resolution, I applied to the Governor-General, M. Petrus Albertus van der Parra, for a pass to travel through the country; my request was granted, and having procured every information, I set out on my expedition. I had procured a recommendation

¹ Banyumas.



BACK VIEW OF A EUROPEAN HOUSE IN JAVA.

from an old Malayan priest to another priest, who lives on the nearest habitable spot to the tree, which is about fifteen or sixteen miles distant. The letter proved of great service to me in my undertaking, as that priest is appointed by the emperor to reside there, in order to prepare for eternity the souls of those who for different crimes are sentenced to approach the tree to procure the poison.

“The *bohun upas* is situated in the island of Java, about twenty-seven leagues from Batavia, fourteen from *Souracarta*, the seat of the emperor, and twenty leagues from *Tinkoe*,¹ the present residence of the Sultan of Java; it is surrounded on all sides by a circle of high hills and mountains, and the country round it to the distance of ten or twelve miles from the tree is entirely barren. Not a tree nor a shrub, nor even the least plant or grass, is to be seen. I have made the tour all around this dangerous spot, at about eighteen miles distance from the centre, and I found the aspect of the country on all sides equally dreary.

“The easiest ascent of the hills is from that part where the old ecclesiastic dwells. From his house the criminals are sent for the poison, into which the points of all warlike instruments are dipped. It is of high value, and produces a considerable revenue to the emperor. The poison which is produced from this tree is a gum that issues out between the bark and the tree itself, like the camphor. Malefactors, who for their crimes are sentenced to die, are the only persons who fetch the poison, and this is the only chance they have of saving their lives. After sentence is pronounced upon them by the judge, they are asked in court whether they will die by the hands of the executioner or whether they will go to the upas tree for a box of poison? They commonly prefer the latter proposal, as there is not only some chance of preserving their lives, but also a certainty, in case of their safe return, that a provision will be made for them in future by the emperor. They are also permitted to ask a favour from the emperor, which is generally of a trifling nature and commonly granted. They are then provided with a silver or tortoise-shell box, into which they are to put the poisonous gum, and are properly instructed how to proceed while they are upon their dangerous expedition; among other particulars, they are always to attend to the direction of the winds, as they go towards the

¹ Passar Gede, near Djockjakarta, where the old Kraton stood.

tree, before the wind, so that the effluvium from the tree is always blown from them. They are told likewise to travel with the utmost despatch, as that is the only method of ensuring a safe return.

“They are afterwards sent to the house of the old priest, to which place they are commonly attended by their friends and relations. Here they generally remain some days, in expectation of a favourable breeze. During that time the ecclesiastic prepares them for their future fate by prayers and admonitions. When the hour of their departure arrives, the priest puts them on a long leather cap, with two glasses before their eyes, which comes down as far as their breast, and also provides them with a pair of leather gloves. They are then conducted by the priest and their friends and relations about two miles on their journey; here the priest repeats his instructions, and tells them where they are to look for the tree. He shows them a hill which they are told to ascend, and that on the other side they will find a rivulet, which they are to follow, and which will conduct them directly to the upas. They now take leave of each other, and amidst prayers for their success, the delinquents hasten away. The worthy old ecclesiastic has assured me that during his residence there for upwards of thirty years he had dismissed above seven hundred criminals in the manner which I have described, and that scarcely two out of twenty returned. He showed me a catalogue of all the unhappy sufferers, with the date of their departure from his house annexed, and a list of the offences for which they had been condemned, to which was added a list of those who had returned in safety. I afterwards saw another list of these culprits at the jail-keeper’s at Souracarta, and found they perfectly corresponded with each other, and with the different informations which I afterwards obtained.

“I was present at some of these melancholy ceremonies, and desired different delinquents to bring with them some pieces of wood, or a small branch, or some leaves of this wonderful tree. I have also given them silken cords desiring them to measure its thickness. I never could procure more than two dry leaves, that were picked up by one of them on his return, and all I could learn from him concerning the tree itself was that it stood on the border of a rivulet, as described by the old priest, that it was of middle size, that five or six young trees of the same kind stood close by it, but that no other shrub or plant could be seen near it, and that

the ground was of a brownish sand, full of stones, almost impracticable for travelling, and covered with dead bodies.

“After many conversations with the old Malayan priest I questioned him about the first discovery, and asked his opinion of this dangerous tree, upon which he gave me the following answer : ‘We are told in our *Alcoran* that above one hundred years ago the country around the tree was inhabited by a people strongly addicted to the sins of Sodom and Gomorrah¹; when the great prophet Mahomet determined not to suffer them to lead such detestable lives any longer, he applied to God to punish them, upon which God caused to grow out of the earth this tree, which destroyed them all, and rendered the country ever uninhabitable.’² Such was the Malayan opinion. I shall not attempt a comment, but must observe that all the Malaysans consider this tree as an holy instrument of the great prophet to punish the sins of mankind, and therefore to die of the *upas* is generally considered among them as an honourable death. For that reason I also observed that the delinquents who were going to the tree were generally dressed in their best apparel. This, however, is certain, though it may appear incredible, that from fifteen to eighteen miles round this tree not only no human creature can exist, but that in that space of ground no living animal of any kind has ever been discovered. I have also been assured by several persons of veracity that there are no fish in the waters, nor has any rat, mouse or any other vermin been seen there, and when any birds fly so near this tree³ that the effluvium reaches them, they fall a sacrifice to the effects of the poison.

“This circumstance has been ascertained by many delinquents, who in their turn have seen the birds drop down, and have picked them up dead and brought them to the old ecclesiastic. I will mention an instance which proves the fact beyond all doubt, and which happened during my stay in Java.

“In 1775 a rebellion broke out among the subjects of the Massay,⁴ a sovereign prince whose dignity is nearly equal to that of the emperor. They refused to pay duty imposed upon them by their sovereign, whom they openly opposed. The Massay sent a body

¹ This vice is still very prevalent in Mid-Java, especially in Djockjakarta.

² The holy city on the mountain Dieng, once the centre of a great priesthood, was of a sudden deserted.

³ Valley.

⁴ Mangku Boemi.

of a thousand troops to disperse the rebels, and to drive them with their families out of his dominions. Thus four hundred families, consisting of about six hundred souls, were obliged to leave their native country. Neither the emperor nor the sultan would give them protection, not only because they were rebels, but also through fear of displeasing their neighbour the Massay. In this distressful situation they had no other resource than to repair to the uncultivated parts round the *upas* and requested permission of the emperor to settle there.

“ Their request was granted on condition of their fixing their abode not more than twelve or fourteen miles from the tree, in order not to deprive the inhabitants already settled there at a greater distance of their lands. With this they were obliged to comply, but the consequence was that in less than two months their number was reduced to about three hundred. The chief of those that remained returned to the Massay, informed him of their losses, and entreated his pardon, which induced him to receive them again as subjects, thinking them sufficiently punished for their misconduct. I have seen and conversed with several of those who survived soon after their return. They had all the appearance of persons tainted with an infectious disorder ; they looked pale and weak, and from the account which they gave of the loss of their comrades and of the symptoms and circumstances which attended their dissolution, such as convulsions and other signs of a violent death, I was fully convinced they fell victims to the poison.

“ This violent effect of the poison at so great a distance from the tree certainly appears surprising and almost incredible, and especially when we consider that it is possible for delinquents who approach the tree to return alive. My wonder, however, in a great measure ceased after I had made the following observation. I have said before that malefactors are instructed to go to the tree with the wind and to return against it. When the wind continues to blow from the same quarter while the delinquent travels thirty or six and thirty miles, if he be of good constitution he certainly survives. But what proves the most destructive is that there is no dependence on the wind in that part of the world for any length of time. There are no regular land winds, and the sea wind is not perceived there at all, the situation of the tree being at too great a distance and surrounded by high mountains and uncultivated forests. Besides, the wind there never blows a

fresh, regular gale, but is commonly merely a current of light, soft breezes, which pass through the different openings of the adjoining mountains. It is also frequently difficult to determine from what part of the globe the wind really comes, as it is divided by various obstructions in its passage, which easily change the direction of the wind and often totally destroy its effects. I therefore impute the distant effects of the poison in a great measure to the constant gentle winds in those parts, which have not power enough to disperse the poisonous particles. If high winds were more frequent and durable there, they would certainly weaken very much, and even destroy the obnoxious effluvia of the poison, but without them the air remains infected and pregnant with these poisonous vapours.

“I am the more convinced of this, as the worthy ecclesiastic assured me that a dead calm is always attended with the greatest danger, as there is a continual perspiration issuing from the tree, which is seen to rise and spread in the air like the putrid steam of a marshy cavern.

“In the year 1776, in the month of February, I was present at the execution of thirteen of the emperor's concubines at *Souracarta*, who were convicted of infidelity to the emperor's bed. It was in the forenoon about eleven o'clock, when the fair criminals were led into an open space, within the walls of the emperor's palace. There the judge passed sentence on them by which they were doomed to suffer death by a lancet poisoned with *upas*. After this the *Alcoran* was presented to them, and they were according to the law of their great Mahomet to acknowledge, and affirm by oath, that the charges brought against them, together with the sentence and their punishment, were fair and equitable. This they did by hanging their right hand upon the *Alcoran*, their left hand upon their breast, and their eyes lifted towards heaven ; the judge then held the *Alcoran* to their lips, and they kissed it. These ceremonies over, the executioner proceeded on his business in the following manner. Thirteen posts, each about five feet high, had been previously erected. To these the delinquents were fastened after being stripped. In this situation they remained a short time in continual prayer, attended by several priests, until a signal was given by the judge to the executioner, on which the latter produced an instrument much like the spring lancet used by farriers for bleeding horses. With this instrument, it being poisoned by the gum of the *upas*, the unhappy wretches

were lanced in the middle of the breasts, and the operation was performed upon them in less than two minutes. My astonishment was raised to the highest degree when I beheld the sudden effects of that poison, for in about five minutes after they were lanced they were taken with a tremor attended with a *subsultus tendinum*, after which they died in the greatest agonies, crying out to God and Mahomet for mercy. In sixteen minutes by my watch, which I held in my hand, all the criminals were no more. Some hours after their death, I observed their bodies full of livid spots, much like those of the *petechiæ*, their faces swelled, their colour changed to a kind of blue, and their eyes looked yellow.

“About a fortnight after this I had an opportunity of seeing such another execution at Samarang. Seven Malaysians were executed there with the same instrument, and in the same manner, and I found the operation of the poison and the spots on their bodies exactly the same. These circumstances made me desirous to try an experiment with some animals in order to be convinced of the real effects of this poison, and as I had then two young puppies I thought them the fittest objects for my purpose. I accordingly procured with great difficulty some grains of *upas*; I dissolved half a grain of that gum in a small quantity of arrack, and dipped a lancet in it.

“With this poisoned instrument I made an incision in the lower muscular part of the belly in one of the puppies. Three minutes after the wound the animal began to cry out most piteously, and ran as fast as possible from one corner of the room to the other.

“So it continued during six minutes, when all its strength being exhausted, it fell to the ground, was taken with convulsions, and died in the eleventh minute. I repeated this experiment with two other puppies, with a cat, and with a fowl, and found the operations of the poison in all of them the same; none of these animals survived above thirteen minutes.

“I thought it necessary to try also the effect of the poison given inwardly, which I did in the following manner. I dissolved a quarter of a grain of the gum in half an ounce of arrack, and made a dog of seven months old drink it. In seven minutes after, a retching ensued, and I observed at the same time that the animal was delirious, as it ran up and down the room, fell on the ground and tumbled about, then it rose again, cried out very loud, and about half an hour after was seized with convulsions and died. I opened the body and found the stomach very much inflamed, as

the intestines were, in some parts, but not so much as the stomach.

“There was a small quantity of the coagulated blood in the stomach, but I could discover no orifice from which it could have issued, and therefore supposed it to have been squeezed out of the lungs by the animal’s straining when it was vomiting. From these experiments I have been convinced that the gum of the *upas* is the most dangerous and most violent of all vegetable poisons, and I am apt to believe that it greatly contributes to the unhealthiness of that island.

“Nor is this the only evil attending it ; hundreds of the natives of Java, as well as Europeans, are yearly destroyed, and treacherously murdered, by that poison, either internally or externally.

“Every man of quality or fashion has his dagger or other arms poisoned with it, and in times of war the Malaysans poison the springs and other waters with it ; by this treacherous practice the Dutch suffered greatly during the last war, as it occasioned the loss of half their army.

“For this reason they have ever since kept fish in the springs of which they drink the water, and sentinels are placed near them, who inspect the waters every hour to see whether the fish are alive.

“If they march with an army, or body of troops, into an enemy’s country, they always carry live fish with them, which they throw into the water some hours before they venture to drink it, by which means they have been able to prevent their total destruction.”

EDIBLE BIRDS’ NESTS.—Birds’ nests are exported in large quantities from Java to China, where as an article of diet they are esteemed a great delicacy.

These nests are nearly half the size of a woman’s hand ; they are made by a very small swallow, and consist of a glutinous substance and froth of the sea interwoven with filaments. They are found on the coasts of all the Sunda Islands, in the cavities of steep rocks. The Javan method of procuring them is by fixing a stake on the summit of the precipice with a rope ladder affixed, whence they descend into the most perilous situations to look for them. These

nests have neither taste nor smell, but they have the property of renovating and giving a new tone to a debilitated and worn-out stomach and restoring all its functions—they are, in short, a most powerful stimulant.

They are made into excellent broths, and are ingredients in all the ragoûts of the princes and sovereigns of Java.

Their high price, however, prevents the ordinary man from partaking of them, for they fetch several pounds sterling per pound avoirdupois.

The white nests are in most request, and their value is proportionately higher. They are prepared by first washing them in three or four changes of lukewarm water, which separates from them the feathers and bits of straw or half-dried grass of which they are partly composed.

What remains has the appearance of vermicelli.

These nests so highly thought of, particularly in China, are the production of a kind of swallow, the salangana (*Hirundo esculenta*), of a blackish-grey colour, a little inclining to green, with a shade of mouse-grey on the beak and under the belly. The middle toe, including the claw, is longer than the foot: the nail of this toe is very sharp, long, and crooked; the bird uses it in fastening itself to the rocks. The tail is longer than the body, neck, and head together; it is also rather forked.

This swallow nearly resembles in shape the bank swallow, but it is so light and delicate that ten of this species weigh only about two and a half ounces.

The salangana is two months preparing and completing its nest.

In form this is a half-oval, elongated, and intersected at right angles by the centre of its little axis.

In the semi-transparent substance feathers are here and there introduced, with the object, apparently, of adding solidity to it.

It may be observed that while the opulent Chinese

consider bird's-nest soup the most delicious of all delicacies, the European palate discovers nothing more than an insipid gelatinous dish, rather resembling ordinary vermicelli.

SHELLS.—In all the small islands lying off the coast of Java numerous miniature harbours are to be found, some full of rocks and the bottoms covered with fields of seaweed, others sandy and pebbly, but the water invariably so clean and transparent as to enable one to discern at the depth of a fathom and more every stone and shell as clearly as if they were but a few inches below water.

The variety of shells to be found is not so extensive as in some parts of the world, and without more than a superficial knowledge of conchology it is impossible to state whether or no there are any rare ones to be found.

Cypræa, the common cowrie, is plentiful, small, and large-spotted.

The *Pectinidæ* family is represented by the genus *Spondylus aurantius*.

The *Haliotidæ* family is represented by specimens of the *Haliotis tuberculata*.

Siphonaria, a genus of the family *Siphonariidæ*, is fairly common.

The family *Mitridæ* is found in the *Mitra* ; and the lovely and elegant *Olivia* represents the family *Olividæ*.

There are also specimens of *Trochidæ*, the commonest being *Trochus argyrostomus*, *Trochus obeliscus*, *Clangulus*, *Rotella*, and *Monodonta* of diminutive size.

Of the *Turbinidæ* family are found *Turbo torquatus*.

There are also representatives of the *Siphonostomata* family, chiefly of the *Murex* genus.

Numerous specimens of the *Conus* may also be picked up on some islands.

There is also the *Neritidæ* family, represented by *Nerita* ;

and the *Naticidæ*, represented by *Natica*, which may be found in fairly large quantities. A small shell called *Columbella* can be found in hundreds of thousands.

These are but a fraction of the shells which a conchologist could discover.

PIRACY.—There was no more favourable place in the world for piracy than the East Indian Archipelago, and until steam was introduced it was very prevalent, especially around Borneo and the Straits of Banca, between Singapore and Batavia. It was looked upon by the Malays themselves as an honourable occupation, worthy of being followed by young princes and nobles, and was an evil of ancient date intimately connected with the Malayan habits. The old Malayan romances and the fragments of their traditional history constantly refer with pride to piratical cruises.

Singapore was once a favourite basis, but later on the bays of North Sumatra were fixed on as the haunts to watch the Straits. Any sailing vessel passing through, unless very well armed, was sure to fall a prey to the ruffians, if becalmed even temporarily.

Their strength was paralysing, and within a few hours a thousand men in well-armed boats would have surrounded the prize, ready to board at the first favourable opportunity.

The Europeans were usually killed, but the native crew were carried off as slaves and sold at the nearest market. Sometimes European ladies were on board, in which case they served to increase the number of some rajah's harem, until poisoned when no longer required.

East Borneo used also to be a centre for the pirates, and the old Sultan of *Kotei*, before he died in 1840, acknowledged, even boastingly, having taken nearly fifty prizes during his life, the English or Dutch captains of which he had murdered and sold the crews as slaves.



LIUDANGLAYA.

The late Admiral of the Fleet, Sir Harry Keppel, then only captain, did, together with Sir James Brook, as much as any one to put down piracy by hunting round the coast of Borneo for the pirates, finding them out in their homes, and destroying their boats, or if he caught them on the high seas, sinking them.

It was not, however, until the advent of steam that this "honourable occupation," or rather scourge of these seas, entirely ceased.

SLAVERY.—Before the abolition of the slave trade by an Act of the British Legislature passed by Lord Minto in 1811, the sources of slavery in all the Malayan countries was piracy, captivity in war, man-stealing along the coast, and the penalties enacted in the Malayan law respecting debts and sundry misdemeanours. The surviving crews of vessels which fell into the hands of the pirates were always disposed of by sale at the first market. The captives which were taken in war were usually herded together and employed tending the cattle or cultivating plantations, until some slave-dealer came round and bought them for disposal at a public market. The coasting vessels at the beginning of the nineteenth century, especially the Arab ones, were almost exclusively navigated by the slaves of the owner, and in their progress from island to island no difficulty was found in recruiting the crew by presents of slaves or, if that should fail, by kidnapping the unfortunate natives.

Kidnapping was practised considerably on the island of Celebes, and the slaves were sold to Europeans, who carried them away to Bourbon, where higher prices were paid for them. The East India Company at Macassar also required several hundreds yearly. This iniquitous traffic was almost wholly in the hands of private individuals.

The Buginese slaves were generally considered the best, the men being muscular and strong, while the women in

general were much handsomer than those of any other of the East Indian natives. There were some even among them who, for the contour of their faces, would be esteemed beauties in Europe ; these, needless to say, fetch very high prices.

In 1815 in Java there were officially rather more than 27,000 slaves, while unofficially there were probably several thousand more. In these days all the domestic servants were slaves, and the evil grew as time went on and the European population increased. Some Europeans had only twenty or thirty ; others could count their slaves by the hundreds. This state of things was not finally abolished until the fifties, when the last slaves had died.

Slaves were brought to the number of fully 3,000 yearly to Batavia. They were of both sexes, and came from the Malabar coast, Bengal, Sumatra, and Celebes. From the last place were imported the greatest numbers. A duty of 12 rix dollars, about 47s. per head, was paid on all slaves that entered for the first time, excepting those brought by the captains of vessels. These slaves were employed in every kind of domestic and menial service, in which they were instructed by those who had been longer in the family. They became in time cooks, tailors, coachmen, etc. In general they experienced much better treatment than that with which the negro slaves in the West Indies met from the British and other colonists. Instances sometimes did occur of barbarity and inhumanity, but it was rather the exception than the rule, and those Europeans who were guilty of such treatment seldom failed to meet their due reward, being generally murdered or poisoned by their exasperated slaves. When the slaves were well treated they possessed fidelity enough, and full confidence could be reposed in them provided they did not carry to excess an inborn passion for gambling, to which they all were extremely addicted. If

they once abandoned themselves to this infatuating vice, they not only played until they lost all they might happen to have of their own, but likewise all they could lay their hands upon belonging to their masters as well, continually flattering themselves with the idle hope of retrieving their former losses by a lucky throw of the dice. In this they were generally deceived, for the Chinese,¹ who kept the gaming houses (and had among other games of hazard one called "top-tables"), were too great adepts for the poor slaves to regain one cent of what they had lost.

However satisfactory the treatment of the slaves may have been once they were bought by a respectable Dutch or English family, there is no doubt that the circumstances which attended this traffic were no less revolting to humanity than those which marked it on the coasts of Africa. The unhappy victims were torn by violence from their friends and country, being delivered pinioned hand and foot to the dealers in human flesh. They were kept bound during the whole course of the voyage, a precaution which was necessary for the safety of the crew. In small schooners or barks of 110 tons as many as 400 would be shipped. They were laid upon their sides, and if they did not lie exactly parallel, a plank was put upon them, and a sailor would get upon it and jam them down. One lay with his arm so as to fit into the next one, so that no space was lost. These poor miserable wretches were kept like this sometimes for two or three days with practically no food, and, what was worse in the tropics, with scarcely any water, for the vessel had no room to carry such things.

When the British cruisers came to Java every vessel that was seen was overhauled and the captain usually questioned as to what quantity of water was on board, which it was

¹ The Chinese paid 3,100 rix dollars monthly for the monopoly of the gaming houses at Batavia. This sum is the equivalent of £8,000 sterling a year.

presumed would show whether she carried slaves or not; but this only resulted for many years in the slavers carrying still less.

The mortality was therefore terrible. Notwithstanding the guard that was kept and the way the slaves were packed, instances now and again occurred where the captives seized a moment of liberty—granted by some of the captains with more humane ideas than the rest—to snatch up the first weapon within their reach, stab all whom they encountered, and conclude the scene by leaping overboard and voluntarily seeking a watery death.

From the island of Nias¹ about 1,500 slaves were kidnapped yearly, mostly the young girls, who are the most lovely of all the East Indian women, being small and delicately made.

In their country the Nias people rarely make use of rice as food, and are almost unacquainted with the use of salt. The sudden change of diet to which they were subjected on board ship, added to their confinement and dejection of mind, to say nothing of the unusually brutal treatment these particular slaves invariably had to suffer from the sailors on board, who took them to wife, were fatal; of a cargo of 100 girls, 95 have been known to perish before the conclusion of the voyage. The demand for these women was greatest in the French Islands—Bourbon, Mauritius, etc.

While at Benkoelen Sir Stamford Raffles did all he could to stop this iniquitous traffic and made a treaty with the Rajah of Nias.

For this, however, he received a severe reprimand from the directors of the East India Company in London, who 'had no hesitation in declaring that his proceedings in regard to *Pulo Nias* were deserving of their decided repre-

¹ Off the west coast of Sumatra.

hension," and that " they were inclined to visit him with some severe mark of their displeasure for the steps he had taken," and even threatened to remove him from his government.

After the transfer of Sumatra to the Dutch, the slave trade, which had received a great blow from Raffles, was resumed with greater vigour than ever.

CHINESE IN JAVA.—Almost all the inland commerce beyond what is carried on through the medium of the *pasar* or market is under the control of the Chinese, who, possessing considerable capital, and frequently speculating on a very extensive scale, engross the greater part of the wholesale trade, buy up the principal articles of export from the native grower, upon whose crop has been given a *voorschot*,¹ or advance, convey them to the maritime capitals, and in return supply the interior with all the necessities required, and with the principal articles imported by the European firms for native consumption, such as cotton and silk goods, and all the cheap ware of Birmingham and Manchester. The industry of the Javans being almost exclusively the cultivation of the soil, they are satisfied if they can find an immediate market for their surplus produce, and the Chinese, from their superior wealth and enterprise, offering them this advantage without interfering with their habits, have obtained almost a monopoly of their produce and an uncontrolled command of the market for their supplies. The European firms give large and long credit to the Chinese merchants on their purchases of goods for the local markets, and, except in the minority of cases, these credits have never been abused and are always faithfully returned. The European merchants when they buy produce generally give a *voorschot* some time before to the Chinese contractor or " go between," who in turn, in order to make sure of the produce, makes a moderate advance to the native on

¹ A Dutch word meaning " before-amount."

his growing crop. The Chinaman, however, remains responsible for the advance, which is deducted when the produce is paid for. The Chinese are the backbone of trade in the country, and from their long residence in the island they are thoroughly conversant with the natives and their habits, which enables them to work with them in an entirely satisfactory manner.

The Chinese are born merchants, and are very active and particularly intelligent. There is almost nothing they will not do—if the required fee for so doing is in sight—be it honest or dishonest. Those merchants who have a name to lose, however, are honest, because it pays them to be so ; but there are others who have no name to lose, and they are the contrary. The European merchants learn, however, whom they can and cannot trust.

The Chinese retain in Java as many of the customs of their native land as they can, one of these being to visit the ancestral tombs once a year. On this day from sunrise an endless multitude of Chinese of both sexes and all ages, some on foot, others in carriages, repair to the tombs. These tombs are ornamented with bands of paper, or if of a rich family, silk, of different colours, and three red wax tapers are burnt on each.

Every Chinese brings various provisions, which are placed as offerings on the tombs.

The opulent are easily distinguished from the rest by the luxuriousness of their meats ; there are dishes spread out with all that the most splendid Oriental table could suggest of viands—fruit, fish, sweetmeats, and drink. After having left these various provisions for some hours on the tombs, they eat part and carry the rest away. Women weep over the graves of their husbands, children deplore the loss of the authors of their being, and the old sigh for their faithful companions and appear to regret having survived them.

The Chinese temples in Java mostly consist of large saloons,

ornamented with grotesque and antique statues, especially those representing the Joss in the midst of his family.

Joss, or Josi, was a disciple of Confucius, to whom he had been a servant, and is the principal being to whom the Chinese pray, or of whom they beg favours.

In nearly every Chinese house, however poor its occupant, there is a table standing at the end of the chief room on which stands the Joss, as well as a centre figure of Confucius.

As a rule two or more wax tapers are burning before these images.

Every now and again, on high days or holidays, in the Chinese kampong a lofty stage is erected, where performances are given from Chinese romances, such as the wars between the Tartars and the Chinese. In these plays various men, made up as chiefs differently dressed, their faces smeared and blackened and whitened or masked, appear and announce a new war in which they anticipate great success; they harangue the soldiers, of which the public can only see two or three on the stage, with a variety of gestures and grimaces, all of which appears supremely funny to the Oriental, but is gross and coarse to the European. Then comes a general upon the scene; he is to be distinguished by the collection of bric-à-brac he carries, hung on his uniform, who, after talking a great deal, exclaims and gesticulates to himself as he parries imaginary foes with his long sword, piercing one man through and cutting another's head off, and so on, to the great amusement of the onlookers, who readily observe in wonderment, "*Wah! wah!*" or "*Wonderful, wonderful!*"

After a further speech the combatants appear. The Chinese have each a different head-dress and costume, and are armed with lances or iron-shod sticks, 7 or 8 feet long, which serve for both offence and defence.

The Tartars are in uniforms, short coats, large trousers,

and large hats. They are armed with a sabre and a shield, which covers the head and body and denotes that they are more up to date than their antiquated enemies.

The fight then begins and the Chinese are victorious (historically they were not so, but that is a detail).

During the combat the Chinese onlookers reach an unimaginable pitch of excitement, and when their countrymen win the yells of delight which pierce the air show the interest they have in the performance. After the combat the general once more appears and makes a speech on the courage of the Chinese soldiers.

All this time great *gongs* are being beaten faster and faster, so that the din and noise is terrific, and nothing else can be heard whilst it lasts.

These performances usually continue all night.

On other occasions a party of *rong'geng* girls are engaged, but the Chinese do not favour them so much as the stage performances.

Round about the stage, when a performance is being acted, there are a number of gaming and eating tables, which are usually full. The Chinese eat, as in China, with chopsticks instead of forks, and all their food is cut up before it is placed on the tables.

The Chinese are great gluttons and eat to excess. Their principal article of diet is pork, which they consume in great quantities. Besides this they eat minces of beef, fish, fowls and soups.

Their drinks are generally hot, and as a rule are limited to water, sugar and water, or arrack.

Independently of the playhouse, on certain feast-days there are processions of men with masked or painted faces, kettle-drums, gongs, and tambourines. They are dressed as devils, who are carried in triumph on poles decorated with paper, ribands, bells, etc. ; others are seated on monsters, and a huge dragon is carried by half-a-dozen or more



NON-COMMISSIONED OFFICERS' CLUB, SAMARANG.

men, whose legs only are to be seen, the rest of their person being hidden in the body of the animal.

The reason the Chinese give for these feasts to the devil is that the God of Heaven and of Earth being infinitely good, it is not necessary to implore Him, but that, on the contrary, the devil must be feasted to prevent his doing them harm.

The Chinese girls are generally shut up and employed in sewing and embroidery, and are not usually seen in public until the day of their marriage.¹

These marriages are made by the parents, without the couple ever holding communication with each other till their celebration.

Once married, the women are frequently shut up and only permitted to see their relations. The poorer Chinese, of course, set their wives to work or serve in their shops, but they are closely watched there.

Notwithstanding the life of severity, even cruelty, which the Chinese woman has to put up with, no people have more domestic virtues.

The Chinaman is a good son, a good father, a good husband, and a good friend ; he carries gratitude to the extreme, and he has been frequently known to offer and divide his fortune, or what little he has, with Europeans who have assisted him before, and have become in turn necessitous.

The Chinamen are, nevertheless, depraved, loose, and immoral, and so avaricious that they will even sell their daughters or nieces if the sum offered is high enough.

In former days, at the beginning of the nineteenth century, there were many examples of Chinamen who had not the means of making good their engagements handing over their daughters to Europeans in final settlement of the debt or as a security for the outstanding loan.

¹ This custom is gradually changing.

The wretched victims of this infamous traffic were slaves until the parents chose to redeem them by paying off the debt.

The commercial genius of the Chinese is great, and there is nothing too small or too large for them to undertake to carry out. They having before the arrival of the Europeans carried on their mercantile pursuits with other Orientals only, excessive conceit of their own talents and superiority has become ingrained in their characters, and, according to their own ideas, no people can equal them. If a comparison is drawn between two similar objects, one made in their own, the other in another country, however inferior the former may be, they would give it the preference.

They are ill-adapted to military science, being not only cowardly and effeminate, but inclined to revolt and run away. The immense population in their own country renders them very restless, but their insurrections never break out until they are fully assured that they are three or four times the number of their opponents ; and the same is true in their private disputes.

In the towns of Java there is always a Chinese chief, who is called the "captain Chinaman," besides two lieutenants. In some of the bigger towns there is also a "major Chinaman."

These chiefs are the "go between" with the Dutch Government officials, and are obliged to keep order among their countrymen and report on their well-being from time to time.

The Chinese have always been great owners of house property in Java, and in some towns, as for instance Samarang, three-quarters at least of all the houses are owned by them.¹ The Europeans find, however, that they are bad landlords, and leave the repairs to be attended to by the occupier at his own expense.

¹ In Samarang and Tjandi most of the houses are owned by the "Major," Oei Tiong Ham, and his brother, Oei Tiong Bing.

The following is a list, from early in the eighteenth century, excluding public buildings, of the number of houses of all descriptions, large and small, in the old Castle of Jacatra and outside ; it will show the proportion even then owned by the Chinese :—

Inside the Old Castle Walls.

Dutch houses—					
Large	.	.	.	.	678
Small	.	.	.	.	564
Chinese houses	.	.	.	.	997
Dutch houses tenanted by Chinese	.	.	.	.	203
Total					2,442

Outside the Castle Walls.

	Arrack Houses owned by Chinese.	Large Dutch Houses.	Small Dutch Houses.	Chinese Houses.	Total.
At the New Gate . . .	6	62	181	309	559
At the Diest Gate . . .	1	7	33	236	277
At the Rotterdam Gate . . .	5	120	501	106	732
At the Utrecht Gate . . .	0	27	135	589	751
Coach-houses . . .	—	—	—	—	9
Total	12	216	850	1,240	2,328

Total outside the Castle walls 2,328

Total inside and outside the Castle walls 4,770

All these Dutch houses gradually fell into the ownership of the Chinese.

HARBOURS.—There are three principal harbours in Java frequented by the shipping which visits the island, namely, Tandjong Priok at Batavia, Surabaya (Sourabaya), and Chelachap, or, as it is more commonly known, Tjilatjap.

That of Tandjong Priok is an artificial harbour, built of granite, with great warehouses of brick and zinc, and an extensive coal wharf, where as a rule 10,000 tons of Cardiff, Australian, Japanese, and Bengal coal are lying.

Tandjong Priok was built by the Dutch, the work being begun in 1877 and completed in 1886. Two breakwaters, each nearly a mile in length, protect an outer harbour. It was found necessary to construct this refuge on account of the ships increasing in draught while the old roadstead of Batavia was gradually silting up. This harbour is now being enlarged.

The other two harbours are natural refuges. Surabaya is nearly land-locked by the island of Madura, which at its western and eastern extremities is only a few miles away from the mainland of Java; to enter the harbour a vessel has to cross a bar, which, according to the different states of the tides, is from 19 to 20 feet deep. The harbour is broad and capacious, secure against the violence of wind and sea, and can be rendered impregnable against any hostile attack.

The vessels load and unload at buoys into lighters, which discharge into commodious warehouses on the Surabaya river.

Tjilatjap is a small harbour on the south coast, but well protected from the Indian Ocean, with its high swell and the heavy surf which breaks here. The entrance to this harbour, is however, dangerous, and needs the assistance of a Dutch pilot. The vessels lie alongside a wharf. Tjilatjap, although one of the most beautiful places in the island, has earned a well-merited name as being also the most unhealthy.

Formerly the exhalations of extensive swamps which surrounded this place, but which now are dried up, occasioned severe malarial fevers, carrying off hundreds of Europeans and thousands of natives.

There are also the harbours of Palabuan Ratu, or Wyn Coops Bay, and Pachitan, on the south coast, which may be approached with safety, but the Dutch have considered it undesirable to attract trade to this side of the island.

for fear of giving an unnecessary advantage to a hostile power ; and for this last reason the harbour of Tjilatjap is protected by a heavy artillery so placed as to render it impregnable.

Samarang is almost an open roadstead, but except during the months of December and January the sea is usually smooth and the weather moderate, enabling vessels to load and discharge with ease into lighters.

MOUNTAINS AND VOLCANOES.—Passing along the coast of Java in a steamer, one cannot fail to be impressed with the bold outline and prominent features of its scenery. From one end of the island to the other there is one long uninterrupted range of large mountains, varying in their elevation from 4,000 to over 12,000 feet, and showing by their circular base and pointed tops their volcanic origin. The highest volcano of all is the *Semiru*, which together with the *Bromo*, *Boedolembœ*, *Ider Ider*, and *Tosari* form the *Tenger* range. These are situated towards the eastern end of the island, near the town of Pasoeroean. In the west the principal volcanoes are the *Salak* and *Gedeh*, which are situated about fifty miles south of Batavia. These two mountains on a clear day are distinctly visible from the Batavia Roads, and from the appearance they exhibit are called by mariners the Blue Mountains.

From the Samarang Roads the mountains known by mariners as the “ Two Brothers ” are discernible on a clear day. These are the *Sumbing* and *Sindoro*. From Samarang may also be seen the mountains *Ung’arang*, *Merbabu* and *Meraju*.

The most interesting volcanoes to visit are the *Tankuban-Prahu*,¹ in Middle Java, the *Papandayang*, near Batavia, and the *Bromo*.

Eruptions.—Eruptions nowadays are not so common as

¹ This mountain has derived its name from its resembling at a distance a *prahu* (or boat) turned upside down.

they were formerly, and the loss of life is usually lessened by the fact that the inhabitants are warned by the Dutch authorities in time to remove themselves from the danger zone. The records from the *Tankuban-Prahu* show that this mountain has been the scene of violent eruptions for many ages, and even during the last century has experienced three—namely, in 1804, in May, 1846, and again in May, 1896, when a new crater was opened. To give an adequate description of the interior of this crater would furnish matter for an able pen ; the impression is increased perhaps by the recollection of the danger which awaits one at the bottom. Everything here contributes to fill the mind with awe. A sight of the interior of a volcano is undoubtedly one of the most grand and terrific scenes which Nature affords, one, indeed, which it is not in the power of the ordinary mortal to describe.

The *Papandayang* was formerly one of the largest volcanoes on the island, but the greater part of it was swallowed up in the ground after a short but severe eruption in the year 1772. The account ¹ which has remained of this event asserts that near midnight between the 11th and 12th August there was observed about the mountain an uncommonly luminous cloud, by which it appeared to be completely enveloped. The inhabitants, as well about the foot as on the declivities of the mountain, alarmed by this appearance, betook themselves to flight ; but before they could all save themselves the mountain began to give way, and the greater part of it fell in and disappeared in the bowels of the earth. At the same time a tremendous noise was heard, resembling the discharge of the heaviest cannon. Immense quantities of volcanic substances, which were thrown out at the same time and spread in every direction, propagated the effects of the explosion through the space of many miles.

¹ From "Batavia Transactions," Vol. IX.

It is estimated that an area made up by the mountain itself and its immediate environs fifteen miles long and fully six broad was by this commotion swallowed up in the depths of the ground. It is also mentioned that forty villages were destroyed on this occasion, being partly swallowed up in the earth and partly covered by the substances thrown out, and that 2,957 of the inhabitants perished. A proportionate number of cattle were also destroyed, and most of the plantations of cotton, indigo, and coffee in the adjacent districts were buried under the volcanic matter. Another eruption of much less force occurred in 1822 at this volcano, since when the crater has more or less remained quiet.

Near the *Papandayang* is the world-famous volcanic lake called the *Telaga Bodas*, or white lake, which is over 5,000 feet above the sea level. This greenish-white sulphur lake is enclosed by steep walls, and is reached by a long march through coffee plantations and a wilderness. In half an hour this lake, which is circular in shape with a diameter of 700 feet, can be gone round; the waterfall, solfatara, and the hot springs where the water bubbles are to be seen close by. The banks that arise circularly around are covered down to the water's edge with the richest green foliage, forming a strange and weird but beautiful contrast to the surface of the water, which receives its white colour from the sulphur and alum at the bottom of the lake.

This lake is no doubt lying in the remains of an extinct crater, which spent its force in the remote past.

The mountain *Gedeh* was the scene of an eruption in 1761, but the damage done was of no great moment, nor were there any lives lost, the inhabitants near (and there were not many of them) receiving apparently timely notice for flight.

On the 12th April, 1815, one of the greatest eruptions of modern times took place at the mountain *Tomboro*, on

the island of Sambawa, by which 12,000 people were destroyed beneath the burning ashes, and according to official statistics 200,000 died from starvation and exposure. The whole island was laid waste by this violent and extraordinary explosion and was covered with from 1 to 2 feet of lava, and for years no rice crops could be raised.

The inhabitants of Lombok still refer to this catastrophe, which they look upon as a visitation by Providence, with fear and trembling and in whispered tones.

The noise was heard as far as Djockjakarta and attributed to distant cannon, so much so that a detachment of troops was marched to Klaten in expectation that this post had been attacked, and on the coast two boats were dispatched in quest of a supposed ship in distress owing to an attack from pirates. The commander of the British cruiser *Benares*, stationed at Macassar, reported that during the day it was as night, and the "ashes began to fall in showers," the general appearance being "truly awful and alarming." The darkness during the day was never equalled by the darkest night, and "it was impossible to see your hand when held close up to your eyes."

"At 6 o'clock next day it continued as dark as ever, but by about 8 o'clock objects could be faintly discerned upon deck. The appearance of the cruiser when daylight returned was most singular, every part being covered with the falling ashes, nearly the colour of wood ashes, notwithstanding the precaution that had been taken of spreading awnings fore and aft."

The British cruiser *Teignmouth*, which was lying at anchor at Ternate, had also a strange experience, and imagined a battle was going on outside the harbour.

Lieutenant Owen Phillips, the Resident at Macassar, who proceeded to Sambawa as soon as possible, states in his report that

"the extreme misery to which the inhabitants have been reduced is shocking to behold ; there were still on the roadside

the remains of several corpses, and the marks of where many others had been interred. The villages were almost deserted, and the houses fallen down, the surviving inhabitants having dispersed in search of food.

“The sole subsistence of the inhabitants for some time past has been the heads of palm trees and the stalks of the papaya and plantain.

“Since the eruption a violent diarrhoea has visited the islands, which has carried off a great number of people. It is supposed by the natives to have been caused by drinking water which has been impregnated with the ashes, and horses have also died in great numbers from a similar complaint.

“The daughter of the rajah has died from hunger so severe has been the famine.

“I have presented rice in your name.”¹

The mountain *Klut* was in eruption in June, 1812, and large quantities of fine ashes were blown up into the air and carried by the ordinary breeze of the monsoon to Batavia and further westward, spreading a light mantle all over the intervening land.

It possessed the properties of the purest clay, and being mixed with water became viscid and ductile. The Javans are not unacquainted with the properties of this ash, and it is the custom among the silversmiths to collect the ashes thrown out by similar eruptions for the purpose of making moulds for the finest works.

There was another eruption of this mountain in 1901. This occurred at 4 o'clock in the morning, and the noise which was heard in Samarang, several hundred miles away, was as if artillery was being discharged in the town. By 10 o'clock it was pitch dark at Samarang, and ashes began to fall until the earth for miles around was covered.

The *Guntur* is a volcano that has a striking appearance, the eastern part of it being completely naked, exposing to view in a singular manner the course of the lava streams of the last eruption.

¹ That is, in Sir Stamford Raffles' name.

Of all eruptions, however, within the knowledge of man there has been none to equal the colossal explosion, on the 27th August, 1883, of the island of Krakatau, in the Straits of Sunda. According to old records there has been an eruption here, "great and violent," as far back as 1680, and there is some mythical story that several hundreds of years before this another eruption still more important took place, when possibly the last remaining link of land joining Sumatra and Java was burnt asunder.

Except however for these, the mountain remained quiet until the 21st May, 1883, when smoke was suddenly seen to rise from it.

The following is an account of this great eruption¹:—

"The island of Krakatau (such, and not Krakatoa, is the native name) is situated in latitude 6° 7' S., longitude 105° 26' E., in the fair-way of the Sunda Straits, about equally distant from Java and Sumatra, close on 26 miles W.S.W. from the village and lighthouse of Anjer, the call-port or signal station, prior to the present eruption, for all vessels passing through that frequented channel. It was a small uninhabited island about five miles in length and three in breadth, culminating in two elevations, the taller of which, known as the Peak of Krakatau, rises (or did rise) some 2,750 feet above the sea. Surrounding it on all sides are numerous volcanic cones. The Tengamoes (or Kaiser's Peak) to its north-west is situated at the head of the Semangka Bay, and the quiescent Rajabasa to its north-east in the southern promontory of Sumatra; in the east by south the Karang smoulders in Bantam, and south-east rise the active cones of the Buitenzorg Mountains. Standing in the straits and very little to the north of Krakatau are the two dormant or dead cones of Sebesie and Sebooko. A line drawn from Rajabasa, passing along the western side of Krakatau and continued thence to Prince's Island, which lies off Java Head, would mark the boundary on the eastward side of the shallow Java Sea, which rarely exceeds 50 fathoms, and on the west side of the deep Indian Ocean. On looking at the accompanying map of the locality before the eruption it will be seen that close to the east and north-west sides of

¹ Extracts from Proc. Roy. Geog. Soc., 1884, Vol. VI., No. 8.

Krakatau there are two small fragments of land, Lang and Verlaten islands respectively. It is Mr. Norman Lockyer's opinion that these are two higher edges of the old rim of a subsided crater, overflowed in part by the sea through inequalities in the margin between them; that the heights on Krakatau itself, the remaining portion of the old volcano summit, are cones elevated on this old crater floor; and that the ancient funnel is practically co-extensive with the area inclosed by these three islets, though, till the 20th of May last, blocked up by volcanic *débris*.

“ On the 20th of May last year, at half-past 10 in the forenoon, the inhabitants of Batavia were astounded by hearing a dull booming noise, whether proceeding from the air or from below was doubtful, soon followed by the forcible drumming and rattling of all the doors and windows in the place. The commotion was strongest between half-past 10 and 1 o'clock in the day and between 7 and 8 in the evening. About mid-day a curious circumstance was observed, that in some spots in the city no vibrations were perceived although the surrounding buildings were experiencing them. It was at once concluded that a volcanic eruption of an alarming character had taken place, but for some time it was impossible to localise the direction of the sounds, though the west was the quarter of the compass to which most people assigned them.

“ A report issued next day by the director of the Observatory in Batavia stated that as he had no instruments for recording the intensity and direction of earthquake shocks, he could certify only that no increase of earth magnetism accompanied the tremblings—the photographs indicating nothing abnormal; and that the quivering was absolutely vertical throughout the periods mentioned above; for a suspended magnet with an exact registering apparatus gave no indications of the slightest horizontal oscillations, but alone of vertical vibrations. This was verified by the observations of one of the philosophical instrument makers in the town on a pendulum in his shop, where only vertical trillings were observable at a time when the windows and glass doors of the house were rattling, just as if shaken by the hand, in so violent a way that it was difficult to carry on conversation. Nowhere, however, do there seem to have been observed any shocks of a true or undulatory earthquake. From midnight of the 20th

throughout the forenoon of the 21st the tremulations continued very distinct. The same morning a thin sprinkling of ashes fell, 'whence is not known,' both at Telok-betong and at Semangka, situated in Sumatra at the head of the Lampong and Semangka bays respectively. At Buitenzorg, 30 miles south of Batavia, the same phenomena were observed; while in the mountains farther to the south-west they were even more pronounced, and the Karang, a mountain situated about west from Batavia, it was thought must be the seat of disturbance. By this time the general opinion had decidedly ascribed to the west or north-west the direction whence the movements were proceeding. Krakatau itself was even named; but some of the Sumatran mountains were considered more likely to be the delinquents. Batavia being connected with that island by a telegraph line passing along the north coast of Java to Anjer, across the Straits of Sunda to Telok-betong, thence northwards to Palembang on the east, and to Padang on the west coast, intelligence from all parts soon began to come in; but none of any eruption anywhere, beyond the notice of the fall of ashes mentioned above. Anjer telegraphed, 'Nothing of the nature of an earthquake known or felt here.' This was dated 21st; a message in much the same terms had been received on the previous day, as well as the report of one of the Government officials, to the following effect: 'On Sunday morning, the 20th, I landed at Anjer and there stayed till 1 o'clock in the afternoon; at half-past 3 I reached Serang and halted an hour. Neither I nor my coachman, either at Anjer or at Serang, or on my whole journey to Tangerang (near Batavia), felt or heard any earthquake or disturbance, or anything at all remarkable.'

"Anjer lies on the narrowest part of the Sunda Straits, 27 miles from Krakatau, which formed a prominent object in one's seaward view from the verandah of its quiet little hotel on the sea margin. This hotel was kept by one of Lloyd's agents, Mr. Schuit (whose family perished in the subsequent disaster), who had in his verandah a powerful telescope for reading the signals of ships for report to Batavia, and by whom consequently any occurrence in the straits could scarcely fail to be observed. Thus during the period of greatest disturbance in Batavia and Buitenzorg, when men there were referring the origin to Krakatau, 80 miles away, at Anjer, only 27 miles distant from it, nothing was felt or heard. The same report was made from Merak, likewise situated on the

straits, 35 miles from, and presenting a clear outlook to, the volcano. The winds prevalent in this region during the month of May are from the east, and would tend to drive any smoke and ashes toward the Indian Ocean, which might explain their not being detected from Anjer ; but the direction of the wind fails to account for the entire absence in that and the surrounding villages of the phenomena which were most conspicuous in Batavia.

“ Not till the evening of the 21st was smoke observed to be issuing from Krakatau ; on the 22nd the volcanic vent there seems to have been fully established, and the vibrations and other phenomena experienced in Batavia quickly subsided.

“ Of the appearance of the volcano on the 27th we have a graphic account in the *Algemeen Dagblad* newspaper, of Batavia, by one of a party that ascended to the crater on that day. As they approached the scene the neighbouring islands had the appearance of being covered with snow. The crater was seen to be situated, not on the peak, but in a hollow of the ground, which lay from south-east to north-west, sloping towards the north point, in front and to the north side of the lower summit, looking towards Verlaten Island. Both heights were seen ; the southerly green, and the more northerly and much lower one quite covered with dust and ashes. The volcano was ejecting, with a great noise, masses of pumice, molten stone, and volumes of steam and smoke, part of which was being carried away westward by the monsoon wind, dropping all round and close at hand its larger pieces, while a higher rising cloud is specially recorded as driving away eastward, having evidently encountered a current in that direction in the upper air. Some of this dust-cloud was carried far to the eastward, for Mr. Forbes relates that on the morning of the 24th of May, when in the island of Timor, 1,200 miles distant, he observed on the verandah of his hut, situated high in the hills behind Dilly, a sprinkling of small particles of a greyish cinder, to which his attention was more particularly drawn later on that and the next day, by their repeated falling with a sudden pat on the page before him. The visitors to the crater seem to have viewed with most amazement the grandeur of the smoke column whirling upward with a terrific roar like a gigantic whirlwind, through whose sides the ascending ejecta, vainly trying to break, were constantly sucked back and borne upwards round and round into the centre of its Stygian coils. The trees which once clothed

this portion of the island presented only bare stems from which their crowns had disappeared, evidently not by fire, for there was no charring visible on them, but rather as if wrenched off by a whirlwind—perhaps of the crater itself.

“After the 28th curiosity in these volcanic phenomena seems to have abated, and during the next eight or nine weeks, though the eruption continued with great vigour, little is recorded of its progress ; indeed so completely did it seem to have been forgotten, that visitors to Batavia, unless they had made inquiries, might have failed to hear of its existence at all. During this period no local disturbances to attract attention or to cause the least alarm are recorded. From the logs of ships in the neighbourhood of the straits, about the middle of August, numerous extracts have been published ; but many of them show that they have been written either with the mind bewildered and confused by the terrifying incidents amid which the officers found themselves, or from the after-recollection of the events, of which under such conditions the important dry facts of time, place, and succession are liable to be unconsciously misstated. Much is therefore lost which might have been known ; but a few are of the utmost value.

“On the 21st August the volcano appears to have been in increased activity, for the ship *Bay of Naples* reports being unable to venture into the straits on account of the great fall of pumice and ashes.

“The first, however, of the more disastrous effects were experienced on the evening of the 26th, commencing about 4 o'clock in the afternoon. They were inaugurated by violent explosions, heard in Anjer, Telok-betong, and as far as Batavia, accompanied by high waves, which after first retreating rolled upon both sides of the straits, causing much damage to the villages there, and were followed by a night of unusually pitchy darkness. These horrors continued all night with increasing violence till midnight, when they were augmented by electrical phenomena on a terrifying scale, which enveloped not only the ships in the vicinity, but embraced those at a distance of even ten to a dozen miles. As the lurid gleams that played on the gigantic column of smoke and ashes were seen in Batavia, 80 miles off in a straight line, we can form some idea of the great height to which the *débris*, some of which fell as fine ashes in Cheribon, 500 miles to the east, was being ejected during the night.

“Between 5 and 7 o'clock (for the hour is uncertain) in the

morning of the 27th there was a still more gigantic explosion, heard in the Andaman Islands and in India, which produced along both shores of the Strait an immense tidal movement, first of recession and then of unwonted rise, occasioning that calamitous loss of life of which we have all heard.

“The material thrown out rose to an elevation which we have no means of estimating, but so tremendous was it that on spreading itself out it covered the whole western end of Java and the south of Sumatra for hundreds of square miles with a pall of impenetrable darkness. During this period abnormal atmospheric and magnetic displays were observed; compass needles rotated violently, and the barometer rose and fell many tenths of an inch in a minute. Following at no great interval, and somewhere between 10 and 12 o'clock in the forenoon of the same day, either by successive rapid outbursts or by one single supreme convulsion, the subterranean powers burst their prison walls with a detonation, so terrific as to have been, as it seems, inaudible from its very immensity to human ears in its close vicinity, but which spread consternation and alarm among the dwellers within a circle whose diameter lay across nearly 3,000 miles, or 50 degrees of longitude.

“With sunrise on the 28th the dense curtain which had enveloped so wide an area in darkness gradually began to clear off, and the light broke on a scene of devastation of the saddest kind, but on one of comparative placidity, as if Nature lay exhausted after her frantic paroxysm. Krakatau was seen reduced to a fraction of its original size; the whole of the northern portion, with the height in front of which the volcano first broke out and half of the peak itself, had vanished. . . . To the northward, however, two new pieces of land, which have received the names of Steers and Calmeyer Islands, raised their tops above the surface of the sea, where the morning previous 30 to 40 fathoms of water had existed. Of the two islets on each side of Krakatau, Lang Island is left practically unaltered, while Verlaten Island seems elevated somewhat, and is reported to be in eruption. But where the volcano had been so active a few hours before, a sea fathomless with a line of a thousand feet is now to be found.

“Having thus followed the succession of events there remains little doubt that the crater on the 26th of August by its constant action had either cleared out the old funnel into its submerged portion, or that a rent by subsidence or otherwise was formed,

through which a column of water was admitted to the heated interior, resulting in explosion after explosion in increasing violence, as more material for generating steam was finding its way into the underground recesses.

“The first great waves on the evening of the 26th and the early part of the 27th were probably caused by a portion of Krakatau being shot out northwards for eight miles and dropped where we have now Steers Island ; while the appalling detonation in that forenoon and the greater wave accompanying it resulted perhaps from that still more titanic effort which lifted the greater portion of Krakatau—several thousand million cubic yards of material—out by its 170 fathom root, hurled through the air over Lang Island, and plunged it into the sea some seven miles to the north-east, where Calmeyer Island now blocks the channel which mariners have known so long as the East Passage.

“The reports we have as to the tidal phenomena differ from different places. At many points it was observed that a distinct withdrawal of the water preceded the rise or great tide ; while from others, as in the canal at Batavia, the opposite is given as the order of occurrence. Everything, however, depends on the moment of the observation. It will be apparent that these waves were the most natural consequents of the events, and were due certainly not to any seismic movement of the sea-bed, but on the one hand to the inrush of water to fill the deep chasms out of which the ejected portions of the island came, which was naturally followed first by a withdrawal of the water, and then by a disastrous recoil over the low foreshores of Java and Sumatra ; and on the other hand to the tremendous stroke—the splash, in fact—imparted to the sea by such a gigantic block of matter, square miles in size, which must have resulted first in a great rise of water followed by a withdrawal.

“To what height the supreme outburst propelled the smoke, dust, and the lighter portion of matter, it is impossible at present to estimate. Mr. Whympers saw Cotopaxi, in by no means one of its extraordinary expirations, eject a column over 20,000 feet in height ; but many multiples of this distance will doubtless be required to measure the spire that was shot sky-ward on the forenoon of the 27th of August last. At all events it rose so high that months have been required for it to descend.”

METEORITES.—During the Hindu period heavenly bodies are said to have fallen upon Java, and were explained no doubt by the ancient *panditas* as warnings from the gods. Coming down to more recent times, however, a Mooltan aerolite fell at Prambanan, Soerakarta, in 1865,¹ and on the 19th September, 1869, at 9 p.m., a meteor, the brilliancy of which is stated to have surpassed that of the moon, was seen to move in a north-easterly direction over the *desah* of Tjabe, near Pandangan, and Bodjo Negoro, in the Rembang residency. It was observed at Pandangan, the chief place of the district, as well as at Bodjo Negoro, the chief town of the residency, and lying east of Pandangan. At the same time a meteorite fell at Tjabe, at a distance of about 20 metres from the house of a native named Sokromo. The sound following the appearance of the meteor is described as an explosion as loud as that of a cannon, followed by a noise resembling that caused by a carriage crossing over a wooden bridge; this lasted some time. The villagers sought in vain for the spot where the meteorite fell; at 6 o'clock next morning, however, it was found at the place already mentioned at a depth of 2 feet in the soil, which was hardened from a long drought. According to the report drawn up by the Resident of Rembang, it was remarked by the Javans that the aerolite, when found, was still so hot that it could not be touched with the hand. This statement, however, must be received with caution.

This stone, the only one found, weighed about 20 kilogrammes. It was covered with a dull greyish coat 0·5 millimetre in thickness; the fresh fracture was dark grey, and exhibited a number of brilliant points; here and there brilliant plates 1 millimetre square were met with, as well as a small number of very dark, almost black, grains of spherical form with a diameter of 2 millimetres. The mass

¹ See Flight's "Meteorites."

of the stone was coarsely granular, and was so very hard that portions were detached with a hammer only with great difficulty.

The specific gravity of the metallic portion was 6·8 ; the magnet removed 14 per cent. of the constituents, which consisted of two alloys of nickel-iron containing respectively 6·2 and 12·5 per cent. of nickel ; in one portion of the stone was found 6·17 per cent. of troilite. The density of the stone was 3·695.

On the 10th December, 1871, at 1:30 p.m., three strange explosions were heard, and six stones were found at Goe-moroeh, near Bandoeng.

The largest, weighing 8 kilogrammes, fell in a rice-field, and penetrated the soil obliquely to the depth of 1 metre. A second, 2·24 kilogrammes in weight, and a third, weighing 0·68 kilogramme, fell in a rice-field about 2,200 metres south-west of Babakan Djattie and 1,500 metres from Tjignelling, or 3,700 metres from the spot where the first stone struck the ground. The three remaining stones weighed in all 150 grammes. The stone second in size, now in the Paris collection, was an irregular block with rounded edges. It was completely enveloped in a dull black crust, and the natural surface exhibited numerous cavities of different sizes, which bore a great resemblance to those produced on quartzite by exposing it to the oxy-hydrogen flame. A fresh fracture was grey, and enclosed in the silicite forming the greater portion of the stones were three kinds of granules, which had a metallic lustre—the one of an iron-grey, which was at once identified as nickel-iron ; the second, of a bronze-yellow, which often possessed a blue or yellow tint, was troilite ; and the third, black and insoluble, was chromite.

The siliceous portion, when examined under the microscope, was found to be made of transparent much-broken grains, which were throughout crystalline.

RIVERS.—As might be expected from a country which abounds in mountains, no region in the world is better watered than Java.

When the first Europeans came to this part of the world there were at least ten rivers that admitted them to the interior during the east monsoon, while in the west monsoon there were not less than fifty which were navigable to some considerable distance from the coast, and during the same season hundreds, if not thousands, valuable to the agriculturist.

The largest river on the island is the Solo, or, as the Javans term it, Beng'awan (the Great) Solo.

This river rises in Kedawang, and after collecting the waters from the surrounding mountains flows down to Surakarta, where it is a stream of great depth and considerable breadth. Its course is north-easterly, and it runs after leaving Surakarta, or Matarem, through Sukawati, Jipang, or Bodjonegoro, Blora, Tubau, Sidayu, and out into the sea at Grésik. To its existence no doubt are due all the principal towns in ancient days which were on its banks, and the fact that Grésik became the great centre for the first Chinese and Arabian adventurers.

The "Surabaya" river (so called) is another stream of great importance, rising in the neighbourhood of the mountain Arjuna.

Near its source it is called Kali Brantas. At the old Hindu town of Malang it receives other streams to increase its volume, and from here it takes another course and then curves round the mountain Kawi. It is even more classical than the Solo river, and on its banks from the earliest times several Hindu cities were built. After crossing the old districts of Wirasaba¹ and Japau² it discharges itself into the ocean by five outlets, which form as many separate

¹ Kediri.

² Modjokerto.

rivers. There is no space for a long account of the other principal rivers, but it may be observed that every district has its main stream, and that no town of any importance exists that cannot be reached by water.

LAKES.—There are one or two lakes, very small, but of exceeding beauty, to be found in the mountains and in the craters of extinct volcanoes, as the principal among which may be mentioned the Telaga Bodas,¹ on the *Papandayang*, and the Telaga Warna, on the Gedeh.

In some places in the island swamps exist which are overgrown with the wild hyacinth and are called by some lakes, but these are ill-termed, as during the dry monsoon they are no more than swamps.

IRRIGATION.—That irrigation was known to the early inhabitants of Java before the advent of the Hindus has been proved by philological investigations, which show that centuries before their arrival rice was cultivated in irrigated fields divided into terraces.

Little more, however, is known as to the means that were used to ensure the supply of water necessary for growing rice, but it cannot be doubted that however perfect these plans were, they were greatly improved upon by the Hindus when they firmly established themselves on the island in A.D. 75.

The first work the Dutch undertook was the Oosterslokkan in Jacatra, which was begun in 1739 and completed in 1753. The work was paid for by private individuals under severe pressure from the East India Company.

In 1766 the Westerslokkan was cut, the East India Company paying for this themselves. It has frequently been stated that these *Slokkans*, or canals, were the cause of the old town of Batavia becoming infinitely more unhealthy than it previously had been, and that they brought the interior

¹ Already described under "Mountains and Volcanoes."

state of the town or “ Old Castle ” into a state of utmost unhealthiness, as the following extract from an old work will show :—

“ A great part of the insalubrity of the city is the little circulation of water in the canals which intersect it. This is occasioned by the river which formerly conveyed most of its water to the city being greatly weakened now by the drain which has been dug called the *Slokkan*, which received its water from the main land, and carries it away from the city, so that many of the canals run almost dry in the good monsoon. The stagnant canals in the dry season exhale an intolerable stench, and the trees planted along them impede the course of the air, by which in some degree the putrid effluvia would be dissipated. In the wet monsoon the inconvenience is equal, for then these reservoirs of corrupted water overflow their banks in the lower part of the town and fill the lower stories of the houses, where they leave behind them an inconceivable quantity of slime and filth ; yet, these canals are sometimes cleaned, but the cleaning of them is so managed as to become as great a nuisance as the foulness of the water, for the black mud taken from the bottom is suffered to lie upon the banks, in the middle of the street, till it has acquired a certain degree of hardness to be made the lading of a boat and carried away. As this mud consists chiefly of human ordure, which is regularly thrown into the canals every morning, there scarcely being a necessary in the whole town, it poisons the air, whilst it is drying, to a considerable extent. Even the running streams become nuisances in their turn, by the negligence of the people, for every now and then a dead hog or a dead horse is stranded upon the shallow parts, and it being the business of no particular person to remove the nuisance, it is negligently left to time and accident.”

In 1818, owing to the numerous complaints from the cultivators of rice and sugar about the water supply, there being too much in one place and too little in another, the Dutch Government established a sort of Department for the proper irrigation of the *sawahs*¹ and the general care of the agricultural interests. Little benefit could be

¹ Rice-fields.

expected, however, from a service which had only five engineers attached to it.

During 1847 130,000 fl. were appropriated for works on the Sampean river in the residency of Bezoeki, and in 1849 281,000 fl. for works in the Cheribon district.

In 1852 works on a considerable scale were undertaken for the irrigation of the Sidoardjo district, in the Sourabaya residency, at Lengkong, and 90,000 bouws were properly irrigated.

The work was carried out by a large number of forced labourers, who were unpaid, but, notwithstanding this, 2,600,000 fl. were spent.

In the same year, owing to a famine which had occurred in the Samarang residency in 1848 through the rice crop failing for want of water, a storage dam in the Kali Toen-tang at a place called Glapan, with irrigation streams tapping off the water on both banks, was constructed.

The Department of Civil Public Works,¹ which was established in 1854, had thirty-three engineers attached to it, and in a general way endeavoured to improve a state of affairs which in some parts of the island had already become critical. As however, there was no plan for the general irrigation of the country, and the department busied itself chiefly in replacing, by permanent works, but without any proper studies, native dams and distributing works whose maintenance was beyond the powers of the administrative officials, nothing of any real benefit was conferred upon the agriculturists for several years.

This department, however, changed its ways in 1872, when the works for a proper supply of water and an improvement in the drainage system in the district of Demak, near Samarang, were undertaken after a careful altimetric survey with the aid of the maps; thus the engineers were enabled to compile altimetric maps, on the basis of which the

¹ Burgelijke Openbare Werken.

complete system of water supply and drainage channels was designed. These works cost 7,750,000fl. Other sums expended between 1872 and 1890 for irrigation works amounted to 4,000,000fl.

In 1885 new regulations were issued for the Department of Civil Public Works, and a section of the engineers was specially entrusted with the preparation and execution of irrigation works.

These regulations were again modified in 1889, but the principle defined in 1885, by which the work of the irrigation department was kept separate from that of the hydraulic department, was adhered to.

An amount of 35,000,000fl. was appropriated in 1891 for the completion of sixteen irrigation undertakings with a total area of 577,300 bouws. These undertakings were carried out by voluntary paid labour, and of the sixteen projected only three were not carried into execution.

Two years later the "Panama Canal" of Java was begun. This was the drainage of 223,000 bouws in the Solo valley, together with an improvement in the water supply of the surrounding country. The cost was estimated at 19,000,000fl., and the work contemplated was the most stupendous of its kind ever undertaken by the Dutch engineers in Java. In 1898, when only partially completed, it was stopped owing to new estimates proving that at least 50,000,000fl. would be required to finish it, while the benefits to be derived therefrom were open to doubt.

In 1888 the Irrigation Department of Serajoe was established for superintending the existing irrigation works, chiefly constructed by the population in the Bagalen and Banjoemas residencies. This decentralisation plan proving successful, the Irrigation Department of Brantas for the residencies of Pasoeroean, Sourabaya, and Kediri and Serang (which comprised the residencies of Samarang and Japara) was established in 1892. These separate and distinct

irrigation departments proving to be an advantage, fresh divisions were mapped out and placed under independent staffs—Pekalen-Sampean in 1907, Pemali-Tjomal in 1908, and Madioen in 1909.

The residency of Kadoe was placed under the Serajoe department in the last-mentioned year, while the irrigation division of Tjimanoeck, extending over the greater portion of the Cheribon residency, was established in 1910.

When the irrigation works now in course of construction in Bantam and Djember are completed, the Dutch Government may be considered to have carried out a difficult plan in a highly satisfactory and scientific manner.

The chief reason which has compelled the Dutch Government to use all its endeavours for increasing the productivity of the soil is the burdensome task which continually stands before it of feeding a prolific race like the Javans, who in rather more than a hundred years have increased from about 3,000,000 to over 30,000,000, that is, at a rate unequalled anywhere else in the world.

ROADS.—There is no country where the roads are more numerous, more level or better kept, taking into consideration the severe wet monsoon, than in Java. The whole island is intersected with main roads, post roads, cross roads and bye roads, so that there is no point that the traveller cannot reach by carriage or motor-car. Fresh horses for the former and the necessary equipment for the latter are procurable about every five to ten miles on the main roads. Travelling is thus a pleasure instead of a labour in this tropical land.

Centuries before the arrival of the Portuguese a high state of civilisation was attained, for the roads as found by the Dutch themselves in the seventeenth century proved conclusively how the trade and industry of the Javans had driven or encouraged the populace to build broad and durable roads. .

Strange to say, the same feature was noticeable in the island of Lombok, for when the first Dutch visited this country they were struck with the roads which stretched through the country and the excellent condition in which they were kept.

During the Hindu period—that is to say, as far back as the time of the empire of *Mendang Kamulan*—there were three main roads by which the capital could be reached. One went from Japara, which was then a large and populous Hindu town, with a rajah known to the first Chinese as the “King of Java,” across country to Sron dol,¹ Oenarang, Salatiga, and Bojolali. The second started from Tagal and went through the Banjoemas; this appears to have been a difficult and troublesome way, and it took twelve days to reach the capital by it. The third road started at Balam-bangan, or in the district now known as Banjoewangie, and passed over Pasoeroean and Kediri. There were also at an early date small roads from the capital running to Jortan (Bangil) and Grisse.

The rivers were crossed by large and powerful bambu and teakwood bridges, which were kept in perfect condition, while the roads, although as far as is known not macadamised, were made durable and able to bear heavy weights by means of hewn djati or teak trees. The first European report on one of these roads is given by Rijklof van Goens, a member of the Council, who in 1656 travelled from Samarang to Matarem. This traveller tells us how he found at the river “Damack” a “fine massive bridge, supported by thick Jaty beams, the planks being 10 to 12 inches thick and 300 feet long, over which thousands of elephants and heavy artillery might safely march.” Van Goens further remarks upon the large population of Matarem and the

¹ Japara and Samarang were linked at a later period before the Europeans arrived, and the road between Samarang and Sron dol was probably then opened up.

three important roads which led out of the capital to the east, west and north, this latter being that by which he travelled.

Antonio Hurdt, of the East India Company's army, who in September, 1678, in company with the Susuhunan of Matarem, travelled from this capital to Kediri to punish Truna Jaya, also mentions the various roads they went over. On this occasion three parties went to the assistance of the emperor; one, the party with which Hurdt was himself, started from Japara, the second was under Captain Tak, the Dutchman who is supposed to have stolen the great diamond from the Majapahit crown, and the third was under Captains Renesse and Muller from Rembang.

According to Hurdt the roads were in good condition, although there were some big holes, caused by the previous year's rains, not yet filled in. With regard to this want of repair, it may be observed that it has everywhere been a noteworthy fact, that no sooner does European influence endeavour to spread itself over an indigenous people, than the inhabitants not only become temporarily impoverished, but permanently demoralised, and lose the arts and crafts which they formerly possessed.

This was the case with Java, for no sooner had the Dutch settled permanently at Jacatra, and the Susuhunan of Matarem discovered that there was no dislodging them, than the great roads were neglected and the Javans were reduced to using narrow footpaths, from which most probably the main highways first took their origin.

The Governor-General Gustave Willem Baron van Imhoff was a great man for travelling in Java, and in 1746 made his memorable journey to East Java; he started at Samarang and proceeded to the Emperor of Matarem's court by way of Oenarang, where the Susuhunan met him in all his pomp with a magnificent retinue and a huge body-guard. Van Imhoff, however, does not fail to report

upon the state of the roads *after* he left Matarem, tersely remarking that they were in such a deplorable state that it would almost seem as if no human being had ever lived near them or used them. Patches here and there were good, but rains, mud, rich vegetation and neglect had made them not only difficult, but extremely dangerous for traffic.

The more the Dutch penetrated into the country and the greater power they assumed in the land, the more clearly they saw the necessity of taking the roads and bridges in hand to enable them to undertake military operations, punitive or otherwise, whenever they wished to do so. Up to the time of Baron van Imhoff's journey the only roads controlled and kept in repair by the Dutch East India Company were those immediately around Batavia; the roads, however, to the forts of Tandjoeng Poera, Tangerang, etc., as also the long road to Bantam, were built by the military and kept by them in repair.

When a long period of inactivity, however, was the lot of the Company's army, the roads were sure to be neglected, there being a complete lack of system and a want of funds, for during such times, when money could not be made out of field services, these funds found their way into divers pockets instead of being used for the repair of the roads, as was officially intended.

[The main roads in the seventeenth century ran along the coast and through the low plains; inland communications were for the greater part non-existent, or, where there were any, remained in such a condition as scarcely to warrant the name of roads, that of "ways" being more appropriate. One of the consequences of this was that great hardships and cruel suffering were inflicted on the sick, who were removed from the steaming, unhealthy hot plain of old Batavia to higher and cooler health resorts at Tji-panas, Kampong Baroe,⁽¹⁾ and other places in the Preanger regencies.]

→ ¹ Buitenzorg.

This state of affairs lasted down to the eighteenth century. After Governor-General Daendels arrived, on the 14th January, 1808, he had begun his first journey by the 29th April to the east of Java, travelling through Buitenzorg. It was during this trip that he issued an order on the 5th May that the post road between Buitenzorg and Karangsamboeng should be laid. The preamble of this order reads as follows :—

“Whereas the enormous disadvantage caused to the country and the inhabitants has been noticed by the lack of serviceable roads that prevents the development of the cultivation of coffee, and other produce imposes enormous expenditure upon the smallest transport and exposes this important colony to great danger if one part should be attacked by the enemy, and troops from other parts could not be brought to the threatened point : Governor-General Daendels, in the absence of the Council for India but by the authority he holds from His Majesty the King,

“Has decided [Heeft besloten]—

“Article 1. That the official responsible for Javan Affairs (zaken van den inlander) during the following dry season as soon as the coffee and rice harvests are over shall make a great road from Buitenzorg to Karangsamboeng over Tji-pannas, Tjanjour, Bandoeng, Pracca, and Sumadang. That the road shall be $7\frac{1}{2}$ yards wide and a post (paal) shall be placed at every $9\frac{1}{2}$ miles indicating the distances, and also the parts for the upkeep of which various districts and their inhabitants shall be responsible.

“Further, that 1,100 *boeijangers* [coolies in chained gangs] shall be employed for the work for which an amount of money will be provided as follows :—

From	To	Number of Workers.	Amount of Money provided in Rijksdaalders Zilver.
Tjiceroa . . .	Tjanjour . . .	400	10 thousand
Tjanjour . . .	Radjamandala . . .	150	4 „
Radjamandala . . .	Bandong . . .	200	6 „
Bandong . . .	Praccamoentjang . . .	50	1 „
Praccamoentjang . . .	Sumadang . . .	150	5 „
Sumadang . . .	Karangsambong . . .	150	4 „

“ That upon receipt of this order Colonel Lutzow shall proceed to the spot with two engineers and a Government official to map out the exact way to be followed. One of the engineers to be employed on the portion of the way between Tjiseroa and Tjanjour, the other for that of Parakan moentjang to Sumadang, whilst both are to be provided with two non-commissioned officers of the artillery.”

This was, however, merely a beginning, for in a short space of time there was a main road from Anjer in Bantam at one end of the island to near Banjoewangie at the other. The making of this main road, however, is not due to Daendels only, for in parts it existed before his arrival ; thus, for instance, a way had already existed for about two hundred years between Cheribon and Buitenzorg *viâ* Bandung and Samarang from the time when the whole of these districts were brought under the control of the Mahometan Sultan of Cheribon after the final destruction of the empire of Pajajaran. So likewise there were various strips of road along the north coast already in use before the great Marshal's arrival. What, however, Daendels did was to link all these together and to make the roads broad and serviceable, and at fixed stations along this post way to arrange that fresh horses and postilions should be always procurable for a certain remuneration which he himself fixed, but which left a loss to the native chief forced to supply them.

It was at this time that the famous *gardoe* system was introduced, or reintroduced as some maintain, who claim it as an ancient Hindu institution which had fallen into disuse in the island. Under this system beats on the *tong tong*¹ every hour conveyed all sorts of signals and warnings from one end of the island to the other in a comparatively short space of time, each *tong tong* being within hearing distance of its neighbours on either side.

¹ Kind of wooden gong made out of the trunk of a tree and hollowed out inside.

All these roads, it may be mentioned, were not made, or remade, by Daendels without a large sacrifice of lives on the part of the poor Javans; five hundred from Galoe in Cheribon perished while making the part of the road across the high Megamendoeng. This, however, is nothing compared to the loss which is said to have happened when the Regent of Batang was forced to make a road through a morass up to the present estate of Siloewok Sawangan, which cost his own life and some say those of as many as ten thousand of his men.¹

This was not the first chief General Daendels had hung in this connection, one of the *pangerans* being punished by death for not having a portion of the road near Sumadang ready within the stipulated time.²

When the English arrived in 1811 the work ordered by General Daendels had been more or less completed, and the testimony of Sir Stamford Raffles on the state in which he found the roads is recorded as follows in his "History of Java":—

"Few countries can boast of roads, either of a better description or of a greater extent, than those of Java. A high post road, passable for carriages at all seasons of the year, runs from Anjer, on the western side of Bantam, to within twenty miles of Banjoe-wangi, the eastern extremity of the island, being a distance of not less than eight hundred English miles. Along this road, at intervals less than five miles, are regular post stations and relays of carriage horses. A portion of it towards the west, which proceeded into the interior and passed over some high and mountainous tracts, was found to occasion great delay and inconvenience to passengers, and to impose an oppressive duty upon those inhabitants who, residing in the neighbourhood, were obliged to lend the use of their cattle, or the assistance of their personal labour, to aid carriages in ascending the steep; this part of the line has therefore been abandoned, and a new road has

¹ The road ran straight through Siloewok Sawangan, or Plellen (to give it its correct name), and not, as now, around it.

² The spot is known as Tjadas Pangeran.

recently been constructed along the low lands from Batavia to Cheribon, by which not only the former inequalities are avoided, but a distance of fifty miles is saved. This route is now so level that a canal might easily be cut along its side and carried on nearly through all the maritime districts of the eastward, by which the convenience of inland navigation might be afforded them for conveying the commodities continually required for the consumption and exportation of the capital. Besides this main road from one extreme to the other, there is also a high military road, equally well constructed, which crosses the island from north to south, leading to the two native capitals of *Sura-Kerta* and *Yug'ya-Kerta*, and consequently to within a few miles of the South Sea. Cross roads have also been formed wherever the convenience or advantage of Europeans required them, and there is no part of the island to which the access is left difficult. But it is not to be concluded that these communications contribute that assistance to agriculture or trade in Java, which such roads would afford in Europe. Their construction has on the contrary in many instances been destructive of whole districts, and [when completed by his own labour or the sacrifice of lives of his neighbours, the peasant was debarred from their use, and not permitted to drive his cattle along them, while he saw the advantage they were capable of yielding, reserved for his European masters that they might be able to hold a more secure possession of his country.

"They were principally formed during the blockade of the island, and were intended to facilitate the conveyance of stores, or the passage of troops necessary for its military defence. The inhabitants, however, felt the exclusion the less, as good inferior roads were often made by the side of these military roads, and bye-roads branched off through all parts of the country, so that the internal commerce met with no impediment for the want of direct or convenient lines of communication."

In 1853, by an Order in Council, all the Government roads were thrown open and allowed to be used by every one and by all vehicles provided these were in accord with certain regulations.} The old-fashioned Javan carts, called *pedatis*, with wooden discs as wheels, were forbidden, as were also vehicles the felloes of which no longer rested flat on the road, through the wheels wobbling on worn-out

TABLE I.—ROADS AND BRIDGES IN JAVA.

Residencies.	Length of Roads in Miles kept by the Government.			Plate Girder and Lattice Girder Bridges.			Number of Arch Bridges.		Emer- gency Bridges till 1896.	Small Cul- verts.	Total Number of Large or Small Cul- verts.	Bridges erected or re- newed between 1896—1903.
	1st Class.	2nd Class.	3rd Class.	Num- ber.	Total Length of Flooring (Feet).	Aver- age Length of Floor- ing (Feet).	Longer than 32·8 Feet or with more than one Opening.	From 32·8 Feet to 6·46 Feet wide.				
Bantam	77·5	171	715	214	6,820	31·8	3	147	736	1,024	2,124	157
Batavia	183	107	59	305	12,650	41·4	10	44	0	675	1,034	62
Preanger Regencies	1,688	484	1,242	1,388	34,300	23·7	8	211	490	7,345	9,443	387
Cheribon	83·5	332·5	331	615	21,200	34·4	30	73	197	2,930	3,845	108
Pekalongan	150	224	482	1,221	33,320	26·9	6	92	356	1,604	3,279	160
Samarang	232	348	443	1,031	31,850	31·2	30	92	270	1,747	3,170	327
Rembang	81	225	379	762	23,200	30·2	4	28	30	1,159	1,983	173
Sourabaya	304	364	327	873	31,550	36·2	33	121	711	1,862	3,600	429
Madura	110	49·6	568	204	6,485	31·5	3	10	386	2,363	2,966	113
Paseroean	125	349	488	621	16,000	25·6	21	182	345	2,075	3,244	163
Besoeki	98	318	274·5	237	8,200	34·4	12	107	1,204	563	2,123	69
Banjoemas	51	123	535	587	17,210	29·3	18	123	55	1,048	1,831	272
Kedu	156	120	862	352	13,405	51·0	57	208	699	5,104	6,420	222
Madjoen	50·5	240	457	417	13,450	32·2	11	53	309	2,600	3,390	144
Kediri	104	412	267	645	18,600	27·9	7	43	66	851	1,612	102
Total	3,493·5	3,867·1	7,429·5	9,473	288,240	30·5	253	1,534	5,854	32,950	50,064	2,888

TABLE II.—ROADS AND BRIDGES IN THE OUTLYING POSSESSIONS.

Residencies.	Length of Roads in Miles kept by the Government.			Plate Girder and Lattice Girder Bridges.			Number of Arch Bridges.		Emergency Bridges till 1896.	Small Culverts.	Total Number of Large or Small Culverts.	Bridges erected or renewed between 1896—1903.
	1st Class.	2nd Class.	3rd Class.	Number.	Total Length of Flooring (Feet).	Average Length of Flooring (Feet).	Longer than 32·8 Feet or with more than one Opening.	From 32·8 Feet to 64·6 Feet wide.				
West Coast of Sumatra	95	405	1,570	1,783	47,100	26·40	6	115	729	2,092	4,725	197
Bencoolen . . .	—	42·80	522	61	3,905	64	—	6	335	1,418	1,820	62
Lampung Dist. . .	—	9·30	579	593	13,550	2·95	—	2	14	532	1,141	23
Palembang . . .	—	29·80	1,581	876	38,000	43·50	—	—	241	1,267	2,384	99
East Coast of Sumatra	34·75	—	278·50	39	995	27·70	—	—	64	72	175	115
Achin ¹ . . .	4·35	—	0·62	8	335	41·80	—	—	—	17	25	5
Riouw . . .	2·48	1·24	29·80	19	204	10·82	—	—	—	46	65	17
Banka . . .	10·55	407·50	77·50	318	6,270	19·70	—	3	—	1,127	1,448	41
Billiton . . .	—	—	260	392	5,405	13·80	—	—	—	37	429	—
Borneo, W. Div. . .	—	—	195·50	152	2,690	17·75	—	—	1	16	169	—
Borneo, S.E. Div. . .	—	4·35	512·50	925	25,500	27·70	—	1	11	228	1,165	58
Menado . . .	3·70	130·20	200·50	123	6,055	49·25	—	—	226	624	973	31
Celebes . . .	—	196	246	272	8,830	32·40	—	—	18	248	538	33
Ambonina . . .	0·62	8·70	282	14	657	47·10	—	13	—	79	106	8
Ternate . . .	2·48	6·80	6·22	4	607	15·10	—	6	1	45	56	2
Bali and Lombok . .	3·70	36·60	269	31	1,318	41·50	4	7	161	544	747	85
Timor . . .	—	1·86	1·86	2	115	57·50	—	—	—	36	38	10
Total . . .	157·63	1,280·15	6,612	5,612	161,530	28·70	10	153	1,801	8,428	16,004	786

¹ The military roads are not included.

axles. Moreover the width of the felloes was prescribed, this width increasing with the load on each wheel.

The Dutch Government at the present time spends money freely on repairs and improvements, as also on the building of new roads and bridges, and the old system initiated by Daendels and carried on by Raffles has been steadily developed in no mean or grudging way. This not only refers to Java but to Sumatra, and the so-called outlying dependencies as well.

Table I. gives the roads and bridges at present in existence in Java, with the exception of those on private estates; whilst Table II. gives the same for the outlying possessions.

It may be remarked before closing this section on the roads of Java that Raffles abrogated Daendels' mail-coach service, which the latter had taken so much trouble in starting in 1812; and on the 4th June, 1813, Raffles also revoked the passenger service as being too burdensome on the Javans.

No sooner, however, had the English left the island in 1816, than the latter service again came into operation, but with a more reasonable and generous remuneration to the native chiefs than before.

Unfortunately, owing to the opening up of the country by railways and tramways, this delightful way of seeing the beauty of the land in the comfortable old mail-coaches is gradually disappearing.

RAILWAYS AND TRAMWAYS.—As far back as 1830 the question of the transport of both man and produce received the serious consideration of the Dutch Government.

The minister J. C. Band suggested that a trial should be made with an importation of forty camels from Teneriffe, and sent to Java large shipments of mules and donkeys.

In 1840 Colonel van der Wyck, of the engineer corps, suggested that railways should be introduced, if not for the benefit of the agriculturists, then for military defence, and that a line should be constructed starting at Sourabaya

and running to the Preanger regencies *viâ* Surakarta and Djockjakarta, with numerous side lines.

Nothing, however, came of this proposal at the moment, but there were numerous petitions from private persons for concessions to construct lines from the seaports to various points in the interior.

In 1841 the Governor-General Count van Hogendorp invited tenders for building a line between Samarang, Surakarta, and Djockjakarta.

It was suggested in a general way that the track should be for horse tramways. The Government not only promised to assist in the undertaking, but under certain conditions was prepared to guarantee the payment of interest upon the money invested.

No one, however, was found willing to enter upon a joint concern of this sort with the Government.

When Governor-General Rochussen came to Java in 1845, he advocated the principle of state ownership of all railways that might be constructed, declined even to consider any of the petitions for concessions from private individuals, and asked for a loan of 2,500,000 guilders to construct a line of railway from Batavia to Buitenzorg. The minister for the colonies at The Hague was found unwilling to propose the grant, and matters therefore remained in abeyance for another five years. It was Governor-General Duymaer van Twist who in 1851 proposed the reconsideration of the invitation to private capital, but it was not until 1860 that J. J. Stieltjes, a Dutch engineer from Holland, and John Dixon, an Englishman from Manchester, were sent to Java to report upon the question of railway communications throughout the island. The report, although favourable, led to nothing on the part of the Government, but in 1862 a concession was granted to Messrs. Alexander Fraser,¹ Poolman, and Kol to build a line from Samarang to

¹ A former partner in Messrs. Maclaine, Watson & Co.

Djockjakarta, to be called the Samarang Crown-Country Railway ("Samarang Vorstenlanden Spoorweg"), and in 1864 a concession was granted to the Netherlands India Railway Company ("Nederlandsche Indische Spoorweg Maatschappij") to build one between Batavia and Buitenzorg. This latter company eventually bought the first-named line.¹

The result of these concessions was that the first railway, a short stretch of 25 kilometres, between Samarang and Tanggoeng, was opened in 1867. It was not, however, until 1872 that the whole of the line to Surakarta and Djockjakarta was opened. The line from Batavia to Buitenzorg was opened for traffic in 1873.

In 1875, after a long consideration, the Government decided to construct its first state railway and voted a sum of money for building a line from Sourabaya to Pasoeroean, which was completed in 1878, and to their surprise was a great financial success. Instead, however, of this stimulating the authorities to build other lines, the home Government seemed less willing than before to vote further supplies for railway construction, so that it was not until the 1st November, 1894, that Java was connected from Batavia to Sourabaya by railway.

The first tramway concession was granted in 1881 for

¹ In 1865 the first committee was formed. This is the notice in the *Java Courant* of 17th and 21st February, 1865 :—

"De ondergeteekenden brengen ter kennis van belanghebbenden dat zij op heden de administratië der Nederlandsch Indische Spoorweg Maatschappij hebben op zich genomen, en van nu af overeenkomstig de Statuten, de vertegen woordigens zijn op Java van bovengenoemde maatschappij.

"Het Comité van Bestuur de Ned. Ind. Spoorweg Maatschappij.

"G. H. MIESEGAES, President.

"ALEX. OLTMANS.

"Mr. J. P. VAN BORSE.

"Samarang, 10th February, 1865."

This body exists at the present day. The G. H. Miesegaes above mentioned was a partner in Maclaine, Watson & Co., being the head of the Samarang branch.

a line between Samarang and Joana, which was called the "Samarang Joana Steam Tram Company."

The following concessions to private persons to build railways have been granted at various times :—

The Java Railway Company (*Java Spoorweg Maatschappij*), to build a line from Tagal to Balapoelang; by order in council of the 18th January, 1882, this concession was handed over to the Samarang Cheribon Tramway Company in September, 1895 (granted to Messrs. Alexander Fraser, Poolman, and Kol).

The Deli Railway Company (*Deli Spoorweg Maatschappij*), to build a line from Belawan, Medan Timbang Langkat; by order in council of the 23rd January, 1883.

The Batavia Bekasi Company (*Bataviasche Oosterspoorweg Maatschappij*), to build a line from Batavia to Bekasi; by order in council of the 19th February, 1884; taken over by the State on the 4th August, 1898.

The railways and tramways of the island of Java are as good and comfortable as are to be found in any other country in the world, whilst their organisation under capable and efficient boards of management and *personnel* is perfect.

Government recognises two types of railways, although the regulations affecting each are practically similar, differing only in the speed allowed.

Of tramways only one type is at present recognised, but a change is contemplated in this direction, so that a division will be made between tramways of primary and secondary importance.

The service of trains on all the railways and tramways is frequent and runs punctually, arriving at the destination whatever the length of journey to within a minute of the tabulated time; this is sufficient proof that these lines may be compared favourably with those in Europe, more especially when one takes into consideration the fact

that on many of the main tracks numerous dangerous curves and steep declivities up the mountains are met with.

There is an overland limited express which runs daily from Batavia to Samarang and Sourabaya, and *vice versâ*. This goes through the Preanger regencies (the most beautiful in Java), and stops at all the principal towns *en route*.

For comfortable accommodation and for the excellence of the refreshment car there is no express in England to equal it.

For a traveller with little time at his disposal there is no better way to see the island than by travelling in this train.

That the railways have been a boon to the country cannot be doubted, and the traffic in such a populous and productive land is so enormous that handsome dividends in the case of every company are unfailingly returned every year.

The following figures show the development of the great net of railways and tramways in Java :—

RAILWAYS.

Company.	Length in Kilo- metres.	Capital Outlay in Guilders (end of 1907).	Cost per Kilometre in Guilders.
State Railways :—			
Eastern Circuit (East of Surakarta) ¹ .	904	68,140,775	75,377
Western Circuit (West of Djockjakarta) .	1,005	89,997,297	89,513
Private Railways :—			
Samarang-Vorstenlanden	205	24,441,397	119,226
Batavia-Buitenzorg	56	4,179,575	74,635

¹ The Eastern and Western Circuits are linked by a third track on the private company's line, Djockja-Solo.

TRAMWAYS.¹

Name of Company.	Length of Line in Kilo- metres (end of 1907).	Capital Outlay in Guilders (end of 1907).	Cost per Kilometre in Guilders.
Samarang Joana Stoom Tram Maatschappij	305	12,543,192	31,755
Oost Java Stoom Tram Mij.	79	2,292,893	32,821
Stoomtramweg Djockja Brosot and	23	596,833	25,949
Stoomtramweg Djockja Magelang Willem I. (both owned by N. I. S. Mij.)	111	8,175,728	73,655
Stoomtramweg Goendih-Sourabaya	245	13,587,420	55,422
Stoomtram Mij. Samarang-Cheribon	334	11,149,963	33,383
Serajoedal Stoomtram Mij.	91	2,935,104	32,202
Kediri Stoomtram Mij.	123	2,671,051	21,716
Malay Stoomtram Mij.	86	2,779,353	32,318
Pasoeroean Stoomtram Mij.	44	1,136,578	25,831
Probolingo Stoomtram Mij.	45	1,357,049	30,156
Modjokerto Stoomtram Mij.	79	2,338,943	29,607
Babat Djombang Stoomtram Mij.	68	1,799,884	26,469
Madoera Stoomtram Mij.	214	6,313,383	29,501
Line Madioen Ponorogo, with extensions Ponorogo Balong, and Ponorogo Soe- moroto ²	56	1,619,996	28,928

Post.—During the time of the old East India Company there was no regular postal service either in the island itself or to Europe.

Whenever a Company's ship happened to be leaving for Europe, which occurred every three to six months or so, a box was opened, called "de gemeene doos," under charge of a "senior merchant" (opper koopman), and into this the Governor-General's dispatches and private letters were packed, the latter duly reaching their destination, the "opper koopman willing."

In the island there was a so-called "overland mail," but it existed in name only, dispatches being sent by coolie every three or four weeks, if there happened to be dispatches to send; or, if a coolie arrived with letters from the Preanger

¹ In this list lines of purely municipal interest are not included.

² Built and managed by the Board of the State Railways.

regencies, or the interior, after a few days' rest, he was returned with letters addressed to the place from whence he had come.

Letters were also carried by the different English and Dutch merchantmen who visited the colony for trading purposes.

At the beginning of the nineteenth century private merchants who had important interests employed their own men to carry their communications, and these sometimes travelled on foot, or if speed was required, on horseback.

On some occasions letters were sent with persons travelling through the country—pedlars, pilgrims, and others.

These overland journeys were not, however, undertaken without considerable risk, many of the carriers never being heard of again, either losing their lives through missing the track in the forests or while crossing some swollen river, or else falling a prey to the wild beasts which still roamed plentifully in the jungle.

When Marshal Daendels arrived in 1808 and constructed and linked up the famous highway from one end of the island to the other, he improvised an overland mail which could at last be wholly relied upon.

The first regulations for this postal service came into operation on the 18th June, 1808.

The communications were from Batavia to Bantam, from Batavia to Samarang *viâ* Buitenzorg, the Preanger regencies, Cheribon and Pekalongan, and from Samarang along the northern coast to Sourabaya. Post offices were erected at Batavia, Samarang, and Sourabaya under the direction of special postmasters.

This mail was carried by special carriers on horseback, who were always accompanied by a guide, and at night by a torch-bearer also, to keep the wild animals at a distance.

The rate of postage on letters weighing more than half an ounce amounted to 2 rupees from Batavia to Samarang

and 3 rupees from Batavia to Sourabaya. The postage had to be paid in cash. Unpaid letters were liable to an additional rate of postage of a quarter of the postage of paid letters, which had to be settled in cash before delivery was given.

This overland mail left twice a week. When Sir Stamford Raffles arrived, the postal regulations underwent an alteration and the rates were somewhat altered.

In the main, however, they coincided with those already in force.

A regular outward mail service was arranged during the English period. One of the Company's ships, or a private vessel belonging to one of the British mercantile houses at Batavia, Deans, Scott & Co. or Chapman, Rutter & Co., being hired by the Government to carry passengers and mails to Calcutta, whence they were transhipped to a sailing ship leaving this port for England.

After the English left, and up to 1848, the correspondence for foreign countries was sent by means of Dutch sailing vessels, which left for Amsterdam and Rotterdam every two or three months as the case might be. The principal British firms, however, made use also of their own private vessels for carrying their correspondence, and for the mail which arrived *viâ* Singapore one firm had a special vessel waiting to bring its own letters down.¹ In these days it was customary to send all documents in triplicate by three separate opportunities, only one of which sometimes arrived owing to the other vessels being lost. Thus one set could be sent *viâ* Holland, another from London to Java direct by a cargo vessel, whose sailing would be advertised to all the East India Merchants, and another by the mail service to Singapore.

In 1849 the Dutch authorities concluded an arrangement for the conveyance of all correspondence *viâ* Southampton and *viâ* Marseilles; this was received in Singapore by the

¹ Maclaine, Watson & Co.

Netherlands Indian Postal Administration and forwarded by means of a monthly steamboat mail service that had been established between Batavia and Singapore.¹

In 1870 the service *viâ* Singapore, and in 1871 the service *viâ* Trieste also, which had been opened in 1849, were discontinued (see note at end).

As a result of the opening of the Suez Canal a six-weekly service oversea was established in 1871, and an agreement was concluded with the Netherland Navigation Company (Stoomvaart Maatschappij Nederland) for a monthly mail service between Holland and Java. On the outward route the steamers called at Naples, and on the homeward route at Padang. For each voyage the Steam Navigation Company was subsidised by the Dutch Government to the extent of 3,000 guilders.

This service became a fortnightly service later on, and in 1887, together with the steamers of the steam navigation company "Rotterdamsche Lloyd," carried on a regular weekly service, calling at Marseilles for the mail on the outward journey and discharging it there on the homeward.

As to the inland postal communication of Java, further developments came, of course, with the introduction of railways and tramways, so that now the post closes several times daily at all the principal towns for any place within the island.

The postal service of Netherlands India compared with that of British India can claim to be in no way inferior.

NOTE.

Extract from *Java Courant*, 3rd October, 1849.

"*Overland Trieste Route.*

"The Austrian Lloyd's steamers continue to ply between Alexandria and Trieste as under, viz. :—

"The direct, leaving Trieste the 25th of each month, arriving

¹ This mail service was carried on by one steamer, the *Koningin der Nederlanden*, Captain (1848) George Batten.

at Alexandria about the 2nd or 3rd of the following month, and starting for Trieste from Alexandria 18 to 24 hours after the arrival there of the Indian passengers by the Calcutta steamer, except on occasions when the latter arrives at Suez behind time.

“A steamer of the same company leaves Alexandria every alternate Thursday for Smyrna, when it meets the steamers of the Levant Line, by means of which communication is kept up as previously through Syria with Constantinople, Trieste, Greece, etc.

Fares direct to Trieste, £18, including table money.

„ viâ Smyrna, £13 4s., without the table money.

Passengers intending to avail of the Trieste route should book to Suez only. There are now so many railroads open through Germany that London may be reached from Trieste in six days with comfort and at an expense of about £10 to £12.

“For further particulars apply to the undersigned agents of the Austrian Lloyd's Steam Navigation Company.

“MACLAINE, WATSON & COMPANY.

“Batavia, 10th October, 1849.”

TELEGRAPHS.—The first proposal to erect telegraphs was made by the Governor-General A. J. Duymaer van Twist in 1855, namely, the erection of a telegraph wire between Batavia and Buitenzorg; and the work on it was begun the following year under the supervision of one Groll. The construction was started on the 18th August, 1856, and completed on the 23rd October following, upon which day the first message was sent from Weltevreden to the Governor-General at Buitenzorg. On the 2nd March, 1857, a beginning was made of the continuation of the line to Sourabaya; Cheribon was reached on the 14th April, 1858, Samarang on the 18th June, and finally Sourabaya on the 25th July, 1858.

The first cable between Singapore and Batavia was established in 1859 with a branch line from Muntok to Palembang.

It was not long, however, before this communication was interrupted again and again, and in view of the high

expenses attending its repair it was decided to dismantle the cable.

A portion of the cable was picked up and relaid in 1865 in the Straits of Sunda, so that communication between Anjer (Java) and Telok Betong (Sumatra) was possible. The line, however, possibly owing to poor material, was never satisfactory, and after being repaired over and over again was finally dismantled and replaced by a new cable.

In 1870 permission was granted to the British Australian Telegraph Company, Limited, to lay and work a cable between Singapore, Java, and Australia. The result was that Batavia was again almost immediately in communication with Singapore, and this port being shortly afterwards in connection with Penang and Madras, Java was at last enabled to participate in the advantages—some merchants who remember the olden days say disadvantages—of international telegraphic communication.

In October, 1872, the cable between Java and Australia was opened, and in 1873 the British Australian Telegraph Company was incorporated with the Eastern Extension, Australasia, and China Telegraph Company, Limited.

As far as Sumatra is concerned the erection of telegraph wires was begun as early as 1866, but the work was carried on under far greater difficulties than those which had been experienced in Java.

Hordes of wild animals and troops of monkeys were continually knocking over or climbing the posts and breaking the wires or damaging the insulators, while later elephants in great numbers maliciously pulled down the masts over considerable distances, playfully dragging them with wires, insulators, and all into the dense jungle, from which they were as a rule not to be recovered. This was not all, however for the difficulties attending the conveyance of materials, owing to there being no facilities, and the malarial fever,

which decimated the engineering staff, hampered the work from its start.

In spite, however, of all these obstacles Palembang was reached in 1867, Padang in 1871, Singkel in 1873, and Deli in 1887.

At the present time the telegraph wires in Netherlands India extend over 8,881·04 kilometres, and the telegraph cables over 5,221·27 kilometres, making the total length 14,102·31 kilometres.¹

TELEPHONE.—In 1880 a concession was granted to some private persons for twenty-five years to construct telephonic communication in Batavia, Samarang, and Sourabaya, and between Batavia and Weltevreden and Batavia and Tandjong Priok.

The work was begun in 1882, and at Batavia, Weltevreden, and Tandjong Priok was ready in 1883, while Samarang and Sourabaya opened their service in 1884. At the end of the contract Government took over all these lines.

In 1896 inter-communal telephones were opened by private initiative from Batavia, Cheribon, Tegal, Pekalongan, Samarang and Sourabaya, and other places to the Preanger districts, Djockjakarta, and Soerakarta.

The whole system has now been taken over by the Government, and works, like all things the Dutch Government undertakes, very well.²

SHIPPING.—Although the rights of coastal navigation are

¹ The only private telegraph line that I have known of in Java is one which connected the General post office at Weltevreden with Messrs. Maclaine, Watson & Co.'s office in the old town of Batavia, for which the latter had to pay a special remuneration to the Government. This special service, which had the advantage of giving messages fifteen minutes sooner, was suspended when the public telephone service came into use.

² There are many private telephone lines in Java, among which may be mentioned that in use at Kendal between the sugar fabricks there, and the property of a small company. The others are all privately owned, being mostly the property of the shareholders in the estates on which they are used.

granted only to Dutch vessels, the ports of Netherlands India are open for general trade and accessible to the ships of all flags with whom the Dutch are on friendly relations, provided always the general local regulations are strictly observed.

Whilst the shipping which trades to and from Java is enormous, as can be easily gathered from an examination of the statistics, there are four companies which may be considered as carrying the bulk of the passengers and cargo¹ inwards and outwards, and as carrying on the local traffic in the archipelago.

For the ocean traffic there are two Dutch companies and one English (although some of the vessels of the latter company fly the Dutch flag), namely, the *Nederland Steam Navigation Company of Amsterdam* (*Stoomvaart Maatschappij Nederland*), the *Rotterdam Lloyd Steamship Company of Rotterdam* (*Stoomvaart Maatschappij Rotterdamsche Lloyd*), and the *Ocean Steamship Company of Liverpool* (*Blue Funnel Line*), the Dutch line of which is called the "*Stoomvaart Maatschappij Ocean*."

For the local trade there is the *Royal Packet Company of Batavia* (*Koninklyke Paketvaart Maatschappij*), which holds the monopoly.

The *Nederland Steam Navigation Company* was established in June, 1870. Previous to this several attempts had been made to form a company, but sufficient money was never forthcoming. When the Suez Canal was opened a further attempt was made and a public meeting was called to discuss the establishment of a national line to Batavia *viâ* Port Said and the Red Sea. The meeting was well attended, as the subject had aroused a good deal of enthusiasm, and within two days a committee was elected to consider the details. The members of the committee were

¹ Excepting the sugar, which is carried to all quarters of the globe in chartered steamers.

G. J. Boelen, of Messrs. de Vries & Co. (shipowners); J. G. Bunge, of Messrs. Bunge & Co.; J. Boissevain, of Messrs. Boissevain & Co. (Eastern traders and insurance agents).

The royal family also took great interest in the undertaking.

It was at once decided that a regular steamship company should be formed, and in February, 1870, a provisional contract was made with the Government whereby the carriage of all Government produce was secured for the new enterprise. The following month the company was floated with a capital of 3,000,000 guilders (£250,000), and the first steamers were ordered from the Glasgow firm of John Elder & Co., of Glasgow.

On the 17th May, 1871, the *Willem III.* started on her maiden voyage, crowds of people witnessing her departure from Den Helder. The company began with misfortune. Two days later the news reached Holland that the *Willem III.* was on fire and had been beached at Portsmouth. Shortly after this another of the company's ships came to grief on a rock in the Red Sea, and it was not until 1875 that the regular sailings could be guaranteed.

The vessels call every fortnight at Southampton, and *en route* to Batavia call at the ports of Lisbon, Tangiers, Algiers, Genoa, Port Said, Suez, island of Perim, Colombo, Sabang (Sumatra) and Singapore, and are the most comfortable and best-equipped steamers travelling to the East.

At the present time the *Nederland Company's* fleet consists of the following mail steamers.

	N.R.T.		N.R.T.
<i>Koning der Nederlanden</i> . . .	5,500	<i>Vondel</i> . . .	3,713
<i>Princess Juliana</i> . . .	5,000	<i>Koning Willem I.</i> . .	2,851
<i>Grotius</i> . . .	3,702	<i>Koning Willem II.</i>	2,684
<i>Rembrandt</i> . . .	3,719	<i>Koning Willem III.</i>	2,872
		<i>Oranje</i> . . .	2,798

Besides this the company has a fleet of fifteen cargo steamers, whose tonnage ranges from 2,500 tons N.R. to nearly 4,000 tons N.R.

The Rotterdam Lloyd Steamship Company began its days under no special name in 1844, when according to old books the *Drie Gebroeders*, a bark of 450 tons gross, sailed from Holland for Batavia on the 11th September.

The first steamer that was built was called the *Ariadne* (in 1870), and the *Fop Smit* followed shortly after this; these were intended for the Levant trade.

In 1872 D. T. Ruys, of Ruys & Co., made an arrangement with the Commercial Steam Navigation Company, of London, for three steamers, the *Wyberton*, 1,450 tons, the *Harrington*, and the *Kingston* to run under the English flag to the East Indies. This was the pioneer line of the Rotterdam Lloyd.

The arrangement was that a regular service should be maintained with six steamers, three of which would be supplied by the English company and three by Ruys & Co., the company to be called "The Rotterdam Lloyd." Ruys & Co., however, found some difficulty in carrying out their part of the agreement owing to no money being procurable in Holland, and it was not until 1875 that the company (Rotterdam Lloyd) was actually formed, and then with nearly the whole capital supplied in London.¹

The first Dutch steamer was the *Groningen*, built by the British firm of Mitchell & Co., Newcastle-on-Tyne, and she sailed on her maiden voyage from Vlissingen on the 7th March, 1875, being followed on the 29th May by the steamship *Friesland*. The *Groningen*, after three voyages, was lost near Antwerp on the 26th March, 1876. She was followed

¹ The capital was supplied, I am told, by G. H. Miesegoës, F. Bogaardt, and F. W. von Laer (partners in Maclaine, Watson & Co.), H. O. Robinson, head of a firm of engineers in London, and one or two others. The agents in Java were Maclaine, Watson & Co.

by the steamship *Drenthe*. In December, 1877, the *Friesland* was lost with all on board on the Corobedos rocks. For years it was not known where she had gone down, but in 1905, through blocks of tin being brought to Corcubion, it was discovered where the place of the wreck was.

On the 3rd September, 1881, four steamers of the Commercial Steam Navigation Company were placed under the Dutch flag to keep up the three-weekly service. Two years later, on the 15th June, 1883, the company as it now is was established and all connection with the Commercial Steam Navigation Company ceased.

At the present time the Rotterdam Lloyd Company's fleet consists of the following mail steamers :—

	N.R.T.		N.R.T.
<i>Tabanan</i> . . .	5,500	<i>Rindjani</i> . . .	4,600
<i>Tambora</i> . . .	5,500	<i>Kawi</i> . . .	4,600
<i>Goentoer</i> . . .	5,500	<i>Orphir</i> . . .	4,600
<i>Sindoro</i> . . .	5,000	<i>Wilis</i> . . .	4,600

Besides this the company has a fleet of twelve cargo steamers with a tonnage ranging from 4,700 tons N.R. to 8,000 tons N.R. The steamers of the company call every two weeks at Southampton, and are splendidly equipped. They take nearly the same route to Java as the *Nederland*.

The Ocean Steamship Company (Alfred Holt & Co.) is so world-famed that no account of the company is necessary. The line was started by Alfred Holt in the fifties with three ships, the steamships *Agamemnon*, *Ajax*, and *Achilles*, which traded to China *viâ* the Cape of Good Hope, returning as a rule with a full cargo of tea only at bumper freights up to £7 and more per ton of 40 cubic feet. While the *Nederland* Company and the Rotterdam Lloyd carry all the passengers to and from Holland to Java, the Ocean Steamship Company take the bulk of the cargo from Java which is landed in Amsterdam.

Four steamers of this company carry the Dutch flag, and constitute a separate concern registered in Holland.

“From small beginnings come great ends,” and such a term may faithfully be used in reference to the Royal Packet Company, which nowadays carries on the whole service of local passenger and cargo transport in the East Indian Archipelago with a magnificent fleet of steamers, veritable yachts in luxury and convenience.

The first steamship to carry out a special service between Batavia (Cheribon, Tegal, and Pekalongan when required), Samarang, and Sourabaya was the *Van der Capellen*, of 216 tons, in 1826, which was nominally owned by the British mercantile house of Thompson, Roberts & Co., Batavia, but in which Maclaine & Co., Forestier & Co., Miln, Haswell & Co., and Trail & Co., all British firms in the place, were also interested.

The advent of steamships in the Eastern Archipelago, as may be well understood, created a great sensation among the native races, and was the death blow to the daring pirates of Borneo and the Celebes after every other method for their suppression had failed.

Few know the story of the first steamer off Java. Some pirate ships saw a steamer in the distance, and observing smoke coming from its fat, short masts concluded the ship was on fire and therefore helpless. They gave chase, therefore, but were amazed to see the strange beast come up steadily before the wind and vomit fire from its guns.

It was generally agreed after this in polite pirate circles that the white man had played a mean trick upon a successful and honourable body of traders.

The *Van der Capellen* continued the service until 1839, when she was lost between Batavia and Singapore. Maclaine, Watson & Co. now ordered a vessel called the *Koningin der Nederlanden* (Queen of the Netherlands), which arrived at Batavia in 1840, to continue the same service. She was

more than twice the size of the *Van der Capellen*, having a capacity of 516 tons. According to the *Java Courant* of the 24th February, 1841, a meeting was called to form a company with this single vessel:—

“Those interested in the steamship the *Koningin der Nederlanden* are invited to attend a meeting on Thursday, 11th March, at 12 o'clock, at the office of Maclaine, Watson & Co., Batavia, to decide and discuss what conditions should be made before requesting the Government to permit the establishment of the Javasche Stoomboot Maatschappij.

“MACLAINE, WATSON & CO.

“Batavia, 22nd February, 1841.”

After this meeting Maclaine, Watson & Co. handed over the directorship of the vessel or company to the British house of Paine, Stricker & Co., as this firm was concentrating its interests in the shipping business, so that it was feared there might be unnecessary competition.¹ While the directorship later on changed hands several times,² Paine, Stricker & Co. were the booking agents at Batavia of the company until 1866, and specially established themselves at Padang to look after the company's large interests there.

On the coast the agents until 1890 were McNeill & Co., Samarang, and Fraser, Eaton & Co., Sourabaya. On the board at Batavia, there was generally, if not always, a partner in Maclaine, Watson & Co.

The Javasche Stoomboot Maatschappij never took official form, but in 1842 the Netherlands India Steamboat Com-

¹ *Java Courant*, 17th March, 1841:—“The undersigned give hereby notice that they have handed over the agency of the steamboat *Koningin der Nederlanden* to Messrs. Paine, Stricker & Co.

“MACLAINE, WATSON & CO.

“Batavia, March 12th, 1841.”

² It would seem that the directors had to be re-elected every year. Paine, Stricker & Co. held the position from 1842 to 1848, J. J. Blanckenhagen in 1848, Thompson, Roberts & Co. from 1849 to 1851, and Maclaine, Watson & Co. from 1852 to 1866; then for the Netherlands India Steam Navigation Company, Alexander Fraser (late partner in Maclaine, Watson & Co.) and J. Schroder were appointed.

pany was established, and in the old records one observes the ownership of the *Koningin der Nederlanden* transferred in 1844 from the name of Maclaine, Watson & Co. to that of the above company.

The first page of a share-warrant is as follows :—

Nederlandsch Indische.

STOOMBOOT-MAATSCHAPPIJ.

opgerigt te Batavia in den jare 1842.

No. 96.

Bewijs van Aandeel Voor

Den Heer JOSEPH MARIE TISSOT

als deelhebbende in de Nederlandsch Indische Stoomboot-Maatschappij, gevestigd te Batavia, voor EEN AANDEEL, groot EEN DUIZEND GULDENS zilvergeld, bereids gefourneerd, alles achtervolgens de acte van oprigting van voorschrevene Maatschappij, op den 3den Maart des jarrs 1842, ten overstaan van den Notaris Mr. H. M. Willer, en getuigen alhier-gepasseerd en sub no. 24 verleden, goedgekeurd door den Vice-President Waarneemend Gouverneur Generaal van Nederlandsch Indië, bij Besluit van den 30sten Maart 1842, no. 16, en waarvan de Statuten hier achter voorkomen.

Batavia, den 29th Augustus, 1842.

PAINE, STRICKER & Co. Directeur.

A. GEVES.

J. McNEILL

} Commissarissen.

The service was now extended with the assistance of a Government steamer, and whilst the *Koningin der Nederlanden* continued its old route, it ran in conjunction with the new vessel which was despatched monthly from Batavia to Singapore *viâ* Muntok and Rhio. Thompson, Roberts & Co. were the agents for this Singapore line.

In 1850 a monthly service was started between Sourabaya and Macassar by way of a trial with a single steamer belonging to private persons, and in the same year the Netherlands India Steamboat Company was granted a loan by the Government for the building of a second steamer, and a

provisional agreement was made with Mr. Cores de Vries for the maintenance of a regular steamship service between Batavia and Padang, Batavia and Macassar *viâ* Sourabaya, and Macassar and Menado *viâ* Amboina and Ternate.

In 1854 the Dutch Government entered into a definite agreement with Mr. Cores de Vries for a period of five years, on condition that from the 1st June, 1854, the following regular services were maintained :—

Batavia, Samarang, Sourabaya, Macassar, Banda, Amboina, Ternate, Menado, Macassar, Sourabaya, Samarang, Batavia ; and Batavia, Muntok, Rhio, Singapore, and back.

A contract for a period of four years beginning on the 1st May, 1854, was also made with the Netherlands India Steamboat Company for the conveyance of the mails from Batavia to Singapore. This contract was extended to the 31st May, 1859, and again continued until the end of 1860, while Mr. Cores de Vries's contract for the other services was extended until the 1st May, 1865.

On the 21st July, 1863, tenders were invited for the maintenance of the following services during a period of ten consecutive years, that is, from 1866 to 1875 :—Fortnightly from Batavia *viâ* Muntok and Rhio to Singapore and back, with some ports of call, with a branch line from Muntok to Palembang and back. Weekly from Batavia *viâ* Samarang to Sourabaya and back *viâ* Samarang. Once a month from Sourabaya to Macassar, Timor, Koepang, Banda, Amboina, Boeroe, Ternate, and Menado, and back to Sourabaya *viâ* Macassar, the route to be reversed alternately. Once a month from Batavia to Pontianak and Singkawang and back to Batavia *viâ* Pontianak.

Fortnightly from Batavia *viâ* Bencoolen to Padang, and back to Batavia *viâ* Bencoolen. Once a month from Sourabaya *viâ* Bawean to Banjermassin and back to Sourabaya *viâ* Bawean.

Mr. H. O. Robinson, the head of a London firm of engineers, put in the lowest tender and obtained the contract, which he transferred to the Netherlands India Steam Navigation Company, which company afterwards also secured the contract offered for public tender in January, 1874. This was for a period of fifteen years from 1876 to 1890.¹

In 1888 there was a patriotic flutter in Holland about all the lines in Netherlands India archipelago being in the hands of Englishmen, and through the combined action of the Nederland and Rotterdam Lloyd the "Royal Packet Company" was established and the contract in 1890 given to Messrs. J. Boissevain and P. E. Tegelberg, directors of the Netherlands Steamship Company of Amsterdam, and Mr. R. Ruys, director of the Rotterdam Lloyd Steamship Company of Rotterdam. The capital of the new concern was 9,000,000fl., and by agreement they took over from the Netherlands India Steam Navigation Company sixteen steamers, coal stocks, warehouses, and wharves, and the greater part of the staff, including captains, officers, engineers, and shore employees.

¹ The largest shareholders in this concern are said to have been the British India Steam Navigation Co.; the rest were mostly English. The director at Batavia was Mr. Schroder. The agents at Samarang were McNeill & Co. and at Sourabaya Fraser, Eaton & Co.

PART IV

Social Life in Java. The Houses of Europeans. The Press. The Batavia Society of Arts and Sciences. The Banks. Currency—Coins in Circulation. Weights and Measures. Land Measurement. Imports and Exports. Duties. Customs Receipts.

SOCIAL LIFE IN JAVA.—The social life of Java is not unlike that in most Eastern countries. The day begins at 5 or 5.30 a.m., the custom being then to breakfast with coffee and fruits. A stroll is then taken by some, while others prefer a ride on horseback. A more solid meal is taken again at 8.30, after which the men usually proceed, by motor car, carriage and pair, train or tram, to their offices, which as a rule start work at about 9 o'clock. The men in the Government bureaus, however, start work at least half an hour earlier than this. Tiffin (lunch) is served in the offices at 1 o'clock.

The mercantile offices close between 4.30 and 5, but the Government departments close at 2 o'clock except in the case of the postal and telegraph offices.

Games of sport, tennis, golf, cricket or football are then indulged in until 6 o'clock or so, when the sun sets, and it at once begins to get dark, there being no twilight in the tropics.

The lady during the day usually attends to her household affairs, which occupy her until noon, after which she partakes of a meal called the “rijstafel” (literally, rice-table), which consists of rice, with a dozen or more small dishes of fish, flesh and fowl, cooked with hot chillies and other equally strong condiments. She then takes a “siesta” until 4 o'clock, when she prepares herself for joining a tennis party with the men or taking an afternoon drive with some lady.

At 7 o'clock the married people either attend some fashionable reception, which each local Dutch dignitary holds once

in the month, or else visit the club to listen to the band, or perhaps, in the case of the man, join a billiard or bridge party.

Dinner is taken at 8 o'clock with "mijnheer" and "mevrouw" (Mr. and Mrs.) in full dress. After dinner the theatre or a concert is sometimes attended, otherwise the evening is spent in literary employment, and the day in this case closes at about 10.30 p.m.

Dinner parties and private and public dances (at the clubs) are frequent and largely attended.

The Dutch are a very hospitable nation, and all the best families open their doors to the English providing they are willing to attend a reception first. The Dutch language is not specially insisted upon, English being a language the Dutch are very proficient in ; at the same time it behoves all Englishmen to learn the Dutch language if they wish to succeed in the country.

The towns are very gay, and there is no end to amusements for those that seek them.

There are also race clubs in at least eight towns in Java, and the scenes on these occasions are very animated.

THE HOUSES OF EUROPEANS.—Although the heat of the day is rather severe in Java, the houses of the better classes are so built that it is, comparatively speaking, quite cool inside of them.

The houses are constructed on the bungalow plan, and deep verandahs encircle the house. Instead of windows, broad and lengthy venetian doors open from the rooms into the verandahs.

The whole flooring is of solid white marble slabs, while the roof is of red tiles.

The bedrooms are large and capacious, and the *salons* or reception rooms broad and long, while the ceilings of all rooms are lofty.

The servants' quarters, the bathrooms, kitchens and

store cupboards are built in a row a little distance from the house, but are connected therewith by a long covered alley-way.

For luxury and comfort, for real magnificence and grandeur, there are no houses in the East to compare with those of the "upper thousand" in Batavia.

A house as described sufficiently large for, say, a family of ten persons may cost anything from £3,000 to £10,000, although there are a good number in Batavia and elsewhere which have cost double this sum.

THE PRESS.—The first experiment in journalism in Java was made by Governor-General van Imhoff in 1744, when he published an official paper called the *Bataviasche Nouvelles*.

This premature journalistic infant did not live long, however, and two years later died a natural death for want of news, which was extremely scarce owing to the severe censure which was feared from the authorities in Holland if anything appeared displeasing to them.

Shortly afterwards another attempt was made with *Het Vendu Nieuws*, which showed rather more freedom than its predecessor. This was superseded by the *Bataviasche Koloniale Courant* in 1810, which lasted until Sir Stamford Raffles arrived in 1811, when it was replaced in 1812 by the *Java Government Gazette*,¹ which contained besides all official proclamations and advertisements of the British Government, the public notices of all the British mercantile houses, accounts of official entertainments, and a vast amount of general information never before published, or allowed to be published, in the island. When the English left Java in 1816 this gazette became the *Bataviasche Courant*,² under which name it fluttered until 1828, when it

¹ First number was published on Saturday, 29th February, 1812, and the last on the 19th August, 1816.

² First number was published on the 20th August, 1816, and the last on the 1st January, 1828.

was re-christened the *Javasche Courant*,¹ the name by which this official organ is still known.

These Dutch *Courants* could scarcely be taken as a real newspaper in the generally accepted sense of the term, for they were as a rule strictly official, and only occasionally condescended to publish ordinary items of news. The first real newspaper which deserves the term, and may be considered as the pioneer of the Java Press, was the *Soerabaya Courant*,² which made its appearance in 1835. This paper, while supplying a long-felt want, did not assume much importance, owing to the fact that the censor kept a rather sharp eye upon it, so that in the end what this official tolerated was nothing more harmful than notices, regulations, instructions, notifications, now and again varied by the appointment of a day for general thanksgiving or perhaps supplication, or a lottery list, or funeral oration.

In 1842 the Government forbade private printing, and in 1847 the authorities decided that the printing press should be used as a medium of publicity only by those to whom such privilege was granted.

In 1848 there was a change, for a meek and rather modest clergyman named van Hoevell startled the high authorities of Java by his agitation for reforms, and the liberty of the Press was the first and most important item on the programme. Like all "men" who strike out a line of their own or endeavour to carry out well-formed principles, whether it be in business or in Government life, van Hoevell not only made many enemies, but set the official class against himself, which resulted in the Government adopting still sterner measures of repression, and when during this period of reaction a certain Mr. W. Bruining, of Rotterdam, arrived at Batavia with a printing press, he was refused permission to use it.

¹ The first *Javasche Courant* was issued on Thursday, 3rd January, 1828.

² Still exists as *Nieuwe Soerabaya Courant*.

The authorities were now alarmed, and apparently regarded Bruining as the transmitter of some pestilential and epidemic disease, and they tried to rid themselves of the danger by offering him a free passage and a monetary compensation to return to Holland.

Later on Dr. J. H. van der Chys, a gentleman by birth and education, with a true journalistic instinct and talent, was appointed editor of the *Javasche Courant*, and conceived the idea of making this dry and unpalatable official organ more agreeable to the general public and thus increase its sale. He therefore arranged to have certain items of news mailed to him from Holland and upon receiving them published those which he considered interesting. This did not, however, last long. In these days there were of course no railways to Buitenzorg, so that it occasionally happened that information regarding home affairs became public property in Batavia before it reached the Government officials at Buitenzorg.

Thus it occurred on one occasion that information which it was desirable the officials should hear of first came to them the day after the public had received it, and this arousing the indignation of the Governor-General, Dr. van der Chys was sent for and given a severe reprimand. After this the home mail was sent with all speed to Buitenzorg, so that the censor might decide what might and what might not be published.

Meantime Bruining remained at Batavia, steadfastly declining to return to Europe, and after a long struggle succeeded in obtaining permission to publish a weekly paper called *Het Bataviasche Advertentieblad* in 1851. This, however, was never much more than an advertising medium, although a few articles were now and again published which had previously appeared in the official organ in Holland, the *Staatscourant*, or in the *Javasche Courant*.

In 1852 the *Advertentieblad* was succeeded by the *Java*

Bode,¹ the owner being still Bruining, who edited and published the paper in conjunction with H. M. van Dorp (who acted as manager), van Haren Noman, and Kolff. This paper was published twice a week, and the yearly subscription was 25 fl.

In 1857 the paper was taken over entirely by H. M. van Dorp, and four years later a special edition was issued for circulation in Holland. On the 1st December, 1869, the *Java Bode* became a daily paper. It was of course subjected to a strict censorship, and the Resident of Batavia was instructed carefully to watch its progress and report from time to time his opinion on the new venture. The subscription to this paper was 40 fl. a year.

The first competitor with the *Java Bode* was *Het Algemeen Dagblad voor Nederlandsche Indie*, which was started by Mr. Coenraad Busken Huet on the completion of his contract with the *Java Bode*, upon whose staff he had been working. Busken Huet was a clever and able journalist, quite capable of conducting a newspaper. He charged 50 fl. a year for his paper, and immediately secured a large number of supporters. A third competitor, however, now came into the field in the *Bataviaasch Handelsblad*, a daily paper, which was published by the firm of Ogilvie & Co. and edited by that well-known and remarkably intelligent lawyer the late Mr. J. A. Haakman.

Mr. Busken Huet some years later returned to Holland, and the *Algemeen Dagblad* was gradually ousted by the *Bataviaasch Handelsblad*, which also eventually succumbed on the sudden death of Mr. Haakman after flourishing for a time.

The *Locomotief* appeared in 1851; it was the first arrival in the world of journalism in Samarang. Mr. J. E. Herman de Groot was the publisher, and it came out once a week.

The journal prospered, and had a large sale in Middle

¹ Still exists.

Java, so much so that in a short time it appeared twice a week, and shortly afterwards daily. Ten years from the date of its first publication the *Locomotief* was purchased by G. Kolff & Co., and five years later, in 1866, passed into the hands of Grivel & Co., and under the guidance of that very capable editor, Mr. C. E. van Kesteren, its circulation more than doubled itself. Until quite recently, when the *Semarang Courant*¹ appeared, the *Locomotief* had no competitor, so that a price of 40 fl. per annum was maintained.

In 1852, in opposition to the *Soerabaya Courant*, the *Soerabayaasch Handelsblad* was started by the publishing firm of Leroy & Co. The business of this firm together with the paper were after a year or two bought up by G. Kolff & Co., who sold it again to Mr. W. Thieme. With the assistance of Mr. Wilkens as editor, Mr. Thieme's venture proved a profitable one, for the sale of the paper soon increased. Wilkens, however, did not remain long, and his place was taken by Mr. S. Kalff, a gentleman whose ability as an article-writer was well known, but who unfortunately failed as a business man; consequently the sale of the paper dwindled away very considerably. Kalff therefore left, and his place was filled by Mr. H. G. Bartels, a brilliant and distinguished pensioned officer, with great journalistic ability.

Having more than ordinary ideas as to the functions of journalism, he went in for a freedom of language in writing his articles and a mode of criticism which soon brought the circulation of the paper back to its former footing. Like, however, so many men before him, Bartels on one occasion went too far, and as there is no greater crime than this in Indian journalism, a tobacco prince sued him for 75,000 fl. damages. A lawsuit followed and Bartels fled the country.

The *Soerabayaasch Handelsblad* is now known as a very

¹ No longer exists.

high-class organ, certainly the best in Java. It has maintained almost throughout a standard and stamp of its own, and under such a brilliant editor as van Geuns it may be safely expected to continue to do so.

In 1883 the town of Cheribon produced a paper called the *Tjerimai*, which still manages to live, and in 1885 the *Bataviaasche Nieuwsblad* was started under Mr. P. A. Daum.

In 1894 the *Soerabaya Courant*, after having reached a high standard under Mr. Eyssel, went into liquidation on his sudden death, but was succeeded by the *Nieuwe Soerabaya Courant*. The *Nieuws van den Dag* was started in 1893 with another name; under the very clever Mr. G. Wybrands it is doing well, and has a large sale.

From a general point of view the Press of Java compares favourably with that of other countries, and must be considered as having a high tone and keeping up a good standard.

There is (or rather was) one English newspaper in Java, the *Java Times*¹; it was started in 1908 by Mr. H. M. Rankilor,² and is (or was) published weekly at Batavia. The *Java Times*, although an excellent little paper for the English resident who cannot read Dutch, or for English travellers visiting the island, could in no way be compared to the Dutch newspapers which daily appear, and are as full of information as it is possible to make them, with columns of telegrams from all parts of the world.

THE BATAVIA SOCIETY OF ARTS AND SCIENCES.—That very distinguished institution known as “The Batavia Society of Arts and Sciences,” or, to give it its Dutch title, “*Het Bataviasch Genootschap voor Kunsten en Wetenschappen*,” was founded by the Governor-General De Klerk and his son-in-law, Mr. Radermacher, on the 24th April, 1778.

¹ This paper died a natural death in April, 1912.

² Mr. Rankilor, who was both the proprietor and editor of the *Java Times*, came to Java from Kuala Lumpur, in the Federated Malay States, where he had held the position of manager of the *Malay Mail*, the oldest newspaper in that country.

It seems that after these gentlemen were elected directors of the Society of Haerlem, in 1777, a programme was issued which contained a plan for extending the branches of this society to Java, a scheme that immediately received support and encouragement from Mr. Radermacher, who was known as a man of great scientific talents and a strong supporter of the Christian religion. It appears, however, that this idea of encouraging the arts and sciences of Batavia and other East Indian establishments then dependent on Holland, although officially coming from the Society of Haerlem, actually emanated from Radermacher, and the idea had received the full and unreserved support of his all-powerful father-in-law, the Governor-General.

For reasons probably of distance and the difficulties likely to ensue from a branch so far away, nothing came of the above plan, but this did not prevent a separate society being formed by the energetic and persevering Radermacher, and this with official support and authority was duly carried out, and the new society as above named took for its motto that of the one at Haerlem, namely, "The Public Utility."

The number of members of the society on its first organisation was 192. The Governor-General was the first chief director, and the members of the Council of India (Raden van Indie) were directors. The ordinary members were elected from the principal families of Batavia and other parts of Java. A committee was nominated of eight members, with a president, vice-president, and secretary; their duties were to attend to the daily occurrences and details, and they were given the authority to settle all questions which admitted of no delay, but were obliged to report all the proceedings and to produce their minutes (*notulen*) at the first ensuing general meeting.

The society, whose ideas have become broader with time, chose for its first objects of research and inquiry whatever might be useful to agriculture, commerce, and the welfare

of the colony. It further as a consequence encouraged the study of the history, antiquities, manners, and usages of the Javans and other East Indian races. It is significant, however, to note that they expressly declined to enter upon any subject which might relate directly or indirectly to the Dutch East India Company, which no doubt was a wise plan, as any criticism from a body of such distinguished gentlemen upon the proceedings of the iniquitous old Company would have soon resulted in the resignation of the Governor-General and members of his council, which in turn would have brought about the fall of the society.

To define definitely and clearly the objects of the society and to contribute towards their accomplishment, a programme was eventually printed and circulated among the members from time to time. Among other questions in these interesting old programmes, besides those which related to commerce and agriculture, were such ones as "the means for combatting the diseases of the climate" and what "means could be used for removing the unhealthiness of the old town of Batavia," etc.

When the society was established and all minor details for its organisation settled, it received from various quarters acquisitions for its museum and library.

From Mr. Radermacher the society received a house, besides eight cases of very valuable books, collections of animals, fossils and minerals, of Javan musical instruments, and of the different coins current in the East, and through the liberality of a Mr. Bartt the society was enabled to form a botanical establishment in a garden presented by that gentleman.

In 1779 the first volume of the society's well-known and interesting "Transactions" appeared. The second came out in 1780 and the third in 1781. Owing, however, to the want of types and other unfortunate circumstances, the first programme did not appear until 1782.

The fourth volume, which was the first given to the public and was printed in Holland under the special privilege of the "States-General," was issued in 1786, and the fifth and sixth in 1790 and 1792. After this the society seems to have languished through the want of good men to control the committees and management, which resulted in less and less interest being taken in it.

Meetings were unattended, no questions were asked, or when they were asked were never answered, and after continuing in this state for several years it practically ceased to exist.

Dr. Thomas Horsfield, the celebrated botanist, when he arrived in the island seems to have done all he could to resuscitate the society and in a small measure succeeded. It remained, however, for Sir Stamford Raffles, who was elected president in 1812, to revive and bring it into new life, and it is now among the distinguished institutions of its kind in the world.

The first meeting Raffles presided over was on the 24th April, 1813, being the anniversary of the institution. There was a large attendance to listen to the magnificent discourse, which took one hour to deliver. It was a wonderful example of forensic art, and showed his knowledge of his subject.

Such was the enthusiasm created by Raffles' peroration that he was requested to deliver another discourse on the 11th September, 1815, when he again made a famous one. This time he spoke for more than two hours. We cannot help marvelling, when we consider the arduous life Raffles lived, how he toiled from before daylight until well into the night; when we read his long minutes and lengthy dispatches (prepared by himself), the new regulations for ruling the land, and voluminous reports on all matters; when we think of the travelling he did and the history he prepared—how he could still find the time to study questions of philosophy and policy of great delicacy which enabled him to deliver long

and heavy lectures on Java or its dependencies, going deep into questions and debating historical records, which nobody until then had ever heard of. All this and more Raffles did, and he not only placed a clean stamp on all Government actions during the short five years the English were in the island, the like of which had never been seen before, but he put on the Batavia Society of Arts and Sciences the impress of zeal and intelligence which it has ever since retained.

The ethnographical collection in the museum at the present day consists of articles of dress, ornaments, furniture, models of dwelling-houses, agricultural implements, fishing requisites and objects of art and industry obtained from all parts of the East Indian Archipelago.

The archæological division consists of antiquarian objects, chiefly of bronze, some dating as far back as the very early ages of Hindu culture in Java; piles of very ancient bronze dishes, for the greater part engraved with various designs, highly interesting from the point of view of the history of art; a whole series of implements of Hindu worship, ornamented with fine engravings; a few of those very ancient, famous, and mysterious kettle-drums, on which more than one German monograph has been published; a large number of small images and prehistoric weapons—all exceeding in number anything of the kind met with in European museums.

Then there is a room in this museum called the “Gold Room,” which is encased in iron; here the public may inspect the valuables derived from subjugated countries and dynasties which have been received by the society in trust from the Netherlands India Government.

Among these are the precious stones and ornamental gold weapons from Lombok and the South Celebes. They include gold articles of state, gold and jewelled weapons, gold shields, gold and silver state ornaments, gold umbrellas,

gold table services, etc., worth many thousands of pounds.

These were all manufactured in the countries they came from, the gold being procured from Sumatra.

There are, too, the old stone images of the Hindu pantheon. These came mostly from Mid-Java, and are daily being added to by private individuals who from time to time find images of value on their mountain estates. In the front gallery as one enters one observes five idols in a row. These, it is said, are seldom if ever found complete, and from an archæological and iconographical point of view are of the highest interest and curiosity. There are also here engraved stones, among which there are some covered with writing of all periods of Javan history. In the left portion of the building is a room called the "East India Company's Room." It is an exact and correct copy of a bedroom of some nabob in the good days of the old Dutch Company. All the furniture, including the doors, windows, blinds, skylights, even the lamps, etc., is quite genuine and old, in black, and of the particular style so handsome and aristocratic which prevailed on the *Kali Besar* of Batavia in the seventeenth and eighteenth centuries. And in the entrance to the library there are some magnificent old cupboards and cases that used to belong to the East India Company, and were brought from "Heemradenplein."

There is also a fine collection of coins¹ and valuable papers which, although as a matter of course less rich than the famous European collections, is nevertheless of considerable value to Indian numismatists.

The library is a large and extensive one, with works on the history, philology, religions, ethnography, and geography, etc., of the East Indian Archipelago. There are also manuscripts written in every language in the East

¹ I understand that Mrs. Duncan Fraser, *née* Van der Chys, helped towards arranging them in the present order.

Indies, among which are some very noteworthy ones in Javan and Arabic.

There are, further, several hundreds of ancient writings made by the Hindu *panditas* on palm or *lontar* leaves. These for the most part are old Javan and Balinese renderings of the *Mahabharata* and *Ramajana* and other literary productions belonging to the Hindu cycle.

Many of the manuscripts have been gathered from the inaccessible recesses of Achin, and contain writings on the Mahometan religion.

It appears from the marginal notes, in these manuscripts often suddenly broken off, that the owners were hunted from one place of refuge to another, where they, like the old Hindus in days gone by, were studying the sacred works of their religion, high up in the wild and lonely mountains, away from their fellow-creatures. They were priests who had become Nature-worshippers, and delighted to contemplate upon the future of their fellow-creatures and to ponder upon the great questions given us by our Creator, far away from all contact with man and with his daily temptations.

These Mahometan priests were actuated with a holy zeal for their religion just as much as the Hindu Buddhists.

The librarian is Dr. van Ronkel, while among other very brilliant members of this distinguished society must not be forgotten Mr. C. M. Pleyte, the lecturer on ethnology, geography, and history¹; and with such able and learned men superintending it the society can never fail in maintaining its high standard.

Java is to the scientist undoubtedly one of the great store-houses of the world, and there are numerous reasons

¹ Other important members of committee or otherwise are Baron Quarles de Quarles (president), P. de Roo de la Faille, Dr. D. A. Rinkes, J. Homan van der Heide, T. V. Zimmermann, Dr. Hazen (vice-president), J. P. Moquette, and Dr. Krom.

for supposing that at one time it was not only connected with Asia, but also with South America.

The puzzling resemblance of the old Hindu ruins in the island with those of Peru, Yucatan, and Central America show a link that has still to be cleared up,¹ while the common characteristics of some of the images with those of ancient Babylon denote a contact with that country at some early period which has still to be fixed. These questions, and many more besides, must, however, be left to others to work out.

BANKS.—The first mention of a bank in Java is in an old account which dates back to about 1768, and reads :

“ A bank of circulation has been established here for some years, which is united with the Lombard, or bank for lending money on pledges. It is under the administration of a director, who is generally a Councillor of India, two commissaries, a cashier, and a book-keeper. A fee of 5 rix dollars is given at the opening of an account ; and stamped bank bills, signed by the director and commissaries, are delivered for the money placed in the bank.

“ Its capital is computed to amount to between two and three millions of rix dollars.”²

With certain modifications this bank continued up to the English period, during which time, and for some years afterwards, Skelton & Co.³ and Deans, Scott & Co. conducted practically all the circulating banking business of the colony.

In 1824 the Netherlands Trading Company (*Nederlandsche Handel Maatschappij*) was formed, a separate department of which conducted a general banking business. This concern has a splendid record of commercial and financial

¹ There are also links in the *flora*, which are still more important than the links in the ruins.

² Between £435,000 and £650,000 sterling.

³ When Skelton & Co. ceased, Macquoid, Davidson & Co. carried on their banking business.

activity to look back upon, clearly showing how completely the objects of its promoters have been realised.

The present capital of the company is 60,000,000 fl.,¹ of which 45,000,000 fl. has been paid up²; the reserve fund is 5,378,375 fl.

The Java Bank (*Javasche Bank*) was founded at the very end of 1827, so dates from 1828. Since its establishment it has been the only bank empowered to issue bank-notes in Netherlands India. It is constituted as a private company with limited liability, the shares, which are fully paid up, being in the hands of the general public, but originally (it is said) they were to a great extent owned by Englishmen. Permission to act as an "issue bank" can be obtained only by royal decree, and while such permission might legally be given to more than one banking corporation, the principle of one "bank of issue" has been adhered to in Holland since 1814. If that principle were broken, the Netherlands India Government would lose their share in the profits of the Java Bank, which share amounts to, roughly, 550,000 fl. per annum.

The standard coin in Netherlands India is the Dutch gold 10-guilder piece, weighing 6·720 grammes, with $\frac{900}{1000}$ fine gold. The Dutch silver coins of $2\frac{1}{2}$, 1, and $\frac{1}{2}$ guilders are also legal tender in the colonies and mother country for any amount, and for this reason are also called standard coins.

The Java Bank is therefore, like the Bank of France, entitled to effect payment in silver to any extent. With regard to international transactions, however, the Java Bank has always been prepared to give gold on gold drafts on sight, or by telegraphic transfer, as it considers it its duty to assist as much as possible in settling international obligations on the gold basis.

¹ Guilders.

² The first president was A. J. L. Ram, who if not actually an Englishman was half-English.

Owing to the Oriental preference for silver, due probably to the fact that the first European tender was silver, it is difficult to keep gold in circulation, and in consequence it is of great importance for the bank to take measures to maintain the gold parity. In consequence of the large exports and the comparatively small imports of the Dutch colonies, however, such a task up to the present has not been a difficult one. The drafts against exported produce are principally drawn on gold countries, and while it is always to be obtained hardly any demand for gold occurs.

The bank acts on behalf of the Government ; its duty is to control the circulation of money in Netherlands India, the neighbouring countries, and Europe. To effect this the Java Bank is prepared to buy or sell drafts on foreign countries and foreign gold coin, and if necessary it will give gold or gold drafts at or within the parity of coin export in order to maintain the fixed value of the silver guilder.

The bank issues notes of 5, 10, 25, 50, 100, 200, 300, 500, and 1,000 guilders, all of which bear the signatures of the president and one of the managing directors. No restriction is made as to the amount the bank may have in circulation at any time, nor is any tax whatsoever payable, but against the notes in circulation, the unpaid bank sight-drafts, and sundry creditors the bank is obliged at all times to have a reserve of at least two-fifths in coin and bullion.

Three-quarters of this obligatory reserve must be kept in Netherlands India, and at least half of it has to be Netherlands Indian legal currency. Apart from this metal reserve, the bank keeps a gold reserve in Europe in loans on call at Amsterdam, and bills of exchange payable in gold, in order to be, in any case, in a position to control the rate of exchange with foreign countries and to maintain the gold parity with them. Owing to the right of circulating and withdrawing from circulation bank-notes without any restriction as to the amount, and without tax, simply on the

condition of maintaining a currency coin reserve equal to 40 per cent. of that amount, the Java Bank has always been able to meet with ease all the financial changes in the East Indian Archipelago.

The bank grants advances on bonds and shares, merchandise, bills of lading, gold and silver coin and bullion, bills of exchange and promissory notes; buys and sells drafts and telegraphic transfers in foreign currency, discounts bills of exchange and promissory notes, effects transfers either by telegraph or by letter between its branches in Netherlands India and in Amsterdam; collects drafts, receipts, and drawn bonds; and superintends investments and securities. It is also prepared to receive securities and valuables for safe custody, and generally conducts all the usual banking business.

The capital of the bank is 6,000,000 fl. and the reserve is 2,000,000 fl. The amount of notes issued has varied during recent years from 61,000,000 to 71,000,000 guilders. The bank makes a net profit of, roughly, 2,000,000 fl. a year.

When the Java Bank opened at Batavia in 1828, an Englishman named O. M. Roberts was appointed a director on the Board, a position he held until his death in 1841,¹ when his place was filled by a Dutchman named J. Schill.²

¹ When he was away in 1838—1839 John Davidson, his partner, filled his place.

² Below in the text are lists of local directors at Sourabaya and Samarang from 1829 to 1874.

The first Board at Batavia consisted of C. D. Haan as president, A. J. L. Ram (the president of the Netherlands Trading Company), O. M. Roberts (partner in Thompson, Roberts & Co., an Englishman, who was no doubt partly taken on owing to his Dutch connections), J. J. Nolthenius (partner in Brouwer, Nolthenius & Co.) as directors, and C. J. Smulders as secretary.

At Samarang from 1829 until the 31st March, 1874, the heads of MacNeill & Co. successively sat on the local board as directors. The last to fill this position was W. T. Fraser, who resigned on his leaving for Europe.

At Sourabaya J. E. Banck held the place of director from 1829 until 1838, giving way to the Englishman Robert Boyd, who kept it until 1842. In 1835 Arthur Fraser, the head of Fraser, Eaton & Co., became also local director, and the successive heads of this firm always took up a post on the

On the 1st March, 1829, the Java Bank opened agencies at Samarang and Sourabaya, John MacNeill being appointed agent at the former place and J. E. Banck at the latter. The following year, however, both these gentlemen, who represented large interests, became local directors, their places as agents being taken respectively by C. J. Daendels and F. H. Preyer.

Following are lists of the local directors at Sourabaya and Samarang, 1829—1875:—

DIRECTORS OF THE JAVA BANK AT SOURABAYA.

1829	A. H. Buchler	J. D. A. Loth	J. E. Banck
1830	"	"	"
1831	"	C. Sluyter	"
1832	T. Schuurman	"	"
1833	"	"	"
1834	C. A. Granprè Molière	"	"
1835	"	Arthur Fraser	"
1836	"	"	"
1837	"	"	"
1838	"	"	Robert Boyd
1839	"	"	"
1840	"	"	"
1841	"	"	"
1842	G. D. Schlegel	"	F. W. Mehlbaum
1843	"	"	"
1844	"	"	C. van Raalsen
1845	"	"	"
1846	"	—	"
1847	"	—	"
1848	"	William Eaton	—
1849	"	"	F. D. Granprè Molière
1850	—	"	"
1851	—	"	"
1852	P. Beets	D. MacLachlan	"
1853	"	"	"
1854	"	"	"
1855	"	"	B. J. van Eck
1856	"	Thomas Bonhote	"
1857	"	J. J. Blanckenhagen	"
1858	"	"	"
1859	"	"	"
1860	J. L. van Gennep	"	"
1861	"	A. J. Anemaet	"
1862	"	"	"
1863	"	"	"
1864	"	L. McLean	A. J. Anemaet
1865	"	Th. von Laer	"

board until the 31st March, 1874, when the Samarang and Sourabaya branches of Maclaine, Watson & Co. declined to sit any longer on the local boards.

DIRECTORS OF THE JAVA BANK AT SOURABAYA—*continued.*

1866	W. H. s' Jacob	Th. von Laer	A. J. Anemaet
1867	"	"	"
1868	"	"	"
1869	"	"	"
1870	"	F. Bogaardt	"
1871	"	"	Jhr. C. G. van Haeften
1872	"	"	"
1873	"	"	"
1874	"	F. W. von Laer	A. J. Anemaet
1875	"	M. van der Heuvell	"

Notes.

(1) It will be seen that from 1835 up to 1874 inclusive there was always a partner of Fraser, Eaton & Co., Sourabaya, sitting on the local board, the years 1861, 1862, and 1863 excepted.

(2) In 1838, 1839, 1840, and 1841 two Englishmen sat on the local board.

(3) The head of the factory also always sat on the local board.

(4) Up to 1837 J. E. Banck was the largest merchant in Sourabaya, he did also an important sugar business, and was the pioneer of the export trade in sugar from Sourabaya, which later on went over to Fraser, Eaton & Co., when W. Eaton and his partners joined A. Fraser.

(5) The head of McNeill & Co., Samarang, always sat on the local board, except during the years 1859—1862 inclusive.

AT SAMARANG.

1829	John MacNeill	T. Schuurman	J. Bremner
1830	"	"	"
1831	"	"	"
1832	"	P. H. Meyer Timmerman Thyssen	C. A. Granprè Molière
1833	"	"	"
1834	"	"	R. F. van der Niepoort
1835	"	"	"
1836	"	"	"
1837	"	"	"
1838	Alexander MacNeill	"	"
1839	"	"	"
1840	"	"	"
1841	"	J. G. Plate	"
1842	"	"	"
1843	"	"	"
1844	"	"	"
1845	"	"	"
1846	Donald MacLachlan	"	D. Scheltema

AT SAMARANG—*continued.*

1847	Donald MacLachlan	J. G. Plate	A. van der Leeuw
1848	"	C. F. Boudriot	"
1849	"	"	"
1850	"	"	"
1851	"	"	"
1852	Donald Maclaine	N. D. van Slype	F. E. de Nys
1853	"	"	"
1854	J. Martens	"	P. Druyvensteijn
1855	"	"	"
1856	"	"	"
1857	"	"	G. L. Dorrepaal
1858	Donald Maclaine	"	"
1859	H. F. Morbotter	J. L. van Gennep	"
1860	"	P. C. van Oosterzee	"
1861	R. J. Stok	"	"
1862	"	"	"
1863	G. H. Miesegaes	J. Ph. von Hemert	"
1864	"	"	"
1865	"	"	"
1866	"	G. A. W. Werwuth	"
1867	"	"	"
1868	J. MacLachlan	V. S. Dolder	"
1869	"	"	"
1870	"	"	"
1871	F. W. von Laer	"	"
1872	W. T. Fraser	C. van Lennep	"
1873	"	C. Nortier	B. V. Houthuysen
1874	"	H. C. F. Schlosser	G. L. Dorrepaal
1875	"	"	"

The first English bank which advertised its doing business at Batavia was the *Bank of Australia* in 1836, the agents for whom were Maclaine, Watson & Co.; its field, however, appears to have been limited.¹

The *Chartered Bank of India, Australia and China*, which was established in 1855, opened a branch at Batavia in 1863 with its own *personnel*, Thomas L. Mullins being the first manager. Throughout the whole of this time its

¹ *Java Courant*, 23rd April, 1836:—"Notice. The undersigned beg to intimate that they have been appointed agents in Java for the Bank of Australia, and for the information of masters of vessels, and others arriving from Sydney and Van Dieman's Land, that they are ready to negotiate the bills of the above Corporation on application at their office.

"Batavia, 26th April, 1836.

MACLAINE, WATSON & CO."

At this time all the ships to and from England and Australia called at Batavia.

operations have been gradually extending, until now it carries on an important and extensive business throughout all parts of Netherlands India, its high reputation and the commanding position it enjoys in different parts of the world, and more especially in the East, combined with its long record of activity in Java, giving it a recognised influence in the country.

The *Hongkong and Shanghai Banking Corporation* established an agency at Batavia in 1875 under the Dutch firm of Suermondt & Co., but in 1878 it was transferred to Pitcairn, Syme & Co., who held it until 1881, when the late firm of Martin Dyce & Co. took charge until their failure in 1884, when the bank opened for themselves with M. C. Kirkpatrick, late of the old Oriental Bank, in charge.

The *Chartered Mercantile Bank of India, London and China*, which now no longer exists, opened under this name an agency at Batavia and Sourabaya, with Pitcairn, Syme & Co. as their agents, in 1871, but in 1873 the bank sent their own *personnel* to Java, F. C. Bishop being the first manager. This bank is now known as the Mercantile Bank of India, for which Maclaine, Watson & Co. are the agents for all Java.

The next Dutch bank of standing is the Netherlands India Commercial Bank (*Nederlandsch Indische Handelsbank*), which opened at Batavia in 1864.

Its object has been to conduct a general banking business in Sumatra, Java, and the neighbouring possessions and to offer every possible facility for carrying through the many financial transactions which are continually taking place between Holland and her East Indian colonies. The result has been an unqualified success.

The bank has a subscribed capital of 15,000,000 fl., equal to £1,250,000, of which a sum of 12,500,000 fl. has been paid up. The reserve amounts to 2,250,000 fl.

The Netherlands India Cash Bank (*Nederlandsch Indische Escompto Maatschappij*) has been in existence fifty-one years, and was established in Batavia. The capital of the company is 12,000,000 fl., of which 7,500,000 fl. has been paid up. The reserve funds amount to 1,000,000 fl.

This bank, which has numerous agencies, conducts the usual business of a bank in buying and selling drafts, receiving bills of exchange for collection, issuing letters of credit, etc.

CURRENCY.—The currency of Netherlands India consists of guilders and cents, the par value of the guilder being 1s. 8d.; 12 guilders therefore go to £1 sterling¹; 1 guilder equals 100 cents.

Coins in Circulation.—The coins in circulation are as follows :—

Coins.	Weight in Grammes.	Standard.
Gold :—		
10 guilder piece . .	6·720	0·900
Silver :—		
1 dollar piece . .	25·0	0·945
1 guilder piece . .	10·0	0·945
$\frac{1}{2}$ „ „ . .	5·0	0·945
$\frac{1}{4}$ „ „ . .	3·180	0·720
10 cents piece . .	1·250	0·720
5 „ „ . .	0·610	0·720
Copper :— . . .		
2½ cents . . .	12·5	
1 cent . . .	4·8	
$\frac{1}{2}$ „ . . .	2·3	

¹ Of old coins, the old Sicca rupee was worth 2s. 5½d.; the old Spanish dollar, 3·30 fl. to 3·60 fl., or 5s. 8¾d. to 6s.; the old Japan gold coupang, 24 fl., or £2 3s. 7¾d.; the old Dutch ducatoon, 4 fl., or 7s. 3¼d.; the old Dutch ducat, 6·90 fl., or 12s.

WEIGHTS AND MEASURES.—The metric system of weights and measures is in force in Netherlands India. Other local weights are :—

Local Weights.	British equivalent.
1 pikul = 61·76 Kg. = 100 katis	136 lbs. av.
1 kati = 1·25 Amsterdam lb.	1·36 „
1 Batavia koyan = 27 pikuls = 253 gantons, or 2,700 katis	1·639 tons.
1 Samarang koyan = 28 pikuls	1·70 „
1 Sourabaya koyan = 30 pikuls	1·821 „
1 last = 1,200 kilos	1·89 „
1,016 kilos	1 ton d.w.
1 corge	20 pieces.

LAND MEASUREMENT.—In Java and the rest of Netherlands India the ground is always let by Government at so much per *bahu* (bahoe or bouw) or *jung*. Four of the former make a *jung*.

One *bahu* or *bouw* equals $1\frac{3}{4}$ English acres.

Until this measure came in the Javans used to sell or let one another a land with so many *tjatjars* upon it. A *tjatjars* is a family, and was usually reckoned to consist of five or six persons—two men, two women, and two children.

IMPORTS AND EXPORTS.—The amounts of the principal Java and Madura imports and exports since 1886 show the growth of the trade of the country, which has made unprecedented strides during the last years.

The imports show in the main a steady increase, chief among which and most noteworthy are the cotton, bleached, printed, and coloured, goods from the United Kingdom. These are the imports of the British houses, and the great increase is due as much to the energy, forethought and care of the British merchants, besides their liberal spirit when dealing with Eastern nations, as to the greater demand there is in Java for an article of quality and lasting wear.

In exports the most remarkable feature is perhaps the large increase in the quantity of sugar the island produces, and as the planters still continue yearly to increase the area under cultivation with this staple, the limit seems as far off as ever.

DUTIES.—Import and export duties in Netherlands India are levied in accordance with the law of the 17th November, 1872, which, although it has been revised on several occasions, is still in force.

Import Duties.—According to the existing tariff an import duty of 6 per cent. of the value is levied on earthenware and porcelain, gunpowder, yarn, wood-work, haberdashery, manufactures, piece goods of cotton and half-wool, manufactured silk, silk ribbon, tape, furniture, and horses.

An import duty of 10 per cent. is levied on several things, including the following :—

Vinegar, manufactured goods not separately specified (made of cotton, wool or fibre), flour, musical instruments, paper of all kinds, carriages, and steelware.

Twelve per cent. is the duty levied on gold and silver (leaf), garments, either ready made, woven or knit, perfumery and eatables of all kinds.

On beer in barrels and beer in bottles the duty is 5·25 fl. and 6 fl. per hectolitre respectively.

An import duty of 50 fl. is due on every hectolitre of spirit containing 50 litres of alcohol at a temperature of 15° Centigrade.

On candles the duty is 12 fl. per 100 kilogrammes ; on opium 450 fl. per 100 kilogrammes, and on petroleum 2·50 fl. per hectolitre.

The import duty on table salt amounts to 12 fl. per 100 kilogrammes.

The following are imported free of duty :—

Arrack leaguers, animal charcoal, books, cement, donkeys

and mules, factory engines, steam engines, machinery, mathematical, physical, surgical and optical instruments, tools and implements used in agriculture, manufacturing, engineering and mining plant, sawn and unsawn wood, iron in bars or pieces, rails, nails, iron wire, ships' anchors and chains, telegraph and telephone wire, lime, charcoal, coal, lead, manure, pitch, rice, pictures, steel bars and plates, ropes, cables, rigging and all other rope for the equipment of ships or for fishing purposes.

In addition to the above the following are all admitted free of duty :—

(1) All goods arriving for or on account of the Government.

(2) (a) All produce of the Netherlands Indian possessions where duties are levied by the Government, with the exception of salt not coming from Government stores ; this only so far as regards cotton goods, tobacco and cigars accompanied by a certificate of export from those possessions.

(b) All produce from other Netherlands Indian possessions and from the native states of the Eastern archipelago on intimate footing with the Netherlands Government, with the exception of gambier, woven cotton goods, tobacco, cigars, and salt.

(3) Personal requisites, such as travellers' luggage and small parcels carried by travellers.

(4) Household goods belonging to the consuls of foreign states, and flags, escutcheons and office requisites belonging to the consulates in Netherlands India.

Export Duties.—Export duty is charged on all goods mentioned in the following table, although there are one or two exceptions, which are dealt with later on in this article.

Goods.	Scale.	Export Duty payable as per Tariff.				
		I.	II.	III.	IV.	V.
Balam and Soentel fruits	koyang of 40 piculs	p. c. —	p. c. —	p. c. —	fl. 10	p. c. —
Benzoin, caoutchouc, damar, gutta-percha, camphor and other kinds of gum and resin	value	—	5	8	— p. c.	—
Benzoin, damar, and other kinds of gum and resin not specially mentioned	„	—	—	—	5	10
Birds' skins	„	—	10	10	—	— fl.
Birds' nests. . . .	kilogramme	6	6	6	6	2.25 p. c.
Caoutchouc, gutta- percha, and other pro- ducts known under the name of "getah."	value	—	—	—	8	10 fl.
Coconuts	1,000 piculs	—	—	—	—	3 p. c.
Gahroe, and other odori- ferous wood	value	—	5	8	—	—
Grease of Balam and Soentel fruits	„	—	—	—	5	—
Hartshorn	„	—	5	8	—	—
Hides	„	2	2	2	2	5
Ivory and rhinoceros horn	„	—	8	8	—	10 fl.
Koelit bakan and Koelit tangan	koyang of 40 piculs	—	5	8	2.50	—
Pepper, white	value	—	—	—	—	4
„ black	„	—	—	—	—	4 fl.
Pinang tjang	100 kilogrammes	—	—	—	—	0.38
„ boelat	„	—	—	—	—	0.19
Rattans of all kinds . .	value	—	5	8	p. c. 5	—
Sago and sago flour . .	„	—	5	8	—	—
„ purified	100 kilogrammes	—	—	—	fl. 0.60	—
„ rough	„	—	—	—	0.40	—
Tengkawang stones . .	value	—	5	8	—	—
Tengkawang or Soentel grease	„	—	5	8	—	—

Goods.	Scale.	Export Duty payable as per Tariff.				
		I.	II.	III.	IV.	V.
Tin	100 kilogrammes	fl. 3·50	fl. 3·50	fl. 3·50	fl. 3·50	fl. 3·50
Tobacco not prepared for the native market	„	1·0	1·0	1·0	1·0	1·0
Tobacco prepared for the native market . . .	„	—	—	—	—	4·0
Wax	value 100 kilo- grammes	—	p. c. 5	p. c. 8	8·0	8·0

The export duty is not only levied on goods for countries outside Netherlands India, but also on goods going to some other port in Netherlands India, if—

(a) At the port of destination no export duty is levied by Government.

(b) At the port of destination a lower rate of export is charged, provided, however, that in the latter case only the difference of export duty shall be paid.

Freedom of duty is allowed on gutta-percha obtained by manufacture from the leaves of gutta-percha trees, and also on gutta-percha and caoutchouc produced from cultivated plantations; in these instances, however, exemption is only granted to the holders of exemption certificates granted by a Dutch official.

The duty on exported Billiton tin ore amounts to 2·35 fl. per 100 kilogrammes.

Exemption from export duty is also granted to—

(a) Goods exported for or on account of the Government.

(b) Goods for which export duty has already been levied at some Netherlands Indian Customs House, save when at such second port of export a higher duty is chargeable. In this instance the goods are not allowed

to pass before the difference in the rate of duty has been paid.

Excise Duty.—(1) Excise on distilled beverages. This duty is levied only in Java and Madura, and amounts to 50 fl. per hectolitre on beverages containing 50 per cent. of alcohol. This ratio is maintained for all other beverages, according to the proportion of alcohol.

(2) Excise is levied on petroleum, together with benzine and gasoline, throughout the whole of the customs sphere,¹ and amounts to 2·50 fl. per hectolitre. It is due—

(a) On petroleum imported from beyond the customs sphere, by the act of importation or that of storing up in entrepôt.

(b) On petroleum acquired within the customs sphere by the act of acquisition as a produce fit for consumption.

(3) Excise on matches is levied in the whole of the customs sphere, and is due—

(a) On matches imported from beyond the customs sphere, by importation for consumption.

(b) On matches manufactured within the customs sphere, as soon as they are made.

The duty on matches of the sort now in use, packed in boxes in the usual way and with a single head, amounts to 0·70 fl. per gross boxes, provided that each box contains no more than seventy-nine matches.

Should a box contain more than seventy-nine matches, the amount chargeable is 0·05 fl. extra per gross boxes on every five matches or less.

If the matches are provided with two heads, the excise amounts to 1·40 fl. per gross boxes containing not more than seventy-nine matches and 0·10 fl. extra per gross boxes on every additional five matches or portion of five contained in each box.

¹ The term "customs sphere" applies to those parts of Netherlands India where the Government levies export and import duties.

PART V

Government. Foreign Consuls. Finance. Army. Navy. Royal Magnetic and Meteorological Observatory. Police. Education.

GOVERNMENT.—The Government of Java, until Sir Stamford Raffles had conquered the whole country, and the Dutch after his departure had thoroughly established themselves and consolidated their position, was in principle an unmixed despotism. There were, however, customs of the country of which the people were very tenacious, and which the *Susuhunan* or *Sultan* seldom infringed. His subjects had no rights to the liberty of person or property, his breath could raise the humblest individual from the dust to the highest distinction or wither the honours of the most exalted. There was no hereditary rank, nothing to oppose his will. Not only posts, honours, and distinctions depended on his pleasure, but all the landed property of his dominions remained at his disposal, and might, together with its cultivators, be parcelled out by his orders among the officers of his household, the members of his family, the ministers of his pleasures, or the useful servants of the state. Every officer was paid by grants of land, or by a power to receive from the peasantry a certain proportion of the produce of certain villages and districts. The despot was the proprietor, everything was his property.

When a sovereign enjoys unlimited power, he generally, in Eastern countries, surrenders it for ease and pleasure, and his servant, under the name of Vizier or some other title, becomes the despot. The highest executive officer, or prime minister, in the Javan Government was called *Raden Adipati*; he usually ruled the country, while his master endeavoured to satisfy himself with flattery, with pomp, and the seraglio. He was formerly entrusted with power so great as even, in particular cases, to extend to the royal

family. All communications to and from the sovereign were made through him ; he received all reports from different parts of the country, and issued all orders.

This office still exists, but the power hitherto attached to it has naturally lessened of late years, since the Dutch Government assumed the right of nominating the person who should fill it.

The Sovereign, too, naturally reposes less confidence in a prime minister so nominated than in one of his own choice, and if he does not take an active part himself in the small field of politics in his court left to him still, he may be under the influence of an ambitious member of his own family, so that his *Raden Adipati*, though left to conduct the details of government, is often ignorant of many an intrigue carried on in the palaces.

In a country like Java the framework of society is so simple, the hand of power is so universally felt or seen, rank, wealth and authority are so identified, and the different classes of the community are so related to each other by contrast or reciprocal influence, that the Dutch, in maintaining this framework and allowing the people to be ruled by their own chiefs, hold sway over all these countries, with their teeming millions of inhabitants, by a mere "pressure of the button," and the *Pangerans* (princes), *Bopatis*,¹ or *Tumung'gungs* (governors or regents of provinces), *Patehs*, the assistants, and petty chiefs classed as *Mantris*, but having various titles, such as *Demangs*, *Luras*, or *Kliwons*, continue to govern the country as they formerly did, if not in theory, in actuality as far as the people are concerned.

These said *pangerans* and *bopatis* are responsible for order among the people of the provinces under their jurisdiction. The laws, orders, and regulations are received by

¹ *Bopati* is the plural of *adipati*.

them from the Dutch Resident, and they, with the assistance of the *patehs* and *mantris*, are obliged to carry them out.

Should it be found that a new regulation is oppressive or irksome to the people, the *mantris* report to the *pateh*, who informs the *adipati*, who holds the right to discuss it with the resident, as the *adipati* is the responsible person if any outbreak or rising takes place.¹ The system works well, and there is no country in the world where an Eastern nation, with an ancient constitution, is so easily ruled as Java ; this is due entirely to the system the Dutch maintain of allowing the people to be nominally ruled by their own chiefs.

The line of succession for the *bopatis* is usually, if possible, from father to son, but the rights of primogeniture are not always observed by the Dutch resident, who has to confirm the appointment, which usually depends on the behaviour of the father during his regency. If there is no direct descent, the claims of collateral branches of the reigning dynasty are settled, but by no law or uniform custom. During the Hindu period females have been known sometimes to hold these offices of power, keeping up establishments with pomp and show as if they were male sovereigns.

The Dutch Government of the East Indies may be divided into four parts :—

- (1) The superintendence exercised by the sovereign.
- (2) The central Government, exercised by the Governor-General, in some cases in concert with the Council of India.
- (3) The civil service, which plays a prominent part in inland government, and
- (4) Provincial and local government carried out with the aid of provincial and local councils.

¹ Both the resident and *adipa'ti* or *bopati* suffer, usually by being pensioned off.

At the head of the *Central Government* stands the Governor-General, who is appointed by the sovereign. The Governor-General is assisted by a department called the *Algemeene Secretaire*, or "General Secretary's Office."

The General Secretary is practically the Governor-General's adviser. He superintends the publication, dispatch, registration, and preservation of the directions issued by the Governor-General, and deals with all Government correspondence, as well as the contents of the "*Java Courant*" or official organ (*Javasche Courant*).

The Governor-General is also assisted by the Council of Netherlands India¹ (Raad van Indië), which dates back as far as 1611, when it was composed of four members. This council is appointed by the sovereign.

The number has undergone frequent change. The president used to be Director-General of Trade, and the members all held some office.

During the period of British occupation the Council consisted of a vice-president (who was commander of the troops) and two members. Its present composition has come down unchanged since 1836, and consists of a vice-president and four members.

As a rule the Council is made up of two former governors or residents of Java or the outlying possessions, one ex-judicial chief officer, and one ex-chief officer of the Central Bureau or "secretaire." The choice of the fifth is left open.

The power of the Governor-General is almost absolute, although at any time his policy may be modified, at the suggestion of the colonial minister at The Hague, in the name of the sovereign.

He is commander-in-chief of the army and navy, and can control as he wishes both these forces. The administrative offices of the navy, however, are under the control of the Dutch admiralty in Holland.

¹ This corresponds to the Viceroy of the British India Council.

In case of war or rebellion he is empowered to take all necessary measures for the safety of this Eastern empire, even such as would require the sovereign's authority under other conditions. He may declare martial law or a state of siege in the whole or any part of Netherlands India, and has extensive legislative authority.

The Government regulations permit and authorise him to declare war, make peace, and conclude treaties with Indian princes and peoples, provided the sovereign's commands be observed.

The yearly salary of the Governor-General amounts to £11,000, besides which he is granted a large sum for travelling and other expenses ; and the annual allowance to the members of the Council amounts to £3,000 for the vice-president and £2,400 for each of the others.

The *Civil Service* is divided into seven departments as follows :—

Agriculture.

Justice.

Interior.

Finance.

Government Works.

Instruction, Public Worship, and Industry.

Public Works.

There are also two other departments in Java, namely, Marine and War.

At the head of each of the first seven departments is placed a director, who, although officially above the heads of provincial governments, are not their superiors, as the latter are placed directly under the orders of the Governor-General.

The departmental chiefs may, however, send orders or instructions to the governors or residents, etc., but beyond that their actions depend mainly on the amount of tact they display or otherwise.

At the head of the Marine Department is the commander of the fleet, and of the War Department the commander-in-chief of the forces.

The following subjects are placed under the different departments :—

Justice.—Judicature ; the civil, commercial, and penal legislation ; the body of notaries ; the interpreters and sworn translators ; the inspection of labour and enlisting of coolies ; the functionaries for Chinese and Japanese affairs ; the orphans and estate courts ; the admission, removal, and extradition of aliens ; the examination of regulations drawn up by the chiefs of provincial administration and ordinances of police ; the system of imprisonment ; joint stock companies ; the equivalence of Asiatics with Europeans and naturalisation ; slavery and hostages ; Press supervision.

Interior.—Provincial and local administration, town militia, and other bodies not directly belonging to the army, as police corps ; private agriculture ; forced labour ; land rent ; the inland system of credit (especially agricultural credit) ; cadastral survey ; agrarian affairs ; directing of the civil store-houses of the State ; means of transport and communication (Royal Packet Company, the Java-China-Japan Line, and the mail steamers sailing between Europe and the East Indies) ; passports.

Instruction, Public Worship, and Industry.—European, native, and Chinese instruction ; worship ; promotion of the knowledge of language and ethnography of Netherlands India, and the publishing of useful books, arts, and sciences (also archæology and scientific explorations) ; civil medical service ; institutions of benevolence or public utility ; boards of charity ; industry (including chambers of commerce and industrial exhibitions, etc.) ; system of marking measures and weights.

Agriculture.—Agriculture and rural instruction ; the

breeding of cattle and horses and civil veterinary service ; fishery and breeding of fish ; Government coffee cultures ; forestry ; botanical garden at Buitenzorg ; physiological researches.

Civil Public Works.—Buildings, bridges, roads, and irrigation.

Government Works.—Railways, tramways, and steam engines ; post telegraph and telephone ; post office savings banks ; mining (including the tin mines of Banka) ; salt monopoly ; Government printing establishment (which publishes the official newspaper, *Javasche Courant*).

Finance.—Financial administration ; system of taxes ; the “ lombard ” service ; the opium “ régie ” ; “ farming ” system ; the public sale houses ; passports and annual passes for ships ; monetary system ; compilation of the report of trade and navigation.

War.—Military affairs ; the steam tramway in the government of Achin.

Marine.—The affairs of the navy, also beaconage, pilotage and hydrography ; the magnetic and meteorological observations.

The General Chamber of Accounts (called Reken Kamer) deals with the moneys and properties of the State.

As previously observed, the one cardinal principle upon which the whole of the Netherlands India system of civil administration is based is to leave the native population as much as possible under the direction of their own chiefs.

These chiefs are either appointed or acknowledged by the Government, and subjected to supervision, either in accordance with special rules laid down by the Governor-General or with treaties which have been concluded between the native princes and the state.

Consequently, upon this underlying idea only the highest posts are conferred upon Europeans. All the subordinate

positions are held by the leading natives, supervised and instructed, of course, by the European officials.

The different provinces into which Netherlands India is divided are governed by governors or residents, according to whether the district is a "gouvernement" or "residentie."

Billiton and South New Guinea are in charge of assistant residents. Military officers are almost invariably chosen for the post, especially in the provinces beyond Java.

Java is divided into seventeen residencies. The possessions outside Java include twenty provinces.

The heads of principal governments are appointed by the Governor-General.

To become a resident takes usually twenty years, and they are chosen from the list of assistant residents. The greater number of assistant residents, however, are pensioned early as unfit to attain to this highly important and responsible post.

The following tables will show the pay allowed by the Dutch Government to their civil servants.

CIVIL SERVICE PAY LIST.

European Staff.

Rank.	Pay, calculated in Sterling per Year.	Remarks.
Governor-General . . .	£ 14,000	Free use of three palaces—Weltevreden (Batavia), Buitenzorg, and Tji-panas (summer place) and allowances for all charges for receptions and travelling.
Member of Council . . .	3,000	
Governors	1,800	Free house and reception money, from £150 to £300.

CIVIL SERVICE PAY LIST—continued.

European Staff—continued.

Rank.	Pay, calculated in Sterling per Year.	Remarks.
Representative for native provinces	£ 1,600	Free house and reception money, £300.
Residency Adviser	1,200	
Residents	1,100	Free house.
(at first)	1,000	
Residency Secretaries, first class .	1,000	
" " " " (at first) .	800	
" " second class	800	
" " " " (at first) .	600	
Assistant Residents	750	Free house.
" " (at first)	450	"
Administrative Controllers . .	350	
Controllers	700	"
" (at first)	225	"
Assistant Controllers	180	
Aspirant Controllers	150	

Javan Staff.

Rank.	Pay, calculated in Sterling per Year.	Remarks.
Bopatis (Regents)	£ 1,200	Ranks with but below a Resident, the position being compared to a younger brother with the Resident as the elder brother.
Patehs	475	
„	325	
„ of Batavia who are not	{ 600	
under any regent	{ 500	
Mantris		
Demangs	260	
Luras	145	
Kliwins	100	

The sub-districts are made up of a number of communities or desahs (villages), each desah being governed by a chief.

The chief is chosen by the people on the understanding that he must meet with the approval of the regent, and after him of the resident. Each chief has a substitute, and is assisted by various officials and the village priest. These may be said to constitute the government of the desah.

He receives no regular salary, but is granted 8 per cent. of the taxes he collects, together with the produce of certain fields allotted to him and known as "bekel."

In the protected states in Java the native government is regulated and supervised by these self-governing states.

There also is found the division into Regencies.

Soerakarta is governed by a Susuhunan, Djockjakarta by a Sultan. In each of these states is also an independent prince with extensive possessions.

In Soerakarta he is the Prince (Pangeran) Mangku Negoro, in Djockjakarta the Prince Paku Alum, who was established in his position by Sir Stamford Raffles. Both these princes were under obligation to hold a legion of soldiers at the disposal of the Dutch or English.

In both states a special Javan, appointed by the Governor-General, acts as mediator between the resident and the native prince, being paid £1,000 a year.

The native princes receive liberal indemnification for the loss of their former income. In Soerakarta it amounts to as much as £73,278 annually, and in Djockjakarta to £39,305. Besides this they have enormous incomes from their private estates. All the money is spent, however, in keeping up their huge establishments with their state and pomp.

Foreign Consuls.—All the European nations are officially represented in Java either by a consul-general or by a consul.

Germany, France, Norway, Persia, and Turkey have consuls-general, whilst for the interests of Great Britain,

America, Denmark, Belgium, Italy, Austria, Portugal, Russia and Switzerland consuls are considered sufficient.

Japan and Siam are represented by a consul and Spain and Sweden by a vice-consul.

All these chief representatives live at Batavia, the capital and seat of the Governor-General, who on special occasions, such as the birthday of the Queen of Holland, receives the consular body in audience as the "corps diplomatique."

At coast ports, such as Samarang and Sourabaya, the principal nations are represented by consuls and vice-consuls, who are under the authority of the consul-general or consul, as the case may be, at Batavia.

As far as Great Britain is concerned, it may be observed that when the English gave up Java and its dependencies in 1816 no representative of the British nation or Government was allowed to be stationed in Java. Sir Stamford Raffles in 1818 and again in 1820 urged upon the British East India Company the necessity of Great Britain having a special "agent" at Batavia with "certain powers," but it was generally assumed, and no doubt with some truth, that the King of Holland would not consider such a proposal. Commercially the British East India Company was represented at Batavia by Jessen, Trail & Co. from 1817 to 1825 and by Trail & Co. from 1825 to 1834.

John Deans from 1818 was in communication with the British Government or one of its officials, either privately or semi-officially, until probably his departure from Batavia on the 1st February, 1828.

After him Gillian Maclaine was semi-officially or privately in communication with some member of the Foreign Office.

In shipping matters, such as the settlement of disputes among British seamen or the care and forwarding of sick sailors to England, Martin Dyce & Co. were from 1842 until 1844 in the possession of certain limited powers, but only

as far as the British Government were concerned, the Dutch Government in no way recognising them.

In 1844, when the question of the sugar duties arose, it was found necessary for the British Government to have some representative or agent at Batavia, Samarang and Sourabaya to sign certificates as to whether the sugar was "free" or "slave-grown."

There is a dispatch from Lord Aberdeen dated London, 8th July, 1844, and sent simultaneously to John Lewis Bonhote at Batavia, Alexander Macneill at Samarang, and Arthur Fraser at Sourabaya.¹ This shows the reason why and under what conditions these gentlemen, who were all partners in the British house of Maclaine, Watson & Co., became the first "consular agents." Since this time down to the present day the successive partners of this old and highly-respected house have been the representatives of the British Government.

Notwithstanding, however, the great success that has always attended the efforts of the British consular officers in this part of the world and the exceedingly high position which they have always taken, there can be no doubt that the time has arrived when Great Britain should be represented by a consul *de carrière* whose standing is not under that of Germany's representative and whose whole time can be devoted to the furtherance of British interests, which during the last few years have become more important and considerable in this part of the world and can no longer be adequately attended to by a trading consul.²

¹ See note at end of this section.

² It is a peculiar but correct fact that, notwithstanding the very valuable services of some of these gentlemen in furthering and upholding the British name, honour and credit, and generally in using their best endeavours towards the interests of English and Dutch and creating a general good feeling between them, not a single consul or vice-consul has ever received any recognition whatever from the British Crown for his labours; and this during a period of almost a century.

If the opinion of so humble an individual as myself could be supposed to reach the ears of the British Premier, I would respectfully but earnestly call his attention to the foregoing remarks.

In further support of my opinion I would observe that a reference to the shipping tables will also show how great is the quantity of British tonnage which visits Java, exceeding as it does even ships under the Dutch flag, while in the matter of property there is no foreign nation which owns anything like the same acreage in Netherlands India as the English or has £20,000,000 invested. A dispatch dated Batavia, 24th November, 1872, from Acting-Consul W. T. Fraser to Earl Granville is given below ; it is more or less of interest.

On the 6th March, 1856, a convention between the Queen of England and the King of the Netherlands was signed at The Hague by Lord Abercromby, van Hall, and Pieter Myer for the reciprocal admission of consuls of each party to the colonies and foreign possessions of the other.

A table below shows the consular agents, consuls, and vice-consuls of Great Britain since 1844 until the present day on the island of Java.

COPY OF DISPATCH FROM LORD ABERDEEN TO CERTAIN PERSONS
IN JAVA.

“ Foreign Office, July 8th, 1844.

“ Sir,—Her Majesty’s Government have proposed to Parliament certain alterations in the sugar duties whereby sugar of foreign growth, not the produce of slave labour, will be admitted into this country at a reduced rate, provided that it be accompanied by a certificate of origin, under the hand and seal of a British agent.

“ The sugar of Java, not being slave-grown, would, of course, be entitled to participate in such a reduction of duty, if accompanied by the necessary certificate, and as the Netherlands Government have hitherto declined to receive a British consular agent in their East India possessions, Her Majesty’s Government

propose to avail themselves of an application which has been made to them in your favour to act as British agent at Batavia.

"It being probable that as the house of which you are a partner has been for many years established in Java, and is of undoubted character and respectability, the Dutch colonial Government will not put any obstruction to your issuing certificates of origin so as to admit the free-grown sugar of Java into the ports of the United Kingdom.

"I have therefore to authorise you, and you are hereby authorised to grant when applied to, under your hand and seal, certificates of the growth and origin of the sugar which may be shipped from Batavia for ports of the United Kingdom.

"I have, however, to caution you that you are not to grant certificates indiscriminately, but to satisfy yourself that the sugar for which you grant certificates is *bonâ fide* free-grown sugar, the produce of Java.

"In order to guide you in this respect, I enclose copies of letters which I have addressed to the consul whom Her Majesty has appointed at Manila.

"I have further to caution you, in order to avoid exciting any jealousy on the part of the local authorities, not to assume any official character or position in consequence of the trust hereby confided to you.

"The certificate, when granted, must be given simply in your name, as a British merchant residing at Batavia, and acting under the authority now conferred upon you. Orders of course will be given to the officers of Her Majesty's Customs to respect it.

"As you will not have authority to levy fees on the certificates you may grant, and as you may be put to some expense in this business, I have to acquaint you that you will receive an adequate remuneration from Her Majesty's Government. You will, however, understand that the whole arrangement is liable to be reconsidered when Her Majesty's Government shall see reason to do so.

"I will forward to you copies of the Act of Parliament and the Orders in Council to be founded upon it by the first opportunity.

"I am, Sir, your most obedient, humble servant,

"(Sd.) ABERDEEN.

"JOHN L. BONHOTE, Esqre., Batavia."

PARLIAMENTARY PAPERS, 1872. REPORTS RELATIVE TO BRITISH
CONSULAR ESTABLISHMENTS, 1858 AND 1871.

1872

Vol. 60, pt. II.,

page 333.

Batavia.

Acting-Consul Fraser to Earl Granville (received January 6th, 1872).

“Batavia, November 24th, 1871.

“My Lord,—In compliance with the wish expressed by your Lordship in circular letter dated Foreign Office, 26th August last, I have the honour to wait upon your Lordship with a report in connection with my consular district, and those at Sourabaya and Samarang as existing at present.

“I would respectfully call your Lordship’s attention to the reply given to query No. 19 regarding the desirability of establishing unpaid consular posts in other parts of Netherlands India.

“I am, etc.,

“(Signed) W. T. FRASER.”

Inclosure.

REPORT BY ACTING-CONSUL FRASER.

“The Consulate of Batavia embraces entire Java, Sumatra, the Dutch possessions in the Moluccas, Borneo, and the islands in Gaspar, and Billiton Straits. The consul’s residence is Batavia, and the appointment is at present filled by Acting-Consul Mr. W. T. Fraser, late vice-consul at Samarang, and for ten years engaged in the consular affairs at this port, and at Sourabaya and Samarang. The newly appointed consul, Mr. N. McLean, will take charge at Batavia on the 1st December next.

“1 and 2.

(Tabular statement of Ships
entered and cleared. Value
of exports and imports, etc.)

Totals

“ 3, 4 and 5.

(Consular Establishments.

Tabular Form.)

Countries.	Rank.	Trading.	Staff.	Salaries.	Fees.

“ 6. The consulate and vice-consulates at Samarang and Sourabaya are commercial posts and are of great service to British commercial interests in these parts. With regard to local industries and productions, the consular report of Acting-Consul Mr. W. T. Fraser for 1870 gave every particular.

“ 7. In 1858 and in 1871 to 30th November the following is the number of British vessels that entered and cleared the port of Batavia.

1858.		1871.	
Entered.	Cleared.	Entered.	Cleared.
68	63	103	94

“ 8. The items for house rent, clerk hire, wages, etc., were much less in 1858 than at present, and it is impossible to compare the two periods.

“ House rent and articles of food especially have advanced very much, and wages, therefore, have followed.

“ The wages of clerks in first-rate mercantile firms vary in proportion to the time they have been in their employer's service and the work they do ; £150 to £1,500 per annum would embrace the lowest and highest cyphers paid to European clerks.

“ 9. Staff of Her Majesty's Consulate.

1858.	1871.
1 clerk.	2 clerks.

“ Being allowed to trade, the above clerks are employed in my mercantile office also, and divide the lesser consular work between them. The salary of clerk is, therefore, procured from that given by my firm and the consular fees.

“ 10. The work of the consulate is increasing yearly, while the fees are decreasing owing to the numerous means of communication. Java is now much more visited than formerly, and the consul's time is much more taken up by rendering advice and assistance than it ever was previously.

“ The consul is always at his post from 9.30 a.m. till 4—5 p.m., and his duties consist in engaging and discharging seamen, noting and extending protests, drawing out powers of attorney, bottomry bonds, and other legal documents, carrying on the general correspondence with the home and Netherlands Indian Governments, giving advice and assistance to British ship-masters and seamen, settling disputes, holding naval courts, and taking measures for the recovery and salvage of wrecked or lost property, caring for the affairs of the British Church establishment, Her Majesty's ships of war, and other matters too numerous to mention here. Her Majesty's consuls at this and other ports come far more into contact with all departments of the Netherlands Indian Government than any of their colleagues, and have very much more consular business to transact and consular responsibilities to bear.

“ The following is a memorandum of the amount of business transacted in 1858 and 1871.

“ 10. Amount of Business.

—	1858.	1871.
Number of dispatches received .	94	178
„ dispatched .	63	129
„ seamen engaged .	36	70
„ „ discharged .	49	127
Protests executed .	4	12
Powers of attorney executed .	18	8
Bills of health issued, etc. .	2	4

“ 11. The consul here received no allowance for office expenses, but, being allowed to trade, has the consul office with his mercantile office.

“ The fees, as above stated, are given to the clerks ; they aggregated

		£	s.	d.
In 1868	.	259	19	4
1869	.	242	12	4
1870	.	272	19	8
The 11 months for 1871	.	123	19	4

“ 12. None.

“ 13. There are at present only two unpaid vice-consulates under my jurisdiction, namely, at Sourabaya and Samarang, and these appointments being held by partners in my mercantile establishment at these ports, no office expenses are allowed. The fees are, as at Batavia, given to the consular clerk.

“ There have not been any consular posts abolished since 1858.

“ 14. As far as I have been able to ascertain, no house allowance is granted to any of the other consuls at this or the other ports.

“ The fees they collect are for their own benefit, with exception, I believe, of those paid at the French consul-general's office.

“ 15. The only privilege granted to Her Majesty's consular officers in Java is immunity from the compulsory militia service, in terms of the Convention of 1856, between Her Majesty and the King of the Netherlands.

“ My position has always been most friendly with the various departments of the local Government, who have invariably done everything in their power to render me assistance when I have required it in the discharge of my consular duties.

“ 16. My colleagues and myself are upon precisely the same footing with regard to immunity from the militia service. The appointment of consul merely gives a certain status to the person holding the office, but no direct advantage accrues from it.

“ 17. The present Table of Fees I consider quite satisfactory, and have never heard any complaints made regarding it by British ship-masters.

“ 18. I have nothing to say on this head.

“ 19. The instructions for the consular service received from the Government and the Board of Trade are so voluminous that it is almost impossible for a consul to act always in strict accordance with them. It is most requisite that a revised edition of the consular instructions be issued, embracing both the original and supplementary instructions.

“With regard to the consular service in Netherlands India, I consider it most necessary that owing to the large arrival of British bottoms that now visit the various ports under my jurisdiction (and which is certain to increase), unpaid vice-consulates be appointed at the following places: Passaroean, near Sourabaya, Macassa, in Celebes, and Padang, in Sumatra.

“The rank of the consular officer at Batavia might also be consul-general without any increase to the present salary of £200 per annum, should this be thought advisable by Her Majesty’s Government. Her Majesty’s representative would then be on an equality with the French consular officer.

“ (Signed) W. T. FRASER.

“Batavia, November 24th, 1871.”

APPENDIX.

(Tonnage of the Shipping.)	
Ships entered.	Ships cleared.
Countries.	Totals, etc.

The number of steamers under the Netherlands East Indian flag, and included in above table, is 21, comprising a capacity of 9,040 tons and of 1,550 horse-power.

The number of British steamers entered at and cleared from Batavia from 1868 to 1870 is 8, of 1,250 tons burthen.

One steamer under the French flag performs the bi-monthly mail service between this and Singapore.

Vice-consulate of Sourabaya.

John Forrest, vice-consul.

Residing at Sourabaya.

Staff—one clerk.

Trading.

Appointed 26th January, 1870.

1. Average number of vessels entered and cleared, with their tonnage, in 1868, 1869 and 1870.

Flag.	Vessels.	Average Tonnage.
Totals.		

The number of British subjects resident in Sourabaya.

Adults, 25.

Children, 15.

Average of fees 1868, 1869 and 1870, £40 per annum.

Vice-consulate of Samarang.

Place of residence—Samarang.

Vice-consul's name—Henry Lash.

Staff—one clerk.

Trading.

Length of service—16 months.

(Tabular statement of Ships and Tonnage
and
Consular Establishments.)

Amount of Business.	1858.	1871.
Number of despatches and letters received and sent .	40	39
Seamen discharged.	—	20
Seamen engaged	—	36
Protests executed	—	2
Bills of health issued	—	4
Average fees, £16 per annum.		

British Vice-Consulate, Samarang, 10th November, 1871.

LIST OF BRITISH REPRESENTATIVES (CONSULS, VICE-CONSULS,
ETC.¹) IN THE ISLAND OF JAVA SINCE 1844.

Year.	Residence.	Rank.	Name.	Pay.	Date of Appointment.
1844	Batavia	consular agent	John L. Bonhote	£ 300	8th July, 1844
	Sourabaya	"	Arthur Fraser	300	" "
	Samarang	"	Alex. McNeill	300	" "
1848	Batavia	"	J. L. Bonhote	—	4th Sept., 1848,
	Sourabaya	"	Arthur Fraser	—	to
	Samarang	"	Donald Maclachlan	—	22nd Jan., 1851

¹ Pro-consular list not complete.

LIST OF BRITISH REPRESENTATIVES—*continued.*

Year.	Residence.	Rank.	Name.	Pay.	Date of Appointment.
				£	
1852	Batavia	consular agent	Alex. Fraser	300	4th Sept., 1848
to	Sourabaya	"	Thos. Bonhote	300	" "
1854	Samarang	"	Donald MacLaine	300	4th April, 1851
1855	Batavia	"	Alex. Fraser	300	4th Sept., 1848
	Sourabaya	"	Donald MacLachlan	300	26th April, 1854
	Samarang	"	Donald MacLaine	300	Jan., 1851
1856	Batavia	consul	Alex. Fraser	200	4th July, 1856
to	Sourabaya	"	Thos. Bonhote	200	" "
1857	Samarang	"	Donald MacLaine	200	" "
1858	Batavia	"	Alex. Fraser	—	" "
to	Sourabaya	"	Donald MacLachlan	—	26th March, 1857
1859	Samarang	"	Donald MacLaine	—	4th July, 1856
	"	acting consul	James McLachlan	—	
	"	"	Jacobus Martens	—	
1860	Batavia	consul	Alex. Fraser	—	4th July, 1856
to	Sourabaya	unpaid vice-consul	Lachlan Maclean	—	28th Oct., 1859
1861	Samarang	"	Peter DuPuy	—	acting from 8th Nov., 1860
1862	Batavia	consul	James McLachlan	—	5th April, 1862
to	Samarang	unpaid vice-consul	Peter DuPuy	—	acting until 1869
1870	Sourabaya	"	Lachlan Maclean	—	28th Oct., 1859
1870	Batavia	consul	James McLachlan	—	5th April, 1862
	Sourabaya	unpaid vice-consul	John Forrest	—	26th Jan., 1870
	Samarang	"	William Thompson	—	26th Jan., 1870
			Fraser.		
			Henry Lash	—	appointed acting vice-consul for W. T. Fraser.
1871	Batavia	consul	Neill McLean	—	19th April, 1871
to					
1874	Samarang	unpaid vice-consul	William T. Fraser	—	26th Jan., 1870
	"	"	Henry Lash	—	acting for W. T. Fraser until 1871
	Sourabaya	"	John Forrest	—	26th Jan., 1870
1875	Batavia	consul	William T. Fraser	—	6th April, 1875
	Samarang	unpaid vice-consul	George Henderson	—	14th Sept., 1875
	Sourabaya	"	John Forrest	—	26th Jan., 1870
1876	Batavia	consul	W. T. Fraser	—	6th April, 1875
to	Samarang	unpaid vice-consul	George Henderson	—	
1878	Sourabaya	"	John Forrest	—	26th Jan., 1870
1879	Batavia	consul	William T. Fraser	—	6th April, 1875
	"	pro-consul	S. R. Lankester	—	31st Dec., 1879
	Samarang	unpaid vice-consul	George Henderson	—	14th Sept., 1875
	Sourabaya	"	Alex. P. Cameron	—	3rd Jan., 1876
1880	Batavia	consul	Alex. P. Cameron	—	23rd June, 1879
to	"	pro-consul	S. R. Lankester	—	31st Dec., 1879
1884	Samarang	unpaid vice-consul	Henry C. Downie	—	22nd Sept., 1879
	Sourabaya	"	George Henderson	—	14th Sept., 1875
	"	pro-consul	W. L. McNeill	—	27th Nov., 1884
1885	Batavia	consul	Neil McNeill	—	12th Aug., 1884
to	"	pro-consul	S. R. Lankester	—	
1886	Samarang	unpaid vice-consul	Henry C. Downie	—	22nd Sept., 1879
	Sourabaya	unpaid vice-consul	Arthur J. Warren	—	21st Feb., 1884
	"	pro-consul	W. L. McNeill	—	

MISCELLANEOUS

1203

LIST OF BRITISH REPRESENTATIVES—*continued.*

Year.	Residence.	Rank.	Name.	Pay.	Date of Appointment.
1887	Batavia	consul	Neil McNeill	£	12th Aug., 1884
to	"	pro-consul <i>ad</i>	H. V. S. Davids	—	19th May, 1887
1888	"	<i>interim</i>			
	"	pro-consul	H. V. S. Davids	—	12th Dec., 1888
	Samarang	vice-consul	Arthur J. Warren	—	21st Feb., 1884
	Sourabaya	"	Adam Dowie	—	9th June, 1886
1889	Batavia	pro-consul	W. L. McNeill		
to	"	consul	Neil McNeill	300	
1890	"	pro-consul	H. V. S. Davids	—	11th April, 1890
	"	"	A. F. McLachlan	—	12th Dec., 1888
	Samarang	vice-consul	Samuel R. Lankester	25	
	Sourabaya	"	Adam Dowie	75	
1891	Batavia	consul	Neil McNeill	300	
to	"	pro-consul	A. F. McLachlan		
1892	"	pro-consul	Duncan D. Fraser	25	28th Feb., 1890
	Samarang	vice-consul	Arthur J. Warren	75	
	Sourabaya	"	S. R. Lankester	300	
1893	Batavia	consul	D. M. Campbell		
to	"	pro-consul	Fred. Bonhote	25	10th Oct., 1892
1896	Samarang	vice-consul	Arthur J. Warren	75	
	Sourabaya	"	H. V. S. Davids	300	
1897	Batavia	consul	D. M. Campbell		
to	"	pro-consul	Duncan D. Fraser	25	14th Dec., 1896
1900	Samarang	vice-consul	A. J. Warren	88	
	Sourabaya	"	H. V. S. Davids	300	
1901	Batavia	consul	D. M. Campbell	—	until 13th May, 1901
to	"	pro-consul	Colin A. Loudon	—	13th May, 1901
1902	"	"	Adam Dowie	25	5th April, 1900
	Samarang	vice-consul	A. J. Warren	88	
	Sourabaya	"	Edward T. Campbell	—	8th May, 1902
	"	pro-consul	Duncan D. Fraser	300	10th May, 1902
1903	Batavia	consul			
	"	pro-consul	Adam Dowie	25	
	Samarang	vice-consul	Alex. McLean	88	22nd April, 1902
	Sourabaya	"	E. T. Campbell		
1904	"	pro-consul	Duncan D. Fraser	300	
to	Batavia	consul	Donald M. Campbell	54	9th Feb., 1903
1905	Samarang	vice-consul	Alex. McLean	88	
	Sourabaya	"	Edward T. Campbell		
	"	pro-consul			
1906	Batavia	consul	Duncan D. Fraser		
	"	pro-consul	H. G. Jackson	—	30th March, 1906
	Samarang	vice-consul	D. M. Campbell		
	Sourabaya	"	David G. Rose	—	17th April, 1905
	"	pro-consul	James Dalton	—	23rd March, 1906
1907	Batavia	consul	David G. Rose	—	1st April, 1906
	"	pro-consul	H. G. Jackson		
	Samarang	vice-consul	D. M. Campbell		
	Sourabaya	"	Arthur Thomson	—	23rd March, 1906
	"	pro-consul	James Dalton		
1908	Batavia	consul	John W. Stewart		
	Samarang	vice-consul	D. M. Campbell		

LIST OF BRITISH REPRESENTATIVES—*continued*.

Year.	Residence.	Rank.	Name.	Pay.	Date of Appointment.
1908	Sourabaya	vice-consul	Arthur Thomson	£	
		pro-consul	J. Dalton		
1909	Batavia	consul	J. W. Stewart		
	Samarang	vice-consul	D. M. Campbell		
	Sourabaya	"	A. C. Ballingal		
		pro-consul	Neil McNeill		
1910	Batavia	consul	J. W. Stewart	300	
	Samarang	vice-consul	D. M. Campbell	54	
	Sourabaya	"	R. W. E. Dalrymple	88	
	"	pro-consul	Neil McNeill		
	"	"	R. Bussell	—	temporarily
1911	Batavia	consul	J. W. Stewart		
	Samarang	vice-consul	D. M. Campbell		
	Sourabaya	"	R. W. E. Dalrymple		
	"	pro-consul	Neil McNeill		
1912	Batavia	consul	J. W. Stewart	—	until March
	"	acting consul	R. W. E. Dalrymple		
	Samarang	vice-consul	D. M. Campbell	—	until March
	"	"	A. C. Ballingal		
	Sourabaya	"	H. G. Jackson		

H. B. M.'s CONSULATE, PERSONALIA.

Ballingal (Alexander Cameron), was vice-consul at Sourabaya, 1909. Resigned 1910. Vice-consul at Samarang, 1912.

Bonhote (Frederic), was vice-consul at Samarang, Java, from 10th October, 1892, to 25th March, 1895, when he resigned. Was acting consul at Batavia from 1st April to 3rd July, 1898, the date of his death.

Bonhote (John Lewis), was first consular agent at Batavia, Java, from 8th July, 1844, until 4th September, 1848, when he resigned. Died 22nd August, 1867.

Bonhote (Thomas), was consular agent at Sourabaya, in the Dutch East Indies, 1st October, 1853, till 4th July, 1856, when he was appointed consul there, which post he held till March, 1857, when he resigned. Died 20th December, 1897.

Cameron (Alexander Patrick), appointed vice-consul at Sourabaya, Java, 3rd January, 1876. Acting consul at Batavia from 24th February, 1878, till 23rd June, 1879, when he was appointed consul for the island of Java, to reside at Batavia. Resigned 12th May, 1884.

Campbell (Donald MacLaine), appointed vice-consul at Samarang, Java, 9th February, 1903. For nine years previous pro-consul at Batavia. Resigned as vice-consul March, 1912.

Campbell (Edward Taswell), pro-consul at Sourabaya from 1902 to 1905. Several times acting vice-consul at Samarang between 1905 and 1909.

Dalrymple (Robert William Elphinstone), was vice-consul at Sourabaya, 1910.

Dauids (Henry Vavasor Saunders), was consul at Batavia, Java, from 14th December, 1896, to April, 1902, when he resigned.

Downie (Adam), was vice-consul at Sourabaya, Java, from 9th June, 1886, to 24th January, 1890, when he resigned. Appointed vice-consul at Samarang 5th April, 1900. Resigned 5th January, 1903.

Downie (Henry Charles), was appointed unpaid vice-consul at Samarang 22nd September, 1879. Died at Samarang 25th January, 1886.

Du Puy (Peter), was acting unpaid vice-consul at Samarang from 8th November, 1860, till December 14th, 1869.

Fraser (Arthur), was first Consular Agent at Sourabaya, from 8th July, 1844, to 4th September, 1848.

Fraser (Alexander), was consular agent in Batavia from 4th September, 1848, till 4th July, 1856, when he was appointed consul. Resigned 6th March, 1862. Died in London 5th July, 1904.

Fraser (Duncan Davidson), was vice-consul at Samarang, Java, from 28th February, 1890, to 30th August, 1892, and acting consul at Batavia from 1st May, 1893, to 20th February, 1894. Again appointed vice-consul at Samarang 1st May, 1895. Resigned 22nd February, 1900. Appointed consul for the island of Java, to reside at Batavia, 10th May, 1902. Resigned 31st March, 1906.

Fraser (William Thomson), was appointed unpaid vice-consul at Samarang, in the consul district of Batavia, 26th January, 1870. Was acting consul at Batavia from 1st April, 1870, till 30th November, 1871, and was appointed to be consul there 6th April, 1875. Resigned 20th March, 1879. Died 31st May, 1880.

Forrest (John), was for some time vice-consul at Sourabaya, in the consul district of Batavia, having been appointed 26th January, 1870.

Henderson (George), from 1871 acting vice-consul at Samarang until he was appointed unpaid vice-consul at Samarang 14th

September, 1875, and was transferred to Sourabaya 22nd September, 1879. Resigned 9th January, 1884. Died 2nd June, 1887.

Lankester (Samuel Rushton), was acting-consul at Batavia from 22nd April to 11th June, 1888. Appointed vice-consul at Samarang, Java, 12th December, 1888. Resigned 15th January, 1890. Was again acting consul at Batavia from 20th to 30th January, 1891, and from 26th April, 1891, to 27th October, 1892; was appointed consul for the island of Java, to reside at Batavia, 28th October, 1892. Died at Batavia 13th October, 1896.

Lash (Henry), was acting unpaid vice-consul at Samarang from 1st April, 1870.

Maclachlan (Donald), served as consular agent at Samarang from 4th September, 1848, till 22nd January, 1851, and as consular agent at Sourabaya from 6th April, 1852, till 3rd August, 1855, and was consul at Sourabaya from 25th March, 1857, till 31st July, 1858, when he resigned. Died at Southsea 23rd January, 1893.

Maclachlan (James), was consul at Batavia from 5th April, 1862, till 24th March, 1871, when he resigned.

Maclaine (Donald), was acting consular agent at Samarang 22nd January, 1851 till appointment as consular agent at Samarang from 4th April, 1851, till 4th July, 1856, when he was appointed consul. Resigned 4th July, 1859, and died at Lochbuy 12th October, 1863.

Martens (Jacobus), acting consul from 1859 to November, 1860.

McLean (Alexander), was vice-consul at Sourabaya, Java, from 22nd April, 1902, to March, 1905, when he resigned.

McLean (Lachlan), was unpaid vice-consul at Sourabaya from 28th October, 1859, till 14th December, 1869, when he resigned. Was acting consul at Batavia from 1st January, 1866, till 31st March, 1870. Died 9th August, 1880.

McLean (Neill), was consul at Batavia from 19th April, 1871, till 22nd January, 1875, when he resigned.

McNeill (Alexander), was first consular agent at Samarang from 8th July, 1848, to 14th September, 1848.

McNeill (Neil), appointed consul for the island of Java, to reside at Batavia, 12th August, 1884. Resigned 5th October, 1892.

McNeill (William Loudon), appointed pro-consul at Sourabaya 27th November, 1884.

McNeill (Neil), appointed pro-consul at Sourabaya, 1909.

Rose (David George), was vice-consul at Sourabaya, Java, from 17th April, 1905, to 1st February, 1906, when he resigned. Appointed acting consul at Batavia 1st April, 1906, and consul for the island of Java, to reside at Batavia, 30th May, 1906. Resigned 11th April, 1907.

Stewart (John William), appointed consul for the island of Java, to reside at Batavia, 17th May, 1907.

Thomson (Arthur), appointed vice-consul at Sourabaya, Java, 23rd March, 1906.

Warren (Arthur John), appointed vice-consul at Sourabaya, Java, 21st February, 1884. Transferred to Samarang, 26th May, 1886. Resigned 3rd November, 1888. Again appointed vice-consul at Sourabaya 11th March, 1890. Resigned 31st March, 1902.

FINANCE.—The following table indicates, in florins, the revenue and expenditure of Netherlands India for the fourteen years 1898 to 1911.

Year.	Revenue (in Florins ¹).	Expenditure (in Florins).
1898 . .	132,432,135	150,709,404
1899 . .	142,600,402	144,371,545
1900 . .	151,809,380	146,115,382
1901 . .	149,379,896	149,903,204
1902 . .	146,616,335	160,675,007
1904 . .	152,617,233	166,537,090
1905 . .	155,646,063	166,222,778
1906 . .	169,340,004	167,950,851
1907 . .	184,716,767	172,990,500
1908 . .	190,050,215	191,321,216
1909 . .	197,488,179	200,863,298
1910 . .	221,516,220	231,427,271
1911 . .	247,293,308	248,453,924

With regard to the period of ten years 1898 to 1907, the following observations are due. Apart from the wars that were being fought in the outlying possessions during a

¹ Twelve florins or guilders equal £1 sterling.

part of this period, 84,000,000 fl. was the outlay on productive works, as follows :—

	fl.
Constructions of railways and tramways .	56,328,400
Irrigation work	17,100,000
Harbours and channels	2,660,000
Waterworks for the town of Sourabaya .	3,605,000
Telegraph cables	4,576,000
Total	84,269,400

Further, during 1906 and 1907 a sum of 3,754,400 fl. was spent in measures having for their object the increase of the economic standing of the population, such as the establishment of agricultural banks, improving the breed of horses, cattle, poultry, promoting fisheries, construction of roads, and emigration.

This policy of improving the economic condition of the native population by a liberal and generous expenditure on the part of the Dutch Government, which cannot have anything but the best results, is being steadfastly adhered to, so that the excess of expenditure over revenue is fully justified, and shows, if nothing else does, the excellent and statesmanlike principles which guide the Dutch in the government of their colonies.

The sources of revenue may be divided into four principal groups, namely—

Taxes.

Monopolies.

Government Industries.

Other Revenues.

ARMY.—The army of the Dutch East Indies is voluntary, and consists of Europeans and natives, in the proportion of one of the former to ten of the latter.

Among the Europeans are to be found, besides Dutchmen, Germans, Belgians, Swiss, and formerly, in the cavalry, French.

The natives are mainly drawn from such born soldiers as the Menadonese and Amboinese, who are very similar to the Ghurkas of our Indian Army.

The officers are mostly Dutchmen born and trained in Holland and drawn from the better classes, but since 1908 a few natives recruited exclusively among the Javan nobility have been included.

The commander-in-chief of the army and navy in the East Indies is the Governor-General, but besides this personage, who, as the head of the State, is the responsible head of the army, is the "Leger Commandant," or Commandant of the army, a lieutenant-general, under whom are four major-generals.

The War Department consists of nine divisions, namely—

Secretary's Department.

Infantry.

Artillery.

Engineers.

Commissariat and Administration (corresponding to our Army Service Corps).

Medical Corps.

General Staff.

Cavalry.

Topographical Service.

Each division is under the command of its own chief.

The field army in Java is divided into four brigades, which have their head-quarters at Batavia, Magelang, Sourabaya, and Bandoeng.

The seat of the war commandant is at present at Batavia, but it is expected that it will shortly be transferred to Bandoeng, together with the first brigade.

The brigades are made up as follows:—Twenty field

battalions of four companies, four field batteries of four guns each, four mountain batteries of four guns each, four field squadrons of cavalry, four companies of engineers, together with the customary auxiliary units, army service, administration, medical corps, etc. Besides the troops already mentioned there are three dépôt battalions in Java, divided between Buitenzorg, Magelang, Djockjakarta, and Solo ; whilst there is a fourth dépôt battalion at Fort de Kock, on the borders of Acheen, in Sumatra. The chief purpose of these battalions is doubtless the training of recruits, but they happen also to be stationed at posts of political importance.

All told, the army of the Dutch East Indies numbers about 30,000 men.

The ordnance of the artillery consists of 3.7 cm. quick-firing guns, whilst the arms of the soldiers are the magazine rifle .95 m., the chopper revolver, and sabre.

The Dutch Government usually arm the infantry when going into wild country with the carbine and a short, very sharp native sabre, called a *klewang*, or else with the rifle and chopper revolver, both with a bayonet.

The *klewang* is, however, a particularly deadly and redoubtable weapon in a hand-to-hand fight, and I understand from officers that a Marechaussee commander prefers, when fighting in the bush, not to shoot, but makes his men sling their carbines and attack only with the *klewang* in hand.

They creep silently through the bush until near their prey ; then at a signal from the captains in charge the Menadonese and Amboinese screech out, in a shrieking ear- and soul- piercing yell, their war cry, " Madjoe Marechaussee " (Advance Marechaussees!), and the impetuous advance which this instantly causes is so well known to the foe, whose acquaintance with the *klewang* is not new, that they flee as before the most terrific rifle fire.

The following table shows the standard of pay and pensions in the Dutch East Indian army :—

ARMY PAY LIST.

Standing.	Pay per Year, calculated in Sterling.	Pension per Year in Sterling.	Widow's Pen- sion per Year in Sterling.
	£	£	£
Commander of the army	2,680		
Lieutenant-generals	2,000	750	150
Major-generals	1,250	500	133
Colonels	1,000	375	115
Lieutenant-colonels	750	275	100
Majors	650	233	91
"	600		
Captains	475	166	75
"	450		
"	400		
First lieutenants of cavalry, artil- lery, engineers and topo- graphical service	225		
After six years' service	250		
After nine years' service	300		
After twelve years' service	350	125	58
Of infantry	210		
After six years' service	240		
After nine years' service	300		
After twelve years' service	350	125	58
Second lieutenants of cavalry, artillery, engineers and topo- graphical service	190	100	35
Of infantry	175	100	35
Magazine masters :			
Captains	400		
"	350		
Lieutenants	200		
After six years' service	225		
After nine years' service	250		
After twelve years' service	300		
Surgeons :			
First class	425		
After eight years' service	450		
After twelve years' service	500		
After sixteen years' service	550		
Second class	275		
After four years' service	325		
Military apothecaries :			
First class	400		
After ten years' service	425		
After fourteen years' service	475		
After eighteen years' service	500		

ARMY PAY LIST—*continued*.

Standing.	Pay per Year calculated in Sterling.	Pension per Year in Sterling.	Widow's Pen- sion per Year in Sterling.
	£	£	£
Military apothecaries— <i>continued</i> .			
Second class	250		
After three years' service	275		
After six years' service	300		
After nine years' service	325		
Military veterinary surgeons	400		
After fifteen years' service	450		
Under-lieutenant of cavalry, artil- lery and engineers	190	100	50
Under-lieutenants of infantry	175	100	50
Military architects	250		
Under-lieutenants, apothecaries, assistants	250		
Adjutant non-commissioned offi- cers	175	55	24
„ „ „	120	15	
Sergeant-major	56		22
Sergeant	30		20
Corporal	21		14
First-class soldier	12 to 7½		
Second-class soldier	11 to 7½		

NAVY.—The Dutch navy in the East Indies consists of some five or six so-called battleships, several protected ships, survey vessels and torpedo- and gun- boats. In addition to this in the roads of Sourabaya there lies an antiquated old guardship, a relic of a by-gone age, which mounts a couple of small guns for saluting purposes. From the foregoing it may be gathered the navy is by no means a powerful one ; it is, however, quite sufficient for the duties it has to perform.

The *personnel* of the navy consists of—

One flag officer.

18 chief officers.

222 subaltern officers.

97 engineers.

2,100 European petty officers and men.

1,000 native petty officers and men.

Besides these 25 petty officers and men of the marines have to be kept as a guard for the protection of the Dutch Embassy in Pekin.

The commander of the navy in the Dutch East Indies is a flag officer, called vice-admiral, who is likewise the chief of the Marine or Navy Department, Batavia.¹

The squadron is under the command of a captain-commander of the sea squadron, who is subordinate to the vice-admiral.

At Sourabaya there is a marine establishment, which is intended for building, constructing, repairing, laying up, and equipping ships, tools, boilers, etc., for the navy and Government marine fleet, for pilotage, buoying, coast lights, and the harbour departments: all of which services are under the supervision of the Department of Marine.

Private ships are allowed to make use of the docks, the mast and boiler derrick, careening pontoon, and boiler pontoon if the private establishments in the locality do not possess the necessary equipment.

There are two iron floating docks, one of 5,000 and one of 1,400 tons, while an iron floating 3,000-ton dock, likewise belonging to the marine establishment, is stationed at Sabang and is worked by a private company.

In addition to the above docks there is also at Tandjong Priok a Government 4,000-ton dock, which is worked by the Tandjong Priok Dry Dock Company.

¹ A Chief of the Marine, or Port Admiral, has been established at Batavia since the year 1762.

For ships up to a maximum weight of 2,000 tons and a maximum length of 90 metres there is also a slip available.

The table on the following two pages shows the ships composing the East India Squadron, the vessels in and out of service in the East Indian Marine, and the gunboats in service in 1911—1912.

ROYAL MAGNETIC AND METEOROLOGICAL OBSERVATORY AT BATAVIA.—When the newly-appointed Governor-General of Netherlands India, Charles Ferdinand Pahud, visited Berlin in 1856 it appears that Alexander von Humboldt discussed with him the desirability of an observatory being established at Batavia, wherein regular meteorological and magnetic observations should be made. This, he stated, would as a matter of course prove a very useful contribution to the knowledge of the elements in the tropics. The result of this discussion was that Professor Buys Ballot submitted certain proposals to the Minister of the Colonies in 1857, which, being eventually accepted, led to the establishment of the Royal Magnetic and Meteorological Observatory in 1865, and since the 1st January, 1866, regular observations of the various meteorological elements have been made, while in July, 1867, magnetic observations were also started.

The latter are not quite complete, however, owing to illness among the European staff in charge, which interrupted the observations in 1883; while in 1899—1901, owing to the great disturbances caused by the newly-established electric tramways, the records for two years were obliged to be entirely obliterated.

Registers are further kept of the temperature, moisture, barometer level, sunshine, direction of wind, velocity of wind, rainfall, electricity in the air, and terrestrial currents.¹

¹ These observations are annually published in the year-book of "Observations" of the Observatory; and the rainfall in a special book under the title of "Rain Observations."

DUTCH EAST INDIAN WARSHIPS.

MISCELLANEOUS

1215

Name of Ship.	Class.	Built.		Number of Cannon.	H.P.	Manning.	
		At.	In.			Europeans.	Natives.
DUTCH EAST INDIAN SQUADRON.							
<i>Tromp</i>	battleship	Amsterdam	1904	19	6,405	300	71
<i>De Buyter</i>	"	Rotterdam	1901	19	6,377	300	71
<i>Konigen Regentes</i>	"	Amsterdam	1900	19	7,290	300	71
<i>Konigen Wilhelmina</i> { <i>Der Nederlanden</i>	armour-clad cruiser	"	1892	19	4,600	277	62
<i>Noordbrabant</i>	"	Vlissingen	1899	17	10,067	275	104
EAST INDIAN MARINE.							
<i>In Service.</i>							
<i>Serdang</i>	cruiser	Vlissingen	1897	6	1,290	57	42
<i>Edi</i>	"	"	1897	10	1,235	57	42
<i>Siboga</i>	"	Amsterdam	1898	6	1,395	57	42
<i>Koeti</i>	"	"	1898	6	1,412	57	42
<i>Flydra</i>	torpedo-boat	Poplar	1900	2	1,204	15	6
<i>Cerberus</i>	"	"	1888	2	1,125	15	6
<i>Scyella</i>	"	"	1900	2	1,201	15	6
<i>Minotaurus</i>	"	Vlissingen	1902	2	1,281	15	6
<i>Pythou</i>	"	"	1902	2	1,260	15	6
<i>Sphinx</i>	"	"	1903	2	1,442	15	6
<i>Drak</i>	"	"	1906	2	1,553	15	6
<i>Krokodil</i>	"	"	1906	2	1,538	15	6
<i>Leeslang</i>	"	"	1907	2	1,591	15	6
<i>Koning der Nederlanden</i>	guardship	Amsterdam	1874	6	—	137	43
<i>Borneo</i>	surveying ship	Glasgow	1892	—	1,040	26	57
<i>Van Gogh</i>	"	Rotterdam	1898	—	386	26	57
<i>Lombok</i>	"	Amsterdam	1891	—	990	26	57
<i>Van Doorn</i>	"	Rotterdam	1901	—	369	26	71
<i>Temporarily out of Service.</i>							
<i>Asahan</i>	cruiser	Feyenoord	1900	5	1,353	—	—
<i>Mataram</i>	"	Amsterdam	1896	6	1,345	—	—
<i>Bromo</i>	guardship	Vlissingen	1874	—	—	—	—
<i>Prins Hendrik der Nederl.</i>	ammunition ship	Birkenhead	1866	—	—	—	—
<i>Makassar</i>	"	Amsterdam	1877	—	—	—	—
<i>J. Nienhuys</i>	"	"	1889	—	—	—	—

DUTCH EAST INDIAN WARSHIPS (*contd.*).
GUNBOATS IN SERVICE.

Name of Ship.	Class.	H.-P.	Manning.		Built.		Station.
			Europeans.	Natives.	At.	In.	
<i>Java</i> .	screw	1,017	6	38	Feyenoord	1885	Batavia
<i>Condor</i> .	"	225	5	26	Amsterdam	1885	Timor
<i>Leemeeuw</i> .	"	225	6	28	Engeland	1878	"
<i>Dog</i> .	"	550	5	26	Amsterdam	1898	Makassar
<i>Glatik</i> .	"	550	6	28	Rotterdam	1894	Atjeh
<i>Valk</i> .	"	637	6	39	Amsterdam	1903	Zuid-Nieuw-Guinea
<i>Kwartel</i> .	"	400	6	26	Vlissingen	1901	Makassar
<i>Telegraaf</i> .	twin-screw	—	8	50	—	1899	Soerabaya
<i>Brak</i> .	screw	500	5	30	Amsterdam	1899	Riouw and O. K. Sumatra
<i>Ceram</i> .	"	800	6	33	Vlissingen	1887	Padang
<i>Nias</i> .	twin-screw	1,227	40	40	Amsterdam	1895	Madoera, Bali and Lombok
<i>Sumbawa</i> .	screw	930	6	38	Vlissingen	1891	Batavia
<i>Reiger</i> .	"	300	5	26	Feyenoord	1887	Atjeh
<i>Raaf</i> .	"	400	6	26	Vlissingen	1889	Amboina
<i>Flamingo</i> .	"	400	6	26	Feyenoord	1891	Menado
<i>Pelikaan</i> .	"	480	6	26	"	1891	Fernate
<i>Hazenwind</i> .	"	500	5	26	Rotterdam	1898	Samarinda
<i>Speurder</i> .	"	400	5	26	Singapore	1908	Batavia (Opium Régie)

There are also the seismological observations, which, until the end of 1908, were made chiefly by means of a Milne seismograph, and one by Rebeur Ehlert, besides an astatic seismograph by Van Wiechert.¹

POLICE.—The general “policing” of Java, by which term is meant the measures taken to secure public peace, order and safety, or in a narrower sense the measures aimed at the prevention and detection of crimes and other disturbances of the peace, is carried on under two divisions, namely, the Government police and the Javan municipal police. The former, however, is again divided into preventive, or general, and repressive, or criminal, police.

The Government police is controlled by European and Javan officials in the Department of the Interior, namely, the chief of the residential and local administration (partly also the “controllers”), the *bopatis*, *patehs*, and the district and sub-district heads, assisted by an extensive European and native *personnel*.

In chief towns of any importance European bailiffs and police inspectors are found, for instance at Batavia there are one bailiff, three assistant bailiffs, two water bailiffs, and the necessary police inspectors. These bailiffs go by the title in Java of “schout.”²

Furthermore, all administrative officials, as a rule, have one or more native policemen at their orders; save for a few exceptions, since the reorganisation in 1897, the following system of attachment has been adopted in principle:—

To a resident, one mounted chief policeman and three men.

¹ A work by Dr. van der Stok, entitled “Wind, Weather, and Currents in the East India Archipelago,” in which observations from 1814 to 1890, taken from ships’ journals kept on board the warships are worked up, together with wind observations relating to sixty points on the coast, is of considerable value. There is also a small work on the rainfall of Java by Dr. van Bemmelen, in which the average monthly rainfall and the number of rainy days is given.

² “Water-schout” is water-police inspector.

To an *adipati* (or regent), one mounted chief policeman and three men.

To a *pateh*, one policeman.

To a *wedono* (or district chief), one mounted policeman and three men.

To an assistant *wedono* (or sub-district head), one mounted and one foot policeman.

Taken together these policemen form a very large number ; at the end of 1907 their number in Java and Madura outside the three ordinary chief towns amounted in round figures to 1,800 mounted and 3,800 foot policemen, or a total of 5,600 men.

In almost all residencies in Java there are further special police officials appointed with the title of " Mantri Police," who in this sphere of work find an excellent training for the office of assistant district chief. In nine residencies these are, for the better securing of peace and order, armed native police corps, organised, it is true, on a military footing, but under civil administration. These corps consist mostly of an instructor, a sergeant, one or two corporals, and 20 or 24 policemen, recruited from districts other than those where they serve ; the corps at Batavia, under the name of the " Corps of Pikemen," numbers five sergeants, nine corporals, and 176 soldiers.

For extraordinary circumstances there are also armed corps, as in the large towns the "*schutterij*," in which all Dutch civilians under 45 years of age are obliged to serve, and in Madura the *Barisans*, like the Javan "*schutterij*."

The policing of Java as compared with that of British India may be considered a very easy matter. The perpetrators of a crime are invariably found out at once and delivered up to justice, which naturally acts as a deterrent to evil-doers.

Convicts with life sentences are seen daily working on the roads without any supervision, and when their work is

finished they return voluntarily to their prison quarters. They are aware it is no use trying to escape, for should they do so they would be immediately caught again and punished with severer tasks and poorer fare.

EDUCATION.—There are excellent schools in Java all over the country, where European boys and girls up to any age can be educated under a very highly efficient staff of professors, schoolmasters, and schoolmistresses.

The schools and staff are under the control of the Government Department of Education, and there are no better institutions of their kind outside Europe.

There are also schools for natives, and one or two for Chinese.

PART VI

Information for Travellers. The Way to get to Java. Hotels. Money in Use. Conveyances in Java. Custom House. Passports. Malay Language, and Sentences in General Use all over the Island. Bibliography. Tourist Bureau.

INFORMATION FOR TRAVELLERS.—The question where is one to go for a holiday often puzzles the jaded traveller who has seen everything and been everywhere in Europe and the United States, perhaps even Canada and South America as well. To those who know there is but one answer to the question: Go to Java. Java the wonderland of the silent East; Java the paradise of the world; Java the land of grand, magnificent, and luxuriant vegetation; of mild, quaintly picturesque, and clean races; of marvellous and stupendous ancient Hindu ruins, of curious customs, of strange religions, and of the gorgeous courts of royal sultanates!

The traveller has nowhere in the world such a pleasant time as in Java. Does he seek health, he has a calm sea voyage, with a choice thereafter of a number of sanatoria with any climate he wishes in the highlands and mountainous districts of Java. Does he want a land of scenery, Java is second to none in this world. Thrown in with these advantages, as it were, are the scented Spice Islands of the Eastern seas with their palm-fringed shores, their vivid tropical green sloping hills, and cloud-capped mountains. Does he want fresh markets for commerce and mercantile enterprise, he has the rich islands of Netherlands India, with Java itself containing a fast-increasing population of over thirty millions.

All this can be reached in the finest and most comfortable ships, over the smoothest seas in the world, if the proper time is chosen.

The often-quoted beauties of the inland sea of Japan are as nothing to the beauties of Java, whilst in all other respects

other lands find a rival in this veritable paradise of the world.

THE WAY TO GET TO JAVA.—The island of Java can be entered either at the capital, Batavia, at the west end, or at Sourabaya, the main commercial centre, on the east coast.

Passengers from China, Singapore, India or Europe always land at Batavia ; those from Australia at Sourabaya.

From Southampton and Marseilles or Genoa there are the weekly steamers of the “Nederland” and “Rotterdam Lloyd,” which proceed without any change direct to Java. For a description of these magnificent steamers, see the section on “Shipping.” The fares are—

From Southampton :—

To.	First Class.		Second Class.	
	Single.	Return.	Single.	Return.
	£ s.	£ s.	£ s.	£ s.
Batavia, Samarang, or Sourabaya	65 0	97 0	37 10	64 0

From Genoa or Marseilles :

To.	First Class.		Second Class.	
	Single.	Return.	Single.	Return.
	£ s.	£ s.	£ s.	£ s.
Batavia, Samarang, or Sourabaya	61 0	91 0	33 0	55 10

The Netherland Company's agent in London is Mr. H. V. Elkins, 2, Panton Street, Haymarket, London, S.W., to whom applications should be made for passages or further particulars.

Messrs. Thomas Cook & Son, whose headquarters are Ludgate Circus, London, E.C., also are agents for all the shipping companies having connection with Java, as well as for the railways of the island, and they will supply guide-books and all information.

HOTELS.—The hotels of Java, which are all under Dutch management, may be reckoned among the very best in the East, and it may be even justly said that they surpass the greater number in the East in cleanliness, general comfort, as well as in the excellence of the *cuisine*. Nor is the tariff high, the best accommodation, including private bathing-rooms, etc., being all obtained for a charge of 6 rupees, or guilders (10s.) per day. The charges for wines and spirits are also very reasonable. Thus the cost of living in the island may be reckoned at, say, from 12s. to 15s. a day for a person of moderate expenditure.

MONEY.—The English sovereign is accepted everywhere at the full value of 12 guilders.

CONVEYANCES.—Motor-cars or carriages may be secured at all the principal hotels at very moderate rates.

Motor-cars cost per hour about the same as in Europe, while carriages cost about a guilder (1s. 8d.) an hour. Smart up-to-date private carriages called “my lords” can also be hired at 1½ guilders (2s. 6d.) an hour.

Four-wheeled hackney coaches are obtainable at 1 guilder an hour, and two-wheelers (“sados”) for 60 cents (1s.) an hour.

On the ship's arrival at Batavia, that is, at its harbour, Tandjong-Priok, porters from most of the principal hotels come directly on board to take charge of one's luggage.

CUSTOM HOUSE.—The Custom House is then passed through. This is quite an informal affair, and the Dutch officials are most obliging, keeping the travellers waiting only a few minutes, unless firearms are being brought into the country.

The train is then taken to Batavia from the harbour. These trains run every twenty minutes. The luggage left with the hotel porter will be later on delivered in the hotel.

From the station at Batavia to the hotel the traveller can take a carriage or one of the two-wheeled *dos-à-dos* ("sados"), any number of which will be found awaiting the trains as they come in.

PASSPORTS.—After settling down at the hotel, travellers should visit their consul and obtain through him a "toela-tings kaart," or pass, giving permission to visit and remain in Java for six months.

For this the following particulars must be furnished :—

- (1) Name in full.
- (2) Where born.
- (3) Age.
- (4) Occupation.
- (5) Where last resided.
- (6) Date of arrival.
- (7) Port at which arrived.
- (8) Steamer by which arrived.
- (9) Name of captain of steamer.

MALAY LANGUAGE.—Without attempting a full vocabulary, a few words and expressions are given for the benefit of English travellers. It may be observed that the Malay language is about the simplest in the world.

The vowels are pronounced generally as in French : *a* full, as in *father* ; *e* as in *neck* ; *i* as *ee* in *feel* ; *o* full, as in *open* ; *oe* is pronounced as *u* in *full*.

On Arrival at Tandjong-Priok Harbour = Sampeh di Tandjong-Priok.

Boat = Sampan.
 Boatman = Toekangsampan.
 Coolie = Coolie.
 Copper coin = Doewit tembaga.
 Custom house = Kantor douane.
 Electric train = Tram lekstrik.
 First class = Klas satoe.

Gold coin = Wang mas.
 Hotel = Roemah makan.
 House = Roemah.
 Letter = Soerat.
 Luggage = Barang.
 Money = Wang.
 Office = Kantor.

On Arrival at Tandjong-Priok Harbour = Sampeh di Tandjong-Priok—continued.

Paper money = Wang kertas.
 Photograph = Gambar gambar.
 Photographer = Toekan gambar.
 Pier = Darat.
 Railway = Spoor.
 Railway carriage = Karetta api.
 Second class = Klas doewa.
 Shore = Darat.
 Silver coin = Wang perak.
 Steamship = Kapal api.
 Stop = Brenti.
 Tailor = Toekan pakian.
 Telegram = Soerat kawat.
 Telegraph office = Kantor kawat.
 Ten-cents piece = Sketip.
 Twenty-five cents piece = Talen (stali).
 Third class = Klas tiga.
 Ticket = Kartjes.
 Policeman = Ôppas policie.
 Police station = Kantor policie.
 Postal card = Kartoe pos.

Post office = Kantor pos.
 I will go = Saja pigi.
 Go quickly = Pigi lekas.
 How much (price) = Brapa doewit.
 How much (quantity) = Brapa ada.
 I won't do it = Tida maoe.
 I won't give it = Tida kassi.
 I don't want it = Saja tida kassi.
 That's enough = Ini sampeh.
 Timetable = Soerat kreta api.
 Tram = Trem.
 Watch = Djaga.
 All right, it is enough = Soedah.
 Come here = Mari sini.
 Don't allow it = Tida maoe.
 Go = Pigi.
 Wait a little = Nanti sedikit.
 Will go ashore = Pigi darat.
 It is no use bothering me any more = Soedah, habis, perkara.
 Hold your tongue = Diam kwe.
 Be off = Pigi.

At the Railway Station = Di Station Spoor (Kareta Api).

Here, coolie, take my luggage =
 Sini, coolie, angkat barang.
 Two men only = Doewa orang sadja.
 Five pieces = Lima potong.
 Are you the mandoer from Hôtel des Indes ? = Kwe mandoer Hôtel des Indes ?
 Yes, Sir = Saja Toean.
 Here is the receipt of my luggage ;
 you take care of it, pay the coolies

for me, and bring it to the hotel =
 Ini recu deri bagage ; kwe djaga bajar coolie dan bawa di hotel.
 Here is a quarter (0.25 fl.) to pay the coolies = Ini satoe talen (stali) (0.25 fl.) boewat bajar coolie.
 Where is your bus (waggon) ? =
 Mana omnibus ? Kareta ?
 Everything all right ? = Soedah klar ?
 Go on, then = Madjoe.

At the Hotel = Di Roemah Makan.

Have you a room ? = Ada kamar ?
 Where is the landlord ? = Mana toean roemah makan ?
 Boy, take my luggage to No. 50 ;
 five pieces = Jonges, angkat barang di kamar ; 50 ada lima potong.
 Have you got them ? = Soedah ada ?
 I want some tea or coffee = Saja minta te (koppie).
 Is there no barber ? = Tida ada toekan tjoekeer ?

Yes, Sir, he will be here after a while = Ada toean, nanti datang.
 Call the washerman for me = Pangil menatoe.
 Here, washerman, are 20 pieces, I want them back in 3 days ; that means on the 29th at 5 o'clock in the afternoon = Sini, menatoe 20 potong, minta kombali 3 hari, djadi hari 29 peekoel lima sore.
 All right, Sir = Baai Toean.
 Boy, I want some writing paper,

At the Hotel = Di Roemah Makan—continued.

some ink, and a pen = Jonges
minta kartas toelis dan penna
tinta.
I want some ice water = Minta ajer
ice.
I want a bottle Apollinaris = Minta
ajer blanda.

Where is the w.c. ? = Mana kamar
ketjil ?
Where is the bathroom ? = Mana
kamar mandi ?
Open this bottle = Boeka ini bottel.
Open this trunk = Boeka ini kop-
per.

In the Evening = Sore.

At what time is dinner, boy ? =
Poekoel brapa makan, jonges ?
Don't forget before dinner to clean
my bed curtain properly from
mosquitos = Djangan loepa bekin
brisi klamboe baaibaai deri
njamok.
Remember, if you don't look after
the mosquitos, you don't get
your fee = Ingat kaloe kwe tida
djaga njamok kwe tida dapat
present.
Yes, Sir, I will take care = Saja
Toe'an, saja djaga.
Wake me up to-morrow at 6 o'clock
sharp. I want to leave by the
first train to Buitenzorg = Kassi
bangoen bissok pagi poekoel 6

betoel. Saja maoe pigi di Buiten-
zorg.
All right, Sir = Baai Toe'an.
Can I have some breakfast before I
leave ? = Bisa dapat makan doc-
loean ?
Yes, Sir, breakfast is always ready
at 6 o'clock = Saja toe'an, Maka-
nan deri poekoel 6 soedah klaar.
Shall I order a carriage for you to
bring you to the station and a
luggage-car for your luggage ? =
Apa saja misti pesen karett
boewat pigi di spoor dan karett
bagage djoega.
Yes I want a carriage and a luggage
car = Ja saja minta karett dan
karett bagagi.

At Dinner = Makan Malam.

Boy, I want some bread = Jonges
minta rotti.
Let me have the wine-list = Bawa
soerat anggoer.
Bring me a bottle claret No. 10 =
Kassi satoe bottel anggoer merra
No. 10.

Give me some ice, boy = Minta ice,
jonges.
Give me some fruit = Minta boea.
Have you a match for me ? = Kwe
ada korrek api ?

At Breakfast = Makan Pagi.

I want some half-boiled eggs =
Minta telur stengah matang.
Let me have a couple of fried eggs
or ham and eggs = Kassi doewa

mata sapi ataw mata sapi dan
ham.
I want some tea, boy = Jonges
minta te.

At the Lunch = Makan Siang.

Where is the menu ? = Mana soerat
makan ?
Bring me some soup first = Bawa
sop doeloe.
I don't want any rice = Tida makan
nassi.
Let me have some rice, but none of

the hot dishes = Minta nassi tapi
tida maoe sambal.
I want only chicken, eggs and fish =
Minta ayam, telur dan ikan sadja.
Let me have some beefsteak and
salad = Minta biefstuk sama
salad.

In a Carriage = Di Karetta.

To the left = Kiri.	Bring me to the Harmonie Club =
To the right = Kanan.	Pigi di kamar bola Harmonie.
To the British consul = Pigi di kantor konsul Inggris.	Wait till I come back = Toengoe sampe saja datang.
To the German consul = Pigi di kantor konsul Djarman.	When rain comes, close the carriage properly = Kaloe hoedjan, toe-toep karettta betoel.
To the French consul = Pigi di kantor konsul Pransman.	Open the carriage = Boeka karettta.
To the American consul = Pigi di kantor konsul Amerika.	Open the hood = Boeka kap.
You know, where it is? = Kwe tao di mana?	Clean the seat first = Bekin brissi bankoe doeloe.
Go back = Balik.	Go to Kemajoran station = Pigi station Kemajoran.
Go home = Poelang.	Go to Weltevreden station = Pigi station Weltevreden.
Go on = Madjoe.	Go to Batavia S. S. = Pigi station Batavia S. S.
Stop = Brenti.	Go to Batavia N. I. S. = Pigi station Batavia N. I. S.
Bring me to the Concordia Club = Pigi di kamar bola Concordia.	

General.

Good morning = Slammat pagi.	Last week = Mingo doeloe.
Good day = Tabeh.	Last month = Boelan doeloe.
Good evening = Slammat malam.	Last night = Kemaren doeloe.
Good-bye = Slammat tingal.	Midday = Tengari.
Periodical time = Temponja.	Month = Boelan.
All night = Satoe malam troes.	To-day = Ini hari.
Day after-to-morrow = Harie loesa.	To-morrow = Bissok.
Day before yesterday = Kemaren doeloe.	To-morrow morning = Bissok pagi.
Evening = Sore.	To-morrow evening = Bissok sorre.
	Yesterday = Kemaren.

Days of the Week = Harinja.

Day = Hari.	Thursday = Hari kemis.
One day = Satoe hari.	Friday = Hari djoemahat.
Sunday = Hari mingo.	Saturday = Hari saptoe.
Monday = Hari senen.	Every day = Hari hari.
Tuesday = Hari selassa.	One week = Satoe mingo.
Wednesday = Hari reboe.	

Colours = Roepa Roepa.

Black = Itam.	White = Poeti.
Brown = Merra toewa.	Yellow = Koening.
Grey = Aboe.	Light = Moeda.
Red = Merra betoel.	

Room Requisites = Barang Dikamar.

Bed = Tampak tidoer.	Drawer = Lemari.
Bench = Bankoe.	Pitcher = Karap.
Chair = Krossie.	Screen = Sampiran.
Desk = Medja toelis.	Table = Medja.

General—continued.

Table Requisites = Barang Medja.

Fork = Garpoe.	Tablecloth = Taplak.
Glass = Glas.	Teacup = Mangkok.
Ice water = Ajer ice.	Teaspoon = Sendok te.
Knife = Piso.	Tumbler = Glas besar.
Plate = Piring.	Wine glass = Glas anggoer.
Spoon = Sendok.	

Food = Makanan.

Beef = Daging.	Mustard = Mosterd.
Beer = Bier.	Pepper = Lada.
Bread = Roti.	Rice = Nassi.
Chicken = Ajam.	Salt = Garam.
Eggs = Telor.	Sugar = Goela.
Fish = Ikan.	Vinegar = Tjoeka.
Milk = Soesoe.	Wine, beer, spirits = Minoeman.

Quantity.

All = Semoewa.	Narrow = Sissek.
A little = Sedikit.	Short = Pendek.
Deep = Dalam.	Small = Ketjil.
Half = Stengah.	Thick = Tebul.
Large = Besar.	Thin = Tipis.
Long = Pandjang.	Wide = Lebar.

Weather = Tempo.

Cold = Dingin.	Storm = Angin kras.
Fine weather = Hari bagoes.	Thunder = Gloedoek.
Hot = Panas.	Waves = Ombak.
Rain = Hoedjan.	Wind = Angin.
Rainy weather = Bari hoedjan.	

Season = Moessim.

Dry season = Moessim kring.	Wet season = Moessim hoedjan.
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Bridge = Djembatan.	Rice-field = Sawah.
Field = Kebon.	River = Kali.
Garden = Kebon.	Sand = Passir.
Hill = Boekit.	Sea = Laoet besar.
Hot spring = Soember panas.	Stone = Batoe.
Island = Poeloe.	Town = Kotta.
Lake = Laoet.	Village = Kampong.
Mountain = Goenoeng.	Waterfall = Ajer pemandjoer.
Path or road = Djalan.	Well = Soemoer.

Human Body = Badan Orang.

Actor = Orang kemedic.	Beggar = Orang minta minta.
Aged people = Orang toewa.	Behind = Di blakang.
Arm = Langang.	Body = Badan.
Back = Blakang.	Boy = Anak laki.
Bachelor = Boedjang.	Beard = Djengot.

*General—continued.*Human Body = *Badan Orang—continued.*

Child = Anak.
 Daughter = Anak prempoean.
 Doctor = Toean dokter.
 Ear = Koeping.
 Eye = Mata.
 Face = Moeka.
 Female = Prempoean.
 Finger = Djari.
 Foot or feet = Kaki.
 Forefinger = Teloendjoek.
 Forehead = Djidat.
 Front of body or chest = Dada.
 Girl = Anak prempoean.
 Girl servant = Baboe.
 Hair = Ramboet.
 Hand = Tangan.

Head = Kapala.
 I = Saja.
 Interpreter = Djoeroe basa.
 Knee or knees = Dengkoel.
 Legs (generally) = Paha.
 Loins = Pingang.
 Male (human) = Laki-laki.
 Mouth = Moeloet.
 Neck = Leher.
 Nose = Hidoeng.
 Shoulders = Poendak.
 Teeth = Gigi.
 Thumb = Dempol.
 Woman = Prempoean.
 You = Kwe; loe.

Writing Material = *Barang Toelis.*

Ink = Tinta.
 Paper = Kretas toelis.
 Pen = Penna.

Pencil = Pottelood.
 Postage-stamps = Kapala radja.
 Postal cards = Karto pos.

Animals, Harness, etc. = *Binatang, Pakejan Koeda.*

Bridle = Leis.
 Carriage = Karetta.
 Dog = Andjing.
 Driver = Koessir.
 Groom = Toekang koeda.

Harness = Pakejan koeda.
 Horse = Koeda.
 Saddle = Sella.
 Whip = Tjambok.

Miscellaneous = *Segala Roepa.*

Bamboe = Bamboe.
 Bath = Mandi.
 Bathroom = Kamar mandi.
 Bedclothes = Seprei.
 Blanket = Slimoet.
 Bookseller = Toko boekoe.
 Boots = Sepatoe.
 Breakfast = Makan pagi.
 Button = Kantjing.
 Candle = Lilin.
 Carry = Pikoel.
 Chain = Ranteh.
 Clean = Brissi.
 Coal = Areng.
 Collar = Kraag.
 Colour = Roepa.
 Comb = Sisir.
 Cushion = Bantal.
 Dinner = Makan malam.
 Dining-room = Kamar makan.
 Drug store = Roemah obat.
 East = Wettan.
 Envelope = Empplop.

Fan = Kipas.
 Fire = Api.
 Flea = Lalar.
 Flower = Kembang.
 Gate = Pintoe.
 Gate-keeper = Djaga pintoe.
 Gloves = Sarong tangan.
 Gold = Mas.
 Handkerchief = Stangan.
 Hat or cap = Topi.
 House = Roema.
 Indian corn = Djagong.
 Key = Koentji.
 Lamp = Lampoe.
 Leaf = Down.
 Lighthouse = Lampoe sowar.
 Lobster = Kepiting.
 Looking-glass = Katja.
 Moon = Bolan.
 Mosque = Missigit.
 Mosquito = Njamok.
 Mosquito net = Klamboe.
 Nail = Pakoe.

General—continued.

Miscellaneous = Segala Roepa—*continued.*

Neckties = Dassie.	South = Kidoel.
North = Lor.	Spectacles = Katji mata.
Oil = Minyak.	Stars = Bintang.
Onion = Bawang.	Sun = Mata hari.
Orange = Djeroek.	Sword = Pedang.
Paper = Kartas.	That man = Ini orang.
Picture = Gambar.	Thief = Pentjoeri.
Pin = Penetee.	Tooth brush = Bros gigi.
Pine tree = Tjemara.	Tooth powder = Obat gigi.
Pocket knife = Piso lipat.	Towel = Handoek.
Potato = Kentang.	Tree = Pohon.
Receipt = Resie.	Trousers = Tjelana.
Ring = Tjintjin.	Trunk = Kopper.
Room = Kamar.	Velvet = Bloedroe.
Rose = Kembang roos.	Vinegar = Tjoeka.
Salt = Garam.	Umbrella = Pajong.
Scissors = Goenting.	Waistcoat = Rompie.
Shirt = Kemedja.	Watchmaker = Toekang lontjeng.
Shoe = Sepatoe.	Water closet = Kakoes; kamar ketjil.
Silk = Soetra.	West = Koelon.
Slippers = Slop.	Window = Djendela.
Soap = Saboen.	Wood = Kajoe.
Socks = Sarong kaki.	

Numbers = Nommer.

One = Satoe.	Fourteen = Ampatblas.
Two = Doewa.	Fifteen = Limablas.
Three = Tiga.	Sixteen = Anambblas.
Four = Ampat.	Seventeen = Toedjoeblas.
Five = Lima.	Eighteen = Delapanblas.
Six = Anam.	Nineteen = Sembilanblas.
Seven = Toedjoe.	Twenty-one = Doewa poeloe satoe.
Eight = Delapan.	Twenty-two = Doewa poeloe doewa.
Nine = Sembilan.	Thirty-four = Tiga poeloe empat.
Ten = Sapoeloe.	Forty-six = Ampat poepoe anam.
Eleven = Sablas.	Hundred = Seratoes.
Twelve = Doewablas.	Thousand = Sereboe.
Thirteen = Tigablas.	

Hours = Djam.

Clock or watch = Lontjeng.	Two o'clock = Poekoel doewa.
Time = Tempo.	Half-past two = Stengah tiga.
Minute = Minuut.	Quarter-past two = Poekoel doewa.
What is the time? = Poekoel brapa.	Morning = Pagi.
One o'clock = Poekoel satoe.	Noon = Siang.
	Afternoon = Sore.

Distance.

One English mile = One paal.

General—continued.

Money = Wang.

1 guilder (1s. 8d.) = 40 cents	10 cents = Sketip.
American gold.	25 cents = Talen (stali).
Guilder = Roepia (100 cents).	50 cents = Stengah roepia.
Cent = Sen.	100 cents = Satoe roepia.

BIBLIOGRAPHY.—Two recent books in English on these East Indies which will prove interesting are—

“Twentieth Century Impressions of Netherlands India.”

“Ledger and Sword,” by Beckles Willson.

TOURIST BUREAU.—It will then be advisable to visit the official Tourist Bureau at Batavia on arrival, where arrangements will be made and all particulars and information furnished for innumerable excursions in this beautiful land.

No one should pass Singapore without visiting Java, and once you have tasted of its waters you will long to return to them again.

For the true European with Javan tastes and interests there can be no such thing as a final parting, for if he has appreciated the quiet charm of Java and her country, and if he has seen the beauty of life that her sons, the descendants of the highest nobility of Hindustan, lead here, he can never altogether be separated from her, for the spirit of the place will have penetrated him and he will carry Java with him wherever he goes to the end of his days.





INDEX

A

Abreu, Antonio de, 157
 Acheen, King of, 183
 Ageng Muhammed, 102
 Aji Saka, 27
 Ancient inhabitants, origin of, 7
 Angkor Wat, 15
 Anjer, English factory at, 241
 Anklung, 11
 Antiquities of Java, 801—802
 Arabian intercourse with Java, 85
 Arkins, E., gravestone at Bencoolen, 609
 Army, 1208—1212
 Auchmuty, Sir S., 325

B

Baillie, Mrs. E. M., gravestone at Bencoolen, 613
 W., gravestone at Bencoolen, 612
 Bandoeng, 526
 Bangkalan, 507
 Banjermassin, English colony at, 241, 507
 Banjoewangie, 505
 Banks, 1167—1175
 Bantam, 139, 528
 agents of E. E. I. Co.'s factory, 593—597
 English ejected from, 235
 treaty with King of, 185
 Batavia, 140, 451—460
 Society of Arts and Sciences, 1160—1167
 Beaulieu, Commodore, 711—713
 Begoes Rang In, 361, 386

Bencoolen, 605—607
 English gravestones at, 608—617
 Best, Capt. Thos., 187
 Bibliography, 1230
 Bing Am, 140
 Births, marriages and deaths, 1039—1040
 Bligh, Capt., 770—771
 Bogle, J. V. L., gravestone at Bencoolen, 609
 Robert, gravestone at Bencoolen, 608
 Bojolali, 488
 Bopatis, 5
 Boro Budur, 4, 803—812
 Bowen, Capt., 362
 British consular establishments, 1192—1200
 representatives, 1201—1204
 Brooke, Sir J., rajah, 425
 Buitenzorg, 5, 520
 Byron, Commodore, 746

C

Cam, Don Diego, 149
 Campbell, Lieut.-Col., epitaph, 459
 Cape of Good Hope, Dutch settlement of, 222
 Carteret, Philip, 748—750
 Cavendish, Thomas, 165, 665—669
 Ceylon, Dutch seizure of, 214
 French expedition to, 216
 Chandi Kalasan, 815—817
 Pawon, 812—814
 Sari, 817—819

- Chandi Sewu, 829—831
 Siva, 821—825
 Vishnu, 825—827
 Brahma, 827
 Lumbung, 831—832
 Bubrah, 832—833
 Plaosan, 833—835
 Sajivan, 835
 Kalongan, 835
 Mendut, 842—845
 Perot, 846
 Pring Apus, 846
 Selo Gryo, 847
 Ungarang, 847—849
 Singa Sari, 849—850
 Panataran, 850—853
- Cheribon, palace at, 95
 administration of, 481—483
- Chermon, Raja of, 75
- China, first intercourse with, 49
- Chinese, arrival of, 60
 Council of Batavia, 141
 customs, 1095—1101
 early knowledge of Java, 132
 estates, 141
 rebellions, 115, 141, 252
- Clipperton, Capt. John, 739
- Cocos Keeling Islands, 640—644
- Coen, Jan, 199
- Coffee production, 943—944
- Consuls, foreign, 1191—1193
- Conti, Nicolo, 146
- Cook, Lieut. James, 753—769
- Cooke, Capt. Edward, 738
- Cowley, Capt., 725
- Cox, Philip, gravestone at Bencoolen, 611
 William, gravestone at Bencoolen, 614
- Crawford, J., British Resident, 357, 378
- Crime and punishment, 1073
- Crisp, Edward, gravestone at Bencoolen, 611
- "Culture system," 421
- Cunningham, G., gravestone at Bencoolen, 460
- Currency, the, 1175
- Curtis, Capt., and Pangéran Chákra, 242
- D
- Da Cabral, Pedro, 152
- Da Cunha, Tristan, 154
- Daendels, Gen., 120, 272—275
- Da Gama, Vasco, 149
- Dampier, Capt. Wm., 726
- Dancing in Java, 1024—1029
- Danes, the, 139
- Davidson, Geo. F., 780—796
- De Albuquerque, Alfonso, 153
 Francisco, 153
- De Almeyda, Francisco, 154
- De Bouganville, Capt. Louis, 750—753
- De Britho, 160
- De Kock, governor, 411
- De Magalhaes, his account of Java, 657—665
- Demak, 489
- De Maudelshoe, J. A., 717—722
- De Sá, Francisco, 158
- Devine, Jane, gravestone at Bencoolen, 611
- De Wilde, Andries, 651—654
- Dezentje, A. J. C., 438
- Dieng, the, 837—842
- Dipo Negoro, 411
- Di Pordonene, Odoric, 146
- Di Varthema, Ludovico, 147
- Djockjakerta, trouble with Sultan of, 378
 description of, 513
- Donston, Stokeham, gravestone at Bencoolen, 610
- Drake, Francis, 163, 665
- Dress in Java, 995—1000
- Dutch—
 first expedition to Java, 171
 second expedition to Java, 178
 first commercial treaty with, 173
 factory at Bantam, 185
 governors of Ceylon, 221—222
 in Japan, 208

Dutch—*continued*.

- possessions in East, 229—230
- E. E. Co., financial difficulties of, 263—267
- E. E. Co., organisation of, 267—272
- rule in Java, 407 *et seq.*
- Dwellings in Java, 991—994

E

- Earl, G. Windsor, in Java, 796—800
- Edible birds' nests, 1087—1088
- Education, 1219
- Elberfeld conspiracy, the, 243
- English—
 - arrival of, in Java, 121
 - E. I. Co., 181
 - expeditions to E. Indies, 163, 165, 169, 325
 - factory at Bantam, 185
 - and Dutch, strife between, 188, 200
 - expeditions to E. Indies, list of, 279
 - occupation of Java, 350—407
- Excise duty, 1181
- Export duty, 1179—1180

F

- Fa Hien, 133
- Fauna of Java, 875—889
- Fendall, John, Lieut.-Gov., 402
- Finance, 1207—1208
- Flora of Java, 868—874
- Fort Marlborough (*see* Bencoolen).
- Fort Rotterdam (*see* Macassar).
- Fraser, Lieut.-Col., inscription on tomb, 503
- Fruits of Java, 857—867
- Funan, 16
- Funnel, Capt. Wm., description of Java, 732—734

G

- Games in Java, 1017—1018
- Garvet, 527

J.—VOL. II.

- Gillespie, Gen., 121
 - charges against Raffles, 398
- Government, 1182—1191
- Gressie, 495—496

H

- Hamilton, Capt. Alex., 726—732
 - Robert, 615
- Harbours, 1101—1103
- Hippon, Capt. Anthony, 704—706
- Hinduism, establishment of in Java, 27
- Holloway, W., gravestone at Bencoolen, 610
- Houtman, Cornelius, 170
 - travels in Java, 670—695

I

- Ibu Batuta, 90
- Ibu Mulána Málík Ibrahim, 92
- Imports and exports, 1176
- Industries of Java, 909—982
- Inglis, Francis, gravestone at Bencoolen, 614
- Inhabitants, present, origin of, 14
- Irrigation, 1117—1122

J

- Jaka Tingkir, 97
- Jakarta (*see* Batavia).
- Janssens, Gov.-Gen., 275
- Japara, 485—486
- Java, origin of name, 18
 - first visitors from the West, 20
 - returned to Dutch, 404
 - end of British occupation, 407
- Javan finance during English occupation, 395
 - war with Dutch, 409
- Jennings, W. R., gravestone at Bencoolen, 612
- Joana, 490—492
- Johnstone, Ann Herries, gravestone at Bencoolen, 614

P P

K

- Kablai Khan, 59
 Kalang, 8
 Keeling, Capt., 700—702
 Kendal, 481
 Kerta Sura, 107
 Khumer Empire, 15
 Knox, Capt. Robert, 723—725

L

- Lancaster, Admiral, 182
 John, gravestone at Bencoolen, 613
 Land measurement, 1176
 Language of Java, 1009—1012
 Lassen, 494
 Lewis, Jane, gravestone at Bencoolen, 612
 Liang dynasty, 137
 Lopez, Diogo, 155

M

- Macassar, 603
 Macartney, Earl, 771—776
 MacGillavray, Henry, 124
 Maclane, Miss Frances, gravestone at Bencoolen, 611
 Maclean, Lieut., memorial, 512
 McLeod, Capt. Norman, 487
 McPherson, Capt., tomb, 503
 Magellan (*see* De Magalhaes).
 Mahavansa, 13
 Mahometanism, introduction of into Java, 75
 Mahometan sovereigns, 128
 Majapahit, 57, 64, 71
 Malacca, Dutch settlement of, 223
 governors of, 225
 returned to English, 406
 Mangku Bumi, 119, 262
 Manners and customs in Java, 983
 Marco Polo, 145
 Matárem, 27, 108
 Maxwell, Capt. Murray, 777—780

- Michelburne, Sir E., at Bantam, 699—700
 Middleton, Capt., 199, 698, 700, 702
 Minerals of Java, 890—908
 Ming Dynasty, and Java, 139
 Minto, Lord, 325, 329
 proclamation, 355
 death of, 400
 Monteath, Alex., gravestone at Bencoolen, 608
 Munden, Sir W., 227
 Murray, Charles, gravestone at Bencoolen, 615
 Museum of Batavia Society of Arts and Sciences, 1164—1167
 Music in Java, 1012—1015

N

- Navy, 1212—1214
 Nienhof, John, 713—717
 Nova, Juan, 152

O

- Observatory, Royal, at Batavia, 1214
 Oenarang, 487

P

- Paku Negára, 261
 Pangeran Adipatti, 374
 Mangkubumi, 261
 Prabu, 114
 Pugar, 106, 109, 112
 Ratu, massacre of Europeans, 370
 Papajáran, 53
 Parr, Thomas, gravestone at Bencoolen, 617
 Pasoeroean, 5, 495
 Pekalongan, 139, 484
 Personalia (H.B.M.'s consulate), 1204—1207

Phœnicians, trade with, 21
 Physical features of Java, 3—6
 Piracy, 1090
 Police, 1217—1218
 Population statistics, 1041—1072
 Pordonone, Odoric di, 146
 Porteous, Major, gravestone at
 Bencoolen, 608
 Portilis, Gonsalo, 203
 Portuguese, arrival of, 53
 Postal service, 1137—1141
 Prambanan, 4
 ruins, 814—815
 temples, 819—821
 Press, the, 1155—1160
 Probolingó, 497
 Pulo Condore, English factory at,
 240

R

Raban, Major, 363
 Raden Pátán, 78
 Raffles, Sir T. Stamford, 121
 birth, 287
 at E. India House, 287
 at Penang, 288
 Lieut.-Gov. of Java, 292
 supersession, 295
 Lieut.-Gov. of Bencoolen, 298
 and Lord Hastings, 305
 at Singapore, 309
 and Sumatra, 315
 return to England, 321
 death of, 322
 genealogical tree, 324
 and improvements in Java, 401
 Railways and tramways, 1132—
 1137
 Ramus, C. R., gravestone at Ben-
 coolen, 609
 Rasaka, 8
 Raymond, Capt., 169
 Religion in Java, 1002—1009
 Rembang, 493
 Roads in Java, 1122—1132
 Robinson, Capt., 121
 Rogers, Commodore, 734—738

Roggewein, Commodore, 252, 739—
 744
 Rubber production, 967—971

S

“Sacred Isles of the Gentiles,” 22
 St. Helena, 227
 Salatija, 487
 Samarang, 471—476
 epitaphs at, 477—479
 European governors, 479—480
 Sambas, 597
 Sarawak, trouble with England,
 425, 449
 massacre of Europeans,
 427
 Saris, Capt. John, 706—710
 Senapati, 98
 Schoven, W. C., 711
 Scott, Capt. E., notes on Bantam,
 696—698
 Sheik Ibu Mulana, 78
 Shipping, 1143—1152
 Ships of E. India Squadron, 1215—
 1216
 Si Kiva, 141
 Singapore—
 Dutch claim to, 405
 British residents at, 622—623
 merchants and occupiers of
 land, 623—624
 prices current at (1833), 632—
 637
 Slavery, 1091—1095
 Smissaert, resident, 410
 family, 433—436
 Social life, 1153—1155
 Soekaboemi, 526
 Sourabaya, 462—471
 Spanish Armada, 167
 Speelman, Admiral, 238
 Spilbergen, Geo., 710
 Sports, 1018—1024
 Sron dol, 486
 Staunton, Sir G., 776—777
 Sugar factories, 923—927
 Su Kro, 109
 Sultan Ageng, 102

Sumenap, 506
 Sunda group, 6
 Sura Kerta, 108, 117, 510
 Susuhunan Ha Mangku—

Rat I., 103
 II., 106
 III., 111

T

Table of events, 129
 Tack, Capt. François, 108
 Taprobana, 26
 Tapso, Capt. T., gravestone at Bencoolen, 611
 Tariff of import duties, 1177—1178
 Tavernier, J. B., 722
 Tea production, 950—953
 Tegal, 483—484
 Telegraphs and telephones, 1141—1143
 Temple caves, 853—854
 Thorne, Robert, 163
 Thunberg, C. P., 769
 Titles and rank, 988—990
 Tjiandi Sévu, 4
 Tjilatjap, 519
 Tjop Wanjok, 141
 Toeban, 494
 Tourist bureau at Batavia, 1230
 Tradenius, Paulus, 203
 Travellers, information for, 1220—1229
 Tritréstra, 34

Truna Jaya, 105
 Tucker, Capt., and Moluccas, 276
 Tumapel, Chinese expedition to, 138

V

Valkenier, 115
 Van den Wyk, Gov.-Gen., 431
 Vau Eck, Governor, 219
 Van Hohendorff, 119
 Van Noort, travels in Java, 695—696
 Van Speult, Governor, 190
 Vocabulary for travellers. 1223—1230
 Volcanoes, 1103—1116
 Von Imhoff, Baron, 219

W

Wallis, Capt. Samuel, 747
 Watson, H. J., gravestone at Bencoolen, 610
 Watts, Richard, gravestone at Bencoolen, 615
 Weights and measures, 1176
 Wetherall, Maj.-Gen., 348
 Whittenberry, Thomas, gravestone at Bencoolen, 610
 Wyaya, 13

Y

Yawa Dvipa, 18

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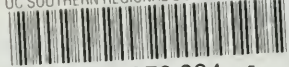
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