

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
51361
AND
EASTERN ASIA.

Edited by
J. R. LOGAN, F. G. S.
Member of the Asiatic Society, Corresponding Member of the Ethnological Society
of London, and of the Batavian Society of Arts and Sciences.

VOL. IV.

SINGAPORE:
1850.

919.105
J.I.A.E.A.



KRAUS REPRINT
A Division of
KRAUS-THOMSON ORGANIZATION LIMITED
Nendeln/Liechtenstein

CENTRAL ARCHAEOLOGICAL
LIBRARY, NEW DELHI.

Acc. No. 51361
Date 7.3.72
Call No. 919.105

J.E.A.E.A.

Received from M/S Hindustan Bank for Rs. 1000/- 8/7/72

CONTENTS.

I.

On the Leading Characteristics of the Papuan, Australian, and Malayu-Polynesian Nations, Chapter II, by G. WINDSOR EARL, Esq., M. R. A. S. 1, 66, 172

II.

An Account of the Origin and Progress of the British Colonies in the Straits of Malacca, by Lieut. Col. JAMES Low, C. M. R. A. S. and M. A. S. C. 11, 106, 360

III.

General Report on the Residency of Singapore, drawn up principally with the view of illustrating its Agricultural Statistics, by J. T. THOMSON, Esq., F. R. G. S., Surveyor to Government..... 27, 162, 134, 206

IV.

Some Account of Keddah.. . . . 49

V.

The Piracy and Slave Trade of the Indian Archipelago. 45, 144, 400, 617, 734.

VI.

The Mixture of Human Races..... 54

VII.

The Vegetable Products of the Tenasserim Provinces, by EDWARD O'RILEY, Esq.,.. . . . 55

VIII.

Tiger Fight at Solo, by JONATHAN RIGG, Esq.,.. . . . 75

IX.

Reply to the Remarks on the "Essay on Coral Reefs as the cause of Fever &c." by R. LITTLE, Esq., Surgeon. 85

X.

Census of Singapore..... 107

XI.

Gunung Dangka, or a Paradise on Earth, a tale of Superstition, by JONATHAN RIGG, Esq..... 119

XII.

Gambier, as a Preservative of Timber, by T C. DRYSDALE, Esq..... 163

XIII.

Notes on the tract of Country lying between the head of the Zimmi River and the source of the Kaundran, adjacent to the Siamese border Province of Ryout Raung, by EDWARD O'RILEY, Esq..... 164

XIV.

A visit to the City of Chiang Chau, by the Reverend A. STRONACH..... 169

XV.

On the Words introduced into the English from the Malay, Polynesian and Chinese languages, by JOHN CRAWFURD, Esq., F. R. S.. .. 182

XVI.

Pulo Aur.... 191

XVII.

The Origin of Laterite, by E. O'RILEY, Esq.. .. 199

XVIII.

Indications of Copper Ore in Torres Straits..... 201

XIX.

Legends of Islam, by Lieutenant Colonel JAMES LOW, C. M. R. A. S. & M. A. S. C.... 202

XX.

Eruptions of Mount Semiru, in January 1845, by M. ZOLLINGER..... 204

XXI.

Some account of the Order of Buddhist Monks or Talapoins, by M. BIGANDET.... 220,505

XXII.

Investiture of the King of Cochin-China by an Envoy of the Emperor of China in 1849..... 232

XXIII.

The Trading Ports of the Indian Archipelago, by G. WINDSOR EARL, Esq., M. R. A. S..... 238, 380, 483, 530

XXIV.

The Ethnology of the Indian Archipelago, embracing enquiries into the Continental relations of the Indo-Pacific Islanders, by J. R. LOGAN, Esq., F. G. S. *Member of the Ethnological Society &c*.... 252

XXVI.

A Trip to Moar... 348

- SECT. 4. Incarnation of the Elemental Spirits. Polytheism.
 SECT. 5. Possession, sorcerers, priests.
 SECT. 6. The change which spiritualism undergoes with the progress of the race.
 SECT. 7. The blending of religions.

II. OBJECTS OF SPIRITUAL FAITH:—

- SECT. 1. Elements, Natural Objects, Animals.

XXXVI.

On the Spirit Worship of the Taliens, by E. O'RILEY, Esq. 591

XXXVII.

Translation of the Annals of Acheen..... 598

XXXVIII.

Observations on Dr Little's Essay on Coral Reefs as the Cause of Fevers in various parts of the East, by J. C. ROSS, Esq. 607

XXXIX.

Notices of Pinang..... 629, 645

XL.

The Geographical Group of Celebes..... 664, 761

XLI.

Note on Maritime Malays, by D. J. MACGOWAN, M. D. 687

XLII.

Notice of the Betsimisarakas, a tribe of Madagascar,.... 692

XLIII.

Description of Malakka and our Establishment there, by FRANCOIS VALENTYN..... 696, 747

XLIV.

On Coral Reefs as a cause of Blakang Mati Fever, and of the Fevers in various parts of the East, by ROBERT LITTLE, Esq., Surgeon.. .. 704

XLV.

On the Culture of Cotton in the Straits Settlements, by G. WINDSOR EARL, Esq..... 720

XLVI.

Ceremony observed at the Court of Acheen, on the King's going to the Mosque Bait Al Rhaman, in the month of Raam-lan.. .. 728

XLVII.

A Boat Voyage from Singapore to Pinang, by J. R. LOGAN, Esq..... 753

XLVIII.

Whale Fishing of the Solorese.... 766

I N D E X.*

A

	Page
<i>Acheen</i> . Translation of the Annals of, xxxviii†	598
Agriculture :	
of <i>Singapore</i> , Statistics of, III.	27,102,134,206
On the Culture of Cotton in the Straits Settlements, xlv. 720	
Arts :	
Whale fishing of the Solorese xlvi.	766
<i>Australians</i> , leading characteristics, I.	1,66,172

B

BIGANDET, Revd P.—Some account of the Order of Buddhist Monks or Talapoins, xxi.	220,505
---	---------

Botany :

The Botany of <i>Singapore</i> xxxi.	436
--	-----

C

Celebes. The Geographical Group of, xl.	664,761
Census of <i>Singapore</i> x.	107
<i>Chiang Chau</i> . A visit to the city of, xiv.	169
CRAWFURD, J.—On the words introduced into the English from the Malay, Polynesian and Chinese languages, xv.	182

D

DRYSDALE, T. C.—Gambier as a preservative of Timber, xii.	163
---	-----

E

EARL, G. WINDSOR.—On the leading characteristics of the Papuan, Australian & Malayu-Polynesian nations, i. 1,66,772	238,380
The Trading Ports of the Indian Archipelago xxiii.	483,630
On the Culture of Cotton in the Straits Settlements, xlv. 720	

Ethnology :

On the leading characteristics of the Papuan, Aus- tralian and Malayu-Polynesian nations, i.	1,66,172
The Ethnology of the Indian Archipelago, embracing enquiries into the Continental relations of the Indo-Pacific Islands, xxiv.	252
The Silong tribe of the Mergui Archipelago, xxvii.	412
The Karean tribes of Martaban and Tavai, xxviii.	413
The Semang and Sakai tribes of the Malay Peninsula xxix 424	
The Ethnology of Eastern Asia, xxxii.	441
" South Eastern Asia, xxxiii.	465
" of Eastern Asia and the Indo-Pacific Islands—Spiritualism, xxxv.	552

* N.B.—Names of authors in CAPITALS; Geographical names in *italics*; Arts and Sciences in *old English*.

† The Roman figures refer to the number of the article in the table of Contents.

G

- The Spirit Worship of the Taliens xxxvi. 591
 Notice of the Betsimisaraks, a tribe of Madagascar xlii. 692
 Gambier as a preservative of Timber xii 163
- Geography :**
 Some account of Kiddah iv. 49
 Notes on the tract of country lying between the
Zimmi river and the source of the Kaundran xiiii 164
 Visit to the city of Chiang Chau xiv. 169
 Pulo Aur xvi. 191
 Trading Ports of the Indian Archipelago xxiii, 238, 380, 483, 530
 The Geographical Group of Celebes xl. 664, 761
 A boat voyage from Singapore to Pinang xlvii 753
- Geology and Mineralogy :**
 The Origin of Laterite xvii. 199
 Indications of Copper Ore in Torres Straits xviii 201
 Eruptions of Mount Semiru in January 1845 xx. 204
 Gunong Dangka or a Paradise on Earth xi 119

H

History and Literature, Native :

- Gunong Dangka or a Paradise on Earth, a tale of
 Superstition ix 119
 Legends of Islam xix. 202
 Translation of the Annals of Acheen xxxvii. 598
 Ceremony Observed at the Court of Acheen on the
 King's going to Mosque xlvii 728

I

- Indian Archipelago*, Piracy and Slave Trade of, v. .45, 146, 400 617, 734
 Trading Ports of the, xxiii. 238, 380, 483, 530
 Investiture of the King of Cochin China by an Envoy of the
 Emperor of China in 1849, xxii. 232

K

- Karean* tribes of *Martaban* and *Tawai*, xxviii. 413
Keddah, some account of, iv. 49

L

Language :

- On the words introduced into English from the Malay,
 Polynesian and Chinese, xv. 182
 Vocabulary of the Silong language, xxvii. 411
 Leading characteristics of the Papuan, Australian and
 Malayu-Polynesian nations, i 1, 66, 172
 Legends of Islam, xix. 202
- LITTLE, R.**—Reply to the remarks on the "Essay on Coral
 Reefs as the cause of Fevers &c." ix. 85
 On Coral reefs as the cause of Blakan Mati fever &c.
 xlv. 704
- Low, Col.**—An account of the origin and progress of the Bri-
 tish Colonies in the Straits of Malacca ii. 11, 106, 360
 Observations on Perak xxxiv. 497
 Legends of Islam xix. 202

The Karean tribes of Martaban and Tavai xxviii	413
Semang and akai tribes of the Malay Peninsula xxxix	424
LOGAN, J. R.—The Ethnology of the Indian Archipelago, embracing enquiries into the Continental relations of the Indo-Pacific islands xxiv	252
The Silong tribe of the Mergui Archipelago, xxvii	411
The Manners and Customs of the Malays xxx	433
The Ethnology of Eastern Asia xxxi	441
Ethnology of Eastern Asia and the Indo-Pacific Islands xxxv	552
A boat voyage from Singapore to Pinang xlvi	753

M

MACGOWAN, D. J.—Note on Maritime Malays xli	687
Malakka.—Description of, xliii	696, 747
Malayu-Polynesians, Leading characteristics of, i	1, 66, 172
Mixture of Human Races vi	54
Moar.—A trip to xxvi	348

O

O'RILEY, E.—The Vegetable Products of the Tenasserim Provinces vii	55
On the Spirit Worship of the Talians xxxvi	591
Notes on the Tract of Country lying between the heads of the Zimmi river and the source of the Kaundran adjacent to the Siamese border province of Ryout-Raung xliii	164
The Origin of Laterite xvii	199
A Vocabulary of the Silong language xxvii*	411
OXLEY, T.—The Botany of Singapore xxxi	436

P

Papuans, Leading characteristics, i	1, 66, 172
Perak. Observations on, xxxiv	497
Pinang. Notices of, xxxix	607, 645
Piracy and Slave Trade of the <i>In. Archipelago</i> v	45, 144, 400, 617, 734

Products Raw :

Vegetable products of the Tenasserim Provinces vii	55
Pulo Aur. xvi	191

R

RIGO, J.—Tiger fight at Solo viii	75
Gunong Danaka or a Paradise on Earth, a tale of superstition xi	119
ROSS, J. S.—Observations on Dr Little's Essay on Coral Reefs xxxviii, 607	

S

Silong. The, xxvii	412
Vocabulary xxvii*	
Singapore, general account of, iii	27, 102, 134, 206
Census of, x	107
Botany of, xxxi	436
Straits of Malacca, account of the origin and progress of the British colonies in, ii	11, 106, 360

STRONACH, Revd. A.—A visit to the City of Chiang Chau xiv... 169

T

Tenasserim Provinces, Vegetable Products of, viii 55

Tiger fight at Solo, viii 75

THOMSON, J. T.—General Report on the Residency of Singapore, drawn up principally with the view of illustrating its Agricultural Statistics iii .. 27, 102, 134, 206

Fulo Aur, xvi. 191

Z

ZÖLLINGER, H.—Eruptions of Mount Semiru in January 1845, xi 240

THE
JOURNAL
OF THE
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

ON THE LEADING CHARACTERISTICS OF THE PAPUAN, AUSTRALIAN, AND MALAYU-POLYNESIAN NATIONS.

By G. WINDSOR EARL, Esq., M. R. A. S.

CHAPTER II.

THE PAPUANS.

On the distribution of the Papuans.—The so-called Aijfers or Arafuras.—Polynesian words in New Guinea dialects.—Natives of South Coast of New Guinea.—Extension of the Papuans eastward to the New Hebrides and Fiji Islands and southward to Van Diemen's Land.—Through the Moluccas and Philippines.—Traces of Papuans in Timor, Flores, and Sumbawa.—The Semangs of the Malayan Peninsula.—The Andaman Islanders.—Probable origin and migrations of the Papuans.

I will now proceed to define the limits within which the Papuans or Oriental Negroes exist, and the localities they at present occupy, which must always prove the first step towards any attempt at a classification of the native tribes of the Indian Archipelago. So simple a task could scarcely be expected to present many difficulties, but such was the confusion with regard to the peculiar nature and characteristics of the various aboriginal tribes of the south eastern parts of the Indian Archipelago when this enquiry was commenced, that it was not until after long and close investigation, which included personal visits to all the groups of islands in the Timor and Banda Seas, that I was enabled to obtain anything approaching to a clear and defined view of the question. This confusion ought never to have existed to the extent that it did, for although the Papuans and Malayu-Polynesians here come into close contact, the two races are found preserving their leading characteristics in the utmost purity, even when placed in such close

juxtaposition as to be occupants of the same island. There are certainly some remarkable exceptions, as in the case of the Australians, but these have evidently been the result of peculiar circumstances. The confusion above alluded to seems to have originated in so simple an occurrence as the misapplication of a name. The Portuguese, who were the original European possessors of Amboyna, bestowed the name of *Alfores* or *Alforias* (terms which signify "manumitted slaves" or "freed-men") on the independent tribes of the interior, precisely as the Spaniards called the aborigines of America *Indios* or Indians, and the Mahomedan natives of Sulu and Mindano *Moros* or Moors. This term was adopted with a host of other Portuguese words into the Malayan dialect of the Moluccas, and at length came to be applied to the inland inhabitants of all the eastern islands of the Archipelago. As many of the Malayu-Polynesian tribes occupy from choice the elevated table lands of these islands, while the Papuans in numerous instances are found driven into the mountain fastnesses, they both appeared as inland inhabitants, and both came to be described under the general name of *Alfores*, which term came in the course of time to be converted by the Dutch into *Alfoer* and by the French and English into *Arafura* and *Horafura*. That excellent old historian Valentijn, who was for nearly a century the chief, indeed the sole authority, on matters connected with the remote eastern islands, did much towards propagating this error by the loose manner in which he applied the term; but at the period in which he wrote, the study of the human race, which has since been elevated into a science, was considered as the least interesting branch of Natural History. I have reason to know that the late lamented Dr Pritchard intended remodelling that portion of his great work on the Physical History of Mankind which relates to the races of the Eastern parts of the Archipelago, had he survived to bring out another edition. I have entered into this matter more fully than I originally intended, as it became necessary to explain why I do not feel called upon to enter into any particulars respecting the Arafuras, who, from the contradictory accounts that have naturally been given respecting them, have excited considerable curiosity among those interested in Ethnology.

I think it must have been owing to some such cause that recent voyagers have fancied they could discover a difference between the coast and inland inhabitants of New Guinea sufficiently great to lead to the supposition that they might be of a different race. It happens that the Papuans of the interior of New Guinea are more generally known to Europeans than the coast natives, as by far the greater portion of the Papuan slaves who are found in such numbers in the Moluccas and even further to the westward, are individuals who have been either purchased or stolen from the inland tribes, and these invariably possess the Papuan characteristics in a very eminent degree. There is a stout able-bodied man now

residing in Singapore, whose broad shoulders and curved shins often attract attention. He is supposed by those unacquainted with his history to be an African negro, but he is a native of the interior of New Guinea. My limited experience with regard to New Guinea would not authorize me to say that *no* difference exists between the coast and inland native of this great island, especially as the peculiar position of each would be likely to engender different habits; but I suspect that the distinction will go no further.

Students in philology have often been startled by the number of Malayu-Polynesian words that they encounter in the vocabularies of the Papuan dialects. These words, are, however, confined almost exclusively to the dialects of those tribes which occupy a position near what appears to have been one of the great routes of Malayu-Polynesian migration, and are invariably found connected with the improvements, especially the acquisition of the art of agriculture, which they have evidently derived from the latter. A very small amount of trouble will enable one even to detect from which particular tribe of Malayu-Polynesians they have derived each particular cultivated fruit or root. This line of improvement seems to have extended along the north side of New Guinea and the islands to the eastward, and to have curved round to the westward along their south sides until it reached Torres Strait;* for certainly the most uncivilized of, at least, the coast tribes of New Guinea, are to be found between Torres Strait and that part of the southwest coast of the island which lies immediately to the eastward of the Arrus, this last spot being the southern limit of the excursions of the Ceram and Macassar traders. Here, therefore we may expect to find the natives of New Guinea in a state more closely approaching their original condition previous to their having had intercourse with strangers, than elsewhere; and I purpose availing myself of some extracts from a little work by Lieut. Modera, one of the officers of the Dutch corvette Triton, which was published in Holland in the year 1830 (Note A.) This vessel sailed from Amboyna in the year 1828 for the purpose of examining the S. W. coast of New Guinea, and as Mr Modera's valuable work has never been translated in English, the details given below may probably prove new to the reader.†

The Papuan race extends from New Guinea eastward through the Louisiade and Solomon Archipelagos to the New Hedrides,

* That is to say if it did not proceed at once from the Friendly Islands westward along the north and south sides of this chain, which seems by no means improbable, but some further information is required concerning the inhabitants of the Louisiade and Solomon groups before this question can be decided.

† While the writer was preparing this paper, he obtained the perusal of the volume of a great national work recently published under the auspices of the King of Holland, which contains an account of this voyage by Mr Muller, one of the naturalists attached to the expedition. Mr Muller's account of the natives corresponds exactly with Lieutenant Modera's, except that he applies the name of Mairassia to the natives of the interior, which is not found in Mr Modera's work, who calls them by the old name of Alfoeren, or Alfoers.

(where it co-exists with some tribes of Malayu-Polynesians) and still further to the Fiji Islands, which, however, is the extreme limit of the race in an eastern direction. It is singular that the Papuan race improves as it recedes from the continent of Asia and advances into the Pacific. The Fijians are the aristocracy of their race. They are Papuans only in their physical characteristics: their civilization is as advanced as that of their neighbours of the Friendly Islands. The equal position they maintain with regard to the latter, who prefer them as friends than as enemies, proves that the *physical* capabilities of the Papuans are not inferior to those of the Malayu-Polynesians, and also that the crushing influence the latter have gained over the former within the limits of the Indian Archipelago, is more to be attributed to their possession of more formidable weapons such as swords and muskets and to their discipline, although imperfect enough, than to any natural superiority. New Caledonia is occupied by a race in which it is difficult to say whether the Papuan or Polynesian element is predominant. Several travellers have also thought that they could discover traces of a negro race in New Zealand, which might possibly be the case, for the Papuans of the Fiji islands have been long accustomed to navigation from island to island, and they might have been carried there by a similar chain of events to that which brought the Malayu-Polynesians.

In a south direction the Papuans have evidently spread far and wide over the continent of Australia, for although the influx of another people has greatly modified the Papuan character of the race, it exists or did exist in its purest character in the Island of Van Diemen's Land. The inextinguishable hatred which they bore towards the European settlers, rendered their presence so hateful, that the latter rose *en masse* to exterminate them, but these children of nature, owing to their superiority in bush tactics, escaped through the cordon that had been drawn around them during the night. Diplomacy effected what force was found unequal to, and the remnant of the tribe was persuaded to surrender and was deported to an island in Bass Strait. It seems that a man and two boys were left behind, for, about three years subsequently, two shepherds, unarmed, and dreading no danger, were attacked and wounded by three half starved wretches, a man and two boys, who had not strength to effect their purpose, and who were soon added to the community of Flinders island. They had remained concealed in the thick brushes near Circular Head until an opportunity occurred, as they thought, of gratifying their hatred against the intruders.

The following succinct account of the Van Diemen's Land natives is from the narrative of the voyage of Marion, the second European visitor to Van Diemen's Land, Abel Tasman being the first. "These people were of the common stature, of a black colour, and

† As quoted by Flinders in his "Voyage to Terra Australis."

were all naked, both men and women; and some of the latter had children fastened to their backs with ropes made of rushes. All the men were armed with pointed sticks (spears) and with stones which appeared to have been sharpened in the manner of axe heads. They had, in general, small eyes, and the white duller than in Europeans; the mouth very wide, the teeth white, and flat noses. The hair, which resembled the wool of Caffrees, was separated into shreds, and powdered with red ochre. They were generally slender, tolerably well made, kept their shoulders back, and upon their prominent chests, several had marks raised in the skin. Their language appeared harsh; the words seeming to be drawn from the bottom of the throat."

The Papuan character of the hair, in which they differ from the Australians, is distinctly noticed by several writers; more especially by Captain Bligh and by Captain Cook's intelligent surgeon and naturalist Mr Anderson. The latter not inaptly compares it with the tuftlike hair of the Hottentots of South Africa, to which indeed it bears a perfect resemblance. Some other travellers have evidently supposed this singularity to have been the result of some artificial process, not being aware that any race on earth possessed hair of so peculiar a nature.

[I do not consider it necessary to enter into any details respecting the Australians at present, for after a long experience of that continent which included prolonged residence on the north, south, east, and west coasts, during which my attention has been particularly directed to the native races, I have never been able to detect a single tribe of pure Papuans, and the only traveller that I have ever known describe a people who might be supposed to be such, is the celebrated Dampier, who speaks of meeting a people with woolly hair on the northwest coast. The tribe which now inhabits that particular spot resembles the people encountered by Dampier in everything but this. It seems improbable that so great a change should have occurred in so comparatively short a period, but it is certainly not impossible. Melville Island, which is separated from the north coast of Australia by a strait only a few miles wide is inhabited by a people of pure or nearly pure Papuan origin, who are looked upon as foreigners by the natives of the opposite coast of Australia, with whom they have little communication, and that little is invariably hostile.]

In a northwest direction from New Guinea, the Papuan race extends through the Moluccas, the Philippines and possibly to Borneo (Note B) but in these islands they only appear in small and scattered tribes occupants of the mountain fastnesses. The small islands which extend from New Guinea to Timor, with the exception of the Arru islands, are occupied by Malayu-Polynesians of the most decided character, but at Timor, especially near the north—east end, a race evidently of Papuan origin again appears, but never, as far as I have been able to ascertain after strict enquiry, in an

absolutely pure state. These tribes are much oppressed by the Malayu-Polynesians who occupy the table land of the interior; and the slaves which are brought down to the settlements on the coast, and were formerly exported to Macao and other places, were chiefly of this race, which has led to very erroneous impressions with regard to the nature of the inhabitants of Timor on the part of those who have only met them at Macao, where the Negro character naturally prevails among them. Some tribes on the great island of Flores or Mang'arai assume a more decided Papuan character, and there is said to be also a tribe of these people in the neighbourhood of the Timboro mountain on Sambawa; but beyond this they disappear, and are not encountered again until we meet them on the Malayan Peninsula under the name of Semangs, occupying some mountain tracts in the states of Kidah, Perah, and Kalantan. The Andaman islands in the Bay of Bengal are occupied by a people of most decided Papuan character, who bear, indeed, a very striking resemblance to the natives of Van Diemen's Land (Note C.) Hence they can be traced no further, unless the analogy recently discovered by Mr Norris, the Assistant Secretary of the Royal Asiatic Society, between the Tamul language of the Coromandel coast and some of the Australian dialects may lead to the establishment of an affinity between the nations that use them. But this is a subject more peculiarly the province of Indian ethnologists, and they may probably find their labours lightened by having the leading characteristics of the Papuans and Australians more clearly defined.

As the Papuans have no records, and no traditions but those of a most vague description, the mystery which hangs over their origin can only be dissipated by analogy drawn from the circumstances in which we find them placed. Of one thing there can be no doubt, namely, that all the negro tribes to the eastward of the continent of Asia, belong to one and the same race. This is proved by the almost perfect identity that exists between all those tribes however remote from each other, which have not had opportunities of deriving improvements from more civilized neighbours; and where this has occurred, in New Guinea and the adjacent islands of the Pacific for example, their *personal* characteristics are still maintained in the utmost purity. With the solitary exception of the Fiji Islands, every spot on which the race is now known to exist, can be reached from the continent of Asia by passing from island to island without being under the necessity of going out of sight of land. An inspection of a chart on a large scale of the Indian Archipelago and the Pacific, will render this point sufficiently palpable to the reader. This would go to prove two things; first, that if they migrated from any continent it must have been from that of Asia; and secondly, that they must have been unprovided with vessels fit to encounter voyages of even a few days duration, in fact they would appear to have been in

precisely the same condition as the natives of Van Diemen's Land, Melville Island and the S. W. part of New Guinea, of the present day, deriving their chief subsistence from the shores of the sea, where those who subsist solely on the productions of nature can provide themselves better than in the dense forests of the interior. The Papuans everywhere delight in dwelling on the coast, although not a decidedly maritime people; while the superior tribes of Malayu-Polynesians, as I shall have occasion to notice presently, delight in occupying the table-lands of the interior, where their knowledge of agriculture enables them to obtain an abundant subsistence. The propensity to migrate is as great in persons living on the sea shores without fixed habitations as in wandering pastoral tribes, especially if, as was probably the case in this instance, they were urged by a pressure from behind, caused by the advance of a superior race on the continent of Asia. This propensity may be witnessed in full force at the present day on the northern coasts of Australia, where the natives take great delight in wandering in families along the margins of the sea, spearing the fish, and often the turtle, as they go, and generally accomplishing eight or ten miles a day. When they wish to visit one of the islands lying off the coast, or to cross a wide river or an arm of the sea, half an hour suffices to strip the bark off the curved stem of a tree in one single sheet, and, by tying up the two ends and spreading the centre out with sticks, to convert it into a boat sufficiently commodious to transport the family across the piece of the water; or, where this material is not to be procured, a raft of the stems of the pandanus palm is made to answer the same purpose. What people could be more adapted for migration than one that cared not for more shelter than the sky afforded, carried all their domestic gear on their backs without inconvenience, and were always tempted onwards by the superior abundance of the productions of nature which untrodden shores afforded? What a paradise must Australia have appeared to such a people, with its sandy bays teeming with fish, and its open interior abounding in herds of kangaroos as yet unaware of the danger which the presence of man placed them in!

NOTES.

(A)

The Dutch corvette *Triton*, in the course of her examination of the S. W. coast of New Guinea, in search of a spot on which to found a settlement, entered an inlet near Cape Valsche which has since proved to be a strait. A party of natives was seen upon the beach, apparently inviting an interview, and an armed boat, containing several officers, among whom was Lieutenant Modera, was sent on shore to communicate with them. The following is Mr Modera's account of the interview. "When the boat had reached to within a musket shot's distance from them, the natives, who were armed with bows, arrows, and lances, commenced making a number of singular gestures with their arms and legs. The Ceramese interpreter called out to them in a language composed partly of Ceramese and partly of a dialect spoken by a tribe which dwelt more to the north, but which was evidently quite unintelligible to them, for they answered only by loud and wild yells. We

endeavoured for a long time without success, to induce them to lay aside their weapons, but at length one of them was prevailed on to do so, and the others followed his example, on which we also laid down our arms, keeping them, however, at hand. We now slowly approached each other, and the interpreter, dipping his hand into the water sprinkled some over the crown of his head as a sign of peace.* This they seemed to understand, for two of them immediately did the same, on which the interpreter jumped into the shallow water, and approached them with some looking glasses and strings of beads, which were received with loud laughter and yells. They now began dancing in the water, making the interpreter join, and the party was soon increased by other natives from the woods, who were attracted by the presents. One of the officers also jumped into the water and joined in the dance, and they soon became so friendly as to come close around the boat."—(*Moderà*. p. 25.)

This state of affairs, however, did not last long. The natives were detected secretly dragging the boat to the beach, and on being prevented from doing so, they shot a flight of arrows into the boat, and wounded two of the crew, who retaliated by a discharge of musketry which killed or wounded three of the natives.

Those who are acquainted with the character of the Papuans will see in this the usual results of first interviews with the more uncivilized tribes, but they will scarcely be prepared for what follows. "In the afternoon of the same day at the time of high water, three of the naturalists went in a boat well armed to the same spot, where they found the trees full of natives of both sexes, who sprang from branch to branch, with their weapons on their backs, like monkeys, making the same gestures, and screaming and laughing as in the morning, and no offers of presents could induce them to come down from the trees to renew the intercourse. This singular scene was also witnessed by those on board by means of their telescopes."—*Moderà* p. 32. Such ape-like agility on the part of any members of the human family would be scarcely credible, had we not so many proofs of how readily man adapts himself to the circumstances in which he is placed. The immense mangrove jungles which line this part of the coast could scarcely be traversed except by climbing from branch to branch. A similar facility in ascending trees, and moving among their branches, is found among the natives of Melville Island on the north coast of Australia, who bear a striking resemblance in many particulars to this New Guinea tribe. During the period in which this island was occupied by a British garrison, many of the men were killed or wounded by spears thrown from the trees, where the natives appeared to use their weapons with as great facility as on terra firma.

The New Guinea tribe abovementioned seems to possess all the general characteristics of the Papuans. "Their stature is the middle size and they are by no means strongly built. Their skin is black, but not very deep in colour, and with a blueish tinge. The lips are pretty thick and the nose somewhat flat. * * * The hair of the head is frizzled, like that of the African negroes, and pitch black in colour. * * * The beard and whiskers are allowed to grow; the first is crisp (*hort gekruid*) like that of the head."—(*Moderà*. p. 30.)

The natives of the Utanata River, about 100 miles to the northward of the tribe just alluded to, are the finest looking men of all the people of the west coast of New Guinea. The river whose banks they occupy, is the southernmost limit of the adventurous voyages of the traders from Celebes. "These men are above the middle size, and many among them may be called large men. They are stout and well made. Their colour is a dark brown, with, sometimes, a bluish tinge. * * * They have dark and small eyes, a flabby, drooping nose, the septum of which is usually bored and an ornament of wood, bone, or hog's tusk worn therein. The mouth is large and provided with very white teeth, which are sometimes filed to points. The lips are tolerably thick. Their features bear considerable resemblance to those of the Africans, a character which they possess in common with the tribe previously described, but the expression is by no means so bad and repulsive as is the case with the latter. * * * Some of them have marks on the body, especially on the arms, breast and belly. These, they informed us, were made by cutting the flesh with sharp stones and then burning the wound, which causes the flesh, when the cicatrice is formed, to stand out in relief in weals the thickness of the finger."—*Moderà*. p. 74 and 75.

* This seems to be generally used as a sign of peace among the Papuans of the coasts. Captain Cook found it to be in use among the natives of Mallicolo. See *Cook's Voyages*, IV p. 92.

(B)

The island of Borneo has hitherto been considered as free from tribes of the Papuan race, and I have myself expressed an opinion to that effect, although I had heard their presence asserted by individuals whom I had met with on the western coast of that island. I have subsequently had reason to modify that opinion. In the early part of the year 1845, I happened to be a fellow passenger in a ship bound from Singapore to England with a Captain Brownrigg, whose ship, the Premier, had been wrecked during the previous year near the northeast coast of Borneo, and who had resided for several months at a town some distance up the Brau or Buru River. I learned from him that during his residence there the town was visited by a small party of people from the interior, who came down purposely to see the Europeans, and who must have been of the Papuan race. He described them also as being a short but strongly built people, black in complexion, with hair so short and curly that the head appeared to be covered with little knobs like peas; and with many raised scarifications over the breast and shoulders. He described them as being on good terms with the people of the town, who were mostly Bugis, and as supplying them occasionally with the produce of the forests. The fact of their existence or non-existence is a point of no great importance, and as our knowledge of the northern parts of Borneo is daily increasing, I have no doubt that it will soon be cleared up.

(C)

Although the Andaman Islands lie in the direct track of ships navigating the eastern side of the Bay of Bengal, and were once actually occupied by a British establishment, the natives are scarcely better known now than they were during the earlier period of our intercourse with India. This is to be attributed to that feeling of hostility and aversion towards strangers which they possess in common with all the wilder Papuan tribes. Having learned by experience that they are utterly unfit to contend with the strangers who occasionally visit or are thrown upon their shores, they usually, or, I may say, invariably, avoid all intercourse, and even the members of our establishments there only came into close contact with those individuals who had been taken captive in hostile encounters, or had been found in the woods or on the strand in a state of exhaustion from famine. A very full account of such particulars as could be acquired concerning them, will be found in one of the earlier volumes of the "Asiatic Researches," and also in Colonel Symes' Embassy to Ava. Their limbs are spare and ill proportioned, their bellies protuberant, the complexion black and the hair woolly. They have also a taste, so characteristic of the wilder Papuans, for daubing their heads with red ochre. They have canoes, but use small rafts when they wish to visit the islets. Both sexes go entirely naked, for the pieces of of fringe that they wear about them are rather intended for ornament than as a covering. They obtain fish by descending to the shore at low water and spearing those that are left among the reefs by the receding tide; or by catching them with small hand-nets, and depositing them in long wicker baskets which they carry slung from their shoulders. All these are characteristics of the wilder coast Papuans, especially those of Van Diemen's Land, to whom indeed the Andamaners bear a resemblance so striking as to excite surprise that two tribes who must have been separated during many ages, and who reside in climates so different, should be distinguished by precisely the same characteristics. The only point of difference that can be detected, consists in the knowledge on the part of the Andamaners of the use of the bow and arrow, which was either never known to the Van Diemen's Land natives or has been neglected in favour of the dart or throwing spear, which is far better adapted to the open nature of their country. Many improbable stories, among others the usual one of a wrecked slave-vessel, have been invented to account for the singularity of a negro race existing on an island near the eastern shores of the Bay of Bengal, but at that time it was not so generally known as it is at present how far and wide this race had spread over the remote East.

[The writer had originally intended to give short descriptions of each tribe of Papuans wherever found, but as this would have occupied much space with matter the greater portion of which could be obtained from other sources, he will content himself with merely referring to the works from which the best information concerning each particular tribe can be obtained. The best and fullest account of the Fijians is found in Lieutenant Wilkes' narrative of the United State Exploring Expedition. An immense deal of valuable matter concerning the inhabitants of Van Diemen's Land, the New Hebrides, New Caledonia, in fact of all the islands of the Pacific with the exception of the Fijis and Samoas, is contained in Cook's

voyages which is quite a text book for the ethnologist in Polynesia. For details respecting the north coast of New Guinea, see Duperry and D'Urville the French voyagers; and Captain Blackwood, of H. M. Surveying ship *Fly*, gives the fullest account of the natives of Torres Strait and of the south part of New Guinea. A recent work by a French gentleman, M. Mallet, gives many details respecting the *negritos* of the Philippines, but further information concerning them is very much wanted, and as a spirit of enquiry respecting the native races seems to have arisen at Manila, we may soon expect to see some valuable details concerning them. No great amount of information concerning the Papuans of Flores or Sumbawa, has ever, as far as I am aware, been published. The Semangs of the Malay Peninsula have been shortly described by Raffles, Crawford and Marsden, and their accounts have been sufficient to decide, at all events, their negro character. Some further information concerning these people is very much required.]

AN ACCOUNT OF THE ORIGIN AND PROGRESS OF THE BRITISH
COLONIES IN THE STRAITS OF MALACCA.*

By Lieut.-Col. JAMES LOW, C. M. R. A. S. & M. A. S. C.

20th April 1800. From this date commences the regular Government of Prince of Wales Island (*a*) or Pinang, by which last and native name, it is now most generally known. The Earl of Mornington, then Governor-General, appointed Sir George Leith to be Lieutenant-Governor and Commander-in-chief with Mr Phillips as his Secretary, Mr Caunter first Assistant, and Mr Dickens, a barrister, as Judge. The Governor's salary was 2,000 Sicca Rupees per month and table allowance. The Secretary had 1,000 per month. Up to the above date there appears to have been hardly any intercourse between Penang and the Tenasserim Coast. This last was frequented by French privateers and frigates for the purpose of refitting. Besides, as the commanders of these vessels were not molested on that coast by the British men-of-war, they found it very convenient to carry into Mergui, which has a sheltered and secluded harbour, such prizes as they made in the Bay of Bengal. The whole of that coast had been for centuries alternately in possession of the Burmans and the Siamese—and the former although they were at the period adverted to, in possession of it, did not feel their position perfectly secure. The Myoowoon of Mergui very soon justly appreciated the new political position of the British to the Eastward, and sagaciously, but ignorantly, endeavoured to penetrate into their ulterior views, by offering to put them in possession of Keddah and the Lancavy Islands if it was desired (*b*). This absurd offer would not, we may suppose, have been made, had that chief reflected or been aware, that the British Government must have felt rather surprised that His Excellency had not exerted the power he *professed* to have, for the securing of the proffered country for his own master the Burman Emperor.

It was declared or rather suggested by the Government that the laws of the different people and tribes inhabiting Penang—tempered by such parts of the British law as are of universal application, being founded on the principles of natural justice, should constitute the rule of decision in the Courts of suits &c. Mr Dickens was appointed (and the first) Judge and Magistrate.

In his public Report he advances that as Penang or Prince of Wales Island had been first peopled under the flag of the British East India Company, he apprehended it to be a colony planted by British subjects, and that it seemed to be the only establishment

* Continued from vol. iii. p. 617.

(*a*) Pinang (*long* Italian *l*) was originally and is now the native name of the island. Penang is the most common mode of pronouncing the word.

(*b*) The Lancavy Islands lie off the Coast of Keddah.

belonging to the Company in the East Indies which could be properly called a British Colony—since there were no aboriginal possessors of the soil, and as in no other place in India could Britons hold property in the soil which they cultivated. But he added that these maxims were then rather inapplicable, owing to the power which had been delegated to the Governor-General of India over existing governments, or those which should be established, within the limits of the exclusive trade of the Company. He afterwards qualified these remarks by observing that when the island was ceded, it was neither a *desert* nor vacant. There were indeed a few fishermen upon it at the cession.

15th July 1800. At this period Sir George Leith without any lengthened negotiations, purchased from the new Rajah of Keddah for the sum of two thousand Spanish dollars, that tract of land on the Peninsula opposite to and outflanking Penang, which has since been called Province Wellesley. It was accordingly taken possession of and the British colours were hoisted in it on the 7th day of the above month; it was then termed Point Wellesley. Both of these names had been successively given to it in honor of the Marquess Wellesley.

This tract was then almost entirely clothed with dense jungle, and had a scanty population of two or three thousand persons, scattered over its area of about 150 square miles, including islands and rivers. The chief objects proposed in obtaining this cession were—to check the resort of pirates to the harbour of Pinang, by the outflanking positions it afforded, to render the island in time independent for provisions of Keddah, by encouraging cultivation, and to open, with advertence at the same time to this last advantage, a sanctuary to the oppressed Malays and other people in the vicinity, to prevent criminals easily escaping from justice, and to debar any rival port being formed on it to the detriment of the island and its trade.

It is much to be regretted that more attention was not paid at the time to the localities of this coast. Territory it is true was not here a greater object than it now is; but a more compact tract might have been easily got, and would have saved a great deal of after trouble, arising from the irregularity of the Eastern frontier. This last should have been the natural one formed by the mountains of Perak on the east, and the north and south boundaries might have been defined by right lines drawn from the coast at Krian and the Keddah Peak respectively, up to these mountains.

The new treaty which was entered into with the Rajah embraced the same articles as those which were contained in the preceding treaties, and the Rajah was to receive 10,000 dollars per annum so long as he was de facto the ruler of Keddah. This treaty was superseded by the treaty of Bankok and by the Rajah's losing his government. But his son now receives it although he is a mere governor appointed by the Court of Bankok over a fourth part of the Keddah country.

1801. A ship, the first that had been built at Penang, was launched this year. She was of 800 tons burthen. It is probable that she was built of teak from Pegu. It was not however found advantageous to continue the building of vessels here.

1802. A large supply of nutmeg and clove plants arrived this year in Penang from the Molucca islands. There were 71,266 nutmeg and 55,264 clove plants. Allowing one-half of the former for male trees, there would only have been 35,633 useful nutmeg plants. It is believed that a mere fraction only of these ever reached maturity, but they served to introduce the cultivation permanently. Plants were likewise sent to Ceylon and Cape Comorin. It does not appear that the climates of these two localities suit the nutmeg tree as it requires rain or at least a very damp climate *throughout* the year. The Company's Spice plantations were sold in 1824 and the trees were thus dispersed over the Island.

13th January 1802. Mr Phillips took charge of the island, Sir G. Leith having gone to Bengal, and the latter resumed charge in May following.

On the 5th January 1804 Mr R. T. Farquhar became Lieutenant Governor. Mr Phillips acted from July following till March 1805.

18th February 1804. Admiral Linois in this year attacked a fleet of Indiamen in these seas. He had an 80 gun ship, two frigates, a corvette, and an 18 gun brig. Captain Dance in charge of the Indiamen, which of course were well-armed in those days, bore down upon the enemy with his ships in succession, fired 18 rounds from the Royal George, and the next two vessels half as many as they came up. The Admiral then bore away and was chased by the Indiamen for some distance.

The Governor-General of India at this period pronounced it to be a duty imposed on the British Government in India, where considerable expense should not be involved, to facilitate and promote all inquiries which might be calculated to enlarge the boundaries of general science. Dr Buchanan was accordingly appointed to collect, digest and publish scientific information.

1804-5. The building of the Fort and Fort Moon battery at Penang cost 71,809 Spanish dollars.

1805-6. The Penang Revenue from farms on luxuries amounted to 74,640 dollars.

To these were added—

Betel leaf (a necessary of life to the natives)	5,400
Pork.....	2,580
Oil and ghee.....	5,400
Shop tax.....	799
Timber.....	8,040
Fees on sales.....	555
Anchorage ditto.....	1,629

Ditto on prows.....	549
Artap leaves for roofing.....	2,500
Exports	35,520
	62,072
	136,712

With quit-rents the ordinary revenue was about 142,000 dollars.

And the disbursements ordinary..... 144,000 „

1805. The first regular Police establishment was formed in this year at Penang, also a Court of Requests.

19th September 1805. The Court of Directors of the E. I. Company in this year, having considered that the growth of the *Colony* of Penang was greatly impeded for want of a regular government, appointed Mr Dundas to be their Governor and Commander-in-Chief at Penang. Malacca was directed to be abandoned. The new establishment consisted, besides the Governor and two Members of Council, and Commandant, of 27 functionaries, ten being writers.

4th October 1805. The Supreme Government approved of the destruction of the Malacca fort.

19th Sept. 1805. Mr Dundas became the Governor in this year, and was succeeded by Mr H. S. Pearson in 1807.

It was in contemplation to build docks and construct ships at Penang, and a Steam Engine was sent from England for the docks, but as teak could not be found nearer than Pegu the project was abandoned. It was found that a seventy-four gun frigate could not be built at Bombay under a cost of 3,836,210 rupees (*a*) and could be better and more cheaply built at Pegu.

The forests of Penang and the adjacent coast furnish many sorts of timber yielding trees; (*b*) but however durable and fitting some of these are for house building, furniture and other common purposes, few or none seem adapted for the building of large vessels. The internal taxes of Malacca yielded this year.... Sp. Drs. 70,840
The Pinang ditto revenue.... „ 146,760
Total revenue.... „ 219,367

1806. The landed property of Malacca was realised at this period by Col. Farquhar at Drs 337,918.

18th Feby. 1807. The first Recorder of Penang, Sir George Stanley, was appointed and arrived in this year.

May 1808. About this period the Viceroy of Rangoon applied to the Governor of Penang for as many sepoy's jackets as could be procured. This freak was reported to have been owing to the partiality of the heir apparent for the English.

16th Oct. 1807. In this year Col. N. Macalister superseded Mr Pearson as chief on the island. The India vessels took from

(*a*) It would seem that there is an error in these figures, perhaps the cypher should be struck off.

(*b*) Described in "Low's Dissertation on Penang and Province Wellesley."

Penang to China produce to the value of 300,000 dollars.

29th Jany. 1808. Sir Edward Pellew apprized the Penang government that he had destroyed a Dutch fleet consisting of the Resolute of 70 guns, the Pluto of 70, a hulk of 68 guns and an Indiaman of 1,000 tons burden, off the eastern extremity of Java.

1807-8. The established receipts of revenue for this year at Pinang were..... Drs 362,800
Disbursements..... „ 386,644

Malacca fort was at length destroyed. This was doubtless directed under the impression that the station would be forever abandoned. Under any other view it was an unnecessary sacrifice. It cost 10,241 dollars to level it and its inclosed public offices to the ground.

Convicts had not long before this period been sent periodically to Penang from India. They were indeed of great service in making roads and in other public works; but it is to be suspected that the morals of the inhabitants, with whom they were allowed too freely to mingle, were seriously contaminated by them.

March 1808. A fire which broke out in the shop of Amie, the Chinese baker, consumed property within a sweep of 250 yards of the fort, estimated at drs 534,750, a pretty fair sample of the prosperity of the settlers.

In this year the pressure of the Indian finances induced Lord Minto to appoint a committee for revising all establishments. India with a revenue then of 15 millions sterling, could not meet the charges, while the debt of the country was above 30 millions sterling.

1808-9. The expences of Malacca were in this year 79,897 dollars.

Mr Phillips carried through the measure of emancipating all government slaves, and gradually freeing private slaves,—measures emanating from a humane and enlightened feeling in advance rather of the age.

The produce yearly of Pepper grown on Penang was 25,000 piculs. At present (1848) hardly any is cultivated.

The revenue derived this year from luxuries and a few other trifling dues was Sp. drs. 123,420.

11th May 1809. The Recorder Sir E. Stanley pronounced that *all Justices of the Peace and other Courts* have a power by the *Charter of adjourning and sitting in the different districts occasionally*, so that justice should be administered to the people at their own doors, without being drawn to the Supreme Court unless in cases of moment. If always acted upon this would indeed be a boon to the population.

October 1809. H. M. S. Piedmontese unfortunately mistook a fleet of Bugis merchant prahus bound to Penang, for pirates and attacked them with its boats, but after a smart action they were forced to retire with the loss of two men killed and 20 wounded. The Bugis put back and returned to Borneo. This is not the only

melancholy and untoward event of the kind which has happened, and it shews the necessity for boats which are to be sent after pirates being supplied with interpreters and men acquainted with the build and equipment of native vessels.

March 1810. Mr C. Bruce became Governor.

Dec. 1810. Mr Phillips acted after him.

June 1810. Lord Minto reached Penang with part of the force destined to capture Java. This was the first time that the advantages of the new position as a mere post became practically apparent in a political point of view. The expedition to China has been the second occasion, but not to the extent which it would have been had Singapore not been established.

In January 1810; Vaccination was tried for the third time on the island. It had before failed in a great measure which was owing to the virus being effete or from other cause; 286 persons were now vaccinated, and with 37 of these the virus failed. In the number of persons vaccinated from every class of the community, 123 were Mahometans.

The revised list of this year for the expenditure in establishments shewed a saving yearly of Spanish Dollars 72,465. 96.

The native population in this year was 24,424 persons.

The British expedition for the capture of the Moluccas and Banda took place in this year.

9th May 1811. Mr Seaton became Governor.

12th Dec. do. Mr Phillip again acted—until Mr S. resumed charge in January 1812. Mr Phillip again acted in July 1812.

January 1811. The Rajah of Keddah—who had at length professed to Mr Bruce the Governor, that it had been the custom of Keddah from time immemorial to send tribute to Siam—but had forgotten to specify at the same time the other acts of subserviency to that state to which he and his ancestors were bound—was called upon by the Siamese to furnish a contingent of one hundred perfectly equipped and armed boats to assist them against the Burmans. To all this the Rajah submitted. Scarcely had the Rajah sent notice of this demand to the Governor of Penang and requested a loan of money, when an Embassy arrived at Keddah from the Emperor of Ava—conveying a letter. It was in this letter stated that the Rajahs of Purlis and Keddah had been accustomed to pay him homage, and that these countries were considered by him as dependencies of Ava. He did not follow out this reasoning by claiming homage also from Penang, but he modestly requested on reaching that island, that the English would assist the Rajah of Keddah against the Siamese. This bygame had, it was believed, been got up by the Rajah himself, for on its being lost, he tried to work on the Governor's fears by advising him to beware of the Siamese power.

The exports of Penang in this year were in value . . . 2,629,996

The imports.....	2,299,896
The duties on imports.....	37,496
do do do exports.....	55,872

28th Sept. 1812. In 1812 Mr Petrie was appointed Governor. Shortly after his arrival the naval station at Penang was broken up.—In the same month (29th July) a fire destroyed property in the town estimated at five lacs of dollars, pretty clear proof that trade had been prospering there.

The duties for this year from Exports and Imports amounted to 449,600. 36½ or Spanish Dollars 74,933 the average of the five preceding years being Drs 75,000. The Opium purchased in this year by Penang Merchants amounted to 1,524 chests.

A curious case occurred in Court about this period. The Recorder (a) imprisoned in the Jail Captain Cookson of the B. Bengal Artillery, because he had taken out probate of a will of a deceased resident in which the Recorder said, there were libellous reflections upon himself. As in the subsequent case of Seyed Hussein he afterward proceeded to the jail and released the prisoner himself. It curiously enough happened that during the ensuing night the roof of the jail gave way killing, it is reported, several persons. This seems to have been rather an arbitrary mode of proceeding for an English Judge, and not likely to be taken as a precedent by his successors.

July, 1813. The Naval Station which had hitherto been kept up at Penang was abandoned in 1813.

In 1798 it had been proposed to establish a British station at Achin. Attempts had been made in 1782 and 1784 to form Commercial Residencies there but the last were of short duration. Again in 1805 the Court of Directors called the attention of the Penang Governor to this subject. The anarchy however which then prevailed in Achin prevented any decisive measures being adopted to gain a footing there.

26th Aug. 1813. The Governor, Mr Petrie, recorded his opinion of the necessity of interference to check the piratical conduct of the Achinese Government towards British subjects trading to his Country—and Captain Rodney of the *Africaine* was despatched to demand restitution of a vessel and crew which had been seized. At this time a British subject of the name of Fenwick was virtually Prime Minister of Achin. He availed himself of his position to monopolize the trade of the country. The vessel was received—the Rajah excusing himself on the plea that she had been smuggling, a not improbable charge. The king now shut his ports and, complained to the Supreme Government, and Captain Canning was deputed to arrange the mercantile interests of the British at Achin. It was resolved not to acknowledge the right the Rajah claimed to impose laws on parts of the

(a) Sir E. Stanley.

coast not actually under his authority and that any molestation which British traders might sustain by him beyond his jurisdiction, should be punished as an act of hostility. The king complained of the style adopted by the Penang government in addressing him as they had said his Courts of Justice were influenced by rogues and vagabonds, and that he should be sorry that a peace observed since the days of Sir John Lancaster should be interrupted.

The king influenced by Fenwick refused to see Captain Canning and then by means of a nominal sale of one of his brigs to Messrs Dunbar & Co., of Penang, he hoped to be able to put her under English colours; when she was to have been sent as if by order of Captain Canning to the districts beyond his influence, in order to seize their chiefs.

Acting under the same evil influence the king wrote to the Supreme government accusing Mr Canning of trying to excite rebellion in his country, and that if English vessels did not chuse to obey his laws they might stay away as their commerce was not wanted!—Seyed Hussain, a wealthy merchant of Penang, a grandson of the legitimate and former king of Achin, proposed to set up his son as king there, but was dissuaded from the attempt. Fenwick found it necessary at this time to quit Achin.

22nd Nov. 1815. The Sagis or oligarchy rather of Achin, now deposed the king and set up Syful Alum Shah in his stead and on the grounds of his oppressions and of his not being of the pure Royal stock of Achin.

1813. The Siamese obliged the Rajah of Keddah in this year to attack the State of Perak, which then, as it now does, bounded Province Wellesley on the south. This was an unprincipled and unprovoked aggression. The Keddah forces evacuated the country soon after, but not before they had inflicted on it the miseries of demibarbarian warfare.

25th February 1814. The Governor General deprecated the undesirable consequences likely to result from the extension of Siamese power to the vicinity of Malacca, but as the invading force had retreated no mediation as contemplated became necessary. Yet the Keddah Rajah before his invasion of Perak had received from the Penang Government one hundred muskets and twenty barrels of gunpowder, and probably on some false plea, for the independence of Perak had all along been desiderated. The Perak Rajah quite unaware of the aid thus untowardly given to his enemy, addressed a letter to the chief authority at Penang which exhibited the profound ignorance which has ever characterized the rulers of that pretty state. He only asked for two ships of war and two thousand troops one half of these last to be Europeans (100 being perhaps the utmost strength of the latter at the time in the island.) "I am," wrote this potentate over twenty thousand subjects "he who holds the royal sword and the dragon betel stand and the shell which came out of the sea which flowed from the Hill

of Se Guntang." He offered at the same time the Dinding islands to the British for nothing and the *monopoly of all the tin and rattans in Perak for the yearly sum of two thousand dollars*, also elephants in exchange for gunpowder, at the rate of 60 dollars for each of the height of six feet, and 600 to 900 dollars for those of the largest size. These requests and offers were not attended to, although some of them were very advantageous. But the Supreme Government afterwards sanctioned the occupation of the Dinding islands. This however never took place. The Rajah's offer of the tin monopoly would seem to argue an undervaluation of the produce of his country, for at the rate of duty of 6 dollars the Bahar which he then enforced the total produce was only 333 bahars whereas the country yielded or has twice yielded a much large quantity annually.

1814 15. The decrease of the revenue for this past year was dollars 16,036.

1816. The deficit in the revenue forms for this year was dollars 7,368.

The value of imports and exports duties was dollars 119,156-64.

The Rajah was, somewhat unaccountably it should seem, advised by the Penang government to pay a tribute to the emperor of Siam to keep him quiet. But he very properly and spiritedly replied that he would not now begin a practice which had never obtained with his predecessors.

27th October 1816. Mr Phillips acted on the death of Mr Petrie. Sir E. Stanley, the Recorder of Penang, on his own authority and in opposition to the remonstrances of the local Government, seized and imprisoned Seyed Hussein on the charge of having excited a rebellion in *Achin*, and driven out its king! for having equipped a fleet with this object, in view of the Penang harbour, and for thus having committed piracy—i. e. having assisted in the change of Government in *Achin*. This very strange, unprecedented and injurious proceeding must have been considered afterwards by the Recorder as illegal, for he proceeded in person to the jail, and peremptorily ordered the jailer to release his prisoner, the Seyed!

Captain Canning after having represented that insult upon insult had been heaped upon him by the Achinese Government returned to Calcutta.

1819-20. Sir S. Raffles and Major Coombs were now appointed Commissioners to *Achin* to reinstate the ex-Rajah in the Government. It does not appear by what right the British Government interfered at all with the internal affairs of this country. The mission did reinstate him, but as he had no support from his subjects, who detested him, he held but a mere nominal authority from the moment that the mission left him. Thus closed any efficient British political intercourse with a country once famous in the history of the east; but which had at last become by misuse

and anarchy, the mere fraction of an empire with a demoralized population. To have gone further by supporting such a puppet on the throne, would have required a considerable military force, and a fixed garrison in Achin. The Supreme Government entirely disapproved of the partiality shewn by the Commissioner to this Prince after his conduct towards British subjects.

1816. The Rajah of Rumbau on the Peninsula, having been expelled by his chiefs took refuge in Malacca. The charges were characteristic. They were for making two sisters marry one man, for blowing a man from a gun on mere suspicion of a fault, for plundering a gun from a chief, and for betrothing his child without consulting his panghulus and other ordinary counsellors, proceedings, observed the chiefs, quite unprecedented.

The Rajah repels the first charge by saying that it was false, as one of the females in question was sister-in-law to his son, and on the death of her parents she was, agreeably to Malayan custom, taken into his house. The execution was admitted.

Certain Polygar rebels whose banishment from India had been effected by Colonel Bannerman, many years before, applied to be allowed to return. The request was not granted then, but afterwards when Colonel Bannerman arrived as Governor, he exerted himself and obtained the release of those who survived, now very old men.

August 1816. The population according to the census taken in 1816 was for the settlement of Penang 37,445, being an increase during the past year of 2,450. The population of Province Wellesley was about 4,000.

In 1817 Colonel J. A. Bannerman became Governor, a man of sterling character. The Siamese now for the first time opened a commercial negotiation, and offered to allow English vessels to trade either at Bangkok or at Ligor.

1818. Mr Phillips, 1st M. C., estimated the receipts and disbursements as follows :

Disbursements per annum.....	Drs 404,000
Local resources.....	192,000
	Less..
	212,000
Deduct charges belonging to Home Department and India.....	108,000
	<u>Drs 104,000</u>

It was not surprising then that the Court of Directors should have sent out Colonel Bannerman with the chief object of retrenching.

About this period the exports of tin fell from 21,000 to 14,000 piculs. Salangore gave an annual average of 700 bhars or 2,100 piculs at 45 dollars per picul. Patani 200 bhars. Perak in former days had yielded 2,000 bhars yearly.

24th September 1818. Malacca was at length restored to the Dutch, and under the express stipulation that Naning was its only dependency. This proviso seemed to be no restraint on the Dutch Colonial Government, for it soon after the cession forced the Rajas of Rhio and Lingin to admit Dutch troops into the former and their flag to fly in the latter. They hoisted their flag also at Pahang and Johore, where previously they had never been seen. They landed five hundred men at Rhio, and to leave the management, and we may of course suppose the profits of this trade in their hands. Thus they virtually commanded the southern or postern gate of the straits. The Dutch soon after tried this, to them, novel experiment of making Malacca a free port in order to draw off traders from Pinang and its Rajah was forced to surrender one-third of his revenues.

The fort of Malacca was demolished before it was delivered up to the Dutch, which would doubtless have been avoided had it been foreseen that it would ere long revert to the British. From a date extant it appeared that this fortress was built in 1743.

In 1819 the Dutch had tried to re-establish themselves on the island of Pankour, off the mouth of the Perak river, but were unsuccessful. They were equally so in their endeavour to controul Salangore.

October 1819. In this year the Asiatic cholera reached Penang and raged during six weeks. The number of deaths was estimated at not less than 1,200 persons. But a much higher computation would perhaps be nearer to the truth, as no correct register was kept nor deaths regularly reported. The Chinese too, after having in vain tried to propitiate their malignant Gods or demons by costly ceremonies and processions, were so ashamed of such ingratitude that they secretly threw their dead into the sea during the night. The disease has not returned to the Peninsula since that year, although a few cases have generally occurred on sudden changes of weather but it ravaged a considerable portion of the east coast of Sumatra from Achin southward about four or five years ago. In 1842-43 or about that period it prevailed for a brief period at Singapore proving very fatal in several confined localities, where the houses were mean and filthy, and the people living in them dirty in their habits. From two to three hundred persons died of this disease.

Reverting to affairs further north we find that the Burmese attacked in 1818 the Siamese dependency of Junk-Ceylon, but from which island they were shortly afterwards expelled with great slaughter. The Burman army consisted of 10,000 men (a.) The Siamese force it is believed was about equal to this, and the

(a) So the writer of these pages was informed by the ex-Myoowoon of Tavoy after the British conquest of that Province.

Keddah contingent was composed of one hundred boats manned by 2,500 men. The Malays of Keddah over-ran the Perak country.

1818. A finance committee was appointed, in order to try what support could be given to the revenue by local and other taxation, but it does not appear that any practical result was obtained.

1817-18. The Malacca revenue farms yielded in this year 20,170.

1818-19. The value of imports to Penang for this official year on which duties were levied was..... Drs 1,089,078 4

Ditto Exports..... 1,881,888

The average value of the whole trade for nine years preceding was about thirty-five lacs of rupees annually, of which Indian articles averaged Spanish dollars 349,000.

Before proceeding further it will be as well that we turn towards the southern extremity of the Straits.

1818. Sir Stamford Raffles commenced in 1818 those negotiations which ended in the British flag being permanently hoisted on the island of Singapore. Under ordinary circumstances a reference to England would have been indispensable;—but this able public man foresaw that before any reference to the home authorities could be replied to, the Dutch would have perfected their long cherished scheme, one which in fact they have partially accomplished afterwards, of repressing the British name and influence in the eyes of the Malayan states, and of monopolizing a very disproportionate share of the Eastern trade. He likewise justly argued that the Dutch could not fairly claim Singapore on the plea of prior engagements which they might have entered into with native princes before the transfer of Malacca to the British in 1795; because the Dutch authorities who transferred Malacca in that year, had declared that Rhio, Johor, Pahang and Lingin were not dependencies of Malacca, and that it was on the ground that Rhio was a dependency that the claim had now been set up. On the other hand engagements had been entered into by the English with the Rajah of Rhio, to retract from which would have been an acknowledgment of inferiority to the Dutch.

19th Jany. 1819. Sir Stamford Raffles therefore left Penang suddenly without waiting to discuss the subject with the government there—and on the 13th of February following he reported to the Supreme government that he had occupied Singapore.

Mr Timmerman Thyssen, the Dutch governor at Malacca, protested against this occupation, quoting for the first time apparently, twenty-three articles of a treaty betwixt the Dutch and the Rajah of Johor. It was also argued by him that the person who had now sanctioned the British occupation, was not the Sovereign of Lingin, of which territory Singapore was an appendage, or appen-
age, but an exiled brother of the Rajah, then reigning, and whose title the English had already acknowledged by treaty.

These assumptions were met by the facts that Singapore was then in the actual possession of this claimant to the Johor supremacy, and had not been mentioned in the treaties betwixt the Dutch and the native princes.

The preliminary treaties of the cession of Singapore by the above chief Sultan Heussain Shah to the British were dated respectively on the 6th February and 26th of June 1819, and a final treaty was concluded betwixt the same parties, Mr Crawford being the British agent, on the 2nd of August 1824. Major Farquhar was the officer who had been deputed by Sir S. Raffles to take possession of Singapore, and upon being informed by the Penang government that he would not be justified in resisting, should the Dutch attack his new position, his duty compelled him to reply that he could not relinquish possession unless under the most positive orders either of Sir S. Raffles or of the Supreme government. The Dutch did not attempt to molest the Settlement, although highly indignant at what they were pleased to consider an infringement upon their rights. The moderation and temper displayed by the British government on this occasion, contrasted favorably with the ambition and irritation of the then Dutch colonial government.

July 1819. The Supreme government of British India communicated to Baron Vander Capellen, Governor-General of the Netherlands possessions to the eastward, that a manifest necessity existed for counteracting the Dutch endeavours at absolute supremacy on the eastern seas, that the views of the British government had always been confined to the security of British commerce and the freedom of other nations; that it was held to be the case that the Dutch had no just claim founded on engagements which might have been made with native Princes before the transfer of Malacca in 1795; that their only right depended on the treaty concluded at Rhio on the 26th November 1818, but which was subsequent to the one entered into by Major Farquhar on the part of the British government with the government of Rhio, in the August preceding, as an independent state; that under this view the Dutch had adopted the most injurious and extraordinary proceeding, of making a treaty declaring that of the British to be null and void; and that the Dutch authorities who transferred Malacca in 1795 had declared that Rhio, Johore, Pahang and Lingin, through the first of which the Dutch claimed Singapore, were not dependencies of Malacca, and that if it should be found that the persons who signed the treaty of cession were the legitimate rulers of the country, then and in that case Singapore must be retained. It may be here remarked that the Sultan of Johore was formerly, and still considers himself, perhaps, the nominal superior of the Peninsular states.

Thus Singapore became a permanent British colony. The merchants of Penang at the same time sustained a severe blow by

the proximity of this new rival, because it denuded them of a portion of the monopoly, almost, of Straits trade they had before enjoyed. But it seems to have been foreseen by them that a fair competition would also be denied them; accordingly we find that while Singapore was boasting its almost unparalleled trading prosperity, its merchants forgot that they were for the time invincibly favored by their port having been made free, while unlucky Penang was up to 1827, groaning under the pressure of five per cent duties; under what principle one British entrepôt and its inhabitants should be depressed to bolster up another, remains to be explained by those who know the mechanism of the sub-political machine. Penang did indeed suffer greatly from it in her trade, and Singapore is in its turn now dividing its long enjoyed mercantile Straits supremacy as a free port, with its rivals, Labuan and Hongkong, and the northern open ports of China.

In 1795 Malacca had been ceded by the Dutch to the British, but previously to this act, the former had adopted the cautious and reserving policy of declaring all the native Malayan states which were then connected with them, to be *free* and *independent*. Thus had the British desired it, there was a fair opening for concluding commercial treaties with these states or of obtaining settlements in them, and this at any time betwixt the above date and August 1818, when Malacca was again restored to the Dutch. But an extreme apathy prevailed amongst British statesmen of the day on the subject of our relations with the Archipelago—and the fall of Java to our arms, seemed to give an earnest of future British supremacy over the whole of that extensive region. A vain anticipation;—if antient friendship or mere policy dictated the restoration of that fine acquisition to the Dutch, the British minister was bound in justice to the British merchant to have for ever debarred the Netherlands government from prosecuting its former grasping policy. The wide range of the Archipelago and its native states should have been declared independent, and its trade should have been pronounced free to all nations who should have been willing to reciprocate the boon.

But when Java was restored, without any useful reservation, to the Dutch, and the British were left in a very cramped and subordinate position, the absolute necessity of having such a station as Singapore was apparent, and it was fortunate that a man, and men, of spirit and decision were at hand to meet that necessity, although no Penang authority could have so adventured unless previously he had received orders from Bengal, as Sir Stamford Raffles had to a certain extent. The governor of Penang had in the meanwhile concluded treaties with the Rajahs of Johor, Perak, and Salangore, binding them to allow of no exclusive trade in their countries with any foreign power.

The governor wrote to the Rajah of Keddah proposing to negotiate for the cession by him to the British of the tract lying betwixt

the Muda river and Keddah Peak. But the Rajah replied that he had no power to do it, as the Keddah country belonged to Siam—thus directly contradicting the original assertion of the same Rajah that he was perfectly independent of Siam.

Upon the death of Colonel Bannerman in 1820 the first member of council, Mr Phillips, succeeded as acting governor and finally became governor. Mr Phillips at length entirely abolished slavery on the island.

Mr Ibbetson was now sent on a mission to the east coast of Sumatra—to improve British intercourse with the chiefs there—which was as successful as Dutch intrigue there and the unsettled state of that coast would admit of.

June 1820. Province Wellesley yielded considerable supplies of cattle and poultry and smaller articles of consumption for the Penang market, still the imports from Keddah were 1000 coyans of paddy, 60,000 fowls and 20,000 ducks, and cattle,—valued in the gross at dollars 80,000 per annum. The Province population was only 5,457 persons.

1820. A mission was despatched from Penang to Achin in 1820, under Mr Sartorius, to observe and report on the state of affairs in the latter country. The Rajah of Keddah having given great outrage to the court of Bankok by delaying to forward the usual tribute, and to comply with other customary payments and marks of vassalage, and by exhibiting other signs of contumacy, that court resolved to deprive him of his delegated government. Although warned by Mr Phillips that he would be attacked, he made no preparations for defence—and it should seem that he was afraid to appeal to the Malays for their support, being well aware that his tyrannical rule had alienated their minds from him.

1820. In support of the system of duties, it was argued by Mr Phillips, that it could hardly be said that commerce at the port of Penang was cramped by duties when it was found that a trade valued at Spanish dollars 2,660,558 annually, only yielded per annum the sum of 98,598 dollars or 2, $\frac{3}{8}$ per cent on the aggregate, the highest rate having been 5 per cent on vessels sailing under the British flag.

There are even at the present day it is believed (1848), persons who think that a small duty would not injure the trade of the port. This might perhaps be true, in regard to native craft coming from those ports which are considerably closer to Penang than to any Dutch or British port which has been pronounced free.

(To be continued.)

Colonel Low has sent us the following memorandum with reference to our note at the foot of the first part of this paper, Vol. III p. 617.

Memorandum.—Mr Anderson the gentleman alluded to in the note, was Secretary to the Penang government. He advocated the independence of Keddah of the Siamese—which was a political view of the case quite at variance with the

views of the Supreme government of India---and although the Local government of Penang did not prevent his publishing the pamphlet, supposing that he would not uphold the Rajah of Keddah against his Liege Lord as it was admitted by the Supreme government that the Emperor of Siam was, yet when the Local government became aware of the side taken by Mr Anderson it instantly directed him to suppress the pamphlet. That all the native public of Penang were in favor of Keddah can excite no surprise, as the bulk of the people was composed of Malays and Chinese whose feelings and interests were closely connected with Keddah. Many of the Europeans from motives of humanity were doubtless also in favor of Keddah---but none of these cases can be deemed as any evidence or proof of the political question in either way, as to the Rajah's claims or rights.

Penang, 9th December, 1849.

J. Low.

We shall not enter into any controversy with our esteemed contributor. In saying that public opinion in Penang has always been strongly in favour of the rights and claims of the Malay kings of Kidah, we meant the opinion of the great majority of the Europeans of Penang not connected with government. Much has been said and written on both sides of the question, and we saw with some apprehension the revival of the discussion in the pages of this Journal. We say nothing as to the relative value of Colonel Low's opinion and that of Mr Anderson and the large number of European residents, past and present, who, like ourselves, agree in Mr Anderson's views. Whether or not the Local government of 1824 concurred in these views, may be gathered from the following extracts from the report of the trial of Tuanku Mahomed Saad in the Court of Judicature at Penang in 1840.

From the evidence of the Hon. J. W. Salmond Esq. Resident Councillor at Penang.

"Have you read this book in which the translation of the treaty is printed, and which bears on its title page to be "by John Anderson, of the Honorable East India Company's Civil Service Pinang," and to be printed at Prince of Wales Island under the authority of government by William Cox in the year 1824, and are the government records therein correctly cited?

I have read Mr Anderson's work but have not compared it with the government records, but I believe they are cited correctly.

Do you know the book to have been printed under the authority of government?

I know that 100 copies were printed by order of government and sent to the Court of Directors.

Is the printed copy produced a true copy?

I cannot say.

Mr Balhetchet. Then we must prove it.

Edward D'Oliveiro called (*previously sworn on the 26th October.*)

I was a printer employed in the Printing Office of the late William Cox; the copy of Mr Anderson's book produced was printed by Mr Cox by order of the government.

Mr Balhetchet.—I have already mentioned to your lordship that the government recalled all copies of this book that could be discovered; that Mr Anderson was obliged to give his word of honour that he did not retain a copy, and that this copy now produced and proved is from the library of Mr James Fairlie Carnegie of this island, a brother-in-law of Mr Anderson."

From the charge to the Jury by the Hon. Sir William Norris, Recorder.

"Again, the prisoner's agents had dwelt at some length, and with much feeling and eloquence, on the cruelties and oppressions which had followed the Siamese invasion of Kedah in 1821; and that they had not exaggerated matters was pretty evident from the details in Mr Anderson's book which could scarcely have been published, as it both purports and was proved to have been, under the authority of the local government of Pinang, within three years from that period, had not the appalling facts which it records been substantially true." Ed.

† By order of the higher authorities. The governor, Mr Fullerton, held the same opinion as Mr Anderson and urged that "the British government should not hesitate to endeavour to obtain the restoration of our ally to the throne of his ancestors." Ed.

GENERAL REPORT ON THE RESIDENCY OF SINGAPORE, DRAWN
UP PRINCIPALLY WITH A VIEW OF ILLUSTRATING ITS
AGRICULTURAL STATISTICS.*

By J. T. THOMSON, Esq., F. R. G. S., Surveyor to Government.

Agricultural Statistics.

NUTMEGS. A cultivation so important to the settlement of Singapore, and affecting the interests of so large a proportion of the inhabitants of the Straits generally will demand as careful a notice, as the materials which I have been able to obtain will admit of. This is the more necessary as the cultivation as far as the English colonies are concerned may be said to peculiarly belong to the Straits. For I am not aware if its cultivation has been carried on with success in any other part of the world, excepting in the East Indian Archipelago. Considerable numbers of plants I am aware have been transplanted to Ceylon where the tree has been said to thrive, but these if they have succeeded must yet be so young, that no produce can yet have been derived from them. Their cultivation in the West Indies, in most cases has been attended with total failure. Porter† writing in 1833 mentions that seeds had been planted sufficient for 100 acres in Trinidad, and that the persons engaged were sanguine as to its success, but I can learn nothing further regarding the success of the enterprise. I would suggest that the high rate of wages in the West Indian colonies, is a sufficient bar in itself to its advantageous introduction there—we may therefore safely conclude that at present and for many years to come the raising of this production will belong to the Dutch and English colonists in this quarter; the former cultivating it at its original locality in the Moluccas and at Bencoolen in Sumatra, and perhaps to a small extent in Java, and the latter cultivating it in Pinang and Singapore, and to a very small extent in Malacca. In noticing the subject my object will therefore be to trace in as far as I am able the statistics of its production in the Moluccas, the rise and progress of its cultivation in Sumatra, and the Straits settlements, and as far as possible the amount of consumption, of which it must be confessed the information obtainable is very scanty and unsatisfactory; to which will be added practical observations by Straits planters. Crawford‡ says that the Portuguese first reached the Moluccas in 1511, under Antonio de Abrew, and the English in 1578 under Sir Francis Drake. The Dutch achieved the conquest of the Banda islands in 1620, and in 1624 commenced hostilities against the inhabitants of the Moluccas

* Continued from vol. iii. p. 744.

† Tropical Agriculture.

‡ Hist. Indian Archipelago.

for selling cloves to other strangers; and in 1680 the Moluccas were entirely subdued from which time the monopoly was put in force with full vigour. In the first Dutch voyage to the East Indian Archipelago they paid Spanish dollars 1.93 per picul for nutmegs or 7s 3½d per cwt. At Sunda Kalapa or the Modern Batavia they cost no more than Spanish dollars 4.63 per picul or 1½d per lb. or 17s 6d per cwt. The above author further considers that the natural price would be Spanish dollars 6 per picul or 2½d per lb., and the price in Europe should only be 6d per lb., but in England it used to be 12 times as much and with duty 17 times as much. The mace which forms the middle of the three envelopes of the nut used to be 4 times the price of nutmegs and with some variation; (on the first Dutch voyage) nutmegs were only ½ the price of mace. Before the discovery of the route to India by way of the Cape of Good Hope, the price of nutmegs in England was Spanish dollars 133½ per picul or 4s 6d per lb., and of mace Spanish dollars 266½ or 9s. per lb. The price in the same country two centuries ago was 74⁷/₁₀ Spanish dollars per picul or 2s. 6d. per lb. and mace 177⁷/₁₀ Spanish dollars per picul or 6s. per lb. The prices in Holland when the Dutch were in full possession of the monopoly of the spice trade was 305 Spanish dollars per picul or 10s. 3½d. per lb. and for mace 903 Spanish dollars per picul or £1 10s. 5¼d. per lb. In 1803, 1804, 1805 nutmegs sold in England for 309 Spanish dollars per picul or 10s. 5¼d. per lb. and in 1820 the price exclusive of duty was 5s. per lb. for nutmegs and 8s. per lb. for mace or including duties 7s. 6d. for the one and 11s. 6d. for the other.

The prices paid to the cultivator when under the Dutch were at first for nutmegs 0½d. per lb. or 81 cents per picul and for mace 0½d. per lb. or 2 Spanish dollars per picul—but these prices were found inadequate and the price was raised to 3½d. per lb. or Spanish dollars 9¹/₁₀ per picul and of mace 9¾d. per lb. or 24 Sp. dollars per picul. The entire monopoly of the spice trade was insured by confining the cultivation of the clove tree to Amboyna and the nutmeg tree to the Banda islands, this system was enforced by paying stipends to the various petty princes for the extermination of the plants in their respective domains and by sending an annual fleet to see that the terms were literally complied with.

The possession of the spice islands by the English in 1796 put it in their power to extend their culture to their own possessions in Sumatra and the Straits of Malacca and some parts of the West Indies, but adds the historian the latter altogether failed. He further mentions that 600,000 lbs. or 4,500 piculs of nutmegs and 150,000 lbs. or 1,150 piculs of mace was the produce of the Banda islands in 1820; Colonel Low in a private memorandum book belonging to Mr J. R. Logan and kindly placed at my disposal—states that in 1814 or 1816 the total number of trees in the Banda

islands was 570,000 from which after deducting 90,000 males there will remain 480,000 bearing trees including 65,000 monoecious ones. The Dutch since that time have not he believes increased their plantations. Count Hogendorp writing in 1830* states that the Banda islands can furnish 500,000 lbs of nutmegs and 150,000 lbs of mace and that the average produce of a tree is 5 to 6 lbs. though some give as high as 15 to 20 lbs. In a table given in the *Free Press* of the same date the exports of Java were in 1825, 1826, 1827, 1828, and 1829 on an average per annum 2,927 piculs or 390,266 lbs. of nutmegs and of mace for the same years 671 piculs or 89,466 lbs. in the year 1841, 1842, 1843, 1844, and 1845 the average per annum was 4,789 piculs or 638,533 lbs. of nutmegs and of mace for the same years 165,473 lbs. It appears from the remarks of the Editor that these exports of Java include all that is produced in the Banda islands as he states that their whole produce now is between 6 and 700,000 lbs. per annum.

Regarding the nutmeg statistics of Bencoolen now under the Dutch government, I have been able to obtain but meagre information—we are informed by Crawford that the nutmeg tree was first transplanted to that settlement in 1798. Dr Lumsdaine† writing in 1820 states that in 1803 an importation of 22,000 trees took place and that the average produce of good bearing trees is 6 to 7 lbs. which would place them on a par with those of Banda. Colonel Low‡ informs us that when Bencoolen was given over to the Dutch there were only 22,000 trees in bearing and that after the year 1820 that government has levied an export duty of 36 per cent on the spice. In Mr J. R. Logan's notes the number of trees in 1819 is estimated at 109,429 and beyond this I can get no statistical information. All proprietors of plantations in Bencoolen that I have met, describe them as unprofitable. Since the time of the English the roads have relapsed into jungle, and thieves abound from whom there is no protection afforded by the Government. Mr Hewetson informs me that at present 30 to 40 per cent is charged as export duty (but I have been informed by others that only 20 now is charged) that there are about 20 to 24 estates some of which are paying but not flourishing and that their cultivation is mostly neglected. For a short time after the transfer of the settlement to the Dutch the plantations were highly cultivated but all the larger estates are now neglected and if there be any cultivation, it is carried on on a small scale by the natives. From the above account it may be anticipated that there has been great retrogression since the date of the last estimate in 1819.

* *Free Press* for 1848.

† *Singapore Chronicle* vol. 4.

‡ *Dissertations*.

Colonel Low* informs us that "in 1798 spices were first imported into Pinang, further that in 1800—500 nutmegs were again imported, in 1802, 25,028 young seedlings and 175 trees of all sizes were imported, and in the same year the total that had been imported was 71,266 nutmeg trees on the island but the total number of trees living was estimated at only 33,000. In 1805 there were only 5,100 trees in the Government gardens; in 1810 the total number of trees on the island was 13,000. It was to David Brown, Esquire, that the public was indebted for the revival of this valuable branch of Straits cultivation, he alone stood in 1810 as a spice planter, in which he persevered notwithstanding that he found no sympathy in those around him and the final success was retarded by such obstacles, that beset the path of all agricultural innovators, till after his decease; and it was consequently left to the spirit and judgment of the late George Brown, Esquire, to overcome every difficulty, and display the full value of the pursuit. In 1818 the bearing trees on the island were 6,900 and in 1836 there were 80,000 trees 45,000 of which were in bearing." From Mr J. R. Logan's private notes we learn on the authority of Mr F. S. Brown, that the produce of Pinang was as follows:—

		Sp. Dollars.		
Nutmegs	{	in 1837-7,065,044 nuts or 480 piculs. at 10 Drs. pr 1000=	76,000	
		in 1838-7,442,10C " or 460 " at 8 "	=60,000	
		in 1839-6,699,332 " or 420 " at 7 "	=47,000	
		in 1840-8,500,211 " or 530 " at 6 "	=55,000	
Mace.	{	in 1837 120 pcls. at 140 Dollars	16,800	Sp. Dollars
		in 1838 105 " at 130 "	13,650	"
		in 1839 116 " at 120 "	13,800	"
		in 1840 132 " at 120 "	15,800	"

Again on the same authority Pinang and Province Wellesley possessed in 1843, bearing trees to the amount of 75,402, male trees to the amount of 47,304, trees and not bearing 111,289. Total planted out 233,995 trees and plants in nursery 52,510. The produce of good nuts in 1842 was 17,086,210, of inferior nuts 1,480,071, giving a total produce of 18,566,281 nuts. The gross value of produce for 1843, was estimated at 86,811 Spanish dollars, and the number of nuts 14,438,762; and the produce of the following year 1844, was anticipated to amount to 28,387,000 nuts. Since which year I have not been able to obtain any more statements.

At Singapore nutmegs were first introduced in 1819† to the amount of 125 plants and 1,000 seeds. In the Assessment returns for 1843 (Mr Logan's notes) the number of trees are estimated at 43,544 of which 5,317 were in bearing and the produce in number was 842,328 nuts. In Dr Oxley's paper above quoted the number

* Dissertations.

† History Indian Archipelago.

of trees is estimated for 1847 at 55,925 of which there were in bearing 14,914, giving in produce 4,085,361 nuts weighing 252 piculs 07½ catties. The following table has been obtained from the Assessment department, but it is so far defective that it only gives the returns of 17 plantations whereas there are 58 in all, in Singapore island, reckoning large and small. To complete the same I have consequently added the deficiency from my own calculations derived from Surveys executed by me.

Returns of the number of Nutmeg Trees in Singapore residency, their produce and value for 1848.

Proprietors.	No. of plantations.	Total No. of Trees	No. of bearing trees	Annual produce in No. and quantity.	Annual produce in weight	Gross annual income
Wm. Cuppage..	1	1,200	847	225,140	15 ¹⁰⁰ pls	900 56
Dr Oxley.....	1	4,000	2,300	1,400,530		2,602 12
Dr Montgomerie	1	2,175	1,361	719,018		2,876 —
C. R. Princep..	1	6,700	5,100	1,452,862	100 „	5,000 —
Government....	1	778	350	283,505		1,134 —
A. Guthrie.....	1	2,250	1,700	368,290		1,473 16
Joaq. d'Almeida.	1	1,100	975	478,675		1,914 70
Dr Martin.....	1	1,530	720	398,951	26 „	1,589 80
Wm. Scott.....	1	5,200	1,700	579,512		2,370 48
T. Hewetson....	1	2,000	850	597,175	44 ¹⁰⁰ „	2,388 70
A. Spottiswoode.	1	3,009	1,200	143,106		470 64
J. Gemmill....	1	593	225	19,000	2 ¹⁰⁰ „	151 80
J. d'Almeida, Sr.	1	4,000	350	1,408		5 63
J. d'Almeida, Jr.	1	1,000	250	80,575		322 30
C. Carnie (crove)	1	870	250	131,915		527 66
Do. (Cairn Hill)	1	3,500	500	221,443		885 77
Syed Ally.....	1	640	43	15,000	1 ¹⁰⁰ „	67 80
	17	40,545	17,721	7,116,105		27,679 12
Others.....	41	30,855	3,100	500,000		2,000
Total.	58	71,400	20,821	7,616,105		29,679 12

From the above table we find that Singapore nutmegs average 14,533 nuts per picul being the mean of Messrs Cuppage's, Martin's and Hewetson's plantations, and that the annual produce of the bearing trees is 366 nuts per tree or 2½ catties or 3½ lbs, but it must be observed that a great majority are only coming into bearing. For an estimate of the weight of Pinang nuts it will be found from the data above given regarding that settlement for 1842 that in that settlement—there are 246 nuts to a tree which according to Mr F. S. Brown's data hereafter given will make 1½ catties per

1 less fruit 2, 3, 4 estimated, 6 calculated at 4 dollars per thousand.

tree or 2 lbs, but the same remark is applicable to Pinang that the majority of the trees were young. From the data given relative to the Banda Islands though Count Hogendorp states that the average of a producing tree is 5 to 6 lbs and even 15 to 20 and Dr Lumsdaine gives 6 to 7 in Bencoolen it will be found that the average on the whole bearing trees does not exceed $1\frac{1}{2}$ lbs per tree. Bencoolen from the neglected state of its plantations may also be safely taken at the last average. In tabulating the results and estimating the total produce of the nutmeg plantations in the four producing localities these averages will consequently be used also 14,500 nuts will be placed to the picul for Singapore and 16,000, to the picul for Pinang, Banda and Bencoolen.

Comparative Estimate of the Produce of Nutmegs in the East Indian Archipelago for 1848.

Locality.	Total No. of of bearing Trees.	No. of Trees.	Amount of pro- duce in lbs	In pcls. and cts.	Price pr. pl.	Gross value.
Singapore	71,400	20,821	70,032	525 24 60drs		31,514 00
Penang ..	286,505	118,278	236,557	1,774 18 60drs		106,450 80
English ..	357,905	130,099	306,589	2,299 42		137,964 80
Banda ...	622,000	522,222	700,000	5,222 00 60drs		313,320 00
Bencoolen	60,000	50,000	66,666	499 99 60drs		29,999 40
Dutch ...	682,000	572,222	766,666	5,721 99		343,319 40
English and Dutch }	1,030,905	711,321	1,073,255	8,021 41		471,280 20

In estimating the mace it may be assumed at $\frac{1}{4}$ the weight of nutmegs—as follows.

	Sp.	Drs	Cents.
English 574 pls 85 cts at 70 dollars	40,239,	50	
Dutch 1430 ,, 49 ,, at 70 dollars	100,134,	30	

Total value of Mace Sp. Dollars 140,373, 80

In the above tables I have assumed that the produce for Pinang has not exceeded the estimated produce for 1844, as many of the larger plantations there I have been informed have decreased in produce. If there be any error it cannot be great and as I am not in possession of the returns of the planters, I have no means of making the table more accurate. The number of trees for the same settlement has been obtained by adding the seeds in nursery to the number of trees estimated for 1842. The estimate for Banda has been constructed from the tables given in the *Free Press* formerly quoted wherein it is stated that the average produce in 1825 was 390,266 lbs. and in 1845, 638,533—thus assuming a progressive increase to 1848, 700,000 lbs. may be approximated to, from this the

number of bearing trees have been calculated from the data already noticed. The male trees have been put down at 100,000 to 522,222 females, which is nearly in conformity with Colonel Low's estimate, who places 90,000 males to 480,000 females.

With regard to the estimate for Bencoolen, it may be assumed from the information already given, that a great decrease in produce and amount of cultivation has taken place there; about $\frac{1}{2}$ of the number that existed in 1819 has therefore been put to that settlement for 1848. The value of the gross produce includes the export duty whatever that may be: proceeding from the above data it will be observed that the British Settlements of the Straits of Malacca now produce $\frac{3}{4}$ of all the nutmegs grown, and $\frac{1}{10}$ th of the quantity grown by the Dutch.

With regard to the consumption of this article of trade, Mr Crawford says that in England during 1615 it was reckoned at 100,000 lbs of nutmegs and 15,000 lbs of mace; and in all Christendom, under the authority of Mr Munn, it was for the first 400,000 lbs and for the second 150,000 lbs; during the middle of the last century it fell to 250,000 lbs. During the first period that the monopoly fell into the hands of the English, the consumption for England was 39,071 lbs of nutmeg and 5,400 of mace and in all Europe it fell to 85,960 lbs of nutmegs and 24,234 lbs of mace. During our last possession the consumption of England was 56,960 lbs of nutmegs, and of all Europe 214,270 lbs, and of mace, for England 3,620 lbs, and for all Europe 250,040 lbs. In Mr Logan's notes—Colonel Low who writes four or five years ago, states that half the produce of the Straits settlements in nutmegs goes to Europe, and the rest to India, China &c., and that the Exports to Europe necessarily include the quantity intended for America and the Colonies. England takes 120,000 lbs of nutmegs—all Europe 280,000 lbs total 400,000 lbs; and the former takes of mace 15,000 lbs and the latter 33,000 lbs, total 48,000 lbs. India takes of nutmeg 216,000 lbs of nutmegs and of mace 30,000. Thus giving a total of nutmegs 616,000 lbs. and of mace 78,000 lbs. The countries lying betwixt Europe and India and Africa may be supposed partly at least included in the estimate for India, it is also doubtful if the Americas did not and do not chiefly indent on the produce sent to Europe. What the consumption of these, China and Australia with other places may be, he has no means of judging. In Waterston's Cyclo: of Commerce, 1847, it is stated that 120,000 lbs were retained for home consumption in Great Britain. The following list is given by Porter* of the same.

	lbs.	lbs.
In 1814	43,160 Nutmegs	5,490 Mace
1815	59,839	7,834
1816	54,677	6,499
1817	65,747	8,642

* Tropical Agriculture.

	lbs.	lbs
In 1818	66,255	10,836
1825	99,214	14,851
1826	101,111	15,600
1827	125,529	16,760
1828	140,002	16,094
1829	113,273	14,254
1830	121,260	12,600
1831	152,369	18,894

The Editor of the *Singapore Free Press* in 1848 states that the average consumption of Great Britain is 140,000 lbs., of Europe 280,000 lbs., of India 216,000 lbs., of China 15,000 lbs., giving a total of 651,000 lbs.—but in an article of so small importance in the commercial world few correct data can be found, and I am not aware how far these can be relied on, excepting with respect to Great Britain. I am indebted to Mr Nicol, of the firm of Hamilton, Gray & Co. for the following table:—

Imports and Deliveries of Nutmegs and Mace into Great Britain for the last five years ending respectively on the 5th of January.

NUTMEGS.

January 5th	Imports.	Consumption.	Export	Total Deliveries.
1845	152,110 lbs	109,720	27,514	137,234
1846	444,706 "	121,446	162,923	284,369
1847	405,679 "	227,321	182,187	409,408
1848	367,936 "	150,936	260,289	411,225
1849	336,420 "	167,215	166,266	333,481
MACE.				
1845	33,898 lbs	22,691	19,795	52,486
1846	35,551 "	17,387	28,004	45,391
1847	33,104 "	19,115	37,152	56,267
1848	60,265 "	18,821	22,119	40,940
1849	47,572 "	19,715	28,064	47,779

To this Mr Nicol adds "that in drawing conclusions from the above it must be borne in mind that wild nutmegs are not distinguished from others in Home returns, but all are included together, hence arises the large imports of 1846 and 1847. The Bugis then and formerly used to bring their wild nutmegs in large quantities, which were sent home unshelled, and sold at such ruinous prices that the trade was extinguished and now the import of them has ceased; recently however, they have begun to find out at home that they are not so valueless as a spice, that they will answer as a cheap coarse kind, the flavour being strong

"and wanting the delicacy of cultivated nuts. These nuts have been shelled here and sent home and sold at such prices as will likely revive the trade in them again. These bring 2s. per lb. because they are admitted at 5d. duty for consumption, while the cultivated ones are chargeable at 1s. 6d." For the following I am indebted to Mr A. Logan, furnished from the Dutch trade statements. :-

Public Sales, rate of prices, and stocks of Nutmegs and Mace, by the Netherlands Handel Maatschappij from the years 1835 to 1848.

Years	Public Sales and price.						Stocks of the 31st December.					
	Nutmegs.			Mace.			Nutmegs.			Mace.		
	Casks sold at		Price of Nuts No. 1.	Casks sold at		Price of Mace D.	Casks		Casks	Casks		Casks
	Amstrn.	Rottm.		Amstrn.	Rottm.		Amstrn.	Rottm.		Amstrn.	Rottm.	
1835	732	557	Cents. 345 a 312	280	202	Cents. 277 a 255	..	90	..	30	..	40
1836	311	555	312 a 315	42	390	201 a 230	90	410	40	80	95	105
1837	1,003	384	250 a 252	217	164	200 a 205	165	165	148	106	148	145
1838	656	371	249 a 238	234	228	202 a 155	148	480	41	106	145	145
1839	1,147	630	230 a 211	233	210	156 a 155	156	250	98	145	145	145
1840	515	204	200 a 182	68	259	130 a 155	622	150	102	40	102	40
1841	987	..	161	309	..	128	366	324	98	42	98	42
1842	317	1,068	142 a 150	5	422	103 a 135	310	180	172	148	172	148
1843	759	1,115	130 a 108	388	251	105 a 93	..	..	..	..	..	..
1844	790	..	195 a 181	406	..	170 a 159	190	160	40	25	40	25
1845	..	1,435	222	..	445	250	..	..	..	..	..	..
1846	1,000	..	262	360	..	185	750	380	152	80	152	80
1847	no sales	..	141 a 140	no sales	..	a 121	1,120	890	305	325	1,120	305
1848	..	1,775	126	..	629	121	1,090	480	300	300	1,090	300

Two casks weighed in Hamburgh averaged each 440 lbs nett; by the average of several weighed in Singapore each amounted to 310 lbs nett, but these are generally of the inferior and light description, 400 lbs may consequently be assumed for reducing the above table to lbs. It will be observed from the above that in the first 5 years, the sales averaged 1,269 casks per annum or 507,600 lbs, and in the last 5 years 1,000 casks or 400,000 lbs, and while in the former the stocks on hand were very scanty, they have latterly amounted to more than 1 year's consumption. The exports from Java for 7 years are shewn in the following table taken from official documents:

	1825	1826	1841	1842	1843	1844	1845
To what Countries	pls	pls	pls	pls	pls	pls	pls
The Netherlands.....	1544	676	4677	4766	1604	7800	3109
England.....	171	106	..	..	164	108	62
France.....	..	..	..	14	..	..	..
Denmark.....	20	..	..	..	..	..	..
Sweden.....	..	..	..	1	4	..	..
Hamburgh.....	..	94	..	..	23	7	..
America.....	495	120	..	31	10	52	31
The Cape of Good Hope	..	3	5	..	27	3½	1
Mauritius.....	..	..	..	..	..	..	..
Arabia (Mocha)...	..	..	..	..	..	..	..
The Gulph of Persia...	..	61	3	2	3	1	..
Hindustan.....	315	100	..	..	..	..	61
China and Macao ..	313	693	134	97	206	47	30
Siam.....	..	..	..	..	10	..	..
Japan.....	..	..	3	6	6	4	3
New Holland.....	..	13	11	6	..	..	..
The Eastern Archipelago	613	371	293	206	76	134	105
Sicily.....	..	..	..	..	..	1½	..
Total.....	3471	2237	5126	5129	2133	8158	3402

It will be remarked that the exports to the Netherlands have trebled since 1825. Those to America have decreased by $\frac{1}{3}$ ths, those to Hindoostan by $\frac{1}{10}$ ths, those to China by $\frac{1}{10}$ ths and to the Eastern Archipelago by also $\frac{1}{10}$ ths, shewing that the Straits spices which first commenced to bear largely in that year have usurped those three latter markets that were formerly supplied by the Dutch, to the extent of at least 1,000 piculs; for it will be observed that the Dutch formerly supplied 1,200 piculs annually, while they do not average 200 now.

The present consumption of the spice in various countries can only be approximately estimated, by making deductions from the data before us;—that the consumption to within these few years has kept pace with the quantities produced, will be seen from tables of

the sales at Amsterdam and Rotterdam, to which two places the sale in Europe of all Dutch produce is confined, but that the market now appears to be glutted will be noted by the stocks on hand for the three last years. In assigning the relative quantities taken off by the various markets for the productions of the Straits Settlements which now amount to 306,589 lbs., and that of the Dutch to 766,666 lbs., giving a total of 1,073,255 lbs, considerable difficulty is encountered. It may be given approximately, by first examining the Imports to England, which show that the average consumption now of Great Britain is about 160,000 lbs., but that country will be seen to have taken off in one year alone the enormous amount of 227,321 lbs. The exports for the last four years average 192,000 lbs., of which quantity North and South America, Canada and the West Indies may be reckoned as the sole consumers. By the Dutch sales it will be seen that Europe takes 400,000 lbs., of which probably 50,000 lbs. go to America, leaving 350,000 lbs. as the annual consumption of Europe. By the exports of Java, it will be noted that so long ago as the years 1825 and 1826, the consumption of Asia, which will include western Arabia and contiguous parts of Africa, was 1,200 piculs or 160,000 lbs., and at the average rate of progression in other parts of the world, the consumption may be safely said now to amount to 256,000 lbs. For the consumption of Australia, Cape of Good Hope &c. no data can be found, it can therefore be only roughly estimated at 25,000 lbs., this gives a total consumption of 1,033,000 lbs., which would now show the production to exceed the consumption by 40,000 lbs. at the present date. We have no facts to show that the Banda Islands under the present system are capable of producing more than 700,000 lbs.; certain it is when they had the monopoly of the world they did not produce at any time more than 600,500 lbs. Assuming therefore that 760,000 lbs. will be the limits of the produce of the Dutch possessions, that of the Straits Settlements, judging from the statement of the quantity of trees planted out in 1842 in Pinang, and from the Assessment returns of Singapore for 1848, in a few years may be expected to double the present produce which will be 600,000 lbs, but that this is the limit of their powers of production, I think may be safely argued from the following facts. First, the circumstances that operate against the extension of the cultivation in Singapore, are in the scarcity of manure which will be more severely felt than at present, the ample employment for capital prevents Asiatics particularly from laying out their money in a cultivation that is so long in affording any returns, and such plantations as belong to Asiatics, the Chinese being the principal class, are generally so neglected that they are seldom brought up to the producing point. In regard to Pinang, all the favorable positions have been occupied, manure is scarce and will be scarcer, and considerable outlay is required for watering trees. It is true, with regard to Chinese cultivators, that they succeed much better than the same class in Singapore—but this is owing to their having

occupied the few favorable localities affording rich soil, that are found in the deep vallies intersecting the mountains of that island;—this has induced a great many others of the same class to clear and cultivate less favorable localities on the hills, where their attempts can hardly meet with success, if they do not end in total failure. In Province Wellesley, a dependency of Pinang, there is considerable room for extension in the southern districts, but as the estates must necessarily be distant from the occupied districts, they can have but limited protection from the Police—thieves will consequently be apt to be troublesome, as is the case with a plantation belonging to a respectable Chinese at Jurong in Singapore island, where half the produce, he has informed me, is lost from this cause—much extension in Province Wellesley can therefore not be anticipated. In Malacca, several small plantations have been formed, but when I visited that settlement they did not look promising. The distance of suitable lands from the town, will confine the cultivation to so small limits that its produce will have no effect on the general market. Under the present circumstances, 6 or 7 years hence the total production of Dutch and English spices may be estimated to amount to 1,360,000 lbs, which will be the limit of their extension, and as the increase in the first instance will be rapid, a considerable fall of prices may be anticipated, for even now they will be seen to have glutted the market; but that the depression will be permanent (after the low prices have induced more extensive sales, as amply shown by Crawford in a former part of this report to have always been the case, and the rate of progression in Europe, but more particularly the rapid strides in America will create more extended markets) can also hardly be anticipated, unless the Dutch government abandon their monopoly, which was lately rumoured, and throw the cultivation open to the world, without imposing restrictions of any kind; a thing that is less than probable, if we consider that they will still retain in a great measure for years to come the command of the market for spices, and that by the step they would give away the means by which they now, even at the reduced prices of the spice, support without loss the elements of their power and influence over a large part of the Indian Archipelago, (an influence which they have been always jealous of upholding) in the employment of their officers, civil and military, and the flottilla that guards these seas.

In order to arrive at a just estimate of the cost of production in the Straits settlements, which can only be drawn from the actual expences of an estate, I have been furnished with the following by a gentleman who possesses a property containing 1,200 trees. He informs me, that he commenced on the middle of 1837, and on the 31st of December of the same year it had cost him Drs 600, and after that the expences averaged yearly Drs 4 00 till December 1846 when it began to yield returns. The property thus cost him in all 4,200 Sp. Dollars or $3\frac{1}{2}$ Drs per tree. In 1847 it produced 150,000 nuts, value at 4 Drs per 1,000—600 Drs, the expences amounted to the

same sum. In 1848 it produced 255,000 nuts, value 1,020 Drs, the expences being also 600 Drs. In 1849 he expects 300,000 nuts, value 1,200 Drs., the expences being 600 Drs. In 1850 he expects 400,000 nuts, value 1,600 Drs., the expences again being 600 Drs, and in 1851 he expects 500,000 nuts, value 2,000 Drs, the expences being also 600 Drs, by which time the estate will have gained its highest limit of production and at which he expects it will continue—the expences being also the same viz : 600 Drs. It will thus be observed that in the 10th year after the commencement, the produce paid the current expences, in the 11th it gave a profit of 420 Drs, in the 12th it is expected to give a profit of 600 Drs, in the 13th a profit of 1,000 Drs, and in the 14th of 1,400 Drs, at which if the present prices rule he expects it will continue for many years. With the views of the proprietor—who, like most of the proprietors of spice plantation, makes the occupation that it gives him subsidiary to his other business in town, and consequently one of relaxation and enjoyment, he is perfectly satisfied with the result, as he considers by the mere outlay of 4,200 Drs. he now reaps a return of 600 Drs. and expects soon 1,400 Drs. per annum—under this idea he could afford to sell his spices, when his plantation is in full production, at 1³/₈ Drs, per 1,000 or 17¹/₈ Drs, per picul without, loss but at no profit or return for his trouble, which sum is nearly double the price paid to the planter in Banda, who receives from the Dutch government 9.15 Sp. Drs. per picul. But this is evidently not the way to view the matter, as a mode of laying out capital; the cultivation must be put on its merits as a mercantile speculation by all those who intend to embark their fortunes on it. By so doing the phase will assume a totally different appearance. Thus in the above property, the usual interest viz : 12 per cent, should be charged annually on the outlay, and 240 Drs should be fixed as an annual charge for superintendence; by so doing the estate will be found to stand at 11,116 Sp. Dollars at the time it commenced to make returns viz: in December 1846, in Decr. 1848 the cost will stand at 14,032, the interest for that year being 1,522 Drs, outlay 840 Drs, equal to 2,362 Drs, against which there is an income of 1,020 Sp. Drs. In December 1851 there will be an outlay of 840 Drs, interest 1972 Drs, equal to 2812 Sp. Drs. against which there is only an income of 2,000 Dollars, which is not expected to increase with the present prices, which as stated before, are not expected to hold up—the speculation is therefore not an advantageous one to the Straits capitalist, as it does not return the usual interest. It may be objected that I have chosen an unfavorable example, and to this I would answer, that I have been informed by another Straits planter who possesses about 4,000 trees, that to bring them up to the paying point, 20,000 Drs, of outlay was required, or 5 Drs, per tree, and many more unfavorable examples than these might be quoted, though others again by favorable positions, good soil and superior management, may have not cost so much.

Before leaving the subject, the following practical information regarding the statistics of the tree and its produce, observed by planters, may not appear uninteresting. In Mr Logan's notes, Mr F. S. Brown informs us of the following experiments with nutmegs in parcels of 10,000 :—

	of No. 1	of No. 2	of No. 3	of No. 4	of No. 5	Total	No. of nuts to a catty
G. uga	9 cty.	9½ cty.	19 cty.	6 cty.	9 cty.	52½ cty.	192 to one catty
Do	8 "	12½ "	18 "	6½ "	7 "	52 "	ditto
James Town	14 "	12½ "	21½ "	9 "	4½ "	61½ "	164
Do	15 "	12 "	18 "	8 "	6 "	59 "	169
Pentlands . .	22 "	43½ "	3 "	6 "	4 "	78½ "	128
Do	23 "	43 "	5 "	2 "	2½ "	75½ "	133

Average 163 to one catty or 16,300 nuts to a picul.

The same gentleman, in a private note book belonging to Mr Charles, Scott and kindly placed at my disposal, states the results in weighing the different qualities.

No. 1 Europe 294 nuts weighed 3 cty. that is 9,800 nuts pr. picul.
 ,, 2 do. 381 do. 3 do. 12,700 do.

No. 1	Bengal	474	nuts	weighed	3	ctys.	that is	15,800	nuts	pr. picl.
"	2	do.	554	do.	3	do.		18,500	do.	
"	3	do.	852	do.	3	do.		28,400	do.	

In the same note book the following observations are by the owner—on trees on an estate at Pinang:—

In 1837	6	trees	12	years	old	yielded	each	827	nuts	} on an average of each.
In 1838	"	do.	13	do.				1,686	"	
In 1839	"	do.	14	do.				1,433	"	

The following observations are by Captain William Scott on a parcel of 11,797 nutmegs from the Estate of Claymore—taken indiscriminately:—

Of No. 1	Nuts	there were	56	lbs.	in number.	4,904.	=87	per lb.
" "	2	do.	43	"	do.	5,033.	117	do.
" "	3	do.	6	"	do.	855.	142	do.
" "	4	do.	3	"	do.	580.	192	do.
" "	5	broken & shriveled	2	"	do.	425.	212	do.

110 lbs

11,797 nuts

This gives 14,300 nuts to picul as the average weight of nuts in Claymore Estate, Singapore, when the broken and shriveled nuts are included which is not the case with other averages.

Mr Joaquim D'Almeida informs me that from a tree about 15 or 16 years old of the average size he obtained 1,192 nuts in 1847 and 4,041 in 1848, during 4 months of this year he has obtained 2,112 nuts. Mr Charles Scott in estimating the average produce of a tree per annum on a first-rate plantation at Pinang allows 2,000 nuts to a tree from 16 to 29 years old, 1,500 to one of 10 to 23 years old, 800 to one of 10 to 18 years old, and 500 to one of 10 to 12 years old, further the average of 6 trees from 25 to 30 years old gave for each tree per annum 1,731 nuts, the maximum being 2,847 nuts and minimum 742, but this he remarks to be a miserable result for trees of that age. I have heard it remarked by an experienced planter that he has known a tree to yield as much as 10,000 nuts in a year.

(To be Continued.)

SOME ACCOUNT OF KEDAH.*

By MICHAEL TOPPING, Esq., chiefly from the information of FRANCIS LIGHT, Esq., Chief of Prince of Wales Island, or Pulo Pinang.

THE country of Kedah extends from Trang in Lat. $7^{\circ} 37'$ N. to Krea in Lat. $5^{\circ} 18'$ N. In length about $15^{\frac{1}{2}}$ miles, in breadth from 20 to 35 miles; but the cultivated lands no where exceed 20 miles from the sea-shore. From Trang to Purlis, the sea-coast is sheltered by many islands, and a flat bank lies between them and the main, navigable for small vessels only, the distance between Trang and Purlis being about 24 leagues. The sea-coast itself is low and covered with wood. Inland are many mountains, some of which as you approach Purlis, project into the sea. The country abounds in rice, cattle, and timber. Eleven rivers empty themselves into the sea, navigable for prows only, on account of the shallows without; the principal of which are Lingu and Sittoul, where those vessels are built: Purlis has a deep narrow river, at the entrance of which is a small sandy island, on which stands a fishing village, which is protected by a few pieces of cannon. The bar of the river is very long, with only ten feet water upon it, at spring tides. The town is situated four or five miles from this entrance, in a valley of a mile and a half in circumference, encompassed with steep hills. The old king, in his latter days chose this place for his residence, which occasioned many vessels and people to resort here. Since his death, it has sunk into its former obscurity, notwithstanding he bequeathed it to his second son Tunku Muda, who still resides here. Pujil is a small province of Paltany,† bordering upon Purlis. The islands Lancavy or Ladda and Trocklon, lie west of this port, about five leagues. The Great Ladda is inhabited by a race of Malays, who are, in general, thieves, and commit frequent acts of piracy: These islands are dependant on the Luxamana of Kedah, who governs here absolutely: They are mountainous, have little pasture, and do not yield Rice sufficient for the inhabitants. There is exceeding good anchorage ground on the Eastern side of them, of sufficient capacity for the largest fleet, with a plentiful supply of wood and water at hand. On the S. W. side is a small harbour of sufficient depth; but its shores are coral. In a former war, the French refitted and masted here, after an engagement with (I believe) Commodore Barnet. The land from Purlis to the mountain Jerrei (a coast of twenty leagues in extent) is low, and level towards the sea, covered with jungle, which extends between Purlis and Kedah one mile from the shore. To the southward of Kedah, the woods grow much broader, and the country is still less cultivated. The principal sea-port, called Kedah by strangers, and Qualla Batrang by the natives, lies in $6^{\circ} 0'$ N. latitude. The river

* From Dalrymple's *Oriental Repertory*.

† Patani.

is navigable for vessels of 300 tons, but its entrance is choked up by a flat mud bank, two and a half miles in length, with only nine feet water on spring tides. Large ships lying in five and six fathoms, are four miles from the river's mouth. At the mouth of the river is a small brick fortress, built by a Gentu, with a few small guns, ill-mounted. The greater part of the fort is in ruins, so that the spring-tides flow into it. The river is about 30 yards wide; both shores are muddy, and have swampy places, which are covered with jungle. This continues for three miles up the river. Half a mile within the jungle, the paddy grounds commence.

Seven miles on the river from the Qualla is Allestar, where the king resides. All vessels that pass the bar can go to Allestar; the river is narrow but deep; the country level, but clear and cultivated, having a fine rich soil. A little above Allestar the ground rises, the river becomes more rapid, and, at length, unfit for any kind of navigation, except that of small prows. The channel on the eastern side of the island, is very narrow, being not 5 feet across.

The king's residence at Allestar, is in a very small brick fort, built by his merchant Jomall about four years ago. The inhabitants near him, are composed of Chuliars, Chinese and Malays.

This place was plundered and burnt in 1770 by the Buggesses, aided by some of the king's own relations; since which it has continued in a very poor state; the only trade left it, is with Sangun; Paltany being destroyed by the Siamese.

Limbun, on the bank of the river, is about four miles from Allestar: This Town is inhabited chiefly by Chuliars; the Soil is exceedingly fertile (clay and sand) produces great abundance of fruit and Vegetables. The Country rises in a gradual ascent: The river is very rapid, with shallows and overfalls, so that prows only can navigate it. A very little above Limbun, the prospect opens into an extensive plain, on which are many miles of Paddy grounds: The river is here contracted into a very narrow channel, being, in some places, not more than ten feet across, and is besides so very crooked and its current so rapid, that only small light prows can make their way up it. During the rainy season this plain is overflowed, which greatly enriches it.

At the commencement of this Plain, the King is enclosing a place for the purpose of erecting a Fort, to defend his country against the Siamese. On its Eastern Boundary, the Country is covered with forests, some small villages, with their cultivated lands, lying scattered here and there.

The next place of any note is Apabukit, which is about six miles S. E. of Alistar, on a branch of the same river. This place is chiefly inhabited by Chuliar families; the soil is more sandy and light, than that of Limbun, but produces abundance of grain. Formerly the course of the river, from Qualla Batrang to Allistar, was twelve miles in length; but the father of the reigning Prince, cut through a narrow Isthmus in order to shorten the distance five miles, and by degrees the old Channel filled up:

This work has however been of singular disadvantage to the neighbourhood, as it has lessened the quantity of fresh water in the country, by giving it an easier communication with the sea: sea-water is now admitted up to Allistar, in the dry season, the bar at the river's mouth is likewise encreased, not having a sufficient weight (or perhaps continuance) of current to carry off the mud, the inhabitants of Allistar are obliged to fetch fresh water in boats, during the months of March and April, for though well-water is good, they do not, in general, use it. At the Qualla, they are supplied with fresh water, entirely by boats, for eight months in the year. In August, September, October and November, the river is fresh, to its entrance, at low water.

Close to the Fort runs a creek, which communicates with the river above Limbun: This has been purposely stopped, by an artificial mound: were it opened, vessels might again water at the river's mouth, in all seasons of the year.

The entire country of Kedah is exceedingly well-watered and fertile. Twenty-three rivers, all navigable for prows, and some of them for larger vessels, empty themselves into the sea, between Trang and creang; the country to the Southward of Kedah river, as far as Qualla Muda (about ten leagues) is less cultivated than that more Northward. At Eang they have the best fruits; the principal natives have gardens at this place, to which they frequently resort (an excursion of six or seven leagues) to feast on durians and mangostins, which ripen here in the greatest perfection.

Qualla Murba is a large river, deep and rapid. The water is here always fresh to the sea; the land is high, and the back sandy. The heavy surge which breaks upon this shore during the southwest monsoon, has, by opposing the current from the river, formed a dangerous sand-bank; extending three miles out to sea, and on which there is only one fathom water. This bank reaches almost as far as Qualla Muda. Qualla Muda is a shallow and rapid river, but convenient on account of its communication with the tin mines. The annual produce here is about a thousand piculs; this small quantity is not however owing to the scarcity of ore, but to the want of hands, and to the few people employed being badly paid. The river Prie lies next to Qualla Muda, and opposite Pinang. This place produces a little tin, it has however very few inhabitants, and those are of very suspicious character. Kreaan produces rattans and canes; this is the southern extremity of Kedah, and hence begins Perak. Great numbers of Paltany people have emigrated, and come down to Qualla Muda (it is supposed nearly fifteen thousand.) If these people settle there, they will greatly encrease the cultivation and benefit Pinang. It is needless to add, that the king of Kedah has been advised of the advantages he would experience, by having the country opposite Pinang well cultivated; the soil of which is of the richest quality.

THE PIRACY AND SLAVE TRADE OF THE INDIAN

ARCHIPELAGO.*

1826—In the 5th number of the *Singapore Chronicle*, there is a very excellent sketch of Malay piracy, which is probably from the pen of Mr Crawford, at that time Resident at Singapore, and who is known to have enriched the pages of the *Chronicle* in the first few years of its existence, with many valuable notices of subjects connected with the Indian Archipelago. Although rather out of the proper chronological order, we shall here introduce a few extracts from this sketch, as it conveys a very just view of the state of piracy existing at this period, and of the means necessary for its suppression. The following is a description of the Malay pirates :

“ A Glance at the Map of the Indian Islands will convince us that this region of the Globe must from its natural configuration and locality be peculiarly liable to become the seat of Piracy. These Islands form an immense cluster, lying as if it were in the highroad which connects the commercial nations of Europe and Asia with each other, and affords thus a hundred fastnesses from which to waylay the traveller. A large proportion of the population is at the same time confined to the coasts or to the estuaries of rivers ; they are fishermen and mariners, they are barbarous and poor, therefore rapacious, faithless, and sanguinary. These are circumstances it must be confessed, which militate strongly to beget a piratical character. It is not surprizing then, that the Malays should have been notorious for their depredations from our first acquaintance with them. It is indeed, on the contrary, rather remarkable, considering the extraordinary temptations which exist, that the matter should be no worse, a result for which we are indebted to the feeble and unenterprising character of this people. A race of European buccaniers under the same circumstances, would soon render these seas impassable for the greater part of the trade that now frequents them.

“ Among the tribes of the Indian Islands, the most noted for their piracies are of course the most idle and the least industrious, and particularly such as are unaccustomed to follow Agriculture or Trade as regular pursuits. The Agricultural Tribes indeed, (embracing the whole of Java, and much of Sumatra) never commit Piracy at all, and the most civilized Inhabitants of Celebes, (although all Mariners) are very little addicted to this vice.

“ Among the confirmed Pirates are the true Malays, inhabiting the small Islands about the Eastern Extremity of the Straits of Malacca, and those lying between Sumatra and Borneo down to Billitin and Carrimatta. Still more noted than these, are the Inha-

* Continued from Vol. III. p. 363.

bitants of certain Islands situated between Borneo and the Philippines, of whom the most desperate and enterprising are the Sooloos and Illanoons, the former inhabiting a well known group of Islands of the same name, and the latter being one of the numerous nations of the Great Island of Magindanao.

“ Besides those who are avowed pirates it ought to be particularly noticed that a great number of the Malayan princes must be considered as accessories to their crimes, for they afford them protection, contribute to their outfit and often share in their booty, so that a piratical prow is too commonly more welcome in their harbours, than a fair trader. Among the worthies of this class may be enumerated the Rajahs of Perak, Salangore, Siac, Kampar, Indragiri and many others. Those who carry on trade and become rich, learn at the same time the utility of being honest, of which we have good examples in Tringanu, Kalantan, Pontianak formerly Palembang, the west coast of Sumatra and Coast of Pedier. The people of Johore were formerly, and in periods by no means remote, celebrated for their piratical habits, a distinction which in some dialects of the Malayan language, made the word “Johore” synonymous with “robber.”

“ Another description of piracy of a more atrocious nature than any of the rest, consists in the treacherous attacks made upon ships invited to trade in a friendly manner at different native ports. This is a sort of Piracy which has become extremely unfrequent since the conquest of Java, and which now that strong European Governments are established within the Archipelago is not likely to be again much repeated.

“ The Malay piratical prows are from 6 to 8 tons burden, and run from 7 to 8 fathoms in length. They carry from one to two small Guns, with commonly four swivels or Rantakas to each side, and a crew of from twenty to thirty men. When they engage they put up a strong bulwark of thick plank. The Illanoon prows are much larger and more formidable, and commonly carry from four to six Guns, and a proportional number of swivels, and have not unfrequently a double bulwark covered with buffalo hide; their crews consist of from forty to eighty men. Both of course are provided with spears and krisses, and as many fire arms as they can procure.

“ The modes of attack are cautious and cowardly, for plunder and not fame is their object. They lie concealed under the land, until they find a fit object and opportunity. The time chosen is when a vessel runs aground, or is becalmed in the interval between the land and sea breezes. A vessel under weigh is seldom or never attacked. Several of the marauders attack together, and station themselves under the bows and quarters of a ship when she has no longer steerage way, and is incapable of pointing her guns. The action continues often for several hours, doing very little mischief, but when the crew are exhausted with the defence or have expended their ammunition, the pirates take this opportunity of boarding in a mass.

"This may suggest the best means of defence. A ship when attacked during a calm, ought perhaps rather to stand upon the defensive, and wait if possible the setting in of the seabreeze, than attempt any active operations which would only fatigue the Crew, and disable them from making the necessary defence when boarding is attempted. Boarding Nettings, Pikes and Pistols appear to us to afford the most effectual security, and indeed we conceive that a vessel thus defended by a resolute crew of Europeans, stands but little danger from any open attack of Pirates whatsoever, for their Guns are so ill served, that neither the Hull nor Rigging of a vessel can receive much damage from them, however much protracted the contest."

The means recommended to be taken for the suppression of piracy are thus laid down :

"The encouragement of industrious habits in the people will afford the surest means of effecting so great a good. This can only be effected as far as we are concerned, by affording them, a ready and free market for their productions. By such means, and which are now fortunately in operation, the most respectable part of their own communities become not less interested than ourselves in suppressing piracy, and are thus made our natural allies. As far as force can be useful, it will be enough to say that the pirates are now in a manner hemmed in by European Establishments, more active and numerous than ever existed in these seas before, and that no act of piracy ought to be henceforth overlooked, but be followed sooner or later by inevitable punishment from one or other of the European Governments. A heavy contribution might be levied on Native princes harboring notorious pirates, and the haunts of some of the most noted and abandoned of these vagabonds should be destroyed by way of example. Towards any effective plan of operations against the pirates, it will be necessary that the European Governments act in concert, and have a thorough understanding with each other. Were the pirates during a moderate period pertinaciously and systematically harrassed on the principle now proposed, and industry at the same time rendered beneficial, the profession of a pirate would become hazardous and discreditable, and industry and fair trade become honorable and prevalent in proportion.

"It will at once occur to any one at all acquainted with the habits of the pirates, and the nature of the seas they frequent, that armed Steam-boats will afford the most effectual means of prosecuting offensive operations against them. The tranquil navigation and abundant fuel of these parts seem peculiarly propitious to the employment of steam vessels. In these, the pirates who by taking advantage of calms and shoal water constantly escape from all other armed vessels, would be pursued to certain destruction, they would be suddenly attacked in their haunts when unprepared for resistance, and in short, from the steadiness, rapidity and certainty of such attacks, they would find themselves reduced to a condition of the utmost precariousness and insecurity."

In May this year two piratical prahus were put to flight by a Dutch gun-boat off Bantjer. The Dutch schooner *Anna* about this time left Singapore for Batavia, having on board as passengers seven Malays or Javanese, who professed to be pilgrims on their return from Mecca. When off Lingin these persons rose during the night and attacked the crew. They wounded the commander, who was on deck, severely with a kriss, and put the crew to flight, forcing them to take refuge in the rigging. The commander having grappled with the foremost of his assailants, during the struggle they both fell down into the cabin, where with the assistance of some of the other passengers the pirate was despatched. The rest of the pirates endeavored to force their way into the cabin, but two of them being killed by shots fired from below, the remainder desisted and attempted to set fire to the vessel. The crew having by this time rallied, prevented this from being carried into effect, one of the pirates was killed by a boarding pike, and the other three driven into the sea. These last cut away the boat of the vessel, but it swamped immediately on reaching the water, and it is supposed they were all three drowned. It was afterwards ascertained that the leader of the party had been some time settled at Singapore as a fisherman, and that shortly before this attempt on board the *Anna* he had absconded, leaving some debts unpaid. A piratical prahu manned by 23 Chinese, was seized by a Dutch cruiser in the month of June, and carried into Rhio. The boat had been fitted out at a small village on the north-east side of the island of Bintang, and cruized at first in the Straits between Singapore and Malacca, but not meeting with much success, they made a descent upon a small island to the southward of the Carimons, where they killed the male inhabitants, three in number, and carried away the women and children and all the portable property. They were soon afterwards taken. On landing at Rhio, two of the Chinese made their escape, and two Malay pilots, of whom there were altogether three attached to the boat, were bayoneted in trying to get away. Some of the Chinese inhabitants of Rhio showed a disposition to effect the liberation of their countrymen by force, but the authorities took measures to repress any attempt of the kind. A number of piratical vessels were seen off the coast of Java, some of them being of very large size. The schooner *Iris*, belonging to the Dutch royal navy, had an engagement with seven of these prahus. A Sambawa trading prahu was attacked off Cape Sandana by a pirate who carried eight lillas, and one gun of large calibre. A short time previous, a brig was taken, a merchant vessel captured off Japara on the north coast of Java. Five pirates took a prahu-mayang off Tegal, after a combat of more than five hours in duration. Another native craft from Rhio, loaded with gambier, was attacked by six pirates off Pekalongan and sunk. The brig *Sara*, on the 11th May, had an engagement with two piratical vessels, each armed with two guns and four lillas, off Mandalike, which lasted from the

morning till the afternoon. The *Sara* having exhausted all her shot, the commander had recourse to copper money (probably the ingots then in use) with which he kept up the fight. During the combat, the pirates several times sent their wounded to a prahu-mayang which they had with them, receiving reinforcements from it. One of the cruisers of Pekalongan was attacked off Batang, to the west of Samarang, by two piratical penjajaps and in spite of a prolonged combat she could not take them. The same thing happened at a short distance from Japara; the gun boat of the residency was attacked by a pirate which three times tried to board her, and a short time before two prahu-mayang had fallen into the hands of pirates the crews being carried away prisoners.

1827. During this year the Sultan of Matam, on the west coast of Borneo, continued to protect and assist the pirates, in spite of the treaty concluded by the Netherlands Indian Government with him in 1825. Towards the end of the year, he made an armed descent upon the island of Carimata, to seize the remains of a vessel wrecked on that island. He massacred Batin Galang who commanded there, and carried the Dutch flag in triumph to Matam. Captain Dibbetz, commander of H. N. M. frigate *Bellona*, was ordered to avenge this insult. The Sultan, was dethroned, and Rajah Akil who had once been famous as a pirate, but who for many years had rendered most important services to the Netherlands Government in their proceedings against the pirates, was established at Succadana as Sultan over the united states of Matam and Simpang. A treaty was concluded with Rajah Akil, which was confirmed by the government of Java in 1831. A Chinese tops on its way from Siam to Singapore, having been disabled by stormy weather, was forced to take refuge at a place near Pahang. She was immediately boarded by Malays, who turned the crew out and took possession of her. Five of the crew were murdered, and the rest found their way to Singapore by land, subsisting on shell fish and jungle fruits. In July, the ship *Loretto* left Singapore for London, but on the 8th August grounded on one of the Carimata group, and all endeavours to get her off having failed, the crew took to their boats and proceeded to Singapore. In about a quarter of an hour after they left the wreck, they saw it taken possession of by five or six pirate prahus, which had been hovering round the vessel for two or three days previously. In March, a boat belonging to the brig *Meridian* which was at anchor off Pulo Pontianak, a little island to the north of Sambas, was sent to the shore, containing the mate, an European apprentice, three Manila seamen and a native passenger. They were seized by a pirate prahu commanded by Nakodah Sitimbah residing at Sarawak. They were stripped of all their clothes, and the mate not being thought sufficiently quick in obeying the commands of the pirates, was knocked down, beaten, spit upon and forced to kiss the feet of the chiefs. The mate was kept exposed to the burning sun with no covering but his trowsers, and the rest were lashed together. It was at first proposed to put

them to death, but this intention was abandoned, and it was resolved to hold them to ransom. The prahu than proceeded to Samatan, plundering a small trading boat on the way, and the chief of Samatan was employed in carrying on negotiations with the Resident of Sambas for their liberation. The mate, apprentice and passenger, were finally brought to Sambas, and sent to the brig, but the Manila seamen were retained by the pirates, who refused to ransom them.

1828. In October, the Dutch schooner *Windhound*, Lieutenant De Man, belonging to the colonial navy, encountered six piratical vessels near Pakkies on the coast of Java, and attacked them. Five made their escape, and one was taken and brought into port. In this year treaties were made by the Dutch government with some chiefs on the coast of New Guinea, which contained clauses stipulating for the repression of piracy.

1829. In May the gun boat of Japara attacked three piratical prahus, one of which she took; it was found to have four guns of some calibre. A tope coming from Sumanap, having a crew of 15 men, was taken by pirates off Biliton. Another trading prahu was captured by pirates between Muntoh and Jebus; and a large galley with two banks of oars, well armed and manned by a crew of 150, gave chase to a tope coming from Singapore, which however succeeded in escaping by taking refuge at Banka. Four pirate boats cruized near Gossong Assam, and fifteen large boats entered the river Banju Assin at Palembang; afterwards proceeding to devastate the coasts of Banka. On the 22nd October, a trading prahu from Makassar came to action with two piratical boats in the Straits of Banka, and half of the crew were already *hors de combat* when it was rescued by the Dutch schooner *Zephyr* of the royal navy. Towards the end of the year 1829, the Dutch colonial marine was reduced to two guard ships, five brigs, nine schooners and nine gunboats, "which number" says Colonel De Man, commandant and director of the maritime forces, "appears insufficient for cruizes, and for the defence of this Archipelago against the attacks and depredations committed in so many quarters by the pirates; insufficient for the service of convoys, which are unceasingly required for the safety of the trade." On the 10th of October, a Malay prahu belonging to the Rajah of Pahang, was taken by three Lanun piratical prahus off Point Romania, at the entrance to the Straits of Singapore. As the boats was passing Point Romania with a light breeze, three large double-banked prahus, which had been lurking behind a projecting piece of land, suddenly made their appearance and hailed the prahu. As there was little wind at the time she did not pull well, the persons in the prahu therefore prepared to fight, on which they fired into her, pulled alongside and boarded before a single gun could be loaded in the unfortunate prahu. The fire of the pirates killed nine men and wounded others. No resistance was made, but the pirates nevertheless speared several men, and pinioning the rest sent them into their own prahus, and then

commenced plundering the boat. The cargo consisted of 100 piculs of tin and several cattles of gold dust, besides other articles of value, which were all removed by the pirates, who cut the masts of the boat and set her adrift, and then returned to their place of concealment. They stated that they were part of a force of forty Lanun prahus, who were lurking about the entrance of the Straits, with the intention of cutting off the trading boats on their way to and from Singapore and Rhio, and had already captured several prahus, the crews of which were with them and whom they intended selling as slaves. These piratical prahus were of very large size, double banked, two of them having crews of from 70 to 80 men each, and the other 40 or 50 men, each boat being armed with two long guns, two swivels, and an abundance of muskets, pistols, spears, swords, &c., Three Arabs who were passengers in the Pahang prahu were released by the pirates and allowed to proceed to Singapore in a small sampan, the pirates giving them a little rice, and permitting five of the men belonging to the Pahang boat to accompany them. This was done from the respect in which Arabs are held by all the Mahomedans of the Archipelago, even the most lawless. The pirates said they were not afraid of any vessels that could be sent against them either from Singapore or Rhio, and that they were determined to remain where they were, and capture every prahu and sampan pukat from Kalantan, Tringanu and Pahang. The English vessels *Nimrod* and *City of Aberdeen*, on their passage from Batavia to Singapore, in October this year, fell in with a native brig off the N. E. point of Lingin, bound to Rhio, which had been plundered by pirates, a number of her crew being killed or severely wounded by them. Before the *Nimrod* and *City of Aberdeen* came up with the brig, they saw several large prahus alongside of her, which sheered off on their approach. These vessels were afterwards becalmed near the same spot, and obliged to come to anchor, upon which five or six prahus also anchored round each vessel. They were of very large size, double banked, and full of men, and had there been only one ship, it is probable they would have attacked and taken her, these ships being very sparingly armed and manned. Several piratical prahus commanded by pretty Rajahs, which had been annoying the native trade, were captured through the exertions used by the Resident of Malacca. A gun boat sent out by the authorities at Singapore, to beat up the haunts of the pirates in the vicinity, was not so fortunate. In one of the first places she entered, such a formidable force of pirates was discovered, that the people of the gun boat dared not make their errand known, but pretended they were in search of some runaway convicts. The gunboat returned to Singapore without having made any captures. In the end of this year, the first authentic account of the murder of Captain Gravesome and part of his crew, at Semirindam in the river Koti, was communicated by Mr J. Dalton, who had left Singapore in a Bugis prahu in 1827, and who was detained as a prisoner for a considerable time by the

Sultan of Koti. The remains of Captain Gravesome's vessel were lying in the river Koti at the time Mr Dalton was there, and a number of articles belonging to the vessel were still in possession of the Sultan and others, while amongst his slaves were six persons who had belonged to the vessel. The vessel left Pinang or Malacca in 1819, having a valuable cargo of opium and piece goods, and two European passengers, a young lady about twenty years of age and a boy of about fifteen. She touched at Sambas and Pontianak and had received about a picul of gold dust besides several boxes of dollars. While Captain Gravesome lay off the Banjarmasin river he met with a famous pirate called Raga, a brother of the Rajah of Bagottan in Borneo, who advised him to proceed to Koti where he could easily dispose of the remainder of his opium and piece goods for gold dust and bird's nests. Captain Gravesome unhappily acceded to this suggestion, and Raga himself undertook to pilot the vessel up the Koti. On arriving in the Koti river the vessel was anchored off the Bugis Kampong of Semirindam, while Raga proceeded up the river under pretence of making arrangements with the Sultan of Koti for trading, but in reality to procure the Sultan's consent to cut off the vessel and to make an agreement for division of the spoil. The Sultan's consent was soon obtained, and Raga returned and commenced the massacre, by stabbing Captain Gravesome in his cabin. The crew were then attacked and all murdered except six who leapt overboard and swimming ashore hid themselves in the jungle. The passengers consisting of the young woman and the boy, who was severely wounded, were taken to the Sultan, and given in charge of his mother who interposed in their behalf. The Sultan told Mr Dalton that they were carried off by small pox, but several other persons, amongst the rest some of the Sultan's brothers and wives, assured Mr Dalton that they were poisoned, as the Sultan did not feel himself safe as long as they lived. The property on board the vessel was divided betwixt the Sultan and Raga according to a written agreement which they had entered into previous to the massacre of the crew. The guns, six iron six pounders were seen by Mr Dalton lying in front of the Sultan's house. The chief Raga boasted to Mr Dalton that he had killed twenty-seven Captains of European vessels with his own hand. This was no doubt a considerable exaggeration, but it is nevertheless well ascertained that many trading vessels had been cut off on the coast of Borneo, abundant evidence of the fact existing in the great quantity of plunder of every description belonging to these illfated ships, every where to be found along the coast, in the possession of the piratical chiefs and their followers. Mr Dalton in the narrative from which we have abridged the foregoing, says—
"In all the native states of Borneo, particularly those on the north east coast, from Point Salatan to the northern extremity Point Sooloo, bordering on the sea coast, may be seen abundance of articles belonging to European vessels. It is impossible to see the number of figure-heads of vessels stuck up in various quarters of

the campongs throughout the country of Koti, and other territories adjoining, without reflecting on the dreadful fate of the crews of such vessels as have been cut off, or wrecked on this inhospitable coast."

During this year, we learn from a very valuable account of the island of Bali published in the *Singapore Chronicle* for 1830, two French vessels from the Isle of France took away from Bali about 500 slaves, mostly young women and boys. French vessels from Bourbon &c. had been in the practice of coming regularly for the purpose of buying slaves, and in the same paper it is stated that the Dutch were in the habit of recruiting their army with slaves purchased in Bali, an agent of the Netherlands Indian government being established at Bali Badong for the purpose. During two years 500 men had been procured from the island of Bali in this manner, at a cost of about 20,000 dollars. On Bali all criminals become slaves to the Rajahs as well as the wives and daughters of persons dying without male issue, prisoners of war, divorced women, and poor unprotected persons. Vessels sailing out of Bali are frequently partially manned by slaves bought or hired from the Rajahs.

THE MIXTURE OF HUMAN RACES.

The subject of human races, and their division in the population of Europe, appears suddenly to have assumed an importance in public attention, which there was heretofore no reason to anticipate, since tribes and nations seem disposed again to break themselves up, and divide according to their races and languages. Races are made the groundwork of political coalitions, and a difference in stock and lineage becomes a plea for separation and hostility. If politicians come down into the ground of the ethnologist, they might condescend to receive a lesson from the science which he cultivates; and this would teach them that the mixture of races is often much more advantageous than their separation. Nothing is better established than that tribes and races of organised beings improve by the intermixture of varieties. A third stock, descended from any two races thus blended, is often superior in physical and psychical qualities to either of the two parent stems. The fierce indomitable spirit of the one, mitigated by the more docile and tamer disposition of the other parent stock, produces a more generous and noble off-spring. Facts which seem to establish this principle are well known in different provinces of the organised world; and corresponding observations have been made in the history of mankind. Without resorting to distant regions, we may observe that the English and French are mixed races. Who can say that our Saxon stock has not been improved by the mixture of other races engrafted upon it, or that the French, though partaking much of their old Celtic character, are not a great improvement on the original Celts.—*Dr. Prichard.*—(Address to the Ethn. Soc.)

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

THE VEGETABLE PRODUCTS OF THE TENNESSERIM PROVINCES.

By EDWARD O'RILEY, Esq.

The Teak Timber.

At the head of the vegetable productions of spontaneous growth of these provinces, the Teak of its extensive forests holds the most prominent place, forming as it does the only staple article of commerce that has as yet undergone any degree of developement, and upon which the interests of the port of Moulmein have arisen and steadily progressed to their present scale of importance.

The teak forests of these provinces form the south-eastern extremity of its "habitat" on the eastern side of the Bay of Bengal, which may be included within the following limits, viz. from the 15. to the 20° degree of N. Lat. and the 94. to the 98° degree E. Long., this space forming the greater portion of the valley of the Irrawaddy through which the branches of that river, and to the eastward the Situng, the Salwein, Gyne and Atturan and their branches have their course, is bounded by the range of mountains separating Arracan from Burmah proper on the west, and the range or ranges of hills supposed to be a continuation of the Himalaya on the east, or the boundary between these provinces and Siam.

Many obstacles oppose themselves to the attainment of an accurate knowledge of the actual resources of the teak localities, the most important and the only insuperable one being the excessive unhealthiness of the forests, which possess an atmosphere loaded with malaria, and fraught with fever to all persons unused to its baneful influence.—Since the demand for teak timber for the home market has been created, it will be apparent from the following statement of exports from 1840 to the present date, that the quantity to be obtained is fully equal to the demand for it, and this is the more evident from the circumstance of there being at the present time a stock of rough logs equal to 15,000 tons of converted timber, which has not yet passed the general department, the absence of a demand preventing the holders from paying the duty upon it. Exports of teak timber for the years from 1840 to 1848 inclusive.

1840	4,952	Tons.
1841	6,399	do.
1842	11,487	do.
1843	10,528	do.
1844	14,245	do.
1845	13,360	do.
1846	16,798	do.
1847	11,250	do.
1848	18,000	do.

to which may be added 3,415 tons appropriated to ship and house building and other purposes, giving a value, at the rate of 40 rupees per ton, of Cos. Rs. 869,800 as an annual amount derivable from this commercial staple of Moulmein.

As these remarks are intended merely as a general notice of the resources of these provinces, the subject of teak timber in relation with the regulations of government for its preservation, working of the forests, tenures &c. do not appertain to the subject in hand. It will not be foreign to the subject however to state that the system of administration applied to this vital element of the prosperity of Moulmein has hitherto fallen far short of its actual requirements. For the due encouragement of the timber trade in the first instance it was deemed advisable to grant licenses to cut teak within certain ill-defined limits to parties connected with the trade of the place, which teak on its arrival from the forests was subject to a certain rate of duty. For the preservation of the forests, certain terms were demanded by government from the holders of licenses, to the effect that trees below a standard size were to be left, and for each full sized tree felled, a stated number of young trees were to be planted, the latter having from experiment been found to be impracticable.

With so frail a tenure, it might have been anticipated that the holders of such licenses, perhaps without any large amount of capital available for forest purposes, would endeavour to realize the largest possible amount of benefit at the least possible outlay, with-

out reference to the ultimate production of the forests ; hence the system of sub-letting supervened as being the most congenial means to the end, and the result of such measure has been the working of the forests by Burmese who receive an advance on a contract to pay to the holder of the cutting license the half of the timber on its arrival in Moulmein. To the same cause must be assigned the reckless destruction of property which has become a system in the extraction of the timber from these forests. Many of the trees being of the largest size and admirably adapted for ship's masts, are for the sake of convenience and expedition in their transport to Moulmein, cut into lengths of more manageable dimensions, say from 15 to 20 cubits, and in this form of log depreciate the value of the original spar to one-tenth of the amount it would have realized as a ship's mast ! No excuse can be admitted in extenuation of this defective process of working the forests ;— the most powerful and effective animal power in the shape of elephants (which are in general use in the forest work) is abundant and cheap ; and if to that power the simplest European mechanical appliances were systematically applied with ordinary skill and management, the British navy might be masted from the teak forests of these provinces.

For the effectual preservation and continuation of supply of this valuable material from these provinces, some remedial measure of legislation is much needed, such in fact has occupied the deepest consideration of the present commissioner, and the point now remaining to be settled is, that of the nature of the measures to be adopted for the future. Whether it be found expedient to reserve the forests as a government property exclusively, or on the other hand, granting right of property in perpetuity to the holders of forest licenses on certain well defined terms, and thereby enlist their pecuniary interest in the preservation of the tree, and improvement of their grants—whether either of the foregoing form the basis of the ultimate measures of government, it must be evident that in the establishment of a well-organised system of administration instead of the present obviously defective one, permanent good must result, and it would be no rash speculation to look forward to the period when the immense tracts of forests still uncut will have become the property of capitalists at home, whose attention has been engaged to this system of investment by the liberal tenures and terms that may hereafter be instituted by government and instead of confining the forest operations to the immediate vicinity of the water as hitherto ; each property will then possess ample means of transit from its most distant parts for the extraction of the noble timber in its entire state, which still remains even in those forests said to be “ exhausted,” because distant from the point at which water carriage becomes available.

The subject of teak timber has claimed the attention of several public journals of late in consequence of some disclosures made in

the proceedings of the government dock yard of Bombay ; and all are unanimous in directing attention to it as a most important commodity, demanding the most stringent legislation to secure supplies for the future from the British possessions, equal to the growing demand for it, as a staple thus noticed by the Friend of India :—
 “The amazing durability, we might almost say indestructibility of teak, renders it not only one of the most valuable, but the most valuable wood in a climate like that of India, where the elements of decay are so numerous and powerful, where dampness brings on rapid corruption and the white ant devours without scruple.”

The useful kinds of timber which abound in the forests in addition to teak are very numerous ; many of these possess qualities superior to that timber in regard to durability under exposure to alternations of heat and moisture, and unlike teak, when used as posts for houses several are impervious to the attack of the white ant—their specific gravity, exceeding for the greater part that of water, and their excessive hardness, forming the principle obstacles to their being more generally known.

The principal trees are the following, some of them classed by Dr Wallich in his notice of the forests of these provinces.

- 1 Anan
- 2 Thengan “*Hopea Odorata*.”
- 3 Peengado “*Acacia*.”
- 4 Bambwai.
- 5 Pumah “*Lagerstromia*.”
- 6 Kouk H'moo.
- 7 Padonk *Pterocarpus*.
- 8 Theet Kha.
- 9 Young Baing.

Yin dick, a Bastard Ebony.

Kuzee-tha, similar to Box wood in grain, and several others of small dimensions but in general use with the natives for household and other useful purposes requiring a hard and close grained material.

Of the foregoing the “Anan” stands pre-eminent in its characteristics as a forest tree of the largest dimensions, its straightness and freedom from internal decay, and more especially in its indestructibility under all circumstances of useful appliances. A specimen of this wood has been brought to the writer's notice which for the last 60 years has formed the supports of a native bridge over a creek in this vicinity ; embedded in mud and exposed to the alternations of wet and dry during each tide ; it has undergone no change beyond the decay of the sappy parts immediately below the bark, the posts of the bridge consisting of *young trees* cut on the spot and so applied at once. This unexampled durability renders the “Anan” of these provinces a valuable article for railway purposes ; and should the attention of parties be directed to it, the supplies to be obtained from these forests alone for rail-

way sleepers are unlimited ; it would also be found to answer admirably for such ship-building purposes as require extra strength and durability, and would afford the finest keel-pieces in the world.

Bambwai and Peenguda possess the same property as Anan in resisting decay, but are less abundant, denser in grain, abound in knots and smaller in size than that timber, they are however prized by the natives for their useful properties, and are with "Thengan" generally used in the whole tree as posts for monasteries, houses &c.

The wood in most general use for almost all purposes but principally for large canoes, which form the bottoms of the native trading crafts is "Thengan," this is owing to its being more plentiful than most of the others, easily worked ; and on killing the tree before felling as with teak is then capable of floating ; this process however is rarely observed ; the tree selected for working is felled and hollowed on the spot, and the canoe removed to the locality of the water to undergo the process of widening by fire, some trees producing by this rude process canoes of 60 to 70 feet long by 6 to 8 feet breadth across the centre.

"Kouk H'moo" "Toung Being" and "Theet Kha" are also much sought after by the natives for boats—the former is also well adapted for spars for vessels, being straight, light, of large dimensions, and of long fibre. "Toung Being" is equally lasting with Thengan but scarcer than the latter of sizes to afford a large canoe ; "Theet Kha" is a light timber easily worked and from its possessing the valuable property of being *exempt from the attack of the "teredo"* is in great request for small canoes, it is a scarce tree however. In common with "Theet Kha" both "Anan" and "Peengado" are impervious to the destructive attack of the "teredo," the two latter may possess such property as the consequence of their closeness of fibre and extreme hardness, but the same reason cannot be applied to "Theet Kha" from its opposite characteristics. In the latter case it is owing in all probability to the existence of some acrid principle in the wood (implied by its name "Bitter-wood") which, similar to oxide of iron has the effect of repelling the insect. In the constructions of wharfs and embankments on the river face, both "Anan" and "Peengado" would be found valuable for posts, and if proper care be observed in the selection of the timber and in freeing it from all the sappy portions of the tree it would doubtless prove as lasting as brick-work.

"Padouk" affords a fine timber for many purposes, and from its large size and even texture has been brought into general notice. Several experiments have been made with it in the Ordnance department of Madras to ascertain its fitness for gun carriages, but with what result, I am unable to state. As a substitute for teak, should it be found to answer for the above stated and other purposes, it is valuable, and from its large size, even grain rendering it

susceptible of a high polish, and beauty of color and pattern, it appears to be well suited to the manufacture of articles of furniture.

The foregoing are the most generally known woods of the forests in common use with the natives, but to them might be added a list of forty to fifty others more or less useful, which require but a careful examination to reveal some quality that may render them of serviceable application.

Of the remaining forest trees and shrubs which possess valuable properties, the following are those most adapted to a demand for Europe consumption; but owing to that absence of commercial enterprise already noticed, are at the present moment all excluded from the list of exports in Great Britain.

Dyes.

		<i>native name.</i>
Sapan Wood.....	"Caesalpinia".....	"Teni-yeit.
Jack.....	"Artocarpus".....	"Peingnay."
Red-Dye.....	"Morinda Citrifolia" ..	"Neepatsay."

For many years past a trade from Mergui to Dacca in Sapan wood has been prosecuted by the native boats, the article being obtained from the Sapan wood forests lying near the frontier hills, from the Eastern side of which large supplies are annually imported through Bangkok into Singapore. It is also found throughout the valley of the Great Tenasserim river and is said by the Karens to be plentiful in the vicinity of the head waters of the "Hloin Bwai" and "Dagyne." In isolated patches it is found generally distributed throughout the whole provinces.

The dye obtained from the wood of the "jack" as prepared by the natives is a brilliant orange yellow, which is attained by the addition of an infusion made from the leaves of the "Don-yat" producing a brilliancy of color not excelled by the best English dyers. The new sacerdotal dresses of the "Poongyees" evince the effect of this process; and were a specimen of the dyed article sent home it would be found to surpass most of the British range of Dyes of its class, and as a process not requiring the application of any of the metallic bases as a mordant, would doubtless become an article of enquiry and consequent standard value.

The red dye obtained from the roots of the "Morinda Citrifolia" is equal in every respect to that of the Sapan wood; it is in fact in general use with the natives for dyeing the yarn of the native cloths, both silk and cotton; and with the exception of some specimens of Java dyes obtained from the same tree, I have rarely seen better single colors of the kind; it must be borne in mind in relation to such a comparison, that the use of mineral mordant in the native process is unknown, and with the exception of weak ley made from the ashes of some of the animals of the jungles, no other application is made beyond the simple solution of the extract from the wood itself.

Indigo

Of four different species of plants indigenous to these provinces, is used by the natives in their blue dyes, those in general use are "Mai-yuet-thai" described as an "Indigofera" by Griffiths.

"Mai-gyee" do. "Creanthæra" do.
 "Mai-Ngwai" do. "Cescepius-tinctoria" by Roxburgh.

The "Mai-Gyee" produces the best coloring solution and is consequently in more general use, each village having a small plot of the plant from which the leaves are obtained as occasion requires: the process of dyeing being simply that of repeated immersion of the yarn into the liquid obtained from the plant after fermentation, until the requisite depth of color is attained, and the subsequent process of the ley application concludes the dyeing operation.

Green colors are produced by the application of a solution of "Turmeric" and any of the juices of fruit possessing a strong acidulous quality—the Citric being preferred in this respect. The Yona is taken from the "ley" solution after dyeing a full depth of color from the indigo, and in its wet state subjected to the action of the Turmeric and Citric acid solution; the depth of color depending upon the wish of the operator as regards a single, or repeated immersion.

Of trees and plants possessing odoriferous properties, those forming articles of trade are as follows:—

Native name.

"Kurrawa"	Laurus Sasafras	Sasafras.
"Kenamet"	Santalum	Bastard sandal wood.
"Thee-Kye-bo"	Larus C.	Wild Cinnamon.
"Akyan"	A very fragrant and a very scarce wood of high value with the natives.	

The whole of the foregoing are more general in the forests of the lower province of Mergui, they are however met with, distributed sparingly throughout the whole of the provinces, chiefly in the valleys near the sources of the larger rivers, all are much prized by the Burmese as forming a portion of their "Materia Medica" and are also in extensive use for incense and similar purposes.

The oil producing trees are:—

"Ten-nyeng" and	} both of the class "Dipterocarpus" and
"Eing"	
"Theet-tyee" producing the black varnish peculiar to the Burman territory and of which the lacquered-ware in general use is made.	

The Tavoy province, from the large number of wood oil trees found in its forests, supplies the whole of the provinces with materials made from the oil; as torches &c. it is also used extensively by the natives for burning and has been found to answer very well

as a paint oil when freed from its coarser feculencies; in which state it is also applied as a varnish for teak built houses; it is not generally known that this oil possesses the same medical qualities as the Balsam Copaiba.

Were a process of clarification applied to this oil, it would be found to meet a ready demand in the home market; and from its great abundance and cheapness would afford every reasonable expectation of a profitable result, it has as yet not undergone such a trial of its value at home, and until that be effected it may remain as heretofore an abundant and useful article of native consumption solely.

“Theet-tzee” is not so abundant in these provinces as to afford room for export, a demand created for this purposes would be met by supplies derived from the trade with Rangoon, where it is procurable in large quantities; this for the present however does not appear probable, from the circumstance of its having been ineffectually brought to the notice of parties at home whose interests would be promoted by its introduction as an article of import from this quarter, and after several notices through the Asiatic Society of Bengal on its valuable properties as a black varnish, it has met with no further enquiry.

The others known forest productions which, in quantities would form a valuable acquisition to the exports of these provinces are;—

	<i>Native name.</i>	
Gamboge—produce of “Slaterguntis”	}	“Tha-nahtan.”
Camboyioides		“Poma-thein.”
Camphor.	“Blumia”	“h’nan-tarook-tzèe.”
Balsam tolu.		“h’pa-la-thee.”
Cardamoms.		

The trees producing both “Gamboge” and “Balsam-tolu” are unequally dispersed through the jungles and are comparatively scarce, the gamboge of the two predominates, and might afford a considerable quantity of the article did the knowledge of its value, and the process of collecting it exist with the Karens; the tree however is felled indiscriminately with the rest of the forest in the annual clearings for upland paddy and vegetable plantations, and an article which forms a prominent item in the rich exports from Siam, is on this side of the border range utterly neglected and destroyed.

The most common weed which springs up after the fires of the new clearings in the jungle, is that which produces the camphor; of its abundance it is scarcely necessary to remark that it is, next to grass, in excess of all other spontaneous vegetable life, and with proper appliances in the manufacture of the salt (its property) might be rendered useful as an article of commerce.

The following remarks of Dr J. McClelland on the subject of this camphor submitted to his inspection by the writer in 1842 may be interesting:—

Camphor.

“With regard to the letter of Mr O’Reiley, which we have inserted in the correspondence, we referred to Dr Voigt of Serampore for information relative to the plant affording the camphor, of which specimens, both of the plant itself, and of the crude camphor afforded by it, had been forwarded by Mr O’Reiley. Regarding the plant, Dr Voigt states, that it belongs to De Candolle’s genus “*Blumia*,” and is, as far as he can see, a new species; the genus however affords, Dr Voigt remarks, several species presenting camphoracious properties. The sample of camphor forwarded by Mr O’Reiley, as obtained from the plant in question, which appears to be very common on the Tenasserim coast, we placed in the hands of the Laboratory Assistant in the Honorable Company’s Dispensary, in order to have a portion of it refined, and also that the various preparations of camphor in medical use might be prepared from it, which has been done accordingly, and the samples of the different articles obtained, have been submitted, through the proper channel, to the Medical Board.

In refining this camphor, there is a loss of about 25 per cent of its weight. The ordinary loss in refining China camphor is about 19 per cent. Taking the value of the latter at 4s 8d per lb. in its crude state, the usual rate being for the present years 2 rupees 8 annas per lb., that of the former would be 3s 9d; but last year the article was obtained for 2 rupees per lb., or 11d per lb. less than its cost, this year; so that the Tenasserim camphor would require to be delivered at 2s 10d or 1 rupee 5 annas per lb. in order to compete with the Chinese article. From the observations of Mr O’Reiley, the plant seems to be very abundant, and the method of manufacture both simple and efficient, so that there would not appear to be any obstacle to the article becoming an important production. In its refined form, it is identical in all its properties with Chinese camphor.”

Cardamoms are collected by the Karens in small quantities, which find a sale in the place; but the amount thus obtained is in very small proportion, to the actual production of the jungles; the older forest clearings appear to be the resort of the plant, which might be propagated to a large extent with no trouble beyond distributing the seed over the surface of the ground at the commencement of the S. W. monsoon; such an employment however is naturally distasteful to the Karens who find full occupation more congenial to their habits in killing and felling the teak of their localities.

Gums and Resins

Are of such trifling importance in the range of native wants that little is known of these productions, which in the large variety of forest trees of these provinces may be supposed to exist. The “Then-gan” “Then-gui” and several other trees belonging to the

class "Eleocarpus," possess a resin similar in its properties to the "Copal" of commerce ; but the quantity to be obtained from each tree, and the process of collecting it, are alike unknown.

Turpentine may also be included in the list of products obtainable within the range of these provinces. A Belt of fir trees (recognised by Dr McClelland as a new variety of the "Pinus-longifolia," is found occupying a range of hills on the upper waters of the Thong-yeen river, the elevation of this site has not been ascertained, but with a contiguous water carriage it is reasonable to suppose that with any ordinary degree of skill, the trees might be extracted from their present locality and made to constitute a valuable addition to the present circumscribed commerce of Moulmein.

In the foregoing enumeration of useful and valuable productions of these provinces, it will be seen that by far the larger portion remains in a state of inutility, but as each succeeding year rolls on, bringing fresh discoveries in the arts, extending the present, and creating new demands, it is to be hoped that a stimulus will, ere long, be given to commercial enterprise and enquiry, which will developpe all sources of commerce these provinces possess ; and it would be hazarding no rash opinion in stating, that at each advancing footstep in the investigation of the interior resources of the country, fresh discoveries would be made ; and articles of commercial value would be brought to light which in their useful application would evince the importance of this hitherto little known portion of the British territory in the east.

It is more than probable that an investigation of the characters of the forest vegetation would disclose the existence of that valuable tree from which the "Gitta Taban" or "Percha" of commerce is obtained, its geographical limits have yet to be ascertained, and on reference to Wallich's list of trees found in the Tavoy provinces, I find the "Sapotea" stated ; with the remark "leaves a beautiful silky and gold color beneath," which I believe to be the same class, and of similar description to the "Taban" of the Straits. Here then is a data upon which a useful search could be instituted, and if found so high up as Tavoy, it doubtless exists in greater abundance further to the south, where the luxuriance of the forest vegetation is rarely equalled.

Several species of "Ficus" found in these forests are known to the natives by the name "tap'haan," a similarity to the "taban" of the Malays at once striking, but the milky juices peculiar to the "Tap'haan" differ in no respect from those of the "Peepul" "Banyan" and others of the same class of "ficus" which possess an inferior "cuouchouc" property.

In completion of this crude notice of the various production of this coast which possess a commercial value, those of the islands must not be forgotten ; forming as they do a list of articles second in importance to none of those enumerated.

Distributed throughout the Mergui Archipelago and forming

the medium of trade by native craft with Pinang principally are bird's nests, beche de mer, fish sounds and dried fish, of the finest description. Tortoiseshell is occasionally met with, and the existence of pearl beds has long been known to the Chinese who frequent the islands. Tin and copper ores have been obtained from known localities in the Mergui group, and the timber of the forests is said to surpass in size and beauty most of that of the coast. The mangrove swamps which surround each island afford in the bark of the tree a powerful "tanin," which with a system of screwing into bales, would prove a source of profit as an article of export to Europe, and in conclusion of the list, with waters teeming with fish, the sounds of which properly prepared constitute the Isinglass of commerce, it would be difficult at the present day to find a nucleus for commercial enterprise more promising than this of the Mergui Archipelago.

The first steps in the advancement of a knowledge of the resources of any country belong as a matter of polity to its government; private enterprise in pioneering operations has become proverbially unsuccessful, finds but few advocates even among the most sanguine and speculative, resting therefore with government to institute measures for dispelling the darkness that clothes many sources of information affecting the commercial resources of these provinces; the most effectual and obviously least expensive plan would be, to establish at the seat of government in each province, under charge of an officer of government, a repository in which to preserve all specimens of economic value and utility found within its area, due encouragement being afforded to the natives, and more especially to the Karens. It would be found that specimens and information connected with the geological and mineralogical characters of the country would accumulate, and in course of time afford a rich and varied store of valuable information, thus obviating the necessity for the employment of means of investigation of the interior in the first instance, except such as on discovery by these means from their importance demanded it, the very extent and importance of which tend to defeat the object in view, by operating upon the readily excited fears of a race of people, who have still the recollection of the compulsory measures of their former rulers deeply impressed upon their minds.

Specimens of importance would be submitted in due course to the report of the home authorities, and by a system of registration of such reports, combined with the prior circumstances of locality &c. duly noted at the time of reception, the best possible information could be obtained by any party wishing to embark in its development, without the necessity of any initiative process of such investigation with its attendant obstacles.

ON THE LEADING CHARACTERISTICS OF THE PAPUAN, AUSTRALIAN, AND MALAYU-POLYNESIAN NATIONS.

By G. WINDSOR EARL, Esq., M. R. A. S.

CHAPTER III.

THE MALAYU-POLYNESIANS.

Great dispersion of the race.—Their physical and moral characteristics as contrasted with those of the Papuans.—Dark and fair tribes.—Human sacrifices.—Mode of disposing of the dead.—Character of their migration as compared with that of the Papuans.—Two great branches of the race.—Maritime enterprise of the "Pacific" branch.—Agricultural spirit of the branch inhabiting the Indian Archipelago.—Effect of foreign influences on the race.—People of Ceram, Timor, and the Serwatty islands.—General appearance of the Serwatty Islanders.—Singular position of their villages.

The Malayu-Polynesians have scarcely been known to us as a nation more than three quarters of a century. The early Spanish navigators and the English buccaneers, when crossing the Pacific, usually pursued a course which led them clear of the numerous groups of islands scattered over the tropical portions of this ocean, and if they happened to discover one or other of the detached islands, their rough method of dealing with aboriginal tribes prevented them from acquiring any accurate details concerning their customs and characteristics. In the Indian Archipelago, again, the Mahomeddan Malays were those with whom European strangers had their principal dealings, and commerce being their chief object, they paid little attention to the people of the interior of the islands they visited. It was not until the Pacific was explored by our celebrated navigator Cook that any thing like accurate details were obtained concerning them, and since then so much information has been afforded by subsequent navigators, and by intelligent missionaries who have resided among them for years, that the Malayu-Polynesians, of the Pacific, at least, are better known to us than many nations nearer home and far more accessible. The great interest they have excited among intelligent Europeans is probably in some degree owing to their comparatively recent discovery; but the singular position in which they were found is quite sufficient to account for it:—a people comparatively uncivilized, unacquainted with the use of iron, and therefore incapable of constructing substantial vessels, yet possessed of a spirit of enterprise that had led them to seek out and occupy islands remote from each other, and scattered over seas comprising from Easter island in the east to Madagascar in the west, 200 degrees of longitude or nearly three fifths of the circumference of the globe.

The strongest evidence in favour of a common origin for all the Malayu-Polynesian tribes is to be found in the general uniformity

that exists in the structure of all the dialects spoken by them, and in the almost perfect identity of many of the words most commonly in use. But this is a subject that I do not purpose to enter upon, especially as it is in the course of illustration by the editor of this Journal, who has given considerable attention to this branch of ethnology, while my own observations have been chiefly the result of the favourable circumstances in which I have been placed for obtaining a *personal* acquaintance with many of the tribes which form the subject of the present essay.

The physical characteristics of the Malayu-Polynesians are so distinct from those of the Papuans, that a single glance is sufficient to detect the difference between the races. Their complexion varies from pale yellow to nut-brown, the former being usually accompanied by comparatively regular features, straight hair, and a superior stature to the others; while the latter is usually found in conjunction with short and squat figures, features of a more heavy character, obliquely-set eyes, and hair, though long, often wavy or slightly curled. The celebrated French navigator, Bougainville, was so struck with the difference he found in these particulars between individuals whom he met with at Otaheite, that he supposed them to belong to different races. This variation, however, admits of easy explanation, for the fair people all belonged to the upper classes, who were well fed and seldom subjected to exposure to sun and rain, while the others all belonged to the poorer classes, on whom labour and hardships may have produced deteriorating influences. The same difference is found among the tribes of the Indian Archipelago, but here the causes are more apparent. The fairer tribes are invariably found occupying the elevated table lands, where they enjoy a pure climate and abundant food; while their bretheren of the coasts spend no small portion of their time cramped up in canoes or small prahus, and rarely enjoy a free use of their limbs. A very fair example of this is afforded by the inhabitants of Celebes, where the mountaineers, as far as personal appearance is concerned, are the aristocracy of their race, yet are evidently the same people with the dark, squat, Bugis.

In their moral characteristics the difference is equally great. The ferocity and hatred to strangers of the Papuans gives place to a mild and gentle disposition and a spirit of hospitality towards visitors which distinguishes them from most of the uncivilized tribes of the world. Instances have certainly been known of their behaving with treachery towards strangers, but this has been only when their cupidity has been tempted by the sight of what, to them, was enormous wealth, which appeared to be of easy acquisition; or when they have been instigated by foreigners who had settled among them and had acquired an influence over them. Until lately our acquaintance with the race was confined chiefly to the tribes of the western parts of the Archipelago, who had fallen under the sway of the Mahommedans, the baneful influence of whose religion

and principles have been found utterly destructive of the better qualities in the nature of the Malayu-Polynesian. This accounts for the generally received opinion of the race, especially of the portion which exists within the limits of the Archipelago, being more unfavourable than that expressed above.

Yet with all the amiable traits which the Malayu-Polynesians undoubtedly possess, their history is darkened by the prevalence of a custom particularly hateful to a civilized people, to whom the shedding of blood, except in fight, is especially obnoxious;—namely that of human sacrifice. Among the tribes of Borneo, the Philippines, Ceram, and Timor, it assumes the form of taking the heads of enemies and strangers to adorn their rude temples, but in the Pacific, and also among the Molucca islands, it has a more decided religious character; and human beings, who are slaughtered for the occasion, are offered up as sacrifices at certain religious ceremonies which occur periodically. The mere expression of abhorrence on the part of Europeans who became acquainted with the prevalence of the custom, has sufficed to put almost a total stop to it throughout the Pacific, but it still prevails, though not to a great extent, among the islands of the Moluccas, as I shall have to notice below. This must not, however, be attributed to blood-thirstiness on the part of the Malayu-Polynesians, but to the establishment of a cast of Priest-Rulers, who found that by assuming the power of pointing out individuals to be sacrificed, they acquired an influence over the minds of the people, who were thus kept in a state of terror and subjection. Christian Priest-Rulers of the last century established the same system in civilized Europe; the Inquisition. Cannibalism, of which the New Zealanders and the Battas of Sumatra have been, and I fear justly, accused, cannot be admitted as being a national custom, and therefore requires no comment here.

But the most striking of all the customs of the Malayu-Polynesians is their mode of disposing of the dead, which seems to have been retained with great scrupulosity by all the tribes of the race, if we may judge by the uniformity of the process among all, even the most remote, who display evidence of having the same origin. Among the more rude tribes the bodies of the dead are rolled up in soft bark and deposited in cradles formed of poles, and arranged between two forked branches of a forest tree, so as to form a secure repository for the body, which is allowed to remain there until the flesh has entirely decayed, when the skeleton is either preserved in their houses, or placed in some sacred repository. Where forests are not at hand, platforms are erected for the purpose, as in the *Morais* of the South Sea Islanders. The reader who feels interested in this subject should compare the sketches of this mode of sepulture given in Angus' Travels in South Australia, Stokes Voyage of H. M. S. *Beagle* (Gulf of Carpentaria,) Catlin's account of the North American Indians, (the Mandans) and in an anonymous work recently published on the Nagas or Hill Tribes of

Assam, where the uniformity to which I have alluded will be sufficiently apparent. The Dayaks of Borneo, the natives of the interior of the island of Formosa, those of Ceram and the groups of the Molucca Seas, in fact all aboriginal tribes which show evidence of an identity of origin with the Malayu-Polynesians, are found to adopt this singular mode of sepulture.

But this subject will lead me into endless details, unless I adopt some more systematic mode of arrangement, and I will therefore depart from the plan I followed in my notices of the Papuans, and proceed at once to discuss the probable course of the Malayu-Polynesian migration. All the evidence that can be collected from the present condition of the Papuans tends to prove that *their* migration took place at a very remote period; that they were then in an almost purely savage state, having no other arts to elevate them above the level of the brute creation than those of obtaining fire by friction and employing it in roasting their food, of shaping pieces of wood into weapons of war or of the chase, and of forming the bark of trees or logs of wood into canoes or rafts for transporting themselves from island to island; and that this migration continued in one uninterrupted stream, until circumstances occurring near its source, cut it off, or turned it in another direction. On the other hand the migration of the Malayu-Polynesians appears to have possessed less unity, and to have been carried on over a long space of time, if we may judge by the different degrees of civilization which various tribes had attained when first discovered by Europeans, whose identity was perfect in every other respect. For instance the South Sea Islanders, who appear to have entered the Pacific by way of the Phillippines, from which the Marian and Caroline Islands form an almost uninterrupted chain to the Friendly Islands, were found, on their first discovery, to be very little advanced in civilization. Their skill in navigation, and in the construction of vessels adapted for long sea voyages, and which their knowledge of agriculture rendered them capable of furnishing with supplies of provisions, enabled them to undertake expeditions which the Papuans could never have attempted; but they were unacquainted with the use of iron, and also of the manufacturing arts, beyond that of beating out pieces of the soft bark of trees into a kind of cloth. That branch of the race which spread over the Indian Archipelago as far to the eastward as Ceram, near New Guinea, where it seems to have been stopped by the Papuans, possessed, however, many of the arts of civilization which have been derived neither from the Hindus nor Mahommedans, and which have evidently been brought from the original seat of the race, wherever that may have been. This branch of the race is also found to differ from the Polynesian branch in a very remarkable particular. That spirit of nautical enterprise which carried the latter over so large a space of open sea scarcely exists among the tribes inhabiting the larger islands of the Archipelago, some of

which, those of Timor for example, have even an objection to embark upon the water. Whether this peculiarity originated in their superior state of civilization at the period of their migration which enabled them to derive an ample subsistence from the rich table-lands of the islands they resorted to, or whether the Polyne- sians of the Pacific may have lost some of the arts they once possessed from the difficulties that attended their migration, or from their not finding the necessary materials in the islands of the Pacific, are points that yet remain to be decided.

The Indian Archipelago, however, is not without people who are equally adventurous navigators with the South Sea Islanders ; the Rayat Laut for example, and the Orang Badju who roam about the coasts of Borneo and Celebes ; but the *bulk* of the aboriginal population of the Indian Archipelago is now agricultural rather than maritime, whatever may have been the case formerly. Among these I will include the Battas of Sumatra, the Dayaks of Borneo, the inland inhabitants of Celebes, and the people of Timor and the Moluccas. I propose to devote a few pages to the illustration of the characteristics of this branch of the race, which is now the least known of the Malayu-Polyne- sians, so many able writers having within the last half century made us acquainted with the most minute particulars connected with the tribes of the Pacific.

The foreign influences to which the western parts of the Archipe- lago have been subjected from having been successively under the partial controul of Hindus, Mahommedans and Christians, have done much to alter the nature and habits of the aboriginal inhabitants. In Java the ancient race has entirely disappeared, unless the people of the Tenger mountains, shortly described in Raffles' History of Java, prove to be a relict of the aboriginal race. Traces of Hindu occupation are to be found in Borneo and Celebes, and the Ma- hommedans have extended themselves even to the Moluccas, so that the only part of the Archipelago in which the ancient race can be found without suspicion of having been subjected to foreign influences, is the chain of islands extending from Timor to Timor- Laut, including the latter, which from their not possessing valuable articles of commerce calculated to attract foreign traders, seem to have been neglected by Indian navigators ; while the Dutch on gaining possession of the Moluccas, contented themselves with keeping other Europeans away by establishing small military posts at the few ports most likely to be resorted to, leaving the natives to the uninterrupted use of their former customs. Traces of Christianity are certainly to be met with near the spots on which they had established their posts, but these do not seem to have inter- fered with the practice of their ancient customs by the bulk of the inhabitants. Equally favourable specimens of the old Polynesian race are to be found in Ceram and in Timor, but here they are mixed up with Papuan tribes, and the origin of their customs would therefore be uncertain. I have also other reasons for selecting the

people of the Serwatty islands, (the name by which this chain is known) as presenting a type of the Malayunesian branch of this race.* We are in possession of more details concerning them than of any other aboriginal tribe of the Indian Archipelago, from their having become an object of great interest to the officers attached to the Port Essington Expedition, and I am able to offer the result of a series of observations on their customs and characteristics carried on during a close and almost constant intercourse of six years, and some of the details may prove not uninteresting even to those who care little about a systematic classification of the human race.

It has been a subject of general remark among those visitors who have had opportunities of comparing the Serwatty Islanders with the people of the neighbouring countries, that they bear a more general resemblance to the inhabitants of the South-Sea Islands than to those of the Indian Archipelago. They are taller and

* I have here found myself under the necessity of inventing a term as applicable to the branch of the Polynesian race inhabiting the Indian Archipelago, which, however, will be sufficiently intelligible to the general reader without much explanation. The term "Indian Archipelago" by which our group of islands is now generally known, cannot supply a concise and appropriate term for the native inhabitants. The Greek Archipelago is inhabited by *Greeks*, and they are called so, but it would be very inappropriate to call natives of the Indian Archipelago *Indians*. It therefore becomes necessary to make use of the term "aboriginal tribes of the Indian Archipelago" or some equally long and inapplicable name, when speaking of the Malayu-Polynesians of the Archipelago, which from the constant repetition required in Ethnological discussion becomes almost offensive, so that a writer on this subject often experiences great difficulty in rendering his compositions even readable.

The French, who are distinguished by the extent of their writings on Ethnology, have adopted the terms *Océanie* or *Océania* and *Malasia* to designate the Indian Archipelago, neither of which, however, have been by any means generally adopted, the late Dr Pritchard, the distinguished author of the "Physical History of Mankind," who uses the term *Malasian* when speaking of the brown-complexioned races of the Indian Archipelago, being the only English writer who appears to have noticed them. The reason is sufficiently obvious. The term "Océania" is equally applicable to several other clusters of islands, and both that and "Malasia" are not sufficiently suggestive to impress themselves on the memory of the general reader. Sir Stamford Raffles proposed that the brown-complexioned races should be termed "Hither Polynesians" to distinguish them from the allied tribes of the Pacific who were to be termed "Further Polynesians;" but the Saxon adjunct seems to have met with no favour with ethnologists, for no other author has adopted them.

Nevertheless the time has arrived when a distinctive name for the brown races of the Indian Archipelago is urgently required, and it should be made to accord as closely as possible with the terms by which that portion of the world is most generally known, namely "Indian Archipelago" or "Malayan Archipelago." By adopting the Greek word for "islands" as a terminal, for which we have a precedent in the term "Polynesia," the inhabitants of the "Indian Archipelago" or "Malayan Archipelago" would become respectively Indu-nesians or Malayunesians. I have chosen the latter for several reasons. The first term would be too general, and might be thought equally applicable to the Ceylonese and to the natives of the Maldives and Laccadives. The latter, on the other hand, will show on the face of it that it is intended to apply only to the brown races of the Archipelago, and it would be some acknowledgement of the enterprise of the Malaysians in having extended their voyages over the entire Archipelago previous to the arrival of Europeans. Their language, too, is spoken at every sea-port, with the exception of those of the Northern Philippines. I would suggest, however, that I do not propose offering the term for general use, but have merely adopted it for my own convenience in illustrating the subject now under review.

fairer than the Malays or Bugis, and being for the most part simply clad in a waist-cloth of cotton or of the bark of the paper mulberry, with their long, and often wavy hair floating over their shoulders, or tied at the back of the head, leaving the ends to stray loose like the hairs of a horse's tail, they have a more primitive and unartificial appearance than their brethren of the west ; which is not a little heightened by the strange proportions of the vessels in which they generally make their first appearance ;—long and graceful cora-coras, with low sides, and great breadth of beam, the high stems and sterns which rise like horns at each extremity of the vessel being ornamented with festoons of large cowrie-shells and bunches of feathers.

The singular position in which their villages are erected is also calculated to arrest attention. Unlike the Malays and other tribes to the west, who build their towns and villages on the low ground near the sea or the banks of rivers, the Serwatty Islanders invariably select the summits of hills, or the brows of cliffs which rise abruptly from the sea, as sites for their habitations. At Kissa, the westernmost, and the most populous in proportion to its size of the group, every hill with which its surface is studded is crowned with a neat and compact village, and as the grassy slopes which run down to the sea are for the most part clear of trees, and generally covered with flocks of sheep and goats, the island presents an appearance of life and cheerfulness which is not to be met with anywhere in the western parts of the Archipelago, where the high mangroves which line the beaches generally hide the interior of the country. The writer will not soon forget the scene that presented itself on the occasion of his first visit to Kissa. The vessel arrived at the island in the early part of a fine night, and as it is extremely difficult to find the anchorage (which lies so close to the cliffs that a warp is usually carried on shore and made fast to the rocks) even in day-light, a gun was fired as a signal for a pilot. Its last echoes had not yet died away among the ravines, when a bright flash was sent up from the hill overlooking the bay, which was repeated from hill to hill until the signal must have spread over the entire island. A boat was launched immediately from the shores of the bay, which in the course of a few minutes brought on board several intelligent natives, with whose assistance the vessel was soon secured at the anchorage. We thought at first that the flashes were those of great guns, but were undeceived on hearing no report. They proved to have been caused by bunches of dried palm leaves suddenly lighted and shaken aloft, these bunches being always kept ready for use at a moments notice. This is part of a system which they have found it necessary to adopt for protection against pirates, who still extend their ravages over these otherwise peaceful countries.*

* Only a few years ago the principal village of the island of Roma, within sight of

These elevated villages are very systematically arranged, and a description of one will serve for all. The crest or extreme summit of the hill is occupied by a large tree of the *ficus* genus (*ficus indica* of Rumphius) called *waringin* by the inhabitants. It bears a larger leaf than the *waringin* of the Malays, and seems to be intermediate between it and the *ficus religiosa* or sacred banyan tree of the continent of India. Under the shade of this tree are placed the idols of the village, upon square platforms of loose stones, and here also the elders meet when any important matter is to be discussed. Below the tree the sides of the hill are scarped into a succession of platforms or terraces, on which their houses are erected;—oblong, barn-like edifices, with walls of thick plank, and roofs thatched with leaves of the cocoanut or sago-palm; the houses of the chiefs being distinguished by wooden appendages, intended apparently to represent buffalo-horns, which are fixed to the roof-tree at the gable ends. The lower part of the village or town is surrounded by a wall formed of large, loose stones, from 12 to 15 feet high, and about 4 feet wide at the base. At Letti, a neighbouring island, where the hills are far inland, the brows of the cliffs which overhang the sea are selected, and a similar mode of scarping into terraces is adopted where necessary. The same system also prevails at Baba and Timor-laut, but here much more attention is paid to the means of defence, probably owing to the constant warfare that is carried on between the inhabitants of the different villages.

This mode of building villages on elevated terraces is not, however, peculiar to the Serwatty Islanders. It is also met with among an ancient people inhabiting the Tenger mountains in Java, to whom allusion has been made above; and from an article on the island of Mindoro which appeared in a late number of this Journal (Vol. III p. 756) it would seem to have prevailed formerly at the Phillippine Islands.

Another singularity in their selection of sites for villages occurs in their sometimes erecting them so close together that the inhabitants can almost shakehands from the tops of the walls. On the south side of the island of Moea, (which is the next to the eastward of Letti) four large villages, Roxali, Patti, Taynama and another are erected in a row so close together on the cliffs adjacent to the coast that their walls are only ten or twelve feet apart at the base. I was informed that the inhabitants even differed considerably in their dialects, but this I have not ascertained from personal obser-

Kissa, and in close correspondence with it, was attacked and destroyed by Lanun pirates from Mindano. The inhabitants, who were among the best and most civilized of the group, were killed or carried off as slaves. They had formerly resided in villages further inland the ruins of which were still to be seen on the summits of the hills in 1839, but they had been tempted by long freedom from piratical visits to come down from their fastnesses, and erect a village on the shore with a neat stone church, and many white cottages, which gave it much the appearance of an English fishing village.

vation, having been so occupied during my short sojourn on the south coast of Moa with matters connected with the service on which I was employed, that I had no time to devote to subjects of more scientific interest. About 4 miles to the eastward of this group of villages, lie two others, Klis Timor and Barrat, or East and West Klis, which are similarly situated with regard to each other.

This singular grouping of villages probably originated in the necessity for mutual protection against foreign invaders, since its maintainance for so long a period as it seems to have existed proves that the inhabitants of the different villages must have agreed pretty well among themselves.

TIGER FIGHT AT SOLO.

By JONATHAN RIGG, Esq.

THE Sovereigns of Java are fond of collecting tigers for the purpose of fighting them with buffaloes, or having them dispatched by men with spears. The Emperor's Menagerie having now accumulated to the number of eight enormous royal tigers, it was thought advisable to get rid of five, as they were becoming troublesome to keep; pariah dogs beginning to get scarce in Solo, in consequence of the royal mandate for their appropriation to this particular service having been lately vigorously enforced. All the eight tigers, were collected together in one large den or house constructed of thick bars of "Ruyung" or palm wood. On entering the enclosure in which this is placed, a person starts back with an involuntary shudder at the greeting he receives. A simultaneous howl, and savage snarl, such as only the hoarse throat of a tiger can send forth, testify the proud but harmless rage of these monsters in their den.

Monday the 9th of September, having been appointed for the grand fight, we took care to be back at the residency against that date. At 10 o'clock A. M. the military officers and private gentlemen collected at the residency in order to proceed in the train of the Resident to the Kraton. The independent Chief Pangeran Mangku Nagoro with his officers, all in full military uniform, also attended in the procession. The Pangeran had with him a small escort of his own cavalry. The party alighted from their carriages on the Alun-Alun at the foot of Sitinggil and were conducted through the successive Courts to the presence of the Susunan. On passing through each Court, the different bands of drums, horns and other music struck up; there was also in each yard, a small guard of the Emperor's men, who presented their arms and lowered their colors as the Resident passed. In the innermost Court, where stands the Pondopo of the Emperor, we found the grand band, which plays exceedingly well on European instruments. The men were dressed in white pantaloons and scarlet coats.

The Emperor was seated under the Pondopo, in front of his dwelling, not in the centre, but somewhat towards the edge, yet still at the head of an avenue of chairs. As the Resident approached, he rose with placid dignity to receive him, which was done by simply giving each other the hand and saying a few words of compliment. Successively each of the guests did the same and then retired to the chairs. The Emperor sat at the head of the avenue, in the centre; the Resident was next him on a similar chair. The Emperor was dressed in embroidered slippers, without stockings. He had on a pair of trowsers, that came down to his ankles, made of a kind of Indian chintz of large square pattern, red on

white ground, with a yellow border round the bottoms of each leg. Round his waist was gracefully folded, a handsome battick sarong, that extended into a sort of train behind. A plain kris was stuck in behind, into the folds of the sarong. His upper man was encased in a white vest, seen only at the bosom and neck. Over this he wore a handsome damasked, black jacket, made in the Malay fashion, ornamented with a close row of diamond buttons. Round his neck was suspended the commander's order of the Dutch Lion, and on his breast also he displayed some other less important badges of distinction. His hair was gathered carefully back and formed into a tail. At the part where the tail left the head, it was bound round with a lashing of black silk thread. The tail itself was a little twisted, and hung down his back to below the shoulder blades. On the top of his head was the truncated conical court cap, made of some stiff gauze like material, semitransparent and white. Round his arm he had a black crape knot, by way of mourning for the Governor General Merkus, who had lately expired. All the native chiefs and courtiers wore the same badge of mourning. Four fingers of his right hand and three of his left were sparkling with rich diamond rings, amongst which was one said to weight 70 carats. His Highness looked pleased, and had, on the whole, a noble deportment, much better than what I had expected from what I saw of him on the evening visit.

The Emperor and Resident, after a short pause, rose simultaneously, and arm in arm walked together. As they left the Pondopo, one of the little dwarfs bore up the Emperor's train, and a band of women crowded in behind carrying several regalia of state and other objects fitted for his personal convenience, as the Stools or Dampar covered with crimson cloth for himself and the Resident, gold spittoons and Siri box, a bow and a quiver of arrows, an old musket with its stock wrapped up in a piece of white cloth, a long cutting instrument or Badi in a golden sheath, and some other trifling articles, amongst which, however, must not be included the most costly *morceau* of the whole, viz: a golden shield about 20 inches in diameter, the centre or boss of which was ornamented with four large precious gems, which appeared to be rubies, sapphires and emeralds; diamonds and other stones were disposed in graceful half-moons and flowers, giving to the whole a most graceful appearance. These objects were all carried by rather elderly ladies, who had long passed their zenith of beauty, if ever they had had any. Some of the most distinguished had belts of gold lace twisted round the neck, one end of which hung down in front, and the other behind. Their shoulders were bare and they wore the Sarong and Salendang. At the side was attached the small court Wadung or Chopper. These matrons are honoured with the title of *Tuan Tumanggung*, which is otherwise applied only to men. A posse comitatus of about 30 middle-aged, well-fed, dirty-clad women in their daily dress and bare shoulders, closed in at the rear of the

Tuan Tumungguns, making in all a guard of honor of about 50 women. Alongside and around these pressed the European visitors, military and civil, without any order or distinction of rank. The Assistant Resident led the way with the brothers of the Emperor and the principal native courtiers. In this manner the procession passed through all the courts and over the Sitinggil, being saluted, drummed and musicked by each successive group as they passed. Arrived on the Alun-Alun at the foot of Sitinggil, we found a large assembly of native chiefs, all squatting in the sand under the flat roofed porticoes called Pagalaran. Here stands a small Pondopo called Bangsal Pengrawit, covered with shingles, where the Emperor and Resident seated themselves and where they were received by a small band of very pretty young girls dressed in yellow sarongs, spotted with a dark sprig and baticked salendangs, all fitting evenly and tightly to the body. The sight of the delicate yellow skins, carefully combed hair and glistening eyes of these members of the royal household, somewhat compensated for the less lovely mein of the Tuan Tumungguns. The Pondopo just mentioned stood at the end of a long avenue of red chairs, on which the Europeans, with Mangku Nagoro and his officers, took their seats. Between the rows of chairs, and near the Pondopo, were squatted on the bare ground, without even a mat, some of the Princes of the blood, all unostentatiously dressed. One handsome young man attracted attention. He was dressed with peculiar care, without handkerchief or court cap; his hair was smoothly combed back from the forehead, and so held by a beautiful tortoiseshell comb. The hair was gathered behind into a knot, in which was stuck a neatly executed sprig of flowers, composed of silver and diamonds. A dashing gold chain was displayed on his vest. His jacket and sarong were of the best description but modest. He was the son of the Emperor who was banished in 1830. An involuntary feeling of compassion came over me, as I gazed upon this handsome youth; his father a prisoner of state in the Moluccos—himself humbly squatting in the dust, and gazing on the chair of honor, from which the policy of the white man has excluded him.

At a greater and more respectful distance than this first group, sat the Prime minister Raden Adhipati Sosrodhi Ning Rat, with his attendant retinue of chiefs. This venerable man of 73 years of age, was plainly clad in a sarong and blue cloth jacket with a white vest within. Round his arm was the mourning knot for the late Governor-General, on his head was a blue court cap, and at his side the court wadung! He, like the rest, was squatting on the bare sand, without any mat. The old man announced to the Emperor, that all was in readiness for the tiger fight, and after a few words had been exchanged between them, wine was handed round to the guests by half-caste lackeys in European clothing. On a separate small tray, were brought two glasses, one for the

Emperor and one for the Resident. The Emperor then gave the toast "Slamat ngadu machan" (success to the tiger fight) which was immediately drunk off without any hurrah or other to do, such being the etiquette on these occasions. The lady of the Resident with some of her female friends joined the party whilst sitting at this spot. The etiquette did not allow the Emperor to take any notice of them. He sat staring right before him, towards the north, without moving a muscle, though the ladies passed close by and she of the Resident was accommodated with a seat under the same Pondopo.

On a given signal the company stood up. The Emperor and Resident arm in arm, followed by the posse of women, walked down the avenue of chairs, and then seated themselves about 50 feet away from the pen, in which the fight was to take place. The company stood around. This pen, being circular and about 15 feet in diameter, was formed of stout teak posts, well bound together with withes of bambu, and similarly grated over at the top. It was sufficiently strong to exclude every apprehension of danger, the closeness of the materials even causing an inconvenience in viewing what was passing within. In the pen was a middle-sized black male buffalo, with whitened horns and a garland of Malati flowers hung round his neck. Presently a tiger was let in, when a din of gongs and gamelan was commenced. Both animals appeared to be shy and surprised at finding themselves thus unexpectedly in each others presenee. The Buffalo appeared less abashed than his antagonist; he held possession of the centre of the ring, while the other kept sneaking round the edge. They carefully avoided all personalities, both apparently acting on the defensive, the buffalo wheeling round with the tiger, with horns ready levelled for an assault. To overcome this delicacy in giving offence, a number of bambu poles, hung from the roof, were so swung about as to annoy the buffalo, and hot-water, in which bruized Spanish pepper had been soaked, was showered down upon the heads and eyes of the combatants; the tiger was further irritated with poles shoved through the paling and by wisps of lighted grass applied to his tail. No small persuasion was required to rouse the two animals to the fighting point. At length driven about by the poles and vexed by the fire and water, they came in contact in the mess and smoke. Once at it the game of war was carried on with some degree of spirit, of which the tiger appeared to have the least, as he was always the first to sneak off, especially after getting well-butted against the enclosure. The tiger soon adopted a new method—climbing up the pen he flung himself down upon the head and neck of the buffaloe, from which the latter soon released himself by tossing him back into the air. This antic, exhibited four or five times in rapid succession, was the most interesting part of the performance. The tiger was soon worsted, and as he showed symptoms of coming off second best, was removed and a second

introduced to the same buffalo. The same course of irritation had to be resorted to, but as the buffalo had his blood up, the attack on his part was not so tardy as before. The second tiger was equally worsted, seeming to have no scope for action in so confined a space. With each tiger the buffalo had only two or three regular and serious tussles, when the tiger grasped him by the neck and the buffalo had to toss him upwards in order to shake him off. The second tiger was withdrawn, after a shorter contest than the first, both fights having lasted about $\frac{3}{4}$ of an hour. The buffalo was not badly wounded, but being considered deficient in pluck, was slaughtered soon after the fight.

At the conclusion of this part of the day's entertainment the Emperor and his company returned to their places in the Pondopo and at the chairs, where they remained seated, for a short time, till announcement was made that the arrangements were in readiness for the further exhibition. The company then again moved forward and took up a position on a stage or wooden platform, called a *Panggong*, elevated about eight feet from the ground, this was close to the fighting pen. On the platform, the Emperor and Resident seated themselves as before, on their Dampars, and the ladies were accommodated with chairs, when the Emperor turned round and addressed a little conversation to the lady of the Resident. To the Resident himself, he here, as previously, often made some observations with a smile and pleasant look. At his back were squatted the Tuan Tumungungs with his Siri apparatus, most of the regalia being left in the Pondopo. Amongst and behind these, stood crowded officers in uniform and as many other Europeans as could find standing room. The view from this stage was very novel and interesting. The ground in front was the Alun Alun, and there the eye wandered round a circle of men, each armed with a long spear and standing several rows deep. The diameter of the ring which they formed could not be less than 300 feet, and the people crowding round it, were estimated at about 3,000. That part of the circle next the Emperor was about 100 feet in front of him, and the interval was occupied by his armed men, some with rifles, others with spears, swords, krisses and other offensive weapons. These men were arranged in rows and troops and were clad variously in red, yellow, green and blue jackets, some wearing the court cap, and others peculiarly old fashioned head-dresses with hanging lappets. A party of the Emperor's dragoons were also drawn up on one side, so that there could be little or no fear of an unexpected pop visit of the tiger *en passant*. Every elevation, roof, tree, or wall, which commanded a view of the scene was crowded with human beings, men, women, and children. In the centre of the ring were placed five narrow, oblong cages in a row, each containing a tiger royal. These cages were covered and hung round with alang alang grass, so that nothing could be seen of the inmates. In the rear of these five, were two others

made of stoutly wattled bambus well-bound together. They were oval in shape, somewhat like a dish-cover with bell-like edge, or the roof of a turtle—they had no bottoms and merely rested upon the ground. Under these were several armed men, whose office will presently be noticed.

Several men were in attendance at the cages, and as soon as all matters were arranged, a deputation came to the foot of the Panggon to receive the Emperor's orders. From a distance they came *tandaking* along, and as they approached crouched down, and by degrees drew near, bowing their faces to the ground, and lifting their clasped hands above their heads. The order was given to commence, which was intimated to the three men who had to let loose the tigers, in succession, from the cages. These three men were now alone in the centre of the ring, and had to perform all their manœuvres at the nod or the motion of the arm of the Emperor. Two were squatted at the further end of the cage, each with a wisp of lighted *alang-alang*. The third sat cross-legged, at the other end of the cage, viz. that next the Emperor, and close to the door of the den. The Emperor made a motion with his hand, which No 3. immediately perceiving, bowed his head in reverence, lifted his hands above his head and arose, again making obeisance before the Emperor. Next he mounted upon the top of the cage and stood there a moment upright. The three men were all dressed alike, were tall and handsome, in the prime of life. They were in court dresses, and wore long close fitting white trousers. Round their waists were wrapped batik kain panjangs of large white and brown pattern; the ends of this article of dress hung in graceful folds from their sides. The upper body was bare, on the head was a white court cap, from under which the long black hair, in a twist, hung down upon their backs. Each had a kris stuck in behind amongst the folds of his dress. At his side was the court Wadung or chopper. The man now standing upon the cage, slowly and gracefully drew his Wadung and with its bright polished blade, after making with it a kind of salute, cut the string which bound the door. The Wadung returned to its sheath, he next grasped the door of the cage—this he drew up and slapped down in its groove four or five times in quick succession, and finally pulling it out, projected it upon the ground. Again making obeisance he descended and reseated himself at the door of the cage, now open; and in front of which merely a bunch of allang-allang was hanging by way of a curtain. Here he sat for about a minute, while the other two behind were arranging their burning whisps, in order to communicate, after a while, with the grass which hung round the cage. The dread suspense was at last terminated by the sign of the Emperor's hand;—gracefully, reverently and slowly, the man at the mouth of the den, bowed himself in the dust, arose and joined the two others; they all moved a few paces to the rear, when the

gamelan struck up, and the three together began a dance, one leading, the other two abreast following. They moved as on a man—each inclination, each movement, each jump was in unison. True to the tones of the gamelan, they slowly approached the ring of spear-men, their progress was by a succession of long steps of jumps, with pauses between. Their dresses floating in the air behind them, they finally reached the circle.

The light did not at once communicate to the cage, and as soon as the three men were out of the ring, one of the oval bambu cages was, all at once, seen in motion. Only the feet of the people within could be seen, lifting it as a mighty shield they thus proceeded. They poked bambus through the interstices of their cell and pushed the lighted alang-alang towards the cage, which now became speedily enveloped in flames, and then returned to their former station. The flames arose from all parts of the cage, but it was not till the door way was in a blaze that any motion of the tiger could be perceived. He came first half out but conscious of the company that surrounded him, bolted back again. The smoke and flames, however, soon forced him out, and the noble animal bounded forth on the open space. The din of the gamelan was now redoubled, the tiger scowled around him and prowling backwards and forwards in front of the Emperor, appeared to be forming a plan of attack upon his numerous enemies. He would approach the circle, and then as if his heart failed, at the sight of the glittering spears bristling towards him, would turn and retreat back to his blazing cage. Here was however, no place of refuge—he stood stock still with his lower jaw hanging down. If he communed with the outer world, the din of the gamelan deprived us of his thoughts. Courage at last he summoned, and doggedly galloped up to the circle. At the first prick of the spear points, he partly flew off, but as quick as thought, rushed onwards and at the circle again. But the sharp spears were too much for him, he flung himself away, and then instantaneously tried those a-head. In this way he ran round about one-third of the ring, but the men stood firm and kept wounding him as he went; he at length rolled and got up again, but his strength was fast failing, and he came down to rise no more—a mass of spears being darted into every part of him, and the stopping of the gamelan showed that he was dead.

After the excitement, consequent on the death of this animal, had passed away, and the ring of spear-men had been re-adjusted, many of the spear blades having to be extracted from the carcass and refitted to their shafts, the three men above mentioned re-entered the ring and with exactly the same ceremonies, as in the first instance, proceeded to unkennel the second. This they repeated till each successive animal was dispatched, never losing their presence of mind or showing any symptoms of hurry, though on two occasions the tiger was at large upon the alun-alun before they had reached

the spear-men. They hurried not their step, but adhered strictly to the intonations of the gamelan, which only in one case rather assisted them by playing a trifle faster. The honour of these men and of their master would be compromised by their hurrying away. At the part of the ring whither they were retreating, a demonstration was made to protect them, should the tiger have taken it into his head to make a charge, but both times he not even ever looked that way. Part of the mystery of their self-possession in sitting down at the cage mouth after the door had been thrown away, was solved in getting out the second tiger. The *alang-alang* all burnt away and the wooden cage was left standing bare and also beginning to flame up, and yet no signs of the inmate had been perceived; every one concluded that he must have been suffocated. The people under their bambu shield now came up and on knocking away the ashes, it was seen that three single cords, of the thickness of the little finger were still fast in front of the door way; by some unaccountable accident the fire had failed to burn them. These were now cut, and the tiger who was lying a little way within was thumped and poked at with bambu poles, but he showed no symptoms of moving. The cages are long and narrow, so that the tiger cannot turn round in them, and they are all put in with their rumps to the door, thus the thumping up and down of the door by the man who opens it, very likely makes the animal crouch in the opposite end. Annoyance from a distance having failed to rouse the second tiger, the men under the shield contrived to get hold of his tail, and taking it through one of the interstices in their own covering, hauled away upon it till they dragged him nearly half out. My gentleman now showed symptoms of resenting the indignity—his tormentors made off and out he came. He was a good deal singed and lame of one foot, but showed very good fight before he was killed. These two first were the same as had been fought with the buffalo.

Of the three others, one came out before his cage was half in flames, showing that the string is no effectual stoppage, if the tiger is willing to come out. This animal, unlike all the rest, immediately bolted at the nearest part of the ring, not far from the Emperor and was dead almost as soon as the three men, who had unkenneled him, had quitted the ring. The last of the five seemed most bent upon mischief and also took longest time to consider of the spot he should attack. He several times approached the spears in front of the Emperor, but finding a forest of steel glistening in his face, he withdrew and took another survey of his enemies. At last he made a dash on one side, attempting to break through as he passed along to the opposite extremity. When close to the royal waringin trees, his opponents gave way and he broke through the line. He passed under a carriage in which some ladies were sitting, but the spearmen were on him again in an instant,

when he was pinned lifeless to the ground. The tiger did not hurt any one, but in the scuffle, two natives got run through the foot, and a European soldier and a child were slightly wounded in the arm. During the whole of the fight, the station of the old prime minister was between the waringin trees, and here he was squatted, treating himself to "som'at-short" when the tiger passed him. The old man sat phlegmatic and unmoved till the monster was dispatched. Great indeed is the command these Javanese have over their emotions! The theory of predestination would almost make one believe that its followers were heroes. None of the tigers, after they had once began their attack, and had been wounded, ever attempted to retreat into the centre; they pushed on till they fell from the exhaustion of their numerous wounds. None of them either ever attempted to jump or make a spring. This is not the case with leopards, which are said sometimes to spring over or into the midst of the spear-men and then escape.

These five huge monsters being now stretched lifeless upon the Alun-Alun, the tiger fight, which in this peculiar way is called *Rampok*, was concluded, and the whole company returned to their former places in the Pondopo and at the chairs. After a while the aged prime minister, attended by his retinue of chiefs, appeared at the furthest extremity of the avenue of chairs; up this they advanced a short way in a cowering attitude and then dropped on their haunches, all reverently making obeisance. The old Raden Adhipati alone now crept forward about 20 feet, and there finally brought to, under another salute. After a short pause, the Emperor addressed his aged mentor, as is usual on such occasions, not by the title of Raden Adhipati, but simply with—"Sosrodhi Ning Rat"—to which this, on bowing to the ground and lifting his clasped hands to his forehead, answered—"Kulo" the menial's pronoun for I. An explanation was now demanded and given of how the last tiger got out of the ring, how he was soon surrounded and killed, but that some people had been unhappily wounded. This over, wine was again brought forward as before, and the Resident thanked the Emperor for the entertainment afforded. On this occasion the head opas of the Resident carried a tray with a single glass and presented it to old Sosroadhi Ning Rat, who quaffed the same with dignity, and in true native style bore testimony to the satisfaction it gave him—by a good belch! His duty towards his sovereign being now discharged, he laid aside his humble looks, and took a good survey of the Europeans seated on chairs on either side of him, puffed out his lantern cheeks and looked "all very fine you chaps sitting there, but I here in the dust, know I can have my own way."

The company now rose to return into the Dalam, in the same order in which they had come out. At the foot of the Sitinggil, a pause was made, while the Dutch national anthem was played. As we passed Sri Menanti, which in spite of its fine name stinks

most infernally of bats, we found exhibited some more of the regalia of state, such as little golden elephants about a foot in height, and also birds, and other objects made of the same precious metal. We were now treated to a cup of tea, then took our leave and departed, it being already 2 o'clock. Four of the tiger's heads were presented to the Resident; the ladies of the Dalam claimed the claws, to be worked up into ornamental amulets, and the lieges of Solo divided the flesh amongst them, to be made into Dingding, there being a native belief that it is a specific for many complaints.

REPLY TO THE REMARKS ON THE "ESSAY ON CORAL REEFS AS
THE CAUSE OF FEVER &c."*

By R. LITTLE, Esq., Surgeon.

IN the series of papers which I have ventured to lay before the Public and the Profession, it has been my object to present the facts in the order they were disclosed to me, by my own investigations and that of my friends and others, and in order that the reader might be enabled to judge of the relation to health and disease of Singapore with its neighbourhood, compared with other localities, my first essay was devoted to its Topography. Amongst the topics discussed in it, was the nature of Malaria, the vital existence of which I advocated, but did not propound it to the public as original.

I have also endeavoured in the same paper, simply and plainly to demonstrate by facts and reasonings that none of the noxious gases formerly and even now supposed to originate miasm or malaria could do so, and that malaria or miasm, or whatever name the noxious product of decomposing animal and vegetable matter may go by, is animalcular, and in the penultimate state of animal existence, the ultimate being the disease. This theory explains many facts connected with malaria, inexplicable by any other, and is supported by so many truths both chemical and physical, as to induce chemists in the love for their own department, to attribute diseases to chemical changes and suppose them to be regulated by chemical laws, yet do they mistake the sequences for the cause, as no alterations in vital actions can be produced, without chemical changes, which are however the products, not the causes of those alterations in vitality.

I believe I was the first to shew, that salt-water marshes under tidal influence are innoxious, and that this is not owing to the non-formation of malaria, but the coeval formation of sulphuretted hydrogen, which destroys it as it is formed. The application of this theory, as the means of arresting the progress of cholera, has since its publication in August 1848, been brought before the medical profession in Paris, by one of its members—but the great object I had in view in this essay was to prove the healthiness of Singapore, and that where fever was endemic, there was a fresh water marsh, with one or two exceptions. The second part was devoted to the cause of fever amongst the islands, and the island which first and principally engaged my attention, was Blakan Mati, the seat of a virulent and endemic fever. On personal investigation, I found that none of the known causes of fever, were present to account for it, when my attention was directed to the large Coral

* Journ. Ind. Arch. Vol. III p. 690.

Reef in front, and the idea immediately struck me, on seeing the mass of living matter crowded on its surface, in the different stages, between life and dissolution, *that from the decomposition continually going on there, Malaria might be formed capable of generating the fever.*—From this I started, and have spared no pains to unravel the mystery, and to my satisfaction I found, that the more I extended my enquiries, the more general did I find the application of the theory. I searched for facts for its elucidation, in all the books I could command, but I am sorry to say I found only a few that illustrated the subject, while I engaged all whom I knew who had visited other countries to furnish me with information. From such indiscriminate sources, I have no doubt many errors have crept in, and some spots laid down by me as Coral localities may turn out not to be so; but what of that, the loss of such cannot affect the principles of the theory and can only deprive me of one or two of the innumerable cases in illustration.

Labuan for instance, may be proved not to be under the influence of Coral Reefs, but the theory does not stand or fall by it. In fact while writing, I was under the impression that this locality could not be brought forward as an illustration, in proof of which, I stated that the fever may depend upon one or other of two causes, (*“fresh water swamps, or coral reefs”*), but so far from having stated that the latter do exist, so as to be the cause of the fever, my words are, “the last exist in the harbour, but not being exposed, cannot exert any influence.” “I consider it therefore an open question, whether Labuan is rendered unhealthy from its limited fresh water swamps or from the exposed coral reefs found at some distance”—but in spite of this conviction, from the facts brought forward, strongly indicating a marine cause for the fever, from the charts of Captains Bethune and Belcher and from the testimony of many parties who in various capacities have visited this port, I could not resist drawing the conclusion, that there was some malarious influence engendering fever, in the harbour of Labuan.

That this influence, is not dependent upon adjacent coral reefs, (but may on more distant ones) I believe, not from the arguments of my nameless critic, though they have strengthened this belief, but from the testimony of Captain Watt of the Brig *Tyrone*, furnished me before the appearance of the remarks, who in his late voyage to Labuan, carefully examined the harbour, and found the rocks off Enow to be sandstone, but could find no exposed coral reefs within two miles of the shore. Dr Mills of the H. C. Steamer *Semiramis*, also kindly examined for me the same points and reports the non-existence of exposed coral reefs, within the distance likely to affect the settlement.

I have while reasoning on the causes likely to produce Labuan fever, stated, that the fresh water swamp is so limited and protected from the sun's rays that, reasoning from analogy, I would

say, it could exert very little influence in producing fever.* My analogies are derived from the island of Singapore, and many adjacent, from the Malay Peninsula, Borneo, &c. where the high close jungle effectually protects the ground from the influence of the sun, by which little or no miasm is generated, but the analogies, unlike my critic's, do not extend to the northern part of India, to the base of the Himalayas, where we have fevers in jungles, in ravines, in passes, and amongst mountains, where with Labuan, there is as much analogy as between its highest hill 100 feet high, and Dhawalagiri 26,000.

I have mentioned "that it is not during the rainy season, that marsh miasm is in its greatest activity, but when the rains have ceased and the ground from evaporation becomes dryish;"—to this my reviewer objects, and refers me to Father Guiseppe and a thousand living witnesses to prove that it is death to remain in a forest tract in the Himalayas, after the commencement of the rainy season. These authorities I cannot dispute, as I have not the Asiatic Researches to examine, nor the address of my critic's large circle of acquaintances; but I would fain persuade him to quit these distant mountains, and look nearer this for his analogies to oppose my statements, and as this is a point that may be of practical service to him, I will go out of my way, to prove my statements by a few unexceptionable authorities. *Dr Mac Culloch* thus writes: "the essential character of all marshes, as far we can decide is; that the land should have been partially inundated, that it should be dry in some places and wet in others, or that pools and dry spots should be intermixed, or that it should be subject to peculiar alternations of moisture and dryness." *Dr Corbryn*, Editor of the Calcutta Journal of Medical Science, says—"it is obvious therefore, that we have strong grounds for our conclusion, that the germ of pestilence is vivified by atmospheric pollution arising from the muddy banks of rivers and of tanks. But be it understood as we shall soon show, it does not form in the body of the water itself, it cannot be formed in spots where water of a certain depth covers the surface, it is formed only from shallow and drying surfaces, and then it is one of the causes of febrile and other diseases in our countries." *Dr Wallace* writes,—"it has always been observed, that when the earth has received an additional quantity of moisture, and when the solar heat is in the extreme, malarious disease is increased in a corresponding "ratio."

Mr Williamson, in a paper on the unhealthiness of some parts of Candeish says, "fever begins to prevail on the cessation of the "rains, and continues till February and March, when it generally "ceases." *Annesley on the diseases of India*:—"But it is not "whilst the inundation continues, that the malaria which is thereby

* The district of Brasse, in the Lyonnais, when well-wooded was comparatively healthy but now deprived of its woods, it is always subject to endemics and epidemics.—*Annesley Researches* p. 61.

“generated, is most noxious, during the evaporation of the stagnant water, and whilst the surface becomes exposed to the action of the sun, intermittents and remittents generally make their appearance, but when the soil itself becomes exposed, and has remained so for a considerable time, to the action of a powerful sun, then fevers of a more virulent character seize upon those in the vicinity.”

My reviewer, in his first page says, he will give as nearly as possible my own words &c., yet in his first quotation “that wherever coral reefs are exposed, fever, especially remittent fever, will be endemic on that spot” he leaves out a most important contingent, “*cœteris paribus*.”

My 4th proposition is considered as illogical, because it assumes the absence of all other causes of fever, except the one named. Now as I do not assume, but prove the absence of all other causes of fever, and as my reviewer has not in one iota refuted my arguments, there only remains his assertion, which is of little importance. Against my general propositions, not one argument has been advanced, not a fact brought forward in contradiction, nay more, my reviewer in his summary of imaginary reproofs, has in his second conclusion, “that animal decomposition under peculiar circumstances, can cause fever occurring on coral reefs or elsewhere” allowed all that I could wish. How is it then that he disagrees with my doctrines, when in reality he is their advocate; for from the above admission, it would appear, he does not disagree with them, but with the extent of their application.

Against the first application of my theory to the islands of Blakan Mati with others adjacent, and a village on Singapore island, no objections have been made, but the theory is tacitly allowed, with this proviso, that a few exceptional cases will not “support a theory, which embraces a large portion of the globe.” Before I have finished with this subject I will be able to shew, that the exceptional cases are so numerous, as to entitle them to a theory of their own, and when cases contradict them, they are from extraneous counteracting circumstances. I will pass over the exemplification of my theory, by a “heap of rotten German sausages” as I cannot see the intention of the writer, in introducing them, unless he wishes his readers to be disgusted “*usque ad nauseam*”; but I will give the observations of Mr J. T. Thomson, Government Surveyor, who has lately most minutely surveyed Pulo Tingi and Pulo Aor and whose observations are very confirmatory of my theory.

“3rd Nov. 1849. When surveying the Eastern Coast of Johore and Pahang, we found that a great many “Orang Ryats” from Johore, Indau, Sugi, Galang, &c. had collected at Pulo Tingi, in a spot called Telo Pinang, to collect Durians that abound there. They had been there for nearly a month; when we returned on the 30th September, we found that they had precipitately removed to

Libu a neighbouring island, from great numbers having been attacked with remittent fever, of which many died."

"While at Pulo Tingi they were located on a sandy beach, in a small bay named as above; the back ground was dry and there were no swamps, while the locality to the back was confined by precipitous hills *facing the beach, coral dry at low water extended round the bay in the shape of a crescent.* The bay faced to the *Southward*, and during the month of September, strong *South, S. E. and S. W. breezes were blowing and none from the North.* There was consequently in my judgement no other assignable cause for the fever than the corals. At the place to which they fled for change of air, there is no coral, the bay is deep, and there are no high hills in the neighbourhood. When I visited Pulo Aor, we anchored in the southern or principal bay, which we found to be the same as Telo Pinang in the island of Tingi. The coral extended round the bay, with high hills to the back. here we were informed by Imaum Ahmet, that of all strangers who stopped more than a fortnight, one only in ten escaped fever, while the inhabitants of the island did not suffer to any noticeable extent."*

My reviewer would attribute the fever of these islands, to the decaying vegetation of a primitive forest, although I have produced instances, where such localities do not generate miasm, and all who have lived for a time in this country, must have had opportunities of confirming the fact that a dry jungle is innocuous and that no doubts may remain, I have been furnished with a list of analogous places viz, Telo Kumbah, Garta Sangal, Batu Feringee, Telu Bahang, Telu Teecoose, all healthy Bays in the island of Pinang, though backed by high hills and primitive jungle, as at the islands of Aor and Tingi, but without swamps or coral reefs. Since the land does not furnish us with a cause for this fever, we must direct our attention to the exposed coral reef in the bay, and looking to the second conclusion of my reviewer, the truth of which he has "proved by facts and arguments" that "*animal decomposition, under peculiar circumstances can cause fever, occurring on coral reefs or elsewhere,*"—attribute the cause to it.

My reviewer cavils at the application of my theory to these islands, because I state that remittent is the especial fever of coral localities, while intermittent was the type mentioned by me as prevailing at Pulo Tingi. But can he not reconcile this? does he not know, that the same cause may give rise under different circumstances to remittent fever at one time, and to intermittent at another? Batavia for instance;—its type of fever is remittent, but many are attacked with intermittent:—further, in a ship's crew, you will have some laid up with remittent, and others with intermit-

* Dr Stevens writing on the African endemic fever says "the disease is confined to the whites."

tent, yet from the same source of malaria, and received at the same time. In regard to Pulo Tingi, when Mr Logan visited it, the type of fever was intermittent, but when Mr Thomson was there, it was remittent. The remarks on that part of my Essay which treats of Batavia fever, are peculiar, and the reasoning somewhat circumscribed for a modern critic; for instance, he says I allow that marsh miasm is the cause of the fever of Batavia town, and as that fever in symptoms and result, is the same in the harbour, he wisely draws this conclusion that "it is superfluous to adduce a second non-distinguishing cause." But is it consistent with reason or experience for marsh miasm to be wafted over a clear sea for 9 miles, and at that distance to be more virulent than on shore which is its source, to leave ships free of fever near that source and decimate others at a distance, to pass over intermediate islands, leaving on them but a sprinkling of the poison, to be poured in a concentrated state at the termination of its journey on the island of Edam?*

Regarding his second objection I perfectly agree with him, "that at particular times, miasm preponderates in one locality "more than in another," but that implies one of two conditions,—either that localities distinct and far separate one from another, are affected from the same source of miasm, or that in such locality, there is a source giving rise to its own miasm. The first condition I have proved cannot exist, the second is what I have endeavoured to prove; to wit, that the town of Batavia, can be affected by its marsh miasm at one time, and the harbour, through its exposed coral reefs, at another. The third objection consists in supposing that Edam is not unhealthy, and that those who were attacked there, had brought the miasm from Onrust: that such was the case with some, there can be no doubt,—but if Edam was a healthy island why was the mortality there greater than at Onrust? That the sick brought from Onrust died, is not to be wondered at, and it was to be expected that one or two would be attacked by fever, subsequent to their removal from Onrust, having there laid in the seeds of malaria, but allowing all that, the previous residence on Onrust can never account for the fact, that out of 60 soldiers landed in good health on Edam, betwixt the 1st October and 12th November, 31 died on the island and 22 at sea—yet many of these victims were not seized with sickness, until a month had expired after leaving Onrust. My reviewer cannot point out an instance in the annals of Medical History, where the seeds of Java remittent fever, have laid dormant in the system for 30 days; but all doubts are removed by the fact, that Edam having once been a penal settlement of the Dutch, was obliged to be deserted on account of the deadly character of its climate.

* "It also appears evident, that the influence of the infected atmosphere, varies in intensity according to its distance from the source of miasm." *Cyclopaedia Prac. Med.*

The 4th paragraph on the subject of Batavia fever, is characteristic of the writer. Mr Leisk in his letter to me, writes that "Edam is a low coral island, surrounded by a coral reef, with a detached coral patch to the northward. (I am not certain whether this patch is ever dry.*)" This the writer of the remarks construes into "*we gather from Mr Leisk's testimony, that there are no exposed coral reefs, as he mentions none in the vicinity of the island*"!!!

To throw a little more light on the subject of Batavia fever, I bring forward the following facts.—On the 7th August 1849, the American ship "Dolphin" anchored in Batavia roads, and from fear of fever, further from the shore and closer to the island than usual. The vessel remained there for little more than a month, leaving on the 17th September. Shortly before and after leaving, 3 men were attacked with fever, who on the ship's arrival in Singapore, were dangerously ill, but all recovered. 2nd the Brig "Druid," anchored in Batavia roads about $\frac{3}{4}$ of a mile from the shore on the 11th September, in 6 fathoms, Batavia church S. by E. left on the 27th but anchored again near Edam island for 2 nights and a day; 3 days after, one boy was attacked with fever, then 3 others, who were all still very ill, when I attended them in Singapore, but all recovered. In Batavia, when the vessel was anchored in front of the town, all the crew were healthy. 3rd the "Anna Watson" Captain Robertson, at the same time was anchored close to the "Druid," the Captain only of the crew left the vessel and visited the shore and he alone was attacked with fever, this vessel unlike the "Druid" had no detention amongst the islands. 4th H. N. M. Steamer "Bromo" about the same time, while anchored at Onrust, had out of her full complement of 150 men, 116 laid up or dead from fever. From these facts, these inferences can safely be drawn—first that vessels laying close to the island of Onrust, are within fever range;—2nd that vessels laying midway betwixt the town and the islands, and in certain seasons even nearer the town than midway, are without the range;—3rd that a ship's crew, although healthy on leaving Batavia, yet if the vessel anchors for a short time, even for 2 days, close to the seat of malaria, as at Edam, it may be attacked with fever.*

Has the author of the remarks proposed a theory to account for Batavia fever? He has not and he is not bound to do so, but has he demolished my theory? I should say not, not even in appearance, he has not refuted my arguments, nor upset my proofs, he cannot deny the unhealthiness of the islands in the harbour and of the crews of vessels that anchored near them;—he has not accounted for the fact that the islands most distant from the Java shore are the most unhealthy, while vessels anchored between these islands

* We believe that exposure for one night, or even for a less period to miasm, having the necessary degree of concentricity, will produce fever, just as certainly, as soon and as violently as if the exposure had been for a longer period.—*Dr Wallace.*

and the shore escape, all combining with other facts to prove, that the source of malaria in the harbour, is different and distinct from what could proceed from the land near them, and that the source is connected with these islands. In some instances, these islands are clear of jungle and swamp, drained and highly cultivated, yet they are as unhealthy as others where the primitive jungle flourishes, though no swamps are present, which fact points to something else than the surface evil as the cause. On farther examination we find that *all the unhealthy islands*, are surrounded by coral reefs, more or less exposed at low water, and as the climate of Batavia roads is well calculated to facilitate the production of malaria, by its moisture, moderate heat and frequent calms, I find the solution of all difficulties in my reviewer's second summary "*that animal decomposition under peculiar circumstances, can cause fever occurring on coral reefs or elsewhere.*"

Regarding Bimah, my reviewer has yet to learn, that changes in temperature, dampness and brackish water, are not now-a-days recognised as direct causes of remittent fever, and that in the Eastern Archipelago, mud flats however offensive, if under tidal influence, are innocuous. There remains nothing but oyster beds and coral reefs to account for the fever, and well they can, when we consider, that in this land-locked harbour, are present all the "*peculiar circumstances*," viz., heat, moisture, and a stagnant atmosphere, necessary to cause fevers of a most malignant type.

In regard to "Delhi Timor" there is no doubt that the fresh water swamp must exert some influence, but it cannot account for fever equally prevailing, when the place is inundated, when water stands in pools and shallows, and when the ground is quite dry. The residents on the coast are much affected with fever, and those who are two or three miles inland are comparatively free, although as much under the influence of the swamp as those on the seaside, while the crews of vessels are much more subject to the effects of the malaria than the residents on shore; all of which reasons point out another cause than the inland swamp, and which we find to be the adjacent coral reef of great extent and uncovered at low water, from which the malaria emanates, generated by the animal decomposition which my reviewer allows may occur on these coral reefs.

When treating of the Aru Islands, I mentioned that Captain Wolfe was attacked with the usual fever of coral localities, which although identical with that produced from marsh miasm, I ventured to ascribe to the influence of coral reefs, because they were all around and exposed, while he in his vessel was separated from the marshes by a thick deep jungle sufficient to prevent the miasmatic influence from spreading. In confirmation of this idea I beg leave to quote the authority of Dr Ferguson, who states that "it is wonderful to see how near the leeward of the pestiferous marshes, in the territory of Guiana particularly where these trees abound, the settlers will venture with impunity to place their

“habitation, provided they have this security, though every one is fully aware that it would be almost certain death for a European to sleep or even to remain after night-fall under the shade of the lofty trees that cover the marsh at so short a distance.”

The finish of the remarks on my examples of the application of the theory, is on a par with what proceeds, in which the author denies the existence of coral reefs at Sulu, because he did not see them. If the author would condescend to give us the particulars of his visit, and observations, we may then consider whether he is to be weighed as an authority against Captain Wolfe, who has traded from these islands for the last 8 years, and Mr Wyndham who has resided there for 12.

All coral formations have been arranged by Darwin, under three head—the barrier, atoll and fringing reefs—which arrangement I will adopt. The first or Barrier reefs may be divided into two classes, 1st those that like a screen front the shore of great continents and large islands as Australia and New Caledonia—the 2nd class are those that like a wall encircle an island, saving where there are one or more channels.

These Barrier reefs are generally at some distance from the shore; the reef on the West Coast of New Caledonia is 400 miles in length, and for many leagues it seldom approaches within 8 miles, of the shore, and near the southern end of the island the space between the reef and the shore is 16 miles in width. The Australian barrier extends with a few interruptions for nearly 1,000 miles, its average distance from the land is between 20 and 30 miles. The great arm of the sea thus included is from 10 to 25 fathoms deep, with sandy bottom, (Darwin) while the surface of this reef when uncovered by the surf which lashes it, is described by Flinders as consisting of a hard white agglomerate of different kinds of coral with rough projecting points. Outside and within the great barrier reef we have detached islands of coral formation, some of which are linear in shape, while others more nearly belong to the 2nd class or atolls. These detached reefs are thus described by Jukes:—“To get an idea of an individual coral reef, let the reader fancy to himself a submarine mound of rock, composed of the fragments and detritus of corals and shells, compacted together into a soft spongy sort of stone, the greater part of the surface of this mound is quite flat and near the level of low water. At its edges it is commonly a little rounded off or slopes down to a depth of 2, 3 or 4 fathoms, and then pitches suddenly down with a very rapid slope into deep water 20 or 200 fathoms as the case may be. The surface of the reef when exposed looks like a great flat of sandstone, with a few loose slabs lying about, or here and there broken coral branches, or a bank of dazzling white sand. It is however chequered with holes and hollows more or less deep, in which small living coral on accumulations of dead are growing, or has perhaps

a large portion that is always covered by 2 or 3 feet of water at the lowest sides, and here are pieces of coral both dead and living."†

Such is the general description of these vast reefs, which in many respects are very different from the fringing reefs that gave origin to my theory. With few exceptions, the sides of all these reef islands that are exposed are steep sided, and the exposed surface, (a belt of sand generally) of these coral islands, seldom varies more than from 200 yards to a mile in width and from $\frac{1}{2}$ a mile to 10 and 15 in length, while from the angle at which the sides dip into the sea, but little living coral is exposed; exceptions there are to this arrangement and to these we will advert hereafter. On turning our attention to the barrier reef surrounding the islands of the Pacific, we find that they are all some distance from the shore. In the Society Archipelago they are from one to three miles, while the land is fringed by a belt of coral sand and detritus. In the Caroline Archipelago the reef varies in distance, from 5 to 20 miles from the shore, and much the same we see exists amongst the Gambier islands, and Vanikoro.‡

In some instances these encircling barrier reefs are converted into land elevated a foot or two above the level of the sea, but generally a snow white line of breakers is all that points out their existence, and divides the troubled waters of the ocean, from the calm unruffled sea within.

From such sources no malaria can arise, as no decomposition of animal matter goes on; they as well as the great barrier reefs, owing to their structure, cannot be brought forward as exceptions to my theory, which never was intended to include them.

Another reason, not as yet adverted to by me, must influence the generation of malaria,—that is, the peculiar species of corals exposed, as we find that some classes are possessed of more animal matter than others. The class nullipora seems to have little or no animal matter proportioned to their calcareous, which contrasts with the astraca, macandrina, and madripora. Tahiti, for instance, says Darwin "when I visited the reef there, although it was low water the surf was too violent for me to see the living masses. *The extreme verge of the reef which was visible between the breaking waves at low water*, consisted of a rounded convex artificial like breakwater entirely coated with nulliporas, and absolutely similar to that I have described at Kuling Atoll."§

It cannot therefore be wondered at, that such an island as Tahiti and thousands that are like it, should be healthy, although surrounded by coral, inasmuch as it is at such a distance from the shore, as not to affect the inhabitants, and in addition is so covered

† Jukes Vol. I. p. 314.

‡ Darwin's chart.

§ How different from the principal description of my reviewer, when he saw Tahiti "abounding with exposed coral reefs broiling under a tropical sun."

by surf, while it is of that nature that little or no decomposition of animal matter can take place.

The next class of Reefs or the Atolls, are so little different from the first, that Darwin thus sums up their resemblance "besides the many points already noticed of resemblance or rather of identity in structure there is a close general agreement in form, average dimensions and grouping." If we take Keeling, or Cocos Atoll situated in the Indian Ocean as characteristic of the class to which it belongs, we find that the stripe of dry land on Direction Island is only about 400 yards in width betwixt the high water mark and the edge of the lagoon. The soil is composed of broken fragments of coral, and in such a loose dry stony state, that the climate of the tropics could alone promote the slightest vegetation. A few trees, 20 species of weeds, and coconuts, are the entire indigenous flora of the island; while the native animals are limited to a few sorts, two waders, one lizard, spiders, ants, and a remarkable kind of crab. Close to the lagoon is a belt of sand. From high water mark to the extremity of the reef, is not more than 150 yards, and that is composed of detached pieces of coral, mostly dead, with others dying—and proceeding to the formation of the coral debris found on the dry flat of the island. The extreme margin of the reef is composed of living porites, but even the surface of these where exposed to the sun and atmosphere are dead. From the extremity of the reef, the water deepens gradually in 150 yards to 25 fathoms, or 1 fathom in every 3, until at the distance of 2,200 yards from the breakers, Captain Fitzroy found a bottom with a line of 7,900 feet in length. The only part of this singular Atoll, that can according to my theory affect the atmosphere with malaria, is the 150 yards uncovered at low water, and from its structure, as described by Darwin, little effect can be produced. Whatever malaria is formed from the decomposition of the coralline zoophytes, with other animals and marine vegetables that are found on this narrow ledge, situated betwixt high and low water mark, is immediately diluted and dissipated in the surrounding atmosphere, as here we have no calms, no lulls, to prevent the dilution of the poison generated, or high hills to arrest its progress. A steady trade wind from the S. E. blows constantly over its narrow shore, never interrupted except by gales from the N. W.

The Cocos Atoll, just described, is a fair representation of the class. Darwin states that the average width of the annular ring or reef of the Atolls may be taken at about a $\frac{1}{2}$ of a mile, Captain Belcher says, that in the Atolls of the Low Archipelago it exceeds in no instance $\frac{1}{2}$ a mile, while Darwin adds "to show how small the total area of the lands of the annular reefs is, in the islands of this class, I may quote a remark from the voyage of Lutke, viz., that, if the 43 rings, or atolls in the Caroline Archipelago were put one within another, and over a steeple in the centre of St. Petersburg, the whole would not cover that city and its suburbs."

As with the detached reefs of the barrier class, so we have it generally the case with Atolls that they are steep sided, so much so, that alluding to Cook's description of Christmas Atoll, "when at $\frac{1}{2}$ a mile from the edge of the reef the depth was about 14 fathoms while a mile, it was no more than 25 fathoms" Darwin says "I know of no such instance of such width in the reef of an atoll, though Mr F. D. Bennett informs me, that the inclination of the bottom round Caroline Atoll in the Pacific is, like that of Christmas Atoll, very gentle."

There are exceptions to these general remarks, both, in regard to the size of the annular reefs, and the size of surface exposed, and Raine's island in the barrier reef is an example of the last—this island is about a thousand yards long and 500 broad—composed of calcareous sandstone and sand, and in no part rises above 20 feet from the level of the sea, to windward there is a reef stretching out for nearly two miles and uncovered at low water. This island was occupied for some time by a party of officers and men in H. M. service without any mention of fever having been produced amongst them, and most plausibly has it been brought forward as an instance where my theory is at fault, overlooking that in page 600 of Vol. 2nd of this Journal, I have made the following most special exception, to certain localities, including this island and many in the Pacific, "from all exposed coral reefs malaria emanates, and the density of the malaria depends upon the non-dilution of the poison, from want of ventilation, or it may be modified, by solution with surrounding atmosphere so that when it reaches a ventilated locality, it is innocuous, as a drop of concentrated sulphuric acid will burn, but mingle it with a pint of water and its effect is lost."

Further to elucidate this conclusion, I will give the reasons that induced me to arrive at it. In tropical latitudes, we have certain meteorological conditions essential to the miasmatic formation, in addition to the marsh or direct source, these are *heat, moisture, and a more or less stagnant state of the atmosphere*, the heat must not be too intense, nor must the moisture be great, while the atmosphere must be more or less stagnant or we find the fever produced of a very mild type, or such dilution may take place, as at a short distance to moderate, even nullify, the miasmatic effects of the marsh. Rio Janeiro according to Dr Wilson, (Ed. Med. and Sur. Journ. Vol. 35.) is built on a low sea shore skirted by hills, and bordering on an extensive swamp, yet the inhabitants are only troubled with slight agues, while similar latitudes in the West Indies are ravaged by yellow fever, owing to the stagnant atmosphere that there prevails at certain times. Dr Craigie, than whom there is not a more profound writer, states, "that while ague is the offspring of marshes and their margins, remittent fever is the effect of a more concentrated form of the same exhalations from solar desiccation. Yellow fever seems to

be the exclusive product of that state of the atmosphere, which takes place after a long continuance of solar heat, *with little or no wind.*" But I need not a better illustration of the powers of ventilation, than is to be met with in Singapore, where we have had marshes filled up, and roads made in town, by Government, from the sweepings of the streets and the "exuviae" of the living, and if it had not been that we are blessed with an atmosphere that is never still, with breezes by night and day, and no encircling high hills, the noisome pestilence would have gone abroad and sickness and death crossed the thresholds of many of our friends, and to *Him* let all praise be given, whose providence watches over us and shields us from the effects of the guilty ignorance of those who rule over us. As with marsh miasm, so with malaria from animal decomposition, unless we have the same essential conditions present, viz. sufficient but not too much moisture, heat, about 80° and a calm atmosphere, we might allow my reviewer's elegant simile "of a decomposing bullock's carcase" to be placed not only in his bed-room but in his bed. From the observation of others, I have drawn this conclusion, that "when corals are exposed to the atmosphere, to rain or detritus, the living animal dies and decomposes and the calcareous portion after sufficient exposure from friction pulverises, by which the beautiful sand of our beaches and bottom of our tropical seas is produced—in addition to these decomposing corrolines we have undergoing a similar change a mass of living matter on the surface of the reef, proportioned to its size, and the calmness of the seas,* as the result of this animal decomposition we have certain emanations which are sensible to our sense of smell, and state of health.

Bearing in mind that this decay of animal matter is continually going on, my first conclusion was, that whenever a coral reef is exposed at low water, animal decomposition goes on to an extent proportioned to the size of that reef *ceteris paribus*, and my next conclusion was, that malaria is the result of such decomposition, which malaria is one and the principle cause of fevers endemic in such localities. I need not again wade through the many reasons that induced me to arrive at these conclusions, as the essence of them is allowed by my reviewer, to wit, that the miasm generated from the decomposition of animal substances is capable of causing fever under given circumstances, and second that animal decomposition under peculiar circumstances can cause fever, occurring on coral reef or elsewhere. Now these peculiar circumstances are, heat, moisture and a calm confined atmosphere, the two first may be taken for granted as always present—so here we have coral reefs, the third condition is the most essential and in my opinion is the

* Jukes thus outlines a coral reef on the Coast of New Holland "what an inconceivable amount of animal life, must be here scattered over the bottom of the sea, every corner and crevice, every point occupied by living beings which as they become more minute, increase in ten fold abundance."

principle cause of the difference in the Hygienic state of the coral islands of the East and West Indies compared with those in the Pacific. Sir James Annesley in his work on the diseases of India, makes this allusion to the 3rd condition, "from these results therefore, it is chiefly to be inferred that the malaria is diluted or weakened as it becomes diffused in the atmosphere or transported from its source and that it is so weakened in proportion as the dilution is promoted by the vertical currents induced in the air by means of the sun's rays, the dilution becoming still greater as its admixture in the air, is further facilitated by free ventilation, *until its bad effects entirely disappear.*" That ventilation is all important in a sanitary point of view, has been proved before the commissioners for enquiring into the state of large towns, and populous districts, in Great Britain; in whose report, we have Dr Grey for London, Dr Davidson for Glasgow, Dr Duncan for Liverpool, all testifying that the mortality from fever increases in proportion to the deficiency in ventilation. Dr Arnott has by making a hole in the chimney above the fire place, and applying a valve to prevent the smoke passing out, introduced a simple but efficacious plan of ventilating the large and wretched Lodging houses of the poor in London, and the dispensing medical men of the district of St. Giles, have found that without any other change of the physical condition of the inmates have much improved, and fever has much decreased. Whoever has paid attention to the sanitary reports of the medical men. who have within the last few years directed their attention to hygiene and medical police, must have noticed with mingled feelings of surprise and horror, the disclosures which have followed the investigations regarding the church yards in our great cities. This intombment of the dead amongst the living has by the increase of streets, and walling the cemeteries round by masses of building, been the means of concentrating the poison emanating from the "cities of the dead" so that the inhabitants of the adjoining streets, besides the awful spectacle of human remains that are frequently turned up to their vision, are affected with the malaria from the decomposition to such an extent that both fever and cholera are more than usually prevalent amongst them. But let these cemeteries be placed in the suburbs of a town as at Liverpool, Glasgow, and lately in Edinburgh, open, unconfined and exposed to the four winds of heaven, malaria must and is still generated, but so diluted, that death no longer carries its sting, and the grave is robbed of its victory. The malaria from the exposed coral reefs of our land-locked harbours, and those localities where the inhabitants are settled betwixt a reef and high land or jungle in the Eastern Archipelago, is in effect, compared with that from the atolls and barrier reefs of the Pacific and Coasts of Australia and Caledonia, as the fumes of a charcoal fire in a confined room, to the thousand times greater volumes of smoke of

a large town. In the chamber, we have but a fractional part of the carbonic acid that is mingling with the atmosphere around, but it is confined, concentrated and deadly to the unconscious slumberer who inhales it; and a watcher outside though surrounded by a thousand fires yet with ventilation round him, might because he was untouched, consider there was no harm in the quiet slumber of the victim, no death in his deep sterterous breathing.

If near Singapore, or any other part, my reviewer allows, that the corralines of a reef and the animal and vegetable matter on its surface, die and decompose, when exposed to heat, rain and the atmosphere, and as these are in existence at Raine's island, we are forced to the conclusion that either there are no corraline zoophytes or living matter on the reef to die and decompose, or that there is such living matter and it does die and decompose, which last, we know is the case. Now my reviewer allows "that animal decomposition under peculiar circumstances can cause fever on coral reefs or elsewhere," what these peculiar circumstances are, he has not chosen to specify, but I will do so for him, and they are, 1st a body or recipient sufficiently susceptible of receiving the morbid or malarious impression, and 2nd malaria in a sufficiently concentrated state. This last is absolutely necessary to produce an effect, as we have found, that when sufficiently diluted, it is, as if it was not present. For this reason I can understand that at Raine's island exposed corralines as well as the many other Zoophytes, Mollusca, and vegetable matter that adorn the surface of the reef, die and decompose, and that from this decomposition, malaria arises, but I can also understand that no bad effects to the settlers on this island may be induced by this malaria, from being so diluted and dissipated, by a perennial breeze always blowing from the south-east, only interrupted by gales from the south-west. This perfect ventilation, from there being no high land, to intercept the currents of air, affords us most satisfactory explanation of the healthy condition of the settlers on Raine's island, and thousand similar atolls, as well as of the following facts narrated to me by Captain Brown himself, who while in command of the ship "Gledstanes" in 1837 struck on a reef not then laid down, subsequently called Ocean island situated in long. 178° 30' west. lat. 28° 10'. It is composed of a barrier reef of coral, 17 miles in circumference, inside of which was a bank of sand, composed of the debris of coral and shells, and only a few feet elevated above the level of the sea. The sides were steep and little or no coral was exposed at low water, while a constant breeze always played over the barrier surface of the sand, on this the shipwreck crew remained for 5 months, until they had constructed a vessel of 22 tons burthen from the wreck, when 10 of them with the Captain left in it for the Sandwich islands, and in two months returned in a chartered vessel for the remainder of the crew, 23 in all. During their sojourn on this coral formed island, exposed as shipwrecked men were to all the inclemencies of

the weather, scurvy was the only disease that attacked them and their immunity from fever, must be ascribed not only to the limited expanse of living coral exposed, and proportional malaria, but to that being diluted, diffused and dissipated through the continuous currents of air.

But if an atoll is surrounded by clusters of exposed coral reefs, or if calms rather than breezes prevail, we have fevers more or less abounding. As an example of the first state, I may cite the Maldives and appeal for my authority to Captain Moresby's work, entitled, "Nautical Directions for the Maldives islands," where in page 17, Male Atoll, is thus described, "the insalubrity of the climate is particularly injuries to strangers, either European or native, and the latter feel its effects sooner than Europeans, and yet there is no swamp, or decaying vegetable matter on this bare island, nothing in fact but exposed coral reefs to account for it." In the face of this testimony, the highest because that of a person of the greatest experience, my reviewer would contend for the healthiness of the locality, because its inhabitants, acclimatised from birth, are not so susceptible of malaria as strangers; as well might we contend for the healthiness of the grain coast of Guinea, the most insalubrious climate with which Europeans are acquainted, where a European scarcely passes a night on its shore, without becoming the victim of fever. Yet in this wide district of country, unfavourable to European life, and even to the higher domesticated animals, the Negro variety of our species exists in its greatest perfection, presents the most perfect symmetry, lives to a good old age and is seldom the subject of disease, or take an instance from the reviewer's favorite ground "the Saul Forest everywhere, but especially to the East of the Kose, is malarious to an extent which no human beings can endure, save the remarkable races, which for ages have made it their dwelling place. Yet the Dhimal, the Rado, the Kechak, the Tharu, the Denwan, not only live but thrive in it, exhibiting no symptoms of that dreadful stricken aspect of countenance and form, which marks the victim of malaria." B. H. Hodgson, Esq. on the aborigines of India, page 148.

It is the 3rd class or fringing reefs, that afford illustrations of my theory, not that they alone furnish malaria, but that where they are to be met with, we have generally one of the essential conditions necessary to enable it to affect the human frame, that is, a more or less stagnant atmosphere that prevents the dilution and diffusion of the morbid principle. I have already furnished examples of this class from amongst the islands of the Indian Archipelago and I have still more to lay before the public, derived from the West Coast of Sumatra, the Nicobar and Andamans, the Atolls of the Maldives, the Coast of Madagascar, the East Coast of Africa and many of the West India islands.

This certainly is a most extensive field and if we find the principle allowed by the author of the remarks "that animal decomposition,

occurring on coral reefs under peculiar circumstances will cause fever", applicable to such a field, the importance of the discovery must be allowed, and is not to be quashed by ridicule, garbled quotations, and loose statements, such as the extraordinary one, "that the inhabitants of Duff's and Disappointment islands, exchange mutual visits of 600 miles on dry reefs," while the fact as stated in Wilson's Missionary voyages is that Duff's island formed of high and bold peaked land, has a reef extending for $\frac{1}{2}$ a mile only from the shore, and at a mile distant has 7 fathoms of water all round. There are many points in these remarks that I might have adverted to, as for instance the statements regarding Sirhassan and Sobi, but will not, preferring much the observations of my friend Captain Congalton, to those without the authenticity of a name, and as I am tired with this long answer, I will finish by assuring the author of the remarks, that I am not desirous of being considered the discoverer of the well established truth, "that in confined situations, especially in hot moist climates, the effluvia of decomposing animal substances, will cause Adynamic fever," but I am proud of having been the first to apply that well established truth to coral localities, to account for their endemic fevers. Which theory has I trust so much truth for its basis, as to be able to withstand the attacks of similar critics, unless they bring to bear upon it, something more than facts unauthenticated, and groundless assertions and when next the author of the remarks deigns to touch my shield, let him discard his *gentle courtesy*, and boldly, openly strike if he wishes to make an impression.

GENERAL REPORT OF THE RESIDENCY OF SINGAPORE, DRAWN
UP PRINCIPALLY WITH A VIEW OF ILLUSTRATING ITS
AGRICULTURAL STATISTICS.*

By J. T. THOMSON, Esqre. F. R. G. S., Surveyor to Government.

Cloves

As the production of this spice is merely nominal in Singapore, it demands little attention. Speaking of it as a cultivation in the Straits it must be pronounced a failure, for in a few localities in Pinang it can only be said to have succeeded. Its original site, like the nutmeg, was in the Moluccas, and with it was made the subject of a close monopoly by the Government of Netherlands India. It has been long introduced into Bourbon, and I am informed by Mr Nicol is also produced in large quantities at Zanzibar. Don Joze D'Almeida informs me, that he considers that the soil of Singapore is not adapted to its growth, for he had planted out four thousand, which grew very luxuriantly for a few years, when they suddenly began to wither and die, and he can assign no other cause for the failure than the above, though he made the most minute inspection. Dr Little informs me that at Annan bank estate there are 200 trees 10 years of age, and about 250 of 6 or 7, about 200 of these have borne fruit, the greatest quantity received being 2 years ago, which was only 2 piculs, or a catty per tree, last year the produce was only half a picul, these trees now show evident symptoms of decay, in their leafless branches and scantiness of produce. The cause of this he cannot positively account for, but thinks they require a rich scanty soil as they have in Bourbon, nor does he consider that the cultivation will ever meet with success. The trees he thinks might be improved by topping in order to make them shoot out laterally, but he would recommend their being extirpated from all nutmeg plantations and grown solely as ornamental trees. Mr Dunman informs me that he planted out 3,000 trees on Holly hill estate, all of which grew exceedingly well, until their fourth year, when they began to fade away, and he cut them all down after trying all sorts of experiments to avert the loss without effect—such as the following:

A row of trees washed with Chunam.

do. do. with Tobacco.

do. do. with Toba.

do. do. with these mixed.

do. do. trenched and manured with grass.

do. do. do. with manure.

do. do. by smoking the leaves.

* Continued from p. 41.

In some trees the 'ops began to wither and die and in others the bottom branches. The leaf was covered with red spots as if they had been burnt, or had been sprinkled with corroding liquids—he did not discover that any insect preyed on the leaf; no crop was obtained from them before they died or were cut down.

So early as 1824 a large estate was planted with this spice tree, near Bato Berlayer—one or two hundred trees in which still remain, but no crop worth the collection was ever received, and in 1830 Bukit Seligie was planted with 2 to 3,000, with nearly the same result. At Pinang there have been at various periods larger estates laid under this cultivation, in some cases attended with total loss to the proprietors, and in none with advantage; many of these attempts have been made by able and experienced planters, there has therefore sufficient experience been gained to warrant the unfavorable opinion of it, already offered; such trees that remain on the various properties in Singapore seem to be fast dying out.

Cocoanuts

The habitat of this tree is on the sea shore fringing the beach. In such a position, should the soil be loose and friable, though of the most meagre description, such as sea sand and shells, it grows luxuriantly without the concomitant aids of cultivation, manure or the proximity of inhabited houses, but this only obtains within one or two hundred feet of the beach. Its bending stem inclined towards the sea, causing its fruit to be received into the bosom of that element, appears to have peculiarly fitted it for extension to the various islands and atolls of the Indian and Pacific oceans, to which the nut is floated by the winds and tides, and to whose inhabitants, when grown to maturity, it affords both shelter and food. When planted in other localities than these, it neither grows well, nor affords fruit, unless it be on rich soil, or in the proximity of dwellings, and in the average soils it requires both considerable manuring and cultivation. The south eastern shores of Singapore are peculiarly well adapted to its growth, and this has been taken advantage of by several spirited gentlemen who have laid out considerable estates under its culture, and some of which are now yielding incomes to the proprietors. Singapore in its cocoanut cultivation may be said to far surpass the other Straits settlements. Mr Crane, one of the above gentlemen, and who has had upwards of 12 years experience has kindly sent me the following notes:

A good cocoanut tree when in full bearing will yield 140 to 150 nuts per annum. The tree commences to yield in damp low rich soils in the 4th or 5th year, on sandy soils of middling height, in the 6th or 7th year, and on high sand ridges in the 9th or 10th, and the last though slow are wholesome good trees. From the time that the blossom shows, three months elapse before the formation of the fruit, and they require six months more to come to full

growth, three months more to ripen, and will remain other two months till they drop—thus 14 months elapse between the blossoming and the falling of the ripe fruit; on the first year of bearing a greater part of the spathæ are unproductive, but in older trees this is seldom the case, though they are so occasionally even at mature age. Mr Crane manures his trees very little, though satisfied of the advantages of it, but does not think it necessary in favorable situations where there is tidal influence. He has observed one tree to carry 187 nuts (large and small) at one time, but this is not ordinary, he has further counted 27 full grown nuts in one bunch, borne by one spatha; trees produce 10 to 12 spathæ in one year, all his trees are planted 30 feet apart, and he would not advise a closer distance. He has not manured his trees highly, but would recommend this on sandy grounds, the tree, he considers will not thrive in lalang, but will do so in low jungle and brushwood, where they are not troubled with beetle; when young they ought in this case to be cleared every year or two, he further states that the cloth or sarong that binds the cocoanut spathæ should never be taken off above these, for it is necessary to strengthen them in upholding the fruit; many planters take this away, thinking the trees look cleaner and prettier. Branches should never be taken from the tree until they become dry. Drainage cannot be too much attended to, particularly in low lands; but at the same time the tree must be supplied with water that does not stagnate about the roots, the truth of this is evidenced by the luxuriance of trees on the slopes of the ridges, where the showers continually wash the roots, in comparison with the inferiority of trees that grow in the lower ground. In laying out an estate he would advise the planter to study the height of his ground, with a view to the supply of water; in the higher ridges he should set the nuts at 1 to 4 feet below the surface as they seldom thrive unless this be attended to. Mr Dunman another planter, writes me that a good cocoanut tree produces 100 nuts per annum, but that he has seen 250 to 300 given by trees 30 years old. He strongly advises the application of manure, particularly in a liquid state, other kinds are apt to breed beetles so destructive to the plant; an inferior tree produces only one to five nuts per annum. If the seed be originally bad though the tree grown therefrom may attain the full size it will never bear—he has many trees 30 years old of fine appearance that yield no fruit. There is very little oil made in Singapore, he uses a native mill for the expression of the oil, but he has little use for it, owing to the great demand for nuts. He thinks it is more profitable to sell the nuts at 10 dollars per 1,000, than manufacture oil; no coir is made on the island. He supposes that the European planters now have 14,100 trees in bearing. His best trees have borne fruit in the fifth year, where on sandy soil they have borne on the 10th. He considers that on an average 15 years is the period when a cocoanut plantation begins to pay the proprietor; he further remarks

that those trees planted 8 years ago in sand, and which have had great attention do not yet show blossom, while those planted near a mangrove swamp 5 years ago, and which have been allowed to grow up in the brushwood, are now in good bearing—their trunks are enormously large and very fine.

A plantation on the best tract in Singapore of 14,000 trees, commenced and carried on gradually since 1837, has cost with interest at 10 per cent per annum 18,160 Spanish dollars, or about Drs. 1. 30 per tree up to December 1848. There were at that date 4,500 trees in bearing whose produce for 1848 was 112,000 nuts sold for about 1,400 Spanish dollars; the outlay for the year was 1,200 Spanish dollars giving a net income of 200 Spanish dollars; we must rest content with this, as the average yield of cocoanuts is too little known to proceed with the probable future income—the proprietor himself expects that they will give him on an average 100 nuts a tree, but I think it must be conceded that he is too sanguine—the return gives only 25 nuts a tree but these are young and may bear better by and bye; at the former calculation, under present circumstances, the plantation when in full bearing would give an annual income of 12,800, and at the latter of 2,300 Spanish dollars, against which, looking at the matter in a mercantile point of view, the interest of the original outlay would require to be placed—or 1,816 Spanish dollars annually.

Before concluding the notice of this cultivation, I may add that I have found it to be the case in the Straits Settlements that this tree fails to grow when out of its habitat on poor or average soils, unless it have both manuring and careful cultivation, and trees if they have been brought up on such soils are very unproductive if manuring be not continued. I have observed the wonderful effects of bats-dung, a species of guano, on a plantation in Batu Lanchang, Pinang—where by the addition of a little in two oblong trenches at opposite sides of the trees they began from a total state of unproductiveness to bear most luxuriantly. The neglected tree when planted on poor soil will remain stationary for 10 years, not attaining a height of above two feet from the ground with the retention of life that characterizes the dwarfed bamboo of the Chinese Horticulturist, while its gigantic congener planted under more favorable circumstances would be affording ample shade to the planter of it.

Betelnut

Another palm of high stature and graceful appearance which unlike the above described has its habitat in the rich vallies and soils of the interior, where, when distant from the dwellings of the natives, it is only to be found to produce abundantly without culture, care, and attention. This tree has not yet in Singapore received the attention of capitalists with a view to its culture, but both in Pinang and Province Wellesley considerable properties have been

laid out with more or less advantage—on the average soils where the culture has been neglected it has invariably turned out a failure; to obtain abundant produce from such soil both cultivation and manuring are required. Under favorable circumstances it will bear in its 4th year but generally in its 6th or 7th. It produces 4 to 6 spathae in the year, each when the tree is superior carrying a bunch of 150 to 200 nuts—but in the quantity of produce there is a great variety. In Singapore where it has no where been cultivated, it is only to be seen producing abundantly in the close proximity of habited houses,—where distant from these, by counting the average of a great number of producing and sterile trees of full growth in various parts of the island, the average produce per bunch is not above 10 to 12 nuts or 50 to 60 nuts per annum for each tree. Mr Charles Scott informs me that he has carefully caused the produce to be collected from 780 full grown good and indifferent bearing trees during a period of four years—the result of which was as follows:—

<i>No. of bearing Trees.</i>	<i>No. of nuts produced in 4 years.</i>	<i>Average No. of nuts in 1 year.</i>	<i>Average No. of nuts per tree per annum.</i>	<i>Price per 100 nuts.</i>	<i>Value of produce of 1 tree per annum.</i>
780	305,824	76,456	98	2½ Cents	2,1 ^s Cents.

Mr Scott further informs me that these trees grow in a nutmeg garden and though not cultivated themselves, may benefit slightly from the attention given to the trees among which they are planted.

(To be Continued.)

Census of Singapore and its Dependencies taken under orders of Government in the Months of November and December, 1849.

TABLE I.

Exhibiting the Local distribution of the Inhabitants, with their various nations.

NATIONS.	TOWN.					COUNTRY.					ISLANDS.					- RIVERS.					TOTAL.				
	Males.	Females.	Boys.	Girls.	Total.	Males.	Females.	Boys.	Girls.	Total.	Males.	Females.	Boys.	Girls.	Total.	Males.	Females.	Boys.	Girls.	Total.	Males.	Females.	Boys.	Girls.	Grand Total.
Europeans.....	145	57	32	30	264	53	17	13	13	96	..	..	..	..	..	..	..	..	..	..	198	74	45	43	360
Eurastians.....	287	273	157	153	870	17	11	11	13	52	..	..	..	..	..	..	..	..	..	..	304	284	168	166	922
Armenians.....	30	7	5	8	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	7	5	8	50
Arabs.....	81	37	39	36	193	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	82	37	39	36	194
Bahinese.....	8	8	1	2	19	46	41	23	20	130	..	..	..	..	..	..	..	..	..	..	54	49	24	22	149
Boyanes.....	283	25	15	11	334	420	5	2	2	429	..	..	..	..	..	..	..	..	..	..	703	30	17	13	763
Bugis.....	424	39	62	23	548	437	393	232	222	1,284	155	91	48	43	337	100	..	..	..	100	1,110	523	342	288	2,269
Caffries.....	1	2	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	3
Chinese.....	12,053	1,251	809	666	14,779	11,915	200	137	106	12,358	217	8	12	7	244	605	1	1	..	607	24,790	1,400	959	779	27,988
Cochin-Chinese.....	..	..	..	..	..	6	8	5	8	27	..	..	..	..	..	..	..	..	..	..	6	8	5	8	27
Javanese.....	483	303	109	80	975	498	77	49	50	674	..	..	..	..	..	..	..	..	..	..	981	380	158	130	1,649
Jems.....	14	3	2	1	20	2	..	..	..	2	..	..	..	..	..	..	..	..	..	..	16	3	2	1	22
Malays.....	1,084	1,020	483	388	2,975	2,374	2,040	1,089	926	6,429	655	633	393	395	2,076	427	121	107	71	726	4,540	3,814	2,072	1,780	12,206
Natives of India.....	3,704	496	436	237	4,873	753	62	46	35	896	..	..	..	..	..	480	3	4	5	492	4,937	561	486	277	6,261
Parsees.....	13	..	..	..	13	10	..	..	..	10	..	..	..	..	..	..	..	..	..	..	23	..	..	..	23
Siamese.....	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	4	..	..	..	4	4	1	..	..	5
	18,610	3,521	2,150	1,635	25,916	16,532	2,855	1,607	1,395	22,389	1,027	732	453	445	2,657	1,616	125	112	76	1,929	37,785	7,233	4,322	3,551	52,891
Military and followers.....																								609	
Continental Convicts.....																								1,426	
Local do.....																								122	
Persons living on board of vessels and boats in the roads.....																								2,995	
Omitted through change or obscurity of residence.....																								1,000	
Grand Total.....																								59,043	

Singapore, 23rd January, 1850.

LOUIS S. JACKSON,
Assistant Resident.

**Census of Singapore and its dependencies, taken under orders of Government in the Months of
November and December, 1849**

TABLE II.

Showing the classification of the adult inhabitants into Profession or callings, as well as the Religions as far as they could be ascertained.

NATIONS.	PROFESSION OR CALLING.							RELIGION.						
	Mer- chants & Clerks	Me- chanics	Agricul- turists.	Labou- rers.	Sev- ants.	Mis- cella- neous.	Total.	Chris- tian.	Jews.	Parsees.	Mahome- dans.	Hindoo.	Buddist.	Total.
Europeans.....	40	14	10	.....	3	131	198	358	.....	.....	2	.....	.....	360
Eurostians.....	52	12	14	.....	102	124	304	921	.....	.....	1	.....	.....	922
Armenians.....	3	3	.....	.....	.....	24	30	50	.....	.....	.....	.....	.....	50
Arabs.....	9	.....	.....	.....	13	60	82	.....	.....	.....	194	.....	.....	194
Balinese.....	.....	3	45	2	3	1	54	.....	.....	.....	4	145	.....	149
Boyonese.....	.....	.....	310	303	21	69	703	.....	.....	.....	763	.....	.....	763
Bugis.....	.....	89	242	308	8	469	1,116	.....	.....	.....	2,269	.....	.....	2,269
Caffries.....	.....	.....	.....	.....	.....	1	1	3	.....	.....	.....	.....	.....	3
Chinese.....	98	2,322	8,426	8,303	335	5,306	24,790	487	.....	.....	6	.....	27,495	27,988
Cochin-Chinese.....	.....	.....	.....	6	.....	.....	6	.....	.....	.....	.....	.....	27	27
Javanese.....	.....	196	336	356	37	116	981	1	.....	.....	1,648	.....	.....	1,649
Jews.....	5	.....	.....	.....	5	6	16	.....	22	.....	.....	.....	.....	22
Malays.....	3	236	450	2,757	361	733	4,540	1	.....	.....	12,205	.....	.....	12,206
Natives of India.....	17	181	255	1,956	415	2,113	4,937	39	.....	.....	4,915	1,307	.....	6,201
Parsees.....	7	.....	.....	.....	11	5	23	.....	.....	23	.....	.....	.....	23
Siamese.....	.....	.....	.....	.....	.....	4	4	1	.....	.....	.....	.....	4	5
	234	2,990	10,088	13,991	1,310	9,156	37,785	1,861	22	23	22,007	1,452	27,526	52,891

LOUIS S. JACKSON,
Assistant Resident.

Singapore, 23rd January, 1850.

received for which, have been already given under the head of Land Revenue. The objects and intentions of the government while not requiring immediate returns have been fully attained in the creating of improving proprietors, and the minimum rate at which lands are alienated, viz. 5 rupees per acre, while it acts as no bar to those who wish to cultivate the lands, for which they apply, is sufficient to prevent the absorption of large tracts of uncultivated land by monied speculators, to the exclusion of the smaller occupiers, who retain only what they can clear and keep under cultivation.

Singapore, 1st June, 1849.

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

AN ACCOUNT OF THE ORIGIN AND PROGRESS OF THE BRITISH
COLONIES IN THE STRAITS OF MALACCA.*

By Lieut-Col. JAMES LOW, C. M. R. A. S. & M. A. S. C.

3rd December 1820. Captain Campbell, of H.B.M.S. *Dauntless* in reporting the massacre which had then occurred at Manila, observed that "the natives had been *incited* to rise under the belief that an epidemic then raging was owing to foreigners poisoning the wells and tanks. The authorities on this occasion behaved with excessive supineness and inhumanity. The natives slaughtered all the English, French, Danes, and Americans whom they could find, and I lament to say that twenty-six Europeans, a large proportion of whom were British, had fallen victims to these ferocious savages, under the *very guns of the citadel of Manila, and in presence of 3,000 troops under arms*, who seem on this occasion to have been drawn out rather to view these scenes of murder than to prevent them. Eighty Chinese were also slaughtered." Have the Spaniards not manifested in other quarters occasionally a dislike of foreigners owing to a less palatable cause.

12th November 1821. The warning before noticed was true for, in the November following it, the Rajah of Ligor burst into Keddah at the head of a force of seven thousand men. The small brick fort at the entrance of Keddah river fell after a feeble defence on the 18th, and the Rajah, without trying to defend it, fled

* Continued from p. 25.

precipitately on an elephant to the coast opposite to Pinang. The Governor deputed Mr Cracroft to offer him an asylum in Pinang, but under the express stipulation, that neither he nor any of his followers should intrigue or commit any political act without the approval of the British Government. The Rajah established himself under these conditions in Pinang, and for upwards of twenty years afterwards strenuously and systematically acted in direct opposition to them.

The Rajah it is said escaped the hot pursuit of the Siamese by scattering rupees from his elephant in his route, which helped to delay the soldiers.

The Rajah of Ligor now addressed a letter to Mr Phillips describing the refractory conduct of the ex-Keddah Rajah,* and stating that the Emperor would appoint a Siamese officer to be its governor, and then in somewhat of the Celestial fashion, he set forth that a large force would be sent to attack any country which should protect the ex-governor and carry him off. "Let my friend the Governor of Pinang if he goes there secure him and deliver him, so that his head may be brought up. Should this be refused, be it known that I am at Keddah with a large force, and near to Pinang, and that friendly relations will be broken and commercial intercourse will cease." He at the same time invites the governor of Pinang to visit him at Keddah to enter into amicable relations. This vaunting letter, which supreme ignorance alone could have dictated and which looked like a close approach to a declaration of war, only that it was not official and was the exhibition of anger in a mere provincial chief unauthorized by his emperor, was calmly replied to. The Rajah of Ligor was told that the British Government was not accustomed to deny the rights of hospitality to an ally or friend, and that confident in its own strength and power, it was not in the habit of receiving or of using in its correspondence with neighbouring states any unavailing threats and expressions.

The Siamese, supposing that the fugitive Rajah was at Kota in Province Wellesley, sent thirteen armed prahus stealthily along the coast to the mouth of the Prye river, nearly opposite to the town of Pinang, but they were there opposed by a Jemadar's party of the local corps, and the small armed vessel the *Nautilus*, and were obliged to return—not a shot was fired. Nearly at the same moment a party of Siamese troops had entered the Province by land in search of the Rajah, but a company of Sepoys under Capt. Crook obliged them to return after an exchange of a few shots. The Rajah of Ligor was warned against a repetition of such conduct in his people, who doubtless supposed that this part of the coast formed part of Keddah at the time. Flushed with success

* He was never styled Rajah by the Court of Bangkok, but Chow Pangeran or Lord, the title which the Emperor conferred upon him when he went to the capital to solicit the Government of Keddah. The Malays following their own custom called him Rajah.

the Rajah of Ligor sent a detachment to Perak, which offered no resistance to his occupation of it.

Mr Timmerman Thyssen seeing this close approach of the Siamese to Malacca, sent to the Penang Government his proffer of every aid against the ambition of the Siamese.

31st December 1821. These occurrences induced the Supreme Government to instruct the Straits Government to continue the same policy towards Siam and Keddah as hitherto—that being based on the recognized dependence of the latter on the former. Mr Crawford, so well-known by his able account of the Archipelago, arrived in this year at Pinang, having been deputed by the Supreme Government to enter into amicable commercial relations with such of the native powers to the eastward as might be disposed to do so.

January 1822. The uncle of the ex-Rajah, who was a tool in the hands of the Ligorian, wrote to the governor to have paid to him the rent as he called it, which the English had to pay for Pinang. To back this demand the Ligorian recognized this Chief as Governor of Keddah, although he had just before declared that a Siamese should be placed over Keddah. As the Siamese *Emperor* had never openly protested against the British occupancy of Pinang, he committed a palpable political blunder in not maintaining the annual payment to the ruler *de facto* of that country. It is of small consequence how this money is paid, for any how, if demanded, it finds its way into the Siamese treasury. But it would have been extremely beneficial had the negotiators at Bangkok induced the Siamese at once to accept a sum of money in lieu of all further demands. At present the payment looks too much like rent or tribute.

April and May, 1822. Mr Phillips informed the Ligorian that the ex-Rajah would not be permitted to wage war on the Siamese. If this chief had been very enterprising the promise would have been exceedingly embarrassing. But the Rajah only worked through others, and his frequent attempts to disturb the Siamese in Keddah and to expel them were productive of no more serious mischiefs than the keeping of the population of the Pinang Settlement, in a state of excitement—the requiring of constant vigilance on the part of Government to counteract the intrigues and exertions of the Rajah and his adherents to gain his point, and in the creating of factions to the annoyance of the peaceably disposed portion of British subjects in the Settlement.

Amongst other schemes the ex-Rajah intrigued with the Burmese who promised him 5,000 men from Tavoy to attack Keddah. His own adherents checked this mad project in the bud. Ava was doubtless then meditating that aggression upon the British frontier which she carried into effect but two years afterwards.

1822. The Revenue Farms yielded this year 77,880 dollars being a decrease in 1821-2 of 12,120 dollars.

The Population of Province Wellesley had greatly risen on account of the influx from Keddah.

1821-1822. Mr Crawford was deputed in 1822 as the Governor General's Envoy to the Eastern States and Siam. It was supposed that amongst other things the ex-Rajah of Keddah might be restored to his government with a larger measure of independence than had before been accorded to him. But the Rajah of Ligor, whose influence was powerful at Bangkok, prevented this result and the mooted of the subject at all only rendered the cause of Keddah more desperate. In fact Keddah had always been a sort of dependency of Ligor itself, and the wily chief pretended to use his influence at court when he well knew that the temper of the emperor was adverse to the ex-Rajah's claims.

13th June 1822. Sir S. Raffles proposed that the ceded territory in Borneo should be occupied. But the policy of such a measure appears to have been reserved for the consideration of the British Government of these latter days.

July 1822. The Rajah of Kalantan, a small state on the East Coast of the Peninsula, wrote to the Governor of Pinang offering to give up that country to the British upon his being allowed one-half of the revenues. He would have made a good bargain, and the British a bad one, had the proposal been entertained—for being then under Siam, it would have relieved him from vassalage, and placed more revenue at his disposal than perhaps he could else have had the power to retain.

7th and 15th August 1822. The tide of emigration now rolled rapidly from Keddah into Province Wellesley and Penang, and Mr Phillips took advantage of it to settle the province. A commission consisting of three Gentlemen, Messrs Maingy, Blundell and Caunter was formed and agriculture was encouraged by grants of land. Mr Maingy was soon afterwards appointed sole superintendent.

1823. Mr Crawford took charge of Singapore with Messrs Bonham and Presgrave as his assistants, and he was succeeded by Mr Prince in 1826. Mr Murchison became resident in November 1827.

Jan'y. 1823. Mr John Anderson was deputed on a commercial mission to Sumatra. He published his itinerary.

A botanical garden was established on Pinang in this year. It languished about ten years, and was then abandoned. The failure was owing to the difficulty of procuring a sufficiently qualified superintendent at the small salary allowed.

Cast iron-pipes were now laid down from a spot towards the hills and about two miles distant from the town, to convey water to it and for the shipping frequenting the harbour.

Coffee began this year to be cultivated on the hills, but the experiment failed. The height was perhaps not sufficient. However there are still patches of coffee scattered about both on the hills

and plains. Under the shade they thrive well and produce a good berry. In Province Wellesley very luxuriant bushes may be seen growing in little better than sand, under the shade of cocoanut trees, and there are some such trees of the age of 20 years and still luxuriant. But it is not certainly a safe speculation at the best.

18th Sept. 1823. The ex-Rajah of Keddah having become more persistent than ever in his endeavours to expel the Siamese from Keddah, he was warned by the Supreme Government that should he continue this conduct protection would be withdrawn from him, and his allowance would be stopped not again to be restored. The Rajah had never intended to wage war by taking the field himself—and he therefore continued awhile his old course—and publicly declared that he must persist in his endeavours to obtain the means for requiting the deeds of the Siamese, an evil race having no regard for the servants of God, (meaning the Mahometans).

28th April 1823. It may in explanation of this declaration be stated that the Keddah people being Mahometans looked upon the Buddhistical Siamese as Cafirs. This open announcement of the Rajah was followed up on the 28th April by an attack on the Siamese in Keddah by a Malayan force of three thousand men, chiefly subjects of the British Government, under the command of Tuanku Abdullah, the eldest son of the ex-Rajah: This body after plundering indiscriminately both friends and foes in Keddah, was defeated by a mere handful of Siamese. The Ligorian remonstrated, but the Pinang Government replied that it could not stop such inroads unless by imitating the severity of the Siamese in like cases, which it would not do. This reply when placed in juxtaposition with the assurance formerly given to the Siamese that the ex-Rajah and his adherents would not be permitted to molest Keddah, induced the Siamese Government to suspect that the British abetted the ex-Rajah in his measures. The cause of this discrepancy may be traced perhaps to the minority in Council in which the Governor found himself on the Keddah question—and as such a clashing might have arisen on more momentous occasions, the absorption of the Straits colonies into the political vortex of India, was a measure, which, although delayed, was not the less required.

1824. In the year 1824 the British Government concluded a Treaty with Netherlands Government, having special reference to the Eastern Archipelago. By this Treaty the British debar themselves from entering into any political alliances with the Princes of Sumatra—thus in fact turning them and the island unceremoniously over to the Dutch influence. The Statesmen who originated such an act of political and mercantile suicide must either have been quite ignorant of the value of the regions which were to be affected by the treaty, or quite unmindful of the interests of British commerce. It was not thought enough to perform an act of generosity by restoring Java to the Dutch, but also to exhibit an uncalled for

hyperliberality at the expense and to the future detriment of the British trade. The clause which stipulated that none of the ceded territories in India, Sumatra, or in the Straits and Malacca Peninsula should be ceded to any other power is all in favor of the Dutch. But it may truly be asked in this nineteenth century—when international justice is not confined at least in theory, to the mere area of Europe, but is ostensibly held out to the whole world—what right any nation can possibly have to thus barter away extensive countries, with their independent populations. The truth unfortunately seems to be that might and right are still convertible terms in the civilized world—as well as in the savage wilderness.

January and February 1824. The Court of Ava finding itself on the eve of war with the British, despatched the Myoowoon or Governor of Tavoy to Penang, as its secret agent for negotiating a league in the Malayan Peninsula against the Siamese power. It seems to have expected several special advantages from this mission. It doubtless hoped to prevent any coalition which might have been projected betwixt the British and Siamese from an attack on the Burman dominions—by forcing the Siamese to send their army to the southward, and so also it expected that if this diversion should have been created, there would have been a chance of the Siamese and British coming into collision, thus hampering the operation of the latter against Ava.

The Emperor of Ava, to begin the hedging process, had previously written to his avowed and bitter enemy the King of Siam, advising that both should suspend for a season their mutual animosities and join against the British—since, should the latter prove successful in the approaching contest, they would next turn their arms against Siam. The Myoowoon, having his quiver well filled, directed letters to the old Rajah of Purlis in Keddah—to the ex-Rajah, and to the Malayan Rajah of Perak, Salangore, and Patani, urging them to co-operate with the Burmese against the Siamese, for the purpose of reinstating the ex-Rajah. These letters were accompanied by presents of gold umbrellas and horse trappings. In his letter to the ex-Rajah of Keddah this Burman chief acknowledges the receipt by the Court of Ava of a letter which the ex-Rajah had forwarded “desiring to become tributary to the golden palace and accompanied by a present of a clock,” and states in reply that when all should have been matured, His Majesty would restore Keddah to him, and take him, and his children and posterity under his protection. Instead of looking on the whole of these intrigues as having been entered into merely for the purpose of alarming the British and Siamese without any present real design, even had they possessed the means to go much further, the Penang Government forwarded a copy of the above letter to the Ligorian hoping to intimidate *him* into a recognition of the ex-Rajah’s claims. But the result was quite the reverse from what was

expected—for the Ligorian was only thereby fully convinced that the English were abetting or had plotted the whole design—while at the same time it had the unhappy effect of betraying the above Native states—so far as to cause them to lie under the strong suspicion of having conspired or leagued against Siam, and thus marking them out for chastisement at some future convenient season.

The Myoowoon had miscalculated his time—for the declaration of war by the British against Ava came down to Pinang before he had left it. He was however not molested—and after witnessing a field day of the troops on the island, as a sort of prelude to what he might ere long expect to see at his own gates, he set sail for Tavoy, under a convoy of a British vessel.

14th April 1824. It was probably this very display of a disciplined force of sepoys which induced him afterwards to give up Tavoy without firing a shot to the British detachment sent against it.

1824. Mr Fullerton became Governor in this year.

When the Burman war broke out in 1824 the Governor General proposed to obtain the co-operation of the Siamese in it to the extent of supplying elephants, draft cattle and boats. An envoy* was therefore despatched to the Rajah of Ligor. It was however found impossible to convince him that the British really intended any thing in their declaration of war beyond a mere border warfare—or to allay his suspicions of the probable ulterior views of the Governor General. The mission returned to Penang after a fruitless negotiation prolonged for three months.

10th August 1824. The Envoy reported to Government that the Siamese appeared piqued at the confidence of success against Ava manifested by the British Government, as they themselves had been conquered by the Burmans—and that his opinion was that there were but slender hopes of their co-operation—but on the contrary that they would in all probability await the issue of the contest in the full assurance that should it prove favorable to the British arms they must be gainer both in strength and confidence—while should the result prove adverse, still their rivals the Burmans will be weakened by the contest—their ancient feud be for a term suspended, and no additional feud be added to it by Siamese co-operation against Ava. Amongst other matters the Envoy stated “that several of the people of the Rajah of Ligor told him in plain terms, and with the greatest apparent good humour in order no doubt to try and throw him off his guard, that there would be nothing to prevent the British taking Siam when they should have conquered Ava!” The results afterwards confirmed these suppositions.

14th September 1824. The Governor-General's agent, Major Canning, had written from Rangoon to the Government of Pinang

* The writer of this sketch.

signifying that the co-operation in the war of the Siamese force was desirable—but that it should be subject to a British commander. Agreeably to this notification the Pinang Government despatched Lieutenant-Colonel Snow as Envoy to the Siamese—and to treat at any point in their country which might be found most eligible. A duplicate power was given for the second in the mission* in case a separation of these officers should be advisable. But it was subsequently found desirable to avoid employing the Siamese, and the mission after having reached Tavoy was dissolved; its second member being retained for the British army then at Rangoon for diplomatic duties. It is most fortunate from numerous considerations that such a determination was arrived at, but on one account it was peculiarly so. Had the British consented to league on their first appearance in the Indo-chinese lists with so prominent a nation as the Siamese, they would have sacrificed a great portion of that reputation for courage and moderation, which the native States to the Eastward were willing to allow them, and which the progress and sequel of the war confirmed—and the Siamese would, while claiming and appropriating an undue share of credit to themselves, have become giddy with success and have by an access of pride and ambition, proved more troublesome neighbours than they hitherto had been to the nations around them.

So long as the existing Treaty betwixt the British and Burmese shall remain in force and intact, for so long the Siamese will be safe along their frontiers touching those of Ava. But if that should be broken they have no other guarantee for peace.

31st December 1824. The population of Pinang in this year was 37,943 persons and of Province Wellesley 16,479—making a total of 54,422 persons.

26th July 1825. The occupation of Singapore caused a loss in the Revenue at Pinang from 1821 up to 1825 of dollars 152,734.

1825. Malacca was re-occupied in the month of March and April of 1825.

Mr Anderson was despatched to Salangore at this period to adjust differences betwixt it and Perak.

31st August 1826. For this period the total value of the Exports from Pinang was 2,526,584 Spanish dollars. But these Exports were not the produce of the Settlement itself, which, with the exception of nutmegs, cloves, and pepper, yielded scarcely any exportable articles worth being noticed. These Exports were chiefly collections from all the countries around, and from India and Europe, China, &c. They were :

	Drs		Drs
Opium.....	446,600	Bird's Nest.....	25,500
India Piece Goods...	488,645	Beche de Mer.....	25,000
Europe do. ..	68,599	Camphor (Malayan)..	21,860

* The writer of this sketch.

	Drs		Drs
Woollens do. ..	17,200	Sago.....	12,513
Salt	9,240	Sticklac.....	11,787
Cotton	19,390	Lustring	22,400
Tobacco	12,380	Raw Silk.....	13,500
Siam Sugar.....	26,664	Europe Sundries.....	19,370
Spices	33,540	India do.	14,730
Rice	17,640	China	48,655
Pepper.....	403,018	Java.....	15,400
Tin.....	147,839	Straits Produce	23,100
Betelnut	86,206	Gold Dust.....	
Rattans	18,688	In Specie....	365,600

The Imports consisting of nearly the same articles amounted to 2,437,557—leaving an excess of exports over imports of 89,027, which must of course be set down to the consumption of the settlement.—Export duties 23,198—import duties 36,908.

Malacca March 1826. The population of Malacca in this year was—

Christians.....	26,000
Malays.....	16,000
Chinese.....	4,478
Klings.. ..	1,622
Hindus....	986

49,086

Nov. 21st 1826. The trade of Pinang had for many years been subjected to duties—but these had been lately abolished. The imports since 1810-11 had increased by Sp. Drs 137,661 and the exports had diminished by Sp. Drs 103,412—while the loss to the revenue by the remission of duties from 1st May to 31st Decr. 1825 had been Sp. Drs 21,849.

In the above year the Imports from Achin alone amounted to 337,860 Dollars, from Delhi 110,664 Dollars, from Lankat, also in Sumatra, 30,550. The value of the whole trade betwixt Pinang and the Northern Portion or Ports of Sumatra was estimated at this period to be not less than 3,500,000 Dollars yearly.

The land revenue of the Pinang Settlement altogether amounted at this time to about 10,000 Dollars—and the land produce was estimated at 450,000 dollars.

In 1820 Province Wellesley had been settled under a Superintendent—His jurisdiction was now considerably extended and his duties embraced those of a Magistrate, Commissioner of Court of Requests, Coroner and Land Collector, with occasional political duties.*

* Superintendents in succession up to this date (1848)——Mr Maingy C. S. ; Mr Presgrave do 4 years ; Captain Low M.N.I. 15 years succeeding do ; Captain Ferrier do 7 years do.

1826. Capt. Burney, Envoy of the Governor General, concluded with the Siamese Court the Treaty called the Treaty of Bankok, on the 20th of June, 1826. This is chiefly of a commercial nature, but the court would not listen to any overtures, for the return of the ex-Rajah of Keddah to that country. The right however of the British to possess Pinang, founded on occupation, was unequivocally and fully recognised in this treaty.*

It does not appear that the commercial compacts contained in this treaty have been all adhered to by the Siamese—so at least we might infer from the frequent complaints of British Merchants at Bankok—and it is believed that the Americans have without difficulty obtained a much better treaty, owing to their being unshackled in the east by any political or other considerations, beyond mercantile ones.

But a civilised nation and a less advanced one can never compact on equal terms. The scale of advantage always preponderates in favor of the latter, unless force be resorted to by the former. The Indo-chinese people are perfectly aware what is meant by a treaty—but they have no Vattels to guide them. International law here is that the weakest must obey the strongest—and treaties are considered by them as useful only where most if not all of the advantages are derived to one of the contracting parties—and where they can be safely broken or set aside when they are otherwise, where the means exist for doing so.†

The ex-Rajah of Keddah was about this time told to go and reside in Malacca to be out of the way of the intrigues going on around him. This he positively refused to do, and sheltered himself under the Court of Judicature at Pinang. He afterwards proceeded to Bruas in Perak much against the wishes of its Rajah. But as his presence there would have contravened part of the treaty of Bankok, and he refused to leave his position unless forced to do so, he was removed, but not until an affair had taken place betwixt his men and a part of the seamen in the boats of H. M. Sloop the *Zebra*, commanded by Captain McCreagh, who had been despatched to bring him away.‡ He was at last sent to stay at Malacca where he resided for some years. It may be as well at

* Art 10th. But as the Siamese right to possess Keddah is also clearly admitted in that document by the British Government, it follows that all Treaties made by the latter with the Rajahs of Keddah are null and void, if they were not virtually so long before.

† It has already been observed that the result of the Burmese war was very favorable to the Siamese, although they had stood surveying its progress at a distance—since it secured to them peace along their whole western frontier. But it is obvious that this security against Burmese aggression rests entirely on the integrity of the British and Burmese treaty now in force being upheld. They would else be open to invasion by the Burmese at any point of that frontier lying to the N. E. of the Tenasserim Provinces, and should these last be abandoned by the British, at any point from *Martaban* to *Keddah* both inclusive.

‡ The Malays fought for half an hour and gave way. Their loss was probably considerable—for the Sloop lost one man killed, one mortally wounded, two severely and slightly.

once to observe that in 1842, Mr Bonham the Governor of the Straits, with the sanction of the Supreme Government, and perhaps also by the aid of Mr Hunter, a British merchant at Bankok, persuaded the Court of Siam to send the ex-Rajah to Keddah as its Governor. He was put in charge of Central Keddah, his old abode—and the remaining three divisions were placed under other chiefs. On the death of ex-King his eldest son Tuanku Abdullah was put in his room by the Siamese, who, on his death, placed the second son of the ex-Rajah, named Tuanku Dace, in the Government; and which he now holds. The policy of the Siamese has here taken a more conciliatory tone, which it is to be hoped will be continued—and Tuanku Dace who has had the advantage of living under the British flag for years and is possessed of a fair portion of tact and discernment, seems desirous of comporting himself in such a manner as shall obtain the favor of his Emperor.

About September 1826, it was found that the Siamese had introduced troops into the state of Perak, on the plea that the Rajah desired them, which, if true, would have been sufficient, but the Rajah after much difficulty got a letter conveyed to the Governor at Pinang acquainting him that the Siamese had arrived without his consent, and at the instigation of some factious chiefs, and that he had been deprived of all power. As this conduct of the Ligor Rajah contravened the 14th article of the Treaty of Bankok, the Governor despatched an officer,* in charge of a party of Sepoys and with a Bombay H. C. Cruizer at his command, to free Perak from Siamese interference. This officer had also the powers of an envoy.

The objects proposed were fully attained. The Siamese force forthwith evacuated their position on the bank of the river, and the Rajah dismissed those who had intrigued with the Siamese and formed a steady Government. He was then told by the Envoy, acting on his instructions, that he might rely in future on the aid of the British in expelling any Siamese who might without his permission proceed to Perak, and for resisting any interference not sought for by him with his Government. These measures secured the independence of Perak.

The Rajah wanted to see the English flag hoisted in Perak, and he proffered a written deed ceding to them the island of Panchour off the mouth of the river, but neither of these offers was accepted by the British Government.

April and May 1827. Scarcely had this detachment and mission returned to Pinang, when the piratical fleets which had been accustomed to make yearly expeditions from some of the southern states up towards Junk-Ceylon, took forcible possession of the Kurow river in the Perak country, thus establishing a strong post within

* The writer of this account.

thirty miles of Pinang harbour. The Local Government ordered me to dislodge them* and a party of artillery was placed at my command besides infantry. The former was however dispensed with by me. From the secrecy maintained, the pirates were taken completely by surprise at day-break—were broken and after having been followed up for some days in the jungle, were dispersed. Their boats and munitions were taken or destroyed, and the stockaded abode of the chief and other houses burned down.

The chief resident pirate was named Udin. He fled far up the river, and the day after the attack he sent down a boat conveying the head of his second in command, as a propitiation—observing that this man was the principal offender! Papers and letters from the Rajah of Ligor to this man Udin were found in the house of the latter—from which it was proved that he was a protégé of the Rajah. Indeed His Highness afterwards protested against this expulsion of his servant as he termed him, representing him as innocent of the charge of piracy. But the memory of His Highness was refreshed by the copy sent to him by the Governor of Pinang of a letter written by him several years previously, in which His Highness himself stigmatised Udin as a notorious pirate and requested that he should be apprehended!

1827. The population at Penang was fixed 30,655.

July 18. The Local Corps composed of natives of the upper Provinces of Bengal was disbanded.†

23rd August 1828. The President in his commercial minute, 23rd August 1828, sets down the internal revenues of the Straits Settlements derived from the Excise Farms of Opium, Arrack, Toddy, Baang, Betel-leaf, Pork and Markets as follows:—

Penang.....	195,623-9
Singapore.....	188,187-2-6
Malacca.....	60,737-13-6

S. Rs. 444,547-03-6

The taxes on vice forming the chief items in this account stood thus, and with reference to the population:—

Pinang Population.....	54,000 persons.
Taxes on vice.....	175,000 Rupees.
Singapore Population.....	14,000 persons.
Taxes on vice.....	101,545 do.

* The party consisted of 9 large and disguised native boats manned by armed Malays, and half a company of the Local Corps concealed in a large cargo boat. The boats carried in all one 3-pounder gun, two 1-pounders and 6 swivels, besides small arms. Captain Low, the Superintendent, who commanded the Local Corps, in command, and no other European officer.

† It had been raised originally to save the expense attending reliefs of Regiments of the Line, but an additional full corps had been sent to the Straits which produced too large a force after the cause for its being embodied had ceased. It had existed for 7 years under the command of Lieutenant-Colonel (then Captain) Low when it was disbanded in 1827.

Malacca Population..... 32,000 persons.
 Taxes on vice 40,476 Rupees.

The condition of the Lands at the three stations will be treated of at the end of this account.

The revenue receipts and disbursements for Prince of Wales Island, Singapore and Malacca for 1827-8 were Rs.

Receipts	{	Prince of Wales Island.....	631,692	9
		Singapore.....	216,939	10-4
		Malacca.....	98,312	3-3
Disburse- ments	{	Prince of Wales Island.....	Rs. 1,373,361	11
		Singapore.....	431,297	11
		Malacca.....	210,288	11
		Excess of Expenditure over receipts	677,021	

(To be Continued.)

GUNUNG DANGKA OR A PARADISE ON EARTH; A TALE
OF SUPERSTITION.

By JONATHAN RIGG, Esq.

THE Natives of Sunda or Western Java, like their uninstructed brethren all over the world, are a superstitious race; their superstitions, however, are seldom, if ever, of a savage or gloomy nature, and would be deserving of ridicule, rather than of anger, were it not that we constantly observe the more knowing part of the community avail of this weakness to dupe their fellow-men. In the presence of a stranger and more particularly of an European, the native is especially careful to conceal his moral failings; he must often feel and indeed I have frequently heard him express his opinions as to the craft of his priest or his augur, but such is the slavish imbecility of his mind, that he dares not manfully defy what habit and antiquity have authorized. No superstition is more prevalent than the respect shown to particular spots, which are supposed to be sacred, and in which wonderful supernatural powers are believed to exist. There is hardly a mountain-top* or remarkable eminence throughout the country that does not contain its *Patapaän* or *Pamujahan*, two words of Hindu origin, the former meaning a place of penance, the latter a place of adoration. These are generally formed of a quantity of rough unheewn river-stones,

* The Polynesian tribes, in common with many other people of the world, appear to have all attributed a mysterious sacredness to the tops of mountains, as may be seen from the following quotations:

"The principal mountains in the three divisions of Ankova are Angavo to the East, Ankaratra to the South, Ambohimiangara to the West, and Andringitra to the North, chiefly distinguished as the scene of legendary tales, recounting the mighty achievements of giants and other monstrous beings, supposed to belong to a fabulous age. The Altars erected by former generations on the summits of these mountains, to the memory of such extraordinary personages, still exist, and are visited by the people as the appropriate places for prayer and sacrifice to the manes of the mighty dead. On the tops of some of these mountains are still existing the vestiges of ancient villages."—*Ellis' History of Madagascar Vol. I. p. 84.*

"The Dayaks believe in a supreme being whom they call sometimes *Dewa* and sometimes *Nyabatta*. They believe that *Nyabatta* is to be found on the tops of mountains, and for this reason every tribe of Dyaks has some mountain top dedicated to their Godhead."—*Tijdschrift voor Ned. Indie 4 jaargang 2 Deel. Westkust van Borneo in 1832 p. 9.*

"They (the inhabitants of the Society Islands) had a kind of heaven, which they called *Miru*. The heaven most familiar, especially in the Leeward Islands, is *Rohutu noanoa*, sweet scented *Rohutu*. This was situated near *Tamahani unauna*, glorious *Tamahani*, the resort of departed spirits, a celebrated mountain on the north-west side of *Raiatea*. The perfumed *Rohutu*, though invisible but to spirits, was somewhere between the former Settlement and the district of *Tipae-hapa* on the north side of *Raiatea*. It was described as a beautiful place, quite an *Elysium*, where the air was remarkably salubrious, plants and shrubs abundant, highly odoriferous, and in perpetual bloom."—*Ellis' Polynesian Researches Vol. I p. 397.*

The natives of Hawaii have numerous fabulous tales relative to *Mounakea*, which is capped with snow, being the abode of the Gods and none ever approach its summit. The missionaries who have visited the top, could not persuade the natives, whom they engaged as guides up the sides of the mountain, to go near the summit.—*Ellis' Polynesian Researches Vol. IV p. 404.*

which it must have cost some trouble and labour to carry up, or of the common trachyte blocks, when such have been afforded by the neighbouring slopes. These stones are generally disposed as if covering some grave and are called a *Balai*; yet the general opinion seems to be that they have not been places of interment. The word *Balai* has so strong a resemblance to, if not identity with the *Malai* of the Tonga islands, and the *Marae* of Tahiti and of many other islands of the Pacific, where it implies a temple of the gods or place for religious observances, that we naturally come to the conclusion that they have a common origin, and that the name being preserved on Java, with almost the same import, shows that formerly there also the observances of the Pacific islands once prevailed. However this may be the natives of the present day all assert that these *Balais* are traces of their former religion, which in times immediately preceding the introduction of Mahometanism, was derived from the continent of India, and to enquiries regarding their origin, invariably reply that they are *Sasakala Alam Buda* vestiges of Bhudist times, in which general term they no doubt confound all that preceded Mahometanism, as the Sunda mountaineers were very likely no better converts to Bhudism or Siwaism, than many of them still are to the tenets of the prophet of Arabia. It is thought that the wonderful people of former days, by penance and fastings, so far ingratiated themselves with the gods, as to receive supernatural powers, (*hasakten*) so as to be able to roam the skies, dive into the earth, and walk upon the sea, as if on *terra firma*. All those who at the general conversion to Islamism in our 15th century, refused to conform to the new faith, and who to avoid persecution fled to the inaccessible mountains and forests, are supposed to have become endued with these powers and never to have died, but though invisible, to be still inhabiting these places. The *Balais* are the spots where these people assumed their impalpable forms, (*Ngahiang*) and remain evident to the present day, as well to prove the superior might of the ancient people, the omnipotence of antiquity, as out of kindness towards the human race, to point out the spots where the divinity is most likely to lend a willing ear to the troubled devotee. Other of these *Balais* are consecrated as being the places of the transfiguration of certain great progenitors (*Luluhur*) of the different tribes of the country; thus in different parts we hear of the people being descended from this or that *Luluhur* whose *Tangtu* or fixed and favorite abode is on some neighbouring summit, and where you are told some mysterious vestiges are to be found, which are known by the name of *Kabuyutan*.* About *Buitenzorg*, a number of the people say

* The *Bu* of this word appears to be its root or crude form, and is again found in the *Tabu* of the South Sea Islands, of such well known import, and which is very closely represented by the *Buyut* of the Sundanese, which implies a prohibition or ancient injunction upon some families and people to refrain from particular food or abstain from certain acts of ordinary life. These *Luluhurs* assumed various forms.

that they are descended from a cloven rock* on the Gunung Salak, known as Beulah Batu, others are descended from Rangga Gading famous in native song for his exploits in thieving; none was ever readier than he to walk off with a lot of buffaloes or cheat at a fight of game-cocks. At Jasinga we have the descendants of Pangawinan or the Spear-bearers, the original inhabitants of the land, who were expelled by the ancestors of the present mass of the population, who immigrated from the river Chimandiri, that falls into Palabuan Ratu on the south coast. Others come of the *Heulang Rawing*, the jagged falcon or of the *Panggang Kalong*, the roasted bat.

Though, with the exception of the small tribe of Badui in South Bantam, all the inhabitants of Sunda have been long converted to Mahometanism, they are still pagans in their hearts, at least the mountaineers. Whenever the native gets into any extraordinary difficulty, it is not to "no God but God and Mahomet the apostle of God" that he addresses himself, but provided with a bit of gum benjamin, on the night preceding the 15th day of the moon, he repairs to some mountain Patapaan and there, after offering incense and praying for assistance, spends the night. He fancies that he is tempted by all sorts of horrible beasts and ghosts, all of which disregarding and withstanding, his sincerity of mind having been thus put to the test, at last the aged and hoary spirit of the place appears, asks the suppliant what may be his wish, pronounces an answer and instantly vanishes; the devotee must instantly descend from the mountain and act upon the oracle he has received. The fancy of a native always outstrips his cooler reason, and hence his narration must always be received with scepticism, though it may be clear that he can have no intention of exactly telling a lie; how easily they are deceived or rather deceive themselves may be learnt from the following anecdote which is likely enough to be true:—A petty chief of Dramaga near Buitenzorg, of the rank of Ngabihi, having gone to the top of the Gunung Salak to consult the Gods, found that he was about to be intruded upon by some other devotee, and by way of securing a monopoly of the divinities, fell upon the following device to get rid of his brother suppliant. Retiring behind some trees, he watched the devotee burning his incense and whilst in the midst of his prayer, availing of a propitious dimness of the moon, walked up to him and in a measured voice said—"my grand child, what troubles have brought thee here!" The poor fellow explained that he was sadly in debt, that he had no means of extricating himself and had therefore approached the awful presence of the God for advice." "Return

* "The tradition most generally received in the Windward Islands, ascribed the origin of the world and all that adorn or inhabit it, to the procreative power of Taaroa, who is said to have embraced a rock, the imagined foundation of all things, which afterwards brought forth the earth and sea."—*Ellis' Polynesian Researches Vol. I p. 324.*

immediately"—said the Ngabihi—"to the low lands, cultivate there with care a large garden, for it is mother earth that is destined to help thee, and thy debts will be paid; leave this and dare not to cast a glance behind." Grateful for the speedy answer, the devotee muttered a few words of thanks and sneaked away from the spot, leaving the Ngabihi, the oracle to himself. The poor man, however, followed out the injunction he had received, set about his garden in earnest and soon cleared his debts. Thus out of deceit and evil, good occasionally flows, though under a perverted impression.

The mountain top appears, in all ages and in all countries to have commanded the reverence of mankind; here the first ray of the morning sun is arrested, and here the lingering gleam of departing day is enshrined; it is here that, elevated in majestic silence above the turmoils of a struggling world, an uninstructed mind would first be struck with the immensity of nature, and question itself for a *cause*.

But it is time to come to the more immediate object of this paper, to which the foregoing has been inserted as a necessary explanatory preface. In the course of the month of January last, whilst in familiar chat with some of the remotest inhabitants of Jasinga of the villages of Chisusu and Gunning Kembang, I was astonished to hear that at a place called Gunung Dangka, on the confines of our south-western boundary, and on the banks of the Chibérang, was a sacred place, considered by the people of the adjoining Bantam district of Sajira, as the paradise they were destined to occupy after death. That I should have lived ten long years at Jasinga without ever hearing a syllable about so strange an idea of a people with whom I was well acquainted, and who live so hard by, appeared as improbable as the story itself was egregious. The village of Buluhen is the last on the Chibérang towards its source, and I knew that the people almost venerated certain parts of the stream, but that the rust of former superstition was wearing away in consequence of more frequent communication with other people, and their becoming thus shamed out of their infidel persuasions. Above Buluhen is a part of the river named *Panglahsain* where yearly offerings of *laksa* or rice vermicelli are made, and where till within a few years past no *horse* had been allowed to enter; great woes to the country having been predicted in case this spell should be broken. The Demang Jaga Sura, then chief of the district at Sajira, little addicted to these follies, forced his way through the line of entreating inhabitants, and rode his horse up to the spot. Above the *Panglahsain* no *fish* might be taken, many *words* in daily use might not be pronounced, and at one part, neither boat nor raft was allowed to pass along the river, but with great trouble being hauled up on the high bank was then dragged past the consecrated pool, to be again launched further down.

Having once got scent of the earthly paradise of Gunung Dangka I was not easily to be diverted from examining as much as possible into the mystery of the affair. I learnt that the Sajira people, though firm in their belief, were still ashamed to have it generally known, and that, if questioned, would plead utter ignorance. They endeavour to conceal the matter as much as possible, and a great many of the Jasinga people were actually unaware of such an idea being entertained by their neighbours. The Demang Jaga Sura, who now lives at Jasinga, but was formerly chief of the district of Sajira during 12 years, and who on one occasion had been encamped for a fortnight at Muhara Chiladaheun, on the look out for Banditti, and thus with only the river Chibérang between him and the mount, was in darkness on the subject, with such care had it been kept from him. I myself had been at the place in 1830 accompanied by a number of natives, but heard not a word of the sacred precincts into which we had then intruded.

I now learnt that though the Dangka was holy and forbidden ground for the Sajira people, our Jasinga mountaineers were in the habit of going there to collect fruit, at certain seasons of the year, with impunity. On a certain occasion, however, one person had offered some indignities to an upright stone on the Balai, and on his return home had been seized with a violent illness, which had kept him for three months to his bed. The native faculty, baffled by the disease, accounted for its obstinacy by attributing it to the indignant spirits of the Dangka. I examined this man in the hope of getting some additional information; he at first pretended that he had never heard of the place, but when he saw that I was acquainted with his case, with evident trepidation referred me to others, who, he said, knew more of the place than himself; he was clearly beginning to fear lest his communications should provoke the unknown gods to send him another fit of disease. Though the Sajira people profess to be Mahometans and externally comply with all the observances of that faith, they believe that the Gunung Dangka authorities take precedence of God and his apostle, and that immediately after death, their souls first visit Dangka, and there find an abundance of everything that can make existence desirable; that if the angel of death, Gabriel is ever allowed to have anything to do with them, it will be after their having revelled in the delights of the earthly paradise. At the moment a person is about to expire or whilst carrying him to his grave, the following form of words is employed, which is considered as reminding the deceased of the way his soul must follow to reach the Dangka :

Nyukcheruk chai, megat bojong
Ka na kaung nu ngalumpuk, ka na pinang nu ngajujar
Kadinio na ngajugjug, "Lailah" palendeng.

Step up the bed of the river, and cross the neck of land,
Where the aren trees stand in a clump, and the pinangs in a row,
Thither direct thy steps, "God the only God" being set aside.

Seeing that no certain information could be gained from the wild and half-frightened fancy of others, I resolved to visit the place myself, and accompanied by my own mountaineers to go direct to the Dangka, without the fore-knowledge of the Sajira people, lest they should throw difficulties in the way. On the 31st March 1839 we left the village of Gunung Kembang, in all a party of 22 persons, and after struggling up and down the ravine of the Chikeasal, took breath at a humah or paddy plantation on the way. While resting ourselves here, we were able to examine and wonder at the extraordinary feats of climbing performed by those whose livelihood depends on chopping the forest, in order to dibble the ground for a transitory crop of paddy. To avoid having the land too much encumbered with logs, a great many of the trees are left standing, but in order to admit the sun, it is necessary to deprive them of their leaves and smaller branches. Many of the larger trees, being more than a man's embrace, cannot be notched and ascended in the usual manner; a neighbouring and smaller stem is therefore selected, whose branches join above, and from the top of the smaller tree, the boughs of the larger one are thus reached; but it often happens that the branches do not touch, and it is then necessary to draw them together with a hooked stick and lash them fast; at other times a bit of rattan of 12 or 15 feet is the only means of connecting two tops, and along this slight bridge, at a height of 50 or 60 feet from the-ground, the mountaineer fearlessly forces his way. Then again only the very extremity of the branches are cut off, and it makes one shudder merely to look at the spots to which the man must have risked his life. Along branches not thicker than the wrist, do they pursue the operation, and at such a distance from the main-stem as to convey an idea of fool-hardiness; accidents, however, are rare; the truth is, that with all their daring and security of footing, they know what trees are brittle in branch and will not venture into all alike.

As we continued our walk through the sombre forest, our ears were greeted with the frequent cry of the bird Haruhuh so characteristic of the scenery; its *Kong-Kong-Kong-Kong* was, as often as repeated, returned by the *Pra-Pra-Pra-Praha* of the Pohpor; these are too blackish birds, the former being a little bigger than the other, but whether male and female, as the responding cry of the latter suggests, I do not know. Further on, the fierce grunt of the black monkey, *Lutung*, announced that we were about to disturb him at his morning repast on some forest fruit, that grew by our path. The bright sun was peering merrily through the tangled forest, the fresh cool breeze from the mountains was murmuring among the lofty branches, whilst the loud screech of the Jumené insect resounded from every thicket. After walking pretty smartly till about noon, we found ourselves on the banks of the Chibérang, after having come down a very precipitous bank of nearly 1,000 feet; the Gunung Dangka was on the opposite side

of the river, and we were about half a mile above where the Chiladaheun falls into the Chibérang. Our morning's exertions had prepared every man's appetite for the breakfast we brought along with us. So spreading a lot of clean dry leaves on the bank of the river, under a wide spreading *Leungsir* (*Irena Glabra*) to shade us from the midday sun, we opened out our store of provisions. As soon as this important service had been gone through, Bapa Aysah of Gunung Kembang, who was acting as our guide, produced a lump of the gum that exudes from the Ténjo and whilst it was burning in honor of *Raden Bujangga Manik*,* the mighty Lord of the *Gurians* or mountain spirits, a prayer was offered up and his favouring offices invoked in behalf of our undertaking. The Ténjo is a tall forest tree, which on being hacked gives out a gum which is aromatic when fresh, somewhat resembling benzoin, only inferior. Some varieties of the Ténjo produce the copal of commerce. Benzoin though more fragrant is in no repute with the mountain divinities, as it is here a foreign product, and the Ténjo, which is indigenons, alone titillates their highly national sensoria.

Here we separated from the greater part of our people, as they were directed to follow the course of the river to the Muhara Chiladaheun and prepare a night's encampment, ready against our arrival there in the evening. Now crossing the Chibérang, which here took us up to the middle, we had to scramble up the opposite bank, with some difficulty from its ascent. We, however, soon got to more level land, and found ourselves surrounded by immense durian trees, with fine clear bolls from 60 to 80 feet high before the division of the branches, and after a short walk among a variety of fruit trees we arrived at an eminence on which we found the *Balai*, being nothing more than a lot of common river stones, disposed over an area of about four feet square. The most remarkable stone (called the Batu Sirit) is about a foot high, with a groove, of four inches broad, running round its middle; this groove, however, is not artificial, for many other similar trachyte rocks often wear and weather in a like manner. This stone is depressed a little towards the south-east, it is said in the direction of another Balai on Gunung Julang, a neighbouring height. Bapa Aysah assured me that he had sometimes tried to shake the stone and found it firmly fixed in the ground; I, however, now turned it over without any difficulty. Another stone, a slab 2 feet 3 inches long by 1 foot in its broadest part, stands close by, also slightly set in the earth. As I observed before, the Balai crowns the top of a small hill, which slopes rapidly away on all sides, particularly on the north, which is an abrupt escarpment terminating in that part of the Chibérang called Panggesengan. Around are observed a

* *Bhujangga manik*, the jewel serpent, from *Bhuja* crooked, *Anga* body, that is a snake or serpent. *Manik* a jewel, a gem.---*Clough's Dictionary Vol. II p. 495.*

number of the dwarf palms called Paku Haji (*Cycas Circinalis*) which from their regular positions have evidently been planted there; they are above 20 feet high from the ground to the division of the fronds; a small bush of Bambu Tali is growing alongside the Balai as well as a few forest trees, and the place bears no appearance of being used as a Patapaan. Close by stands a solitary Aren tree, from which the Java sugar is made, and near it the ficus elastica which gives the caoutchouk of commerce. The *Karét*, for so it is here called, is originally a creeper, like many other of the arborescent figs; its fruit or seed is originally deposited with the dung of birds, mostly of the numerous tribes of pigeon, in the cleft or gaping bark of some other forest tree around which it disposes its rope-like stems; by degrees these increase, and forming a strong trellis-work, from which fresh roots are shot out towards the ground, the former parasite now towers high into the air, and in its treacherous embrace destroys its ancient benefactor. This soon rots away leaving hollow the centre of the *Karét*, which is now strong enough to stand by itself. The *Karét* keeps sending out shoots at a height of from 12 to 20 feet; these grow downwards and entering the earth, form so many props to the parent trunk, which, though often massive and solid above, allows a person on the ground to walk through the body of the tree, as through so many passages. Like all figs, on hacking the stem a copious milky juice exudes; this soon coagulates, at first retaining its white colour; it then passes through yellow to dark and can be scraped from the bark, the perfect Indian rubber. A small quantity taken on the fingers dries up in two or three minutes, leaving the elastic substance behind. The only use natives make of this gum is as torches to explore the limestone caverns, where the swallow builds its esculent nest. It burns readily with a pure white flame, gives little smoke and that not oppressive, consumes slowly, and easily takes flame when applied to a dull touch-wood match and blown upon briskly.

On our return we found a quantity of fine ripe kokosan and mangosteens, the latter hanging ripe in plenty within reach of the ground. The fruit here is in a great measure lost; when it has arrived at maturity it naturally drops and serves as food for the numerous wild swine, whose traces we everywhere observed. Being at so great a distance from the villages of those who would dare to take it, and approached by so mountainous a path, few think it worth their while to come here. When the durians are in season, however, the Gunung Kembang people come with pans, and collecting the pulp, boil it down with sugar into a kind of preserve, which they carry home in bambus; this is called Lempog. The following is a list of the fruit trees which I observed growing on Gunung Dangka:—

Durian	in Malay	Kadu	in Sunda	Durio	Zibethinus.
Manggis	do.	Manggu	do.	Garcinia	Mangostana.

Gandaria	do.	Jataké	do.	Mangifera	Oppositifolia.
do.	do.	Kokosan	do.	}	variety of Lansium Domes- ticum.
Rambutan	do.	Tundun	do.			Euphoria	Nephelium.
Kranji	do.	Ranji	do.	Dialium	Indum.
do.	do.	Turallak	do.	Uvaria	Burahol.
Salak	do.	Salak	do.	Salakka	Edulis.

Some of the above fruits grow naturally wild in the forests; others do not—still we never see any one species growing in such quantities together as on Gunung Dangka, nor so many kinds associated together; this leads me to believe that all the above have been originally planted by man, and not brought by the chance of nature, as by birds or wild beasts. It also strikes me, from the number of Balais found in the solitary forest, that at some former period, this part of the country has been much more thickly inhabited than at present. We also often meet with patches of bambus planted at regular distances and arranged in even order, which would seem to indicate the interference of man, this, however, may perhaps be reconcileable with a disposition, with which nature has endowed them, viz. of propagating themselves from a common centre. If you ask a native for any explanation of all these matters, he has none to give. Amongst a rude race, whose language is merely oral, all remembrance of the past is soon lost; only some of the more stirring events are handed down by tradition and that sadly distorted by the lapse of time. To your most earnest enquiries, the native, with a happy conviction of the truth of what his father told him, answers that such and such fruit trees or bambus were planted by the Guriangs in the good old days of Pajajaran. May not in former lawless days, when superstition was the only check upon the actions of man, the Dangka have been the garden ground of some tribe, who to secure it from the depredations of its neighbours, had enclosed it with a fence more impenetrable than adamant? Amongst all communities, as well in times gone by, as at the present moment, the more cunning avail themselves of the weakness of their followers, to hold them in dread. And when will the world be any better? Look even to the boasted civilization of Europe; the social compact there is often little better than a veil, through which those who only dare, may look and see the shallowness beyond.

The Dangka is well defined, being a hill surrounded on three sides by water, and its base may occupy an area of half a mile in extent each way—the Chibérang bounds it on the north—the Chiladaheun on the west—the Chipamali (river of Prohibition) on the south and the Gunung Julang on the east. The route we took to return by was over the summit of Gunung Dangka, across some small ravines, abounding with the fruit trees above mentioned, to the rivulet Chipamali, the southern boundary; the bed of this we followed for about a quarter of a mile and then got to the Chila

daheun, down which we also descended, and after paddling through the water, for about half a mile, shut in on the right hand by the high bank of the Gunung Dangka, and on the left by the equally precipitous heights of Sereg Taméng (meaning so narrow that only a shield could be jammed in) we arrived at the *Muhara* or embouchure on the Chibérang. First we sighted the big rock in the middle of the river, known by the name of *Batu Buragu* (which the people say means the propitious stone) and soon after espied our hut just above, with the smoke from the cook's fire curling up amongst the tops of the lofty trees. It was about 5 P.M. when we reached our night's lodging; the sun was sinking brilliantly and fast behind the western heights, the loud and frequent scream of the Tongéret insect bespoke also the period of the day, and the mild freshness of the evening, combined with a luscious bathe in the cool and crystal river, tended not a little to refresh our wearied limbs, and to cast a charm over the wild and roaming excursion on which we were occupied. Our people were meanwhile busily employed; some in circumventing the fish in the river, others in searching the neighbouring thickets for fruits and roots or tender stems, that none know better than a native how to appropriate to the commissariat department; a third party was busy at the hut, making additional accommodation, helping to cook the rice or collect fire-wood. The evening, however, had no sooner closed upon us, than distant thunder announced the approach of rain, and about 7½ o'clock down it came in torrents and lasted for above an hour, finding its way through the multifarious crevices of our rudely constructed hut, to the no small discomfiture of its occupants. This, however, went past, we had a hearty supper, and the natives relighting their extinguished fires, first smoked and dried a few leaves by way of bedding, and then rolling themselves up in their *sarongs*, and huddling as close as possible to the glowing embers, consigned themselves to the care of the hardship soothing morpheus, with this naïve consolation, that though their beds were moist, they would not be troubled with bugs as at home. I was about the last to think of sleep; I could not help admiring the willingness and good nature of our poor mountaineers; they are in their way an extraordinary set, are easily led by kindness, but harshness rankles in their hearts; there they lay, far away from their homes, in the depths of the forest, in peace and contentment around me, a single solitary white man, willing at my call to execute any reasonable order or in familiar chat to tell me the secrets of their hearts. The rain had now begun to produce its effect on the stream before us, and the Chibérang was pouring on a swollen and foaming flood, which the clouded and uncertain moon-light, however, only disclosed at intervals; being high enough to dispel any apprehension of danger, I threw myself back on a half-soaked mattress and the dash of the waters racing over their rocky bed, soon lulled me to sleep.

Break of day on the 1st of April found us all on the alert. The river had returned to its usual limits and I determined to spend the morning in a party of fishing. The fish here are mostly Soro, Kanchara, and Léat. The Chibéranꝝ is renowned for the size and excellence of the last named. The people remonstrated against my wish; it was universally declared that after having unceremoniously examined the Gunung Dangka, the day before and taken away so much fruit, the spirits of the place would give us no fish—they instanced the little success they themselves had had the evening before, and considered the sudden rain and flood as infallible marks of displeasure. These arguments only served to increase my desire to try our luck; so to please me, they went to work. The method agreed upon was to fence off about one hundred feet of the river, by running two lines of wattled bambus, called *Karé-pék* across the stream at that distance apart, the water running through the apertures; an opening being left in the lower fence, the fish are driven from below into the enclosure, the opening being then secured, the collected fish can then be spread or taken in the casting net. While the people were employed in making these *Karé-péks*, I went down the river to geologize. We soon came to a small hut, where three *Sajira* men had spent the night; it was the second they had been in the bush, as they were collecting mangosteens for market, a quantity of which they had hanging by them. I bargained for a part of their fruit and invited them to our own hut, whither they soon afterwards followed me. These people confirmed all that we had heard of Gunung Dangka, and after a while, wishing to test the firmness of their opinions, I offered a guilder if the person to whom I was speaking would just cross the Chibéranꝝ to the Dangka side, and cut down a single bambu. This was instantly refused. I then raised my offer to five and subsequently to ten guilders, but the man firmly refused and said that though poor and the sum was great in his estimation, yet he would rather lay down his life than venture across the river; he related at the same time, that his own great grand-father had once violated the prohibition and had returned laden with oranges, but that becoming conscience-stricken, he applied to the Dukun or Augur to consult the divinity at the *Sengyang*, a part of the Chibéranꝝ below Baluhen near the forest of Aub. The answer of the oracle was that the man having violated his sacred obligations, had incurred the wrath of his *Luluhur*, and that he would be excluded after death from the paradise of Dangka. It is hardly necessary to add that the unfortunate wretch was miserable for the remainder of his life, and that his dying injunction to his children was, that above all things they must respect the sacred mount. I now asked the *Sajira* man, as money could not tempt him to set foot within the precincts of the Dangka, how he would act if the temporal Lords of the land—the Dutch Resident or the native Regent—were to order

him to enter the Dangka, the man's ready answer was—"I would flee from the country." This man could give no account of the origin of his superstition, he said that the old people had insisted on its truth and he was content to abide by it, one thing was certain, if common people violated its sanctity, they would not only make themselves miserable, but the tigers would be let loose to devour their own chiefs for not having restrained the people entrusted to their care. Such is, alas, the abject state of an uninstructed mind, haunted by imaginary terrors that have been inculcated in childhood, the after man becomes too great a slave to venture to entertain a doubt of their reality. I am unwilling to join in a cry against the Malayan races, as if their natures were different from those of the rest of the world. That they are sunk deep in the mud of ignorance no one can deny, yet I believe them as susceptible of improvement as any other race of the earth, not excepting even the whites. We daily see with what dexterity they accomplish apparently laborious operations with comparatively inadequate means, and an intelligent native is always ready with a number of *akals* or devices, which often astonish Europeans. The great drawback in Europeans communicating better ideas, is the jealousy with which they are watched, principally on account of their being the conquerors of the country, for though they acknowledge their superior moderation and justice in government, they still look upon them as a wily and unscrupulous race, ever on the watch to take advantages, and in the most simple admonition search out some real or supposed (alas their bitter experience has often taught them that it was real) object of aggrandizement that there must be in view. A people are never wronged with impunity! It is thus that the benefit which the good would do them is spurned and despised.

At the Batu Buragu the Chibérang flows in a very deep and narrow glen, with only one patch of level land opposite the Muhara Chiladaheun. The large stone Buragu is in the middle of the Chibérang, just at the point where the Chiladaheun is discharged. It is a roundish mass of trachyte gravel embedded in volcanic tuff and has about 15 feet of diameter. The ground we were encamped on, as well as the Gunung Dangka, was the district of Sajira, but a small narrow strip of the district of Bombang comes down here to the Chibérang, between the rivers Chiladaheun and Chihinis, both of which have their origin on the Gunung Endut or lofty Sajira hill, the last prominent peak, towards the westward, of the range which extends from Buitenzorg. The Chihinis falls into the Chibérang about 500 yards further down than Chiladaheun. The land opposite the Muhara Chiladaheun has often been occupied; there were a few houses hereabouts, when I visited the spot in 1830, but now it was deserted. Here the Ratu Bagus Ali concealed himself from the jealousy of the Bantam Court, and here he collected a quantity of warlike instruments, with which he

joined Tuan Tapa on Gunung Munara above Rumping, about the year 1745.

Our fishing party did not succeed very well; however we got in enough fish for my purpose, which was to show the people their error respecting the power of the spirits of the place. Before I conclude, I must mention that Bapa Ayseh had strictly forbidden that any bambu, stick or leaf should be molested on the Dangka side of the river; in explanation of which he said that it was not that he cared for the sacredness of the spot, but that he was afraid the divinities would give us no fish, if we pushed our rudeness too far. Superstition is part and parcel of every native's mind.

About 1 P. M. as it was beginning to rain, we got our traps packed up and proceeded on our return home, first up the steep northern bank of the Chibérang, then past a few houses called Sigobang on the Chinyasag, and successively over the Chinyiru and through the village of Chilangké, and again recrossing the Chikeusal, arrived at Talaga, sometime after nightfall, well pleased but also heartily fatigued with our excursion.

The word Dangka in the Sunda language implies, "uncivilized," "uninstructed," "not converted to Islamism," and as such is applied to the Badui tribe who inhabit the mountains somewhat further to the westward, and who still adhere to their ancestral pagan institutions.

Jasinga, 10th April, 1839.

Referring to the foregoing account of an excursion to Gunung Dangka, I am sorry to have to note that our visit is likely to confirm the Sajira people in their superstition. The day after we left Buragu there was a heavy fall of rain attended by wind, which passed over Jasinga. The wind blew down some empty bambu paddy stores in Buluhen and injured some crazy houses. But the most undeniable evidence of the displeasure of the Luluhur was manifested on the 11th of April at the village of Malangetengah, a little above that of Sajira. The divorced wife of a former Maririo (village Mandor's assistant) was with her three children in their paddy field or gaga. In the afternoon, wishing to return early, as the weather threatened a storm, the mother sent the two eldest children, a girl of 18 and a boy of 6 years, on before her, with orders to wait her at their grandfather's shed, in a gaga on the way to the village. The children, it appears, had reached this shed when a tiger attacked them and, killing both, concealed their entire and uneaten corpses under a heap of paddy gleanings in the shed. The mother arriving soon after with the third child in her arms, an infant of eight months old, the tiger sprung upon her from the shed and seized her infant which she, however, retained in a mother's embrace, till

the tiger gave her a slap in the face with his paw, which threw her down. On recovering herself, she observed the tiger running off with the child, and screaming for assistance, a man who was in the neighbourhood hurried up and chasing the tiger, the infant was dropped but life was extinct. It was not till after getting up the steps of the shed, that the full amount of the mother's loss became known. Now the tiger having merely killed and not having devoured these poor children, the offspring of a village official, and of a village inhabited by the *noblesse* of Sajira, is looked upon as a visitation of the Dangka for having been profaned by our visit, the punishment falling upon the votaries* of the place, not upon the disbelievers who had intruded there. Many stories are in circulation of the tigers prowling about the villages, night and day, and some impostor is very likely reaping a harvest at the expense of his terrified neighbours.

The above melancholy event is circumstantially narrated in a semi-official form in the *Java Courant* of the 8th May 1839, being a report of the Assistant Resident of Lebak to the Resident of Bantam. It is there however, stated that the bodies were partially devoured, but confirms the fact of their being found *concealed* under paddy, which the tiger at least must have done before the woman came to the shed. The general belief, throughout the country, was that no part of the bodies had been eaten.

The Dangka tiger has been killed! The Demang Pati Jaga Sura after an absence of a fortnight to Lebak, came back yesterday and told me that on his way thither on the 24th of April he fell in with the Slayer carrying the ears and tail to the Assistant Resident, to claim the Government allowance of £16 copper. Whether the tiger in question was the monster which killed the three children is not so clear, but the natives are persuaded he was. The man was setting a fish trap, in a small rivulet, close to his village, accompanied by his son, a child of 7 or 8 years old. On a sudden the child cried out to his father that a tiger was about to spring upon him. The father immediately drew his common Bedog or Chopper and had only time to raise his hand and launch a blow as the tiger flew upon him. The man was steady, and his Bedog striking the tiger above the snout, between the two eyes, injured the skull and cut open the grizzly flesh and sent it hanging

* An analogous idea is entertained by the people of Hawaii. A priestess of Pélé (the goddess of the volcano) applied to the chiefs of the island to have some missionaries banished for having desecrated with a visit her abode in the volcano of Kiranea, threatening that if her wish was not complied with, Pélé would take vengeance, by inundating the country with lava, and destroying the people.—Ellis' *Polynesian Researches* Vol. IV. p. 276.

with an eye over one side. The tiger dropped, and at the same instant the man repeated his blow on its flank, as it lay the moment on the earth; the blow, it may be presumed, was given with a will, out came pouring the entrails of the beast, which thereupon instantly expired. The man declared that the paws of the tiger were just about touching his two shoulders when he fell. The tiger's aim, when attacking a man, is always to knock him down first, and then gripe him by the neck, for which purpose, when brought to bay, he rears up on his hind legs, and in that upright position, rushes to the charge.

It is no unfrequent thing for natives to beat off or kill the tigers that attack them, when they get a moment's previous notice of his presence; being always armed and their minds ever ready to encounter the monster which is so common in the jungles, they never lose their cool collected intrepidity, but stand manfully to the fight. If the tiger fails in his first attack, he appears to make off directly, often carrying a severe wound. If he stumbles or staggers, the native fetches him a blow over the skull that deprives him of his life.

GENERAL REPORT ON THE RESIDENCY OF SINGAPORE, DRAWN
UP PRINCIPALLY WITH A VIEW OF ILLUSTRATING ITS
AGRICULTURAL STATISTICS.*

By J. T. THOMSON, Esq., F. R. G. S., Surveyor to Government.

Fruit Trees.

I am again indebted to Mr Charles Scott for the following valuable data regarding fruit trees, a subject on which few persons in the Straits that I am aware of are possessed of accurate information. Gardens of fruit trees, mostly if not entirely, are in the hands of natives, in Singapore and Pinang, but in Malacca the old Dutch families possess considerable property of this kind—and their representatives could no doubt furnish much interesting information.

The following table was constructed by Mr Scott from the collections of various fruit trees included in a large nutmeg plantation, whose produce and sales he carefully noted during a period of four years—the utmost reliance can therefore be placed on it :

Name of Tree.	No. of trees in bearing.	No. of fruits collected in 4 years.	Value of fruits collected in 4 years.		Average of fruits collected in 1 year.	Aver. of fruits collected from 1 tree p. annum.	Value of produce per tree per annum.	
			Drs.	Cs.			Ds.	Cs.
Chumpada	157	13308	331	..	3327	21	..	52
Jacks.	248	1406	46	..	351	1½	..	05
Red Rose Apple	26	33789	89	..	8447	325	..	85
Durians	28	1122	112	50	280	10	1	..
Mangosteen	168	35248	220	50	8812	52	..	33
Rambutan	78	171719	177	..	42929	550	..	56
Orange	33	25970	29	..	6492	196	..	22
Bachang	6	1858	20	..	464	77	..	83
Sintul	17	66081	72	..	14520	854	1	06
Mangoe	14	2174	3	11	543	39	..	05
Jerring	12	78965	32	..	19741	1645	..	66
Rose Water Apple	16	6556	9	..	1639	102	..	14
Sweet Blimbing	4	1970	2	55	492	123	..	15
Polassan	24	16293	39	..	4073	170	..	40

Rambei	23	242756	94	..	60639	2636	1	102
Small Sour Blimbing..	14	73242	17	23	18310	1307		31
Nam Nam.....	5	2646	17	50	661	132		87
Alligator Pear.....	3	679	21	..	174	58		175
Locop.....	6	305	1	50	76	12		06
Pumaloe	3	110	1	..	27	9		08
Large Sour Blimbing..	3	13263	9	..	3316	1105		75
Lime	66	13083	21	..	3270	46		08
Rokam.....	6	32104	15	..	8026	1337		62
Gomooti	14	2131	60	..	532	38		107
Wild Mangis.....	1	1694	2	73	423	423		68
Chico'.....	1	209	4	47	52	209		111
Large & small Blimbing	21	51365	29	..	12841	611		34
Total Trees..	997	Total for 4 years.	1476	09				

To the above table Mr Scott appends the following remarks:— A large proportion of the Champadas and Jacks are very small and generally injured by insects. Several of the Durian trees are very old and fruit small. The produce of the Orange trees are of inferior size, for want of culture, without which there is no use of rearing this tree. The Bachang, a coarse Mango, is very much liked by the natives. The Sintool has also a free sale from the same cause. The Mangoes are of a very indifferent kind. The small sour Blimbing is much used by Dobies in washing. He further remarks that natives never manure their trees and Europeans seldom do so, altho' he has no doubt it would both improve the trees and their fruit. The indigenous trees generally bear in 7 to 9 years from the time that they are planted. The proper distance to plant them is from 20 to 30 feet, but natives never attend to this, crowding their trees and planting them mixed indiscriminately. In the above table only one third of the fruits are good and these bring 100 per cent more than the indifferent ones.

The greater part of the above trees belonged to orchards planted by Malays, but whose houses have been removed, and as they are situated in a large nutmeg plantation and receive neither culture nor manure beyond what they may accidentally have in the cleaning of the adjoining nutmeg trees, the same remarks may be applied to them as has been already done regarding cocoanuts and betel-nuts, that when cultivated and manured or, which is as effectual, when they are in the proximity of inhabited houses—they bear well producing good fruit, but when they partake of the benefits of none of these, the returns are scanty and the produce inferior in quality. Whether the native or indigenous fruit trees would repay the expence of culture and manure is a problem yet to be solved. In Malacca, which is famed for its fruit gardens, an extensive proprietor informed me, that they never were cultivated nor manured. In planting out a garden after the primeval forest is cut

down, the plants are stuck in the ground and allowed to grow up amongst the young forest trees that quickly spring up in a thick brushwood, and not until the fruit trees are expected to be in bearing is the brushwood cleared away from them—and which process is continued annually at the season of fructification. Whether or not this mode if long persevered in, (and there is every reason to believe it has in Malacca) would have the effect of deteriorating the quality of the fruit I am unable to say; in Malacca I was informed such was not the case, but this would be found to be contrary to what obtains in other parts of the world, a great many conclusive examples of which are given by Dr Pritchard with regard to trees and vegetables of a more northern clime, in his well known ethnographical work, and I was informed by Dr Little that by manuring and cultivating a mangoe tree found in a deserted Malay campong whose fruit was very inferior and stringy that a great improvement of the produce was the result of his attention—most if not all the indigenous fruit trees are found growing wild in the forest whose fruit is coarse, insipid and of inferior size—while again there are forest trees that are not cultivated which bear fruit of delicate and pleasant taste such as the Tampui and Kaledang.

The above table given by Mr Scott will stand as a fair example of most of the fruit gardens of Singapore, though many species are wanting in it. Dr Ward gives a list of one hundred* but a great proportion of the list are not to be found in the gardens of the natives but grow wild in the forest and are in little request. One hundred trees may be placed to the acre; the trees in the above table would therefore stand on 10 acres nearly, which would show a produce of 36-90 Spanish dollars per acre per annum, the outlay being no more than the expense of gathering and carrying to market. Of the quantity of plantains, popayas &c, as they are so irregularly planted no estimate can be given. Many instances could be given of one tree returning to the owner as much as the whole acre does here, but an average of all the bearing fruit gardens of Singapore will not be found to much exceed the yield of this one.

Gambier.

This cultivation in Singapore is entirely carried on by the Chinese, and as a staple product it is confined to this residency and adjoining coasts and the Dutch residency of Rhio. A gambier plantation has much the appearance of brushwood of 3 years growth whose leaves are of a light green colour. The article of commerce for which this plant is cultivated is obtained from the leaves which are collected 3 or 4 times a year and boiled in a cauldron from which a strong decoction is obtained. This is precipitated in square boxes which when cool hardens and is cut into

* Low's Dissertations.

small cubes of about $1\frac{1}{2}$ inches. The colour of the substance is yellow and for its astringent properties is much used in Tanneries, a cleaner and superior manufactured kind is used by the natives with their seree. The average size of the plantations are 30 acres and when in full bearing employ 8 men. A plantation becomes exhausted and worn out in 15 years from its commencement and there are about 800 in Singapore, 600 of which are under cultivation. The extension of this cultivation increased rapidly since 1830 and now is retrograding as the older plantations have all become exhausted, but the extension is proceeding at a rapid rate on the adjoining coast of Johore.

Pepper.

The cultivation of this article is carried on by gambier planters who use the refuse gambier leaves as a manure to the vine, which would otherwise not succeed, owing to the poverty of the soil. There is generally 3 acres of pepper to 30 of gambier and when one dies out the other soon follows. Mr UChin a respectable Chinese merchant of Singapore informs me that the best vines average $2\frac{1}{2}$ catties per vine per annum; the average of a plantation does not exceed $1\frac{3}{4}$ catties; a plantation generally contains 3,000 vines. These are trained on posts of tampenis, the dadap is never used for this purpose in Singapore. Mr Marsden* states that in Sumatra,—where the collection of this spice was the principal object of the company's establishments on that island—the mean annual produce of 1,000 vines in all the various stages of bearing—taken collectively throughout the country was 404 lbs or less than $\frac{1}{2}$ lb per vine. Colonel Low estimates the produce of a vine at $\frac{1}{3}$ of a lb of dry produce at the end of the first year, $\frac{1}{4}$ lb at the end of the second, and 1 lb at the end of the 3rd, at the end of the 4th year 3 to $3\frac{1}{2}$ lbs, and at the end of the 5th 8 to 10 lbs, from which year to the 15th or even to the 20th, 10 lbs of dry merchantable produce may be obtained from each vine. Mr Charles Scott informs me that the Chinese at an early period of this settlement embarked in the cultivation, but that Europeans have not done so unless in conjunction with Chinese; in the early days of the settlement the price per picul was 14 to 15 Drs, it has since fallen to 3 and 4 Drs. This cultivation will decline with that of the gambier. An extensive plantation at Malacca was laid under this cultivation by an European Gentleman about 20 years ago, but ended in total loss to him.

Vegetables.

This cultivation is entirely in the hands of the Chinese. Those principally cultivated are the Labu Mera (Pumpkin) Labu Puteh (Melon) Mendikei (Water Melon) Timun Tikus (Sweet Melon)

* Hist. of Sumatra.

Trong, (Brinjal) Timun (Cucumber); Preah, Patollah, Kelor, Lobak, Byam, Kaladie, Ubi, (Yam); Kledek, (sweet Potatoes): Bawang (Onions): Bawang Puteh (Garlic): Kuniet &c. Dr Oxley informs me that he has reared with success the following exotics Cabbage, Lettuce, Asparagus, Celery, Turnips, Parsley, French Beans, and Tomatoes; he succeeded in raising Peas but imperfectly.

Seree or Paun.

This cultivation is carried on by natives generally—but principally by the Chinese. Colonel Low* informs us that this vine is trained on posts of durable timber—and the plucking of its leaves commences about the 6th to the 8th month—the number of the pluckings in a year is 25 and the average of each 50 leaves for each vine. The produce of 6,000 vines in Pinang he estimates at 63,000 bundles which at 50 cents per 100 bundles is equal to 315 Spanish Dollars; the annual rent of an orlong or $1\frac{1}{2}$ acre he states frequently to be 200 Spanish Dollars. This product is raised to a very small extent in Singapore and consequently possesses little interest.

Sugar Cane.

Singapore presents a small field for this cultivation in comparison with the other Straits settlements; the soil adapted to its growth can hardly exceed 3,000 acres. The European cultivation has never exceeded 400 acres in extent, and this has probably now decreased to under 200 acres. The cane is reared by all classes of natives in small quantities for consumption in a raw state. Mr William Montgomerie informs me that Sugar was first manufactured on a large scale at Balestier; at Kallangdale it was manufactured by the Chinese method in 1838 and on a large scale on the West India method in the end of 1840. He considers for this cultivation that the Klings and Chinese are adapted as labourers if well looked after, but the former in working have less system than the latter. He has carried on an estate for the last 4 years by the contract system, in which he gives the ground to the Chinese, who plant and cultivate the cane, at their own expence; on the manufacture of their crop, he pays them at the rate of $1\frac{1}{2}$ Spanish Dollar per picul (133 $\frac{1}{2}$ lbs) for the Raw Sugar (that is sugar undrained of the molasses.) In the Raw Sugar there is 60 per cent of sugar, 37 of molasses and 3 loss, and in drying the sugar there is a further loss of 7 per cent; this will give 55 piculs and 80 cattiees of dry sugar from 100 piculs of the raw. He obtains 400 Imperial Gallons of Rum from the drainage of 100 piculs of raw sugar, whose price in the Singapore market is 40 to 50 cents per gallon. He disposes of his sugar in the colonies (Australia) or the English market. He estimates the cost of producing the raw

* Dissertations,

sugar at 2½ Sp. Dollars per picul. Since he has given over the cultivation of the Sugar Cane to Chinese, they of course have the entire management of the rearing of the cane. They always use manure to the young canes, but after they have reached 4 months they merely earth them till they arrive to maturity, which in plant canes requires 12 to 14 months—they do not use lime at all which he supposes arises more from an ignorance of its properties than an unwillingness to use it. They generally use calcined earth and rubbish as a manure. They seldom or ever raise rattoons and then only when they promise to be very fine. The use of the plough is prevented by the stumpiness of the ground. The produce of his estate gives a ratio of 10 gallons of rum to one picul of sugar. Mr Joaquim Almeida who has for two or three years been carrying on experiments in the production of this article, with a view to extensive operations, should these give him encouragement to proceed, informs me, that he was the first porter of canes from the Mauritius which he used as seed. The result of his rattoons from the native or indigenous canes was most discouraging, nor does he think that they can be raised in Singapore with advantage to the planter. He pays 1½ Spanish dollars per picul to the Chinese cultivator for the raw or undrained sugar. He has 5 contractors at the above rate each cultivating 100 fathoms square or nearly 8 acres. Four men attend to each such field, and 2 dollars per month is advanced to each man which is deducted with 12 per cent interest from the sum that the crop amounts to after the sugar is manufactured. He is of opinion that the only description of cane that will answer this climate and soil is the Mauritius which he imported in 1846. In the experiments made with this cane the sugar is much superior in quality, and grain, to the sugar made of Tubu Liat (an indigenous plant) and gave 40 piculs per acre of undrained sugar. He considers in a place where manual labour is comparatively so cheap and the difference of the produce of rattoons with the planted canes being generally so great, he should say that the planting every season, is more an advantage, than a draw back here. He has imported and tried Chinese, Manila, Java, Siam, and Cochin-china canes but all have proved inferior (when grown in this climate) to the indigenous canes, such as Tubu Liat, and Tubu Cappor. The latter cane mentioned, he would consider valuable were it not so easily affected by the irregular wet and dry weather, the first crop of this gave 50 piculs per acre and the juice stood at 10° of the Sacharometer but the second trial (not rattoons) proved a complete failure in consequence of unseasonably dry weather. He has never used manure in any of his trials excepting burnt earth, by using manure he considers that the trials would have given more favorable results. When in Province Wellesley last year I was informed by Mr Braddel that at Batu Kawan the undrained sugar gave 50 per cent of dry merchantable sugar, and that the cost of the latter to the manufacturer

was 4 Spanish dollars per picul—he paying the Chinese grower at the rate of $1\frac{1}{2}$ Spanish dollars per picul of undrained sugar, since then I have been informed that the Chinese cultivators have reduced their rates from the above to 75 cents and 1 Sp. dollar per picul, which will reduce the cost to the manufacturer by 1 dollar to $1\frac{1}{2}$ dollars per picul. Mr Braddel further informed me that the cost of the manufacture of rum was 15 cents per gallon which is the same sum at which Mr Montgomerie informed me it could be manufactured in Singapore. I am not aware if any of the sugar estates have answered the expectations of the proprietors, as I am not in possession of a statement of the actual outlay and returns of any property. The cultivation has been carried on by Chinese for 30 or 40 years in Province Wellesley with I believe considerable success. Its cultivation on a large scale on the west India principle was introduced into Singapore in 1836 and into Pinang in 1838 and Province Wellesley in 1840. At Malacca where there is a considerable field open for the culture there is no manufacture of the article.

Pine-Apples.

This is a cultivation for which Singapore is famous. The beautiful Islands and Islets to the west of the harbour are covered with plots neatly planted by rows of this favorite fruit. The peculiar soil of these is said to impart the delicious flavour possessed by Singapore pine apples. The principal cultivators are Bugis. The produce at times far exceeds the consumption—and at such times when bought at the garden is sometimes to be had for 10 apples to a cent. The plant is hardy and requires little care or cultivation. The principal labour is in collecting the fruit. The fibres of the leaf are prepared to a small extent for shipment to China.

Rice or Paddy.

Singapore unlike Pinang, Province Wellesley or Malacca possesses little or no paddy cultivation: the climate appears to be unsuitable to it and what is raised is in small and unproductive crops.

Pasture.

Grazing ground is principally obtained from the esplanades, road sides, and public grounds; there is little pasture retained by private individuals; grazing ground is of no value and fetches no rent; such as there is in the island is generally common to the villages near which it is situated.

Coffee.

Though this cultivation is not included in the statements which are annexed to this report, it cannot be passed without remark as

its introduction has at different periods been extensively attempted but with complete failure. A few trees are yet to be seen in the close proximity of the houses of the natives where the plant thrives and grows luxuriantly; this circumstance no doubt has been the cause of encouraging capitalists to embark largely in the culture, who were, it may be supposed, unaware that the tree will not succeed in any other situation, this knowledge no doubt would have been the means of preventing much loss to individuals. I therefore feel that it will be of service to recount such authentic information that I have been able to obtain from gentlemen that had been engaged with it, and who all agree in the main point, that it will not succeed in Singapore—though differing slightly when detailing the causes.

Mr Charles Scott informs me that he planted 800 to 1,000 plants at Lessudden in the years 1825 and 1826, all of which thrived well and in three years were covered with blossom—from which anticipations of a good crop arose, in a few months after this they all died without bearing—the plants were not shaded but were kept clean and manured.

Senor Don Jose D'Almeida informs me that he is of opinion that the climate of Singapore being equable throughout the year, there is no facility given to the plant for recruiting itself so that the continual vegetation and irregularity of production exhausts the plants. The soil of Singapore is also poor and cold, so that it is only when highly manured that the raising of the plant can have any prospect of success. The berries ripen well but the cropping season is very irregular and scanty.

Mr Dunman informs me that he possessed 30,000 plants at Holly hill estate, and the reason of his giving up the cultivation was that there is no cropping season, there being blossom, green and ripe fruit, on the same plant at all times—so that the ripe berries had to be plucked all the year round. The plants looked beautiful but he did not shade them, as he was too late in receiving dadaps (a plant used for this purpose) from Java. He recommends shading coffee until they come into bearing after which he would dispense with it. The coffee looked well till it was cut down by him, and the crops were good, but the quantities he cannot tell. He has found it to be a fact that coffee can be bought in the bazaar in Singapore town at a cheaper rate, than for what the mere picking, cleaning, and sending to town, of the produce of Singapore plantations can be effected; this he attributes to the high rate of wages here in comparison with the wages of coffee countries where children and women are employed to gather the fruit.

Mr Cong Tuan, a Chinese merchant, informed me that he planted out about 50 acres with the plant near Jurong, but the plantation died out and ended in total failure. The properties belonging to the three last mentioned gentlemen were planted between 1833 and 1839. The coffee belonging to Senor Don Jose D'Almeida was

shaded by the silk cotton tree. With a knowledge of the above circumstances it is unlikely that the cultivation will be again attempted. At Pinang and Province Wellesley as far as I have observed the cultivation has met with no better success than at Singapore. At Malacca I am not aware its cultivation has ever been attempted excepting in the vicinity of native dwellings.

Cotton.

This cultivation has also been attempted with failure—regarding it Mr T. O. Crane informs me that he commenced clearing in May 1836 and by the end of that year had about 20 acres partially planted out but the greatest extent that he ever had fairly planted out was 17 acres. He commenced with “Pernambuco” from seed grown in some garden in Singapore and also from two or three trees that were flourishing in the Botanical garden on Government hill—this species appeared to thrive in gardens but in field cultivation the pods were invariably attacked by a caterpillar which destroyed both seed and cotton, its cultivation was consequently abandoned and his attention was directed to other species obtained from the Agricultural Society of Calcutta—such as Sea island, Upland Georgia, New Orleans, Tenevelley, Bourbon Sechelle, Manila and Egyptian also a known cotton from Manila, said to be the cotton from which Nankin is manufactured. During the whole of 1837 he made experiments on these different species, all of which sprang up and and promised well as plants. The Upland Georgia, New Orleans, Manila and Tenevelley, turned out to be annual plants, and were the first that proved a failure, giving a scanty produce and dying off, this he attributed to the quality and was still sanguine of success, with regard to Sea island and Sechelle, and consequently his whole attention was given to these two species which grew up rapidly thriving beyond expectation and exceeding in size (as he learned by report) the plants which grow in their original localities. The different kinds flowered as elsewhere in 40 to 45 days but not very abundantly and from the continuance of flowering he soon found out that the real cause of failure was in the want of season, together with the variableness of weather—consequently the crops instead of coming forward at one time continued scantily all the year round and were thus subject to damage from rains—field mice &c. great expence was thus incurred in gathering, so much so, that were labour even very cheap and abundant—such as that of women and children, the speculation could not give a remuneration to the European planter. The undertaking was consequently abandoned.

The soil on which these experiments took place was analyzed in Calcutta, by an experienced person who reported it to be of the best kind adapted to the growth of the plant in its native localities. The quality of the produce was favorably reported on in London and Calcutta more especially that of the “Sea Island” and “Sechelle” whose staple was long, colour good, and texture soft—

about 5 cwt of "Sea Island" was sent to London, and was sold at 11½d when the produce of the original locality was selling at 1s 1d. The Brokers reported the quality equal to the best "Sea Island," but not sufficient attention had been paid to the cleaning of it. The whole produce of 17 to 20 acres did not exceed 9 to 10 cwt. The produce in America would have been about 1½ cwt per acre.

Senor Don Jose D'Almeida informs me that in his experiments all varieties grew pretty well and produced tolerably, but the irregularity of the rains spoil the whole.

Cinnamon.

Of this tree there are a considerable number in several plantations of the island. Senor Don Jose D'Almeida informs me that he has a few plants that thrive well and look healthy—he has no objection to believe that it will be one of the staples of the island. The plant grows as well on sand as it does in red earth, although he is inclined to think that the produce grown on red earth will be inferior to that grown on sand. Mr T. O. Crane informs me that the soil on which he grew his cotton was reported in Calcutta to be also well adapted to cinnamon, he has a few very fine trees but he has never cut them for cinnamon until lately, and next year may be able to report on its quality.

Coco.

There are a few of these plants which thrive and bear in the proximity of inhabited houses; of it, Senor Don Jose D'Almeida informs me that he is of opinion that it will grow well in Singapore if planted in proper soil, and some care be taken of the plants. New cleared soils do not suit this cultivation as in these insects abound which prey upon the leaves. Captain Wm. Scott informed me that his opinion as to the success of its introduction as a cultivation was not so favorable, but it has not been tried sufficiently to warrant any conclusive opinions on the subject.

Indigo.

This article may be said not to be cultivated in Singapore. I am only aware of an acre of it being under cultivation by a Chinaman, who informed me that it did not repay his labour, considerable quantity is produced in Pinang by the same class who export it in a liquid state, the dye is precipitated by lime. The extraction of the dye was attempted in Pinang about 10 years ago by the Bengal method, but it did not succeed so well as to warrant a continuance.

(To be continued.)

Erratum. Ante p. 105, 20th line from top for dollars 2,300 read dollars 3,200.

THE PIRACY AND SLAVE TRADE OF THE INDIAN

ARCHIPELAGO.*

1830. The Netherlands Indian Government this year took more decisive measures than for some time previously, to check and diminish piracy. The war in Java having been successfully terminated by the submission of Dhipo Negoro, the new Governor-General van Den Bosch was enabled to turn his attention to the promotion of the agriculture and commerce of the dominions confided to his care. He re-organized the naval forces destined to act against the pirates, combining the small cruizers of the residencies and a number of schooners of small draught of water into a flotilla, which was placed under the command of Mr Kolff, an intelligent officer of the colonial marine. At fixed periods these vessels, in concert with those of the royal and colonial marines, were to undertake expeditions against the pirates; every year they were to attack them in their haunts, inflicting exemplary justice upon them, burning their boats, seizing their arms, and thus inspiring amongst them fear and dread. Twenty boats, to form a flotilla, were ordered to be built this year. In September two villages were ravaged on the coast of Banka, and 63 persons carried away by the pirates. The coasts of Lampong, in the south of Sumatra, were equally infested by pirates, but a considerable number of them were seized and banished to Banda. In consequence of a treaty made with the Sultan of Linga the viceroy of Rhio sent his son on an expedition to Pulo Buaya in July 1830, which was attended with success, two of the principal chiefs being made prisoners and condemned to hard labour for life.

In March 1830 the Straits Government published a proclamation at Singapore, setting forth that the attention of the Governor in Council had lately been called to the practice which prevailed in the Eastern Settlements of importing persons under the denomination of "slave-debtors," but which in reality was only a cover to actual slave-dealing, and it was therefore notified that such practice was illegal, and that all persons offending in that respect would subject themselves to the penalties prescribed by Act of Parliament V Geo. IV cap. 113. In the *Singapore Chronicle* of 8th April it is stated that the Bugis, with the aid of the Chinese, had been in the habit for many years past, of importing slaves under the name of slave-debtors and disposing of them to the Chinese, who actually purchased them or redeemed the alleged debts, and retained these persons as their slaves, a considerable number of them being taken to Malacca.

In September 1830 the boats of H. M. S. *Southampton* and the

* Continued from p. 52.

H. C. schooner *Diamond*, while cruising in the Straits of Malacca for pirates, had an engagement with a fleet of piratical prahus, about 30 in number, which lasted for several hours.

1831. In September the Netherlands troops had a serious encounter with Achinese pirates in the neighbourhood of the island of Ougé on the coast of Sumatra. Lieutenant Evarts was killed and the agent Bonnet was seriously wounded. On 4th March 1831, the Governor General of British India addressed a letter to the Government of Netherlands India in which it was proposed to unite their efforts to put an end to piracy. This communication is stated to have been called forth by the fact of Rear-Admiral Sir E. Owen having encountered a fleet of pirates in the Straits of Malacca, and having observed some piratical prahus on the north-east coast of Bintang, which had made a descent upon the shore in that quarter. The Governor General Van den Bosch in answer stated that he was not less disposed than the British Government to co-operate in measures for the safety of the coasts, navigation and commerce, and that he would use every means to attain this end. In a report made by Captain Kolff to the Dutch Government in November of this year, it is shown how widely scattered the haunts of the pirates are through the Indian Archipelago. In Magindanao, Sulo, on the north-east, south, west, and north-west shores of Borneo, on Buru, on Gilolo, Celebes, Billiton, Linga, the south-east and east coast of Sumatra, in the Straits of Malacca, and the southern parts of the Malay Peninsula. He gives a particular description of the different kinds of vessels used by them, and of the routes followed at various times of the year when they set out on their long cruizes. This report is too lengthy to be given with any detail, but it will be found in the *Moniteur des Indes-Orientales* for 1846-47.

In Feb. 1831, while an American vessel, the *Friendship*, was lying off Kwalla Batu on the west coast of Sumatra taking in a cargo of pepper, a boat came off from a neighbouring village with pepper, and while it was being received the Malays attacked the officers and crew and put the whole to death. The vessel was then plundered, and property, principally specie, to the amount of 7 or 8 thousand dollars was carried off. The Captain, who was on shore at the time with four of his men, on his return found every person he had left on board murdered, but, obtaining assistance from other American vessels then on the coast, he remained in his ship. These vessels assembled at Kwalla Batu and demanded restitution of the property but could obtain no satisfaction, the chiefs denying all participation on knowledge of the affair. A year later an American frigate the *Potomac* arrived at Kwalla Batu, and assaulted the place, setting fire to the houses, and killing about 200 of the inhabitants. In May 1831 H. M. S. *Wolf* arrived at Singapore, having been sent to the Straits in consequence of the very great injury inflicted on the commerce of the Eastern Archipelago, and

especially of the British Settlements, by pirates, who for some time had met with little or no check in their proceedings and had therefore much increased in audacity, The *Wolf* however was soon afterwards employed in blockading the coast of Keddah, instead of co-operating with the Dutch naval forces as was at first stated to be intended. In July six Lanun pirate prahus were seen on the north coast of Bintang where a party landed and carried off two Chinese fishermen, severely wounding a third. A large naval and military party was immediately despatched from the Dutch Settlement of Rhio in quest of the pirates, but did not succeed in falling in with them. Two trading prahus from Pontiana bound to Singapore with valuable cargoes, were about this time fallen in with at sea by another prahu which had sailed at the same time, but for a day had parted company with them; the two boats were found lashed to each other, empty, and only containing three bodies of persons belonging to the crews who had evidently been murdered. The rest of the crews, who originally amounted to 14 men in all, and the property, had no doubt been carried away. On the 25th August the *Singapore Chronicle* states that a number of Bugis nakodas, headed by the chief of the Bugis Kampong in Singapore, had called to give information that a formidable pirate fleet consisting of twenty-two prahus, most of them double-banked, and carrying upwards of 100 men each, were then at or near Pulo Tingi off the coast of Johore, and that within a few days they had cut off seven trading prahus. These prahus consisted of one from Singapore bound to Pahang, three Bugis prahus bound to Singapore from Bali and Pontiana laden with sarongs, gold dust, diamonds, rattans, rice &c, and three small Malay trading prahus from Pahang to Singapore having upwards of 80 piculs of tin, and some gold dust. The crews of the three last mentioned boats on being fired at by the pirates, immediately jumped into the sea and swam to the Johore coast which was at hand, the crews of the others were all either murdered or made captive, the vessels being scuttled or burned. These nakodas complained of the supineness of the British Government, contrasted with the activity of the Dutch, in putting down piracy, and added that if matters did not mend they would be obliged to desert Singapore altogether, and seek some other port from whose Government they would probably meet with greater protection! H. M. S. *Crocodile* and *Cochin* immediately sailed from Singapore in pursuit of these pirates but did not encounter them. In the *Chronicle* of 13th October we find a narrative by the commander of the English merchant brig *Lady Francis Harriet* of the capture of that vessel in August by the natives on the coast of Pedier. The brig was lying in the roads of Telasamay when she was visited by a Malay chief and about twenty followers, who picking a quarrel with those on board seized the commander and crew (five of whom, Caffres, sided with the Malays) and took possession of

the vessel. Captain Daviot was then compelled to get the vessel under weigh and steer for another harbour on the coast. The vessel was plundered of a great part of her cargo, but another English vessel having arrived at the same place, they abandoned her, carrying off specie and jewels to the amount of about ten thousand dollars and spiking her guns. Not being sufficiently strong to cope with the pirates the two vessels left the place as quickly as they could, and the *Lady Francis Harriet* proceeded to Pinang.

A French vessel from Bourbon this year visited the islands to the east of Java and purchased and carried away a great number of boys and girls.

1832. Captain Brown, of the barque *Alexander*, was this year murdered at Indramayu (Java) at the mouth of the river as he was returning from that town in a boat with four men. One of the men jumped into the water and succeeded in reaching the town, where he gave information to the authorities,—the boat and the other three men were carried away by the pirates.

It having been reported at Singapore that several large pirate prahus were lurking outside the harbour, the Chinese traders who carry on a very extensive and constant commercial intercourse with the east coast of the Peninsula, by means of small native vessels called sampan-pukats, in May, with the sanction of the Government, fitted out four sampan-pukats with a crew of thirty men in each, well-armed and carrying some light swivels, for the purpose of driving the pirates off the coast. They met two pirate prahus with which they engaged, sinking one and putting the other to flight. It could only have arisen from an utter want of every means of acting against the pirates that the Government gave their sanction to this step which must be viewed as a very hazardous one, since it is well known that the Chinese themselves are addicted to piracy, and were therefore the very worst persons to be entrusted with such a duty. In the beginning of August it was reported that a number of pirate prahus were outside the harbour of Singapore, sheltering themselves amongst the Romania islands, and a sampan-pukat coming from Pahang was chased into the mouth of the harbour by some of the pirates. There was no means at the command of the local Government for taking any steps against these scourges of commerce. It will be observed that these prahus made their appearance near Singapore at the same season in this as in the preceding year. This probably arose from its being the period at which they might expect in this neighbourhood to fall in with the Bugis prahu on their way to Singapore. In September a vessel of about 80 tons burthen belonging to the Rajah of Tringanu, while on its way to Singapore with a valuable cargo of coffee, pepper and tin, was chased by 30 or 40 piratical prahus and finally captured off Pulo Tingi, and afterwards carried into Kemaman, a

place on the east coast of the Peninsula a little to the north of Pahang. The Nakoda and some of the crew were murdered. The pirates by whom this outrage was committed were all from places in the vicinity of Singapore, namely, Galang in the Straits of Rhio, Timian in the Linga group, Pahang on the east coast of the Peninsula, and Teluk Blangah or New Harbour on the island of Singapore. On the 22nd October a sampan pukat sailed from Singapore for Pahang with a cargo of opium, raw silk, piece goods &c, valued at from 10 to 12 thousand dollars, having a crew of 33 Chinamen, and carrying seven lelas or small guns. On the 3rd November when off Pulo Tingi, she fell in with a fleet of pirate prahus, 15 or 16 in number, which immediately attacked her. After a fight of two hours, in which four of the Chinese were killed, some powder in the pukat exploded by accident and set fire to the sails. The pirates took advantage of the confusion and closed on the boat, assailing the Chinese with spears; the crew threw themselves into the water where most of them perished by drowning or the weapons of the pirates. The nakoda and 12 of the crew aided by the darkness contrived to escape the notice of the pirates, and after floating on the water for sometime on pieces of wood were picked up by some Malay fishermen who took them to the shore, and treated them with great kindness. The pirates suspecting that some of the Chinese were at this place watched to prevent their escape by sea, on which the Malays conducted them overland to the Johore river from whence they reached Singapore. The nakoda made an affidavit of the circumstances at the police office, in which he stated that he recognised two of the pirate Panglimas belonging to Timian and Galang, whom he formerly knew as Chinese at Rhio, but who had subsequently professed the Mahomedan faith and assumed the Malay dress. In November a trading prahu of six coyans burthen, coming from Delli in Sumatra to Singapore with a cargo of pepper, was attacked by five piratical prahus off Pulo Cocob, a small island near the western entrance of the Straits of Singapore. The crew of the trading boat offered a determined resistance and fought her until she sank under them. The nakoda was killed and the rest of the crew were picked up by the pirates and carried to Campar river in Sumatra. On the way the pirates captured other two boats bound to Singapore, killing five men and taking the rest to Campar where they were sold. Two of the crew of the Delli boat contrived to make their escape in a small sampan and were picked up by a native brig and brought to Singapore. The only gun-boat at Singapore was sent to Pulo Cocob, but learning there that nine pirate prahus were in the vicinity, two of them Iapun vessels, she immediately returned to Singapore, being too weak to contend with such a formidable party. H. M. S. *Wolf* and the gun-boat afterwards proceeded to cruise in search of the pirates but did not meet them, the pirates no doubt keeping carefully out

of the reach of the man-of-war in some of the innumerable creeks and rivers which offer such facilities for escape and shelter.

1833. The Dutch Government still continued to manifest much greater anxiety to check piracy than was evinced on the part of the British, and were indefatigable in devising means for attaining this end. About this period small armed steamers were sent from Holland. An engagement took place near Cheribon between some pirate prahus and a gun-boat in which the commander of the latter was killed. The new Sultan of Ceram (Molucca group) having afforded assistance and protection to pirates was brought a prisoner to Java. The Papuan pirates not only sold the captives they had taken in their expeditions at Ceram, but they also brought their own countrymen there for sale. An establishment was formed on the island of Tana Jamea to the south of Salayer, to which the pirates were sent and employed in cultivating the ground. An expedition was sent against the pirates of Bima and Sumbawa which fought with seven prahus part of which were taken, and forty-two captives were restored to liberty. The pirates who had established themselves in the Linga Archipelago, on the river Jambi and in other localities in Sumatra, were routed out, and a fort was built on the Jambi river to overawe them.

In a report addressed to the Governor-General Van Den Bosch in November 1833, by the late Mr Vosmaer, it is said "if we except those fortunate countries where the influence of Europeans has wrought a reformation in the character of the natives, so that the primitive vices of the population are only seen in a few instances, we must acknowledge that the natives are, in general, addicted to brigandage. In spite of all the measures taken against them, the number of the pirates has not diminished, and this circumstance combined with the facilities with they can procure better arms, renders them very formidable."

A native boat of 12 coyans, proceeding from Tavoy to Pinang with a cargo of rice, was attacked and captured by four pirate prahus off Junk-ceylon, four of the crew were killed, the rest were made captive and the boat rifled and sunk. The pirates afterwards proceeded down the Straits, and one of the Burmese contrived to make his escape in a small boat belonging to the pirates. He landed on Barren island near Singapore, and was brought to Singapore by a passing vessel. *H. M. S. Harrier* in the beginning of this year destroyed a notorious piratical haunt in the Straits of Dryon to which she was guided by natives who had been captives to the pirates there. The pirates offered some resistance, but ultimately fled into the jungle, and their village and boats were burnt.

In April information was received at Singapore that a number of sampan-pukats, having property on board to the amount of upwards of 200,000 dollars, the property of Chinese merchants, were blockaded in the port of Pahang by a fleet of pirate boats.

The Government was unable at the moment to afford any effectual assistance, and the Chinese merchants therefore contemplated chartering and arming a brig and sending her to Pahang to raise the blockade, but the design from some cause or other fell to the ground. Three of the pukats contrived to escape the vigilance of the pirates by getting away from Pahang at night and keeping well out at sea, but another was not so fortunate, having met a number of pirate prahus off Tringanu with which it had a severe conflict, the commander and nine of the crew being killed and five severely wounded. The pukat with difficulty succeeded in entering the Tringanu river, the Rajah of which place was obliged to open a fire upon the pirates in order to drive them away. The property on board this boat amounted to about 14,000 dollars in value. On receiving this information a petition was drawn up and signed by about forty of the Chinese merchants, and on the 4th May presented to the Governor. In this petition it is stated that all the native traders residing in the Settlement of Singapore had suffered many severe losses from the numerous piracies committed in the neighbouring seas. Piracy is represented to have increased to an alarming extent of late, especially as it affected the commerce carried on with the east coast of the Malayan Peninsula, which trade amounted in value to about one million of Spanish dollars per annum. Several acts of piracy are then alluded to, such as the attack on the sampan pukat which was forced to seek refuge in Tringanu river as above related, and it is stated on the authority of letters from the east coast that two Tringanu prahus and one from Pahang had likewise been lately captured, some of the crews having been murdered. A sampan pukat belonging to a Chinese, proceeding to Muntoh in Banka, with a lading of about 10,000 dollars in value, was captured by pirates off Lingin. The petitioners entreat that the measures of relief which may be taken may not be of a temporary nature, but permanent and constant, so as to ensure continued protection for the future and restore confidence among the traders residing in the settlement and those who frequent the port for purposes of commerce. The petition points out some of the most notorious haunts of the pirates and of their abettors amongst the petty chiefs on the east coast, and suggests that an expedition should be sent to Pulo Tingi, the most noted refuge of the pirates; that threatening letters should be written to the neighbouring rajahs and chiefs suspected of aiding the pirates, and that the friendly rajahs and chiefs should be invited to lend their assistance. This petition it is stated was received with some degree of approbation by the Governor, who promised that as soon as the government schooner was repaired it should be sent to Tringanu, and that he would submit that petition to the consideration of the Supreme Government. The government schooner *Zephyr* was afterwards sent to the East Coast to make enquiries and the commander reported that he had carefully examined all the islands along the

coast, and had found no traces of pirates with the exception of being informed that a small fleet of Linga pirates had passed along the coast. The authorities at the different ports accused the nakodas of the pukats of being great gamblers, and that they had been known to lose large sums of money in that manner. This however, it will be observed, would not account for the well-established fact of several boats having been cut off, and many of the crews murdered. It is probable therefore that the chiefs and others questioned, finding themselves suspected, betook themselves to the system almost invariably adopted on such occasions, of professing a profound ignorance of the matter, and trying to throw discredit on the parties complaining. It is also stated that at only one place, during this voyage, was the real chief met with, the persons communicating with the *Zephyr* being mostly inferior chiefs, the head men keeping out of the way. In the presentment made by the Grand Jury on the 9th May, at the Session of Oyer and Terminer of the Court of Judicature at Singapore, we find the following paragraph: "The Grand Jury have further to notice, with regret, the very great increase of piracy in the Straits and the neighbourhood within the last twelve months, which, if some effectual measures be not speedily adopted to put a stop to it, will, without doubt, prove seriously detrimental to the trade of the settlement. The Grand Jury do not feel quite satisfied as to whether this is a subject which properly comes within their province to present to your Lordships, but if it should not be, its vast importance to their interests will be their best excuse for so doing." The Recorder, Sir B. Malkin, in reply observed "he regretted that by an unfortunate oversight in framing the Charter of the Straits Court, it had not the power even to try offences of this nature, but, being aware of the urgency and importance of the subject, he would most willingly impress the same upon the attention of Government." At this time it is stated that the Chinese merchants at Singapore could not get credit for opium *solely* in consequence of the extreme risk they incurred by sending it along the east coast. On the 19th June Captain Duncan, of the whaling ship *Finsbury*, arrived in Singapore, having been wrecked in February of the preceding year, near the coast of New Guinea, where several of the crew were made prisoners by the natives, and Captain Duncan and some of his men while proceeding in their boat to Ternate were finally taken captive by the natives of Mysoury by whom they were taken from one place to another for six months, being repeatedly sold and re-sold. Captain Duncan, his son, and four of his men were at last redeemed by Captain Russell, of the schooner *Success*, at Dory, and brought to Ternate, some of the crew being still slaves at Mysoury. Captain Duncan during his residence at Mysoury was informed by the natives that there were nine Europeans or white men on the island who had been in slavery for seven years. The Dutch schooner *Sarie Kenduruan* on her way

from Tringanu to Singapore in October this year was attacked by three pirates which she beat off after a short engagement. The vessel on its arrival exhibited marks of the encounter, her sides being pierced by several shot. The brig *Harriet*, Captain Roys, which left Singapore on the 22nd December, on the following day while abreast of Middleburgh shoal and near Red island fell in with three large prahus. They were at first thought to be trading craft but as they pulled across the brig's bows, and at the same time raised their barricades in front in evident preparation for an attack, their true character was speedily ascertained. They pulled quickly after the vessel beating their war gongs, and in about an hour's time came close to the vessel which then fired a shot at them from her twelve-pounder. The pirates replied by a discharge of grape shot which however passed over the brig's deck without doing any damage. The brig rounded to and fired two guns which took effect on the largest prahu. A breeze springing up the brig made sail followed at a distance by the pirates, and in the afternoon they again neared the vessel which was then put about and bore down upon them, but they avoided an encounter and another vessel coming in sight they finally pulled away. The despatch boat from Malacca to Singapore was about the same time chased by three prahus and with difficulty succeeded in escaping. On the 23rd November the gun-boat at Pinang carrying a six-pounder was attacked off Kwalla Muda, the northern boundary of the British territory of Province Wellesley, by a fleet of upwards of 20 piratical prahus, one-half of which were well manned and armed with guns, the rest having swivels. The *Nakoda* of the gun-boat kept up the fight as long as she could but was at last obliged by the failure of his ammunition to retreat. After this exploit the pirates are said to have plundered and kidnapped with impunity from all the small trading boats which fell in their way. They also attacked some places on the mainland. These pirates are said to have come from Linga, Siak, Galang and other places in the vicinity of Singapore, and to pay an annual visit to the northern end of the Straits and the Mergui Archipelago in quest of bird's nests and slaves. The crews of these fleets are stated to have consisted almost entirely of the class of people called *Orang laut*, who live entirely on the water and whose religion consists of a variety of gross superstitions, with little trace of the Musselman faith. They carry in their prahus charms to lure prey. Thirty-seven prahus large and small were reported to be cruising in the neighbourhood of Pinang at this time.

1834. In the *Moniteur des Indes Orientales* we find the following notices relating to piracy in this year. In the beginning of the year H. N. M. brig *Meermin* in concert with the schooners *Janus* and *Pylades* belonging to the colonial marine, were sent to cruise after pirates in the vicinity of Bali and Lombok. The schooner *Iris* engaged 17 pirate prahus near the island of Gilboan

to the north of the straits of Bali, and a schooner, name unknown, was taken about this time by these same pirates. In February the Sultan of Linga and the vice-roy of Rhio sent several vessels, which in concert with three Government cruizers attacked the pirates established at the north of the river Indragiri, on the east coast of Sumatra. Five of the leaders were made prisoners, three of whom were executed, and the others condemned to hard labour for life. In April the government sent an expedition consisting of four vessels of war and a number of gun-boats against Batu Puti and Beron on the east coast of Borneo, but the pirates having previous intelligence of the design, very few were to be found when the expedition reached its destination. The principal villages and the vessels of the pirates were destroyed and all those who were found in possession of fire arms were made prisoners. Many native chiefs and amongst them the princes of Gunung Tabor and Bulongan, who had made common cause with the pirates, gave in their submission to the Netherlands Government. In August Captain Man of the colonial schooner *Pylades* fell in with a brig to the east of Java, the Captain of which had set it on fire rather than abandon it to pirates. In September a declaration was made at Makassar by a person named Alexander Brossi to the following purport:—"In the month of August of the past year, he embarked on board the schooner *Maria Philipina* commanded by Mr Cramer, and bound from Makassar to Bali. Off Bali Jolo a pirate attacked the vessel and took it, after a short but severe engagement. Some of the crew lost their lives, and amongst them the commander of the schooner. Brossi himself and eight of the Javanese sailors leapt into, the sea intending to swim ashore, but being disabled by a wound which he had received on the arm he was forced to regain the ship and being a creol of Makassar and at the time dressed in native costume, and speaking the Mandhar, Makassar and Bugis dialects with facility, he passed himself upon the pirates as a Mahomedan. He was forced to shew where the money and other effects were kept on board. By degrees being received into the confidence of the pirates they at last gave him the command of one of their prahus. From that time he was forced to take part in their expeditions which were ordinarily directed along the coasts of Bali and Mangary, their fleets sometimes consisting of as many as 190 vessels. One day they saw a European vessel which they thought was a Merchant ship, not being painted black as men of war generally are, and they gave chase. It however turned out to be H. N. M. brig *Meermia*, which by a few broadsides sent three of their prahus to the bottom and killed and wounded a number of the pirates. The pirates took to flight as quickly as they could, abandoning a prahu paduakan which they had captured on the preceding day. A fleet of 80 prahus in which Brossi was had an engagement with a Javanese piratical fleet, which lasted twenty four hours, seven prahus being lost. He was

afterwards sent to cruise off the bay of Bima. He often wished to escape, and at last was sold with two others for a ball of opium and taken to Salayer, from whence he reached Makassar. Brossi gave the particulars of several native vessels whose capture he had witnessed, and mentioned some of the chief haunts of the pirates. In October an expedition under Colonel Elout reduced the district of Si Kampong on the eastern shore of the bay of Lampong in Sumatra, the chiefs of which had long been in close league with the pirates. By a treaty concluded this year between the Netherlands Government and the Sultan of Jambi, that prince came under engagements to put an end to the purchase of prisoners from the pirates, and to deliver all who came into his hands to the Government.

In the Straits papers we find a number of cases of piracy mentioned, most of which occurred in the immediate vicinity of the European Settlements. On the afternoon of the 20th April H. M. Sloop *Harrier*, Captain Vassal, anchored near the Arroas in the Straits of Malacca. In the evening two officers with four men proceeded in a small boat to one of the islands to catch turtle. At about eleven o'clock the boat returned with one seaman mortally wounded and another wounded in the head. The Master, who escaped by swimming off, reported that while turning a turtle they were attacked by a number of Malays who had crossed from another of the islands. The boats were immediately sent to prevent the escape of the pirates. At daylight a fire of jinjals from the rocks and musketry from the jungle was opened upon the boats, which was quickly returned. The seamen and marines with some difficulty effected a landing and advanced upon the pirates who stood to receive them, contesting the ground with great obstinacy. The chief being shot and others of the pirates falling, the rest at last gave way and retreated into the jungle. Three large prahus and two smaller boats were destroyed and a great quantity of arms taken which were afterwards presented to the United Service Museum by Captain Vassal.* A native boat proceeding from Singapore

* *United Service Journal*, September, 1835. In the same Journal we find the following cases mentioned which have not been noticed in the previous part of this paper, in which we only profess to give at the best a very imperfect record of the annals of piracy—:

^a The *Victor*, a sloop-of-war of 18 guns and 114 men, being off Java, on the 15th of April, 1807, brought three proas too and as it fell calm, she anchored at about 5 P.M., and brought two of the vessels alongside to overhaul them, while the other hung upon the quarter. The prisoners, amounting to about 120, were taken out of those alongside, and a strong guard placed over them; but as the crew of the proa on the quarter refused to come from under hatches, Captain Bell ordered a carronade and some musketry to be discharged into her, which they returned by throwing spears and firing pistols. A gun was then got out of the stern port to fire on her, the sparks of which most unfortunately communicated to a quantity of gunpowder, which had been carelessly handed out of the other proas, and blew the after-part of the ship up; at which alarming moment the guard over the prisoners dropped their arms, and ran to extinguish the flames. The prisoners instantly seized the arms, and also picked up several spears and knives which had been thrown on board and commenced a bloody conflict. By this time, about 8 P.M., the

to Pulo Laut in April was fired into just outside the harbour by three pirate prahus, four of the crew being killed and two or three dangerously wounded. After plundering the boat of her cargo, consisting of rice, the pirates released it. It was asserted that the pirate prahus had been fitted out at Singapore a short time before, that they belonged to natives of rank on the island and were manned by Malays and Chinese. They had previously captured a pukat coming from the north coast of Bintang, and taken her to the old straits of Singapore. The H. C. Schooner *Zephyr* proceeding to the eastward in May, picked up a Cochin-chinese who stated that the rope in which he sailed from Cochin-china, bound to Singapore with a cargo, had been captured by pirates off Pulo Tingi, about three weeks previously, and out of a crew of 16 men three only escaped with their lives by taking to a small boat in which they reached Point Romania. No sooner did they touch the shore than two were seized by the Malays there, and the third, with difficulty escaping capture, wandered along the beach where he was found by the schooner. In

fire, most providentially, had given way to the extreme exertions of the officers and men, the proas were cut adrift, and the attention of all hands directed to the defence of the ship, which was admirably performed; for, in little more than half an hour, 80 of the enemy lay dead in a most mangled state, the rest were driven over-board. The scene was described to us afterwards by the gallant defenders, as truly distressing and extraordinary, from the united effects of slaughter, fire, and darkness: nor was the ship preserved to his Majesty's service without the loss of her first lieutenant (Blaxton) and five seamen killed outright, her commander, gunner, and 4 men, wounded by the Malays, or dreadfully burnt by the explosion; and most of the wounded died after the Victor's arrival at Pulo Pinang.

"Among the most desperate and successful of the cruisers is the widely-dreaded Rajah Raga, known as the Prince of Pirates, who, for more than twenty years 'carried all before him.' His expeditions have invariably been stamped with singular cunning and intelligence, barbarity and recklessness. During his noviciate under an experienced chief, he was frequently exposed to imminent danger by the vigilance of our cruisers: once, when many of his companions were destroyed by a furious shower of grape from his Majesty's sloop *Rattlesnake*; and again, in January, 1808, when two or three vessels then belonging to his leader were taken and burnt by the *Drake* frigate, near the Arroas, in the Straits of Malacca. We accidentally fell in with them at this moment, and we well remember seeing the third proa creeping off under the land, but little suspected the destinies she bore, till we heard of Raga's bragging afterwards of this escape.

"While the *Alceste* frigate was unfortunately bilged in the straits of Gaspar, on the 18th of Feby., 1817, the crew escaped to the barren isle of Leat, leaving a Lieutenant and party in the ship to preserve necessaries. But in two or three days the pirate prahu hove in sight, when the persons on board were compelled to seek safety on Pulo Leat, leaving the wreck to the brutal ruffians, who plundered, and then burnt it to the water's edge. Soon afterwards they invested the island itself, with a force of sixty prahus; and as their purposes were very evident, the officers and seamen prepared for a vigorous resistance. The example of Captain Maxwell, in fortifying their position, and participating in every privation, was beyond all praise, and endeared him to his people, so that no fears were entertained as to the result of an attack. This state of suspense lasted for sixteen days, absolute want staring them in the face on the one hand, and destruction from the savages on the other; when, on the 3rd of March, the officer on the 'look-out tree' announced that he perceived the sail of a ship or brig, at all events larger than those of the Malays. The pirates soon after made the same discovery; and the rapidity of their movements in consequence was such, that they were enabled to retreat without damage. The vessel proved to be the *Ternate*, a Company's cruiser of 16 guns."

the same month the guard boat returning to Singapore from Malacca was attacked at 6 A.M. off Pulo Cocob by two pirate prahus, one about her own size and the other rather larger. Both were well manned and armed. They demanded the brass 12-pounder with which the boat was armed, and on the nakoda refusing to give it up a fight commenced which lasted from 6 till 11 A.M., the boat receiving several shots in her hull, and one of the crew being wounded in the thigh. The pirates at last sheered off and the gun-boat entered the harbour in a disabled state. The panglima commanding the pirates was recognized as a well-known character belonging to a place called Mouro, near the piratical settlement of Sugi, which had been destroyed by the *Harrier* in 1833. A Chulia brig under English colours was captured on the west coast of Sumatra by a barque belonging to the king of Acheen which had previously made three attempts to take the English brig *Glory*, Wyatt, Master, belonging to Pinang, but was as often repulsed. About the same time a vessel belonging to a native was also captured by this barque at Tappanooly, but both were seized by the Dutch authorities at that place who restored the brig to her owner, and also released the Achinese vessel threatening to visit any similar act with severe punishment. Three cargo boats on their way from Rhio to Singapore were attacked by some piratical craft who deprived them of their masts and sails and stripped the crews of their clothes. The crew of one of the boats jumped into the water and swam to an island and their boat went adrift and was lost.

1835. The English clipper *Sylph* having 1,000 chests of opium on board was wrecked in the end of January on the north-east coast of Bintang. The wreck was immediately menaced by pirates but they were fortunately prevented from attacking it by the prompt despatch of the H. C. S. *Clive* to the spot, and the equally prompt assistance rendered by the Resident of the Dutch Settlement of Rhio, Mr Cornets de Groot, who on receiving the news of the disaster immediately proceeded to the place by land with a detachment of soldiers and sailors, and a quantity of provisions. The Resident himself remained five days on the spot, and on his departure left a guard to protect the wreck. The greater part of the cargo was saved and taken to Singapore, and the vessel itself was ultimately got off and repaired. For his services on this occasion Mr de Groot was named a Chevalier of the Order of the Netherlands Lion by the King of Holland, and the Under-writers in Calcutta transmitted to him a handsome silver vase with an appropriate inscription. An expedition consisting of a brig of war, two schooners, and a number of gun-boats was this year sent by the Netherland India Government against Pagatan and Batu Lityin upon the south-east coast of Borneo, and the islands of Pulo Swangie, Pulo Laut and the neighbourhood. On the 25th May they captured a great number of piratical prahus and pieces of cannon on the first named of these islands. The pirates were pursued into the interior, their

houses destroyed, and 156 persons who had been captured by them restored to liberty. The expedition then visited other places on the coast of Borneo, destroying the piratical establishments, and releasing the slaves to the number of 193 persons in all, many of whom had been carried away from the coasts of Java and Madura. Active operations were also undertaken this year against the pirates who had established themselves in considerable numbers on the islands of Karimon Java near the coast of Java. In consequence of extensive enquiries made by the Netherlands India Government on the subject of piracy, it was found that piracy had much increased in the neighbourhood of Linga in spite of the promises made by the Sultan in 1831. Each year a great many boats were fitted out there, which returned loaded with booty. A number of Javanese were found to be in slavery, having been taken by the pirates. In consequence of these facts the Resident of Rhio and Captain Koopman were ordered to make serious representations to the Sultan of Linga on the gross violation of the treaty which had taken place, and to admonish him to set at liberty all the Javanese who might be in slavery in his territories. The Sultan excused himself on account of his inability to oppose the piracy, but forty Javanese were nevertheless restored to freedom. The English authorities at Singapore having addressed the Resident at Rhio on the subject of an attack alleged to have been made upon a sampan-pukat by some prahus belonging to the Sultan of Linga which were conveying his brother-in-law to Tringanu, the Resident thus replied:—"It is possible that this piracy has been their work, for the population of Rhio, of Linga and the dependencies, is in general, altogether bad; it is therefore possible that the subjects of the Sultan have really been guilty of such an outrage. But the fact is not *proved*; and it is known, the English themselves acknowledge it, that a multitude of these robbers find a shelter *in Singapore itself and in the neighbourhood.*" The Resident goes on to remark—"I will be bound to say that a good number of pirates will be found *in Singapore and in the environs*; the thing is so well known, it has been so often repeated, that it is impossible to doubt it. We even read in one of the last *Chronicles* of the colony, that the young Tommongong (son of the one who bore the same title before the dismemberment of the ancient Malay empire) settled at Telok Banga, a village situated very near to Singapore and on the same island, applies himself incessantly to piracy, and even that he has accomplices and spies amongst the head boat-men and tambang boys *in the harbour of Singapore!* By means of this espionage he is always apprised of the departure of a prahu with a valuable cargo but poorly provided with the means of defence. I do not in the least doubt that the pirates of these latitudes generally obtain their powder and shot clandestinely at Singapore, and the booty made by them is taken there and sold at a low price or bartered for the stores required by

them. Singapore and Rhio are both surrounded by pirates and the scum of the neighbouring populations. But piracies are more fatal and more frequent at Singapore than at Rhio, for the trade of the first is much more active than that of Rhio. There is without doubt much blame to be thrown upon the rayats dependants of our Sultan, but it would be wrong to lay the whole to their account. The evil is everywhere—receivers of stolen goods and thieves exist on all sides, it is this which renders the extirpation of piracy so difficult.”

A sampan pukat proceeding from Singapore to Tringanu with 8 chests of opium and other valuable goods was in March of this year captured near Point Romania by a pirate prahu having cloth sails and an English ensign flying. Twenty-two of the Chinese crew were murdered, while nine who leapt overboard contrived to keep themselves afloat and were picked up by a Dutch gun-boat in which they reached Rhio. Three Malay boats on their way to Singapore with sago were attacked by seven pirate prahus. The crews of two of the boats were all murdered, and of the third some shared the same fate while three escaped in a small sampan, and reached Singapore. Eighteen men were murdered on this occasion. The brig *Helen* on her way to Singapore, when at the entrance of the Straits of Banca on the 22nd March, observed three prahus close together and some firing. Three of the prahus made sail and bore away for the shore, the fourth remained at anchor and on the *Helen* closing it was found to be deserted, the sails being gone, the rigging cut, and the vessel scuttled. The body of a Malay was discovered with the head and left arm almost severed from the body. A pukat on her way to Singapore from Rhio in the beginning of April was overhauled by a large pirate prahu mounting several brass guns and manned by from 30 to 40 Malays. Finding that the pukat only contained gambier it was allowed to proceed. The pirates had new sails of canvas and hoisted an English ensign which caused her at first to be mistaken for the Singapore gun-boat. A Chinese junk on its way from Canton was attacked near Pulo Tingi, by five pirate prahus each containing about 40 men and after engaging for two days, the pirates at last boarded the junk at night near the Bintang shore, and thirty of the crew having been killed in the engagement and by the pirates on boarding, they plundered the junk and set it on fire. Only two of the crew escaped by feigning to be dead, and floated to the shore on pieces of plank. A cargo boat with five men on the 17th April conveying tin from Singapore to the American ship *Cashmere*, which was at anchor a little way outside of the harbour, was attacked by a Malay prahu, the five men were krossed and part of the tin carried away. On the 18th the Rev. Messrs Jones and Dean, two American Missionaries residing at Singapore, were proceeding to the *Cashmere* in a small boat, when they were accosted by five Malays in a sampan who asked for some plantains lying in the boat. Mr

Jones rose to give them, when one of the Malays who had stepped into the boat apparently to receive them pushed Mr Jones into the sea. They then attacked Mr Dean but he succeeded in disengaging himself from them. Returning to their own boat they commenced throwing fish-spears by which Mr Dean was severely wounded in several places. Their spears being exhausted they drew their cutlasses and threatened to put all to death if a small box which was in the boat was not given to them. They were assured that it only contained letters, but as they insisted on getting possession of it, the box was thrown into the sea, and Mr Jones having regained the boat the missionaries made their way back to Singapore as fast as possible. A public meeting of the merchants and inhabitants of Singapore was held on the 23rd April at which amongst other matters affecting the prosperity of the Settlement, the alarming increase of piracy in the vicinity was noticed, and it was resolved to address the government on the subject. The following memorial was in consequence transmitted to the Supreme Government:—

To the Right Honorable the Governor-General in Council.

The Memorial of the undersigned Merchants and Inhabitants of Singapore.

Sheweth,

That the prosperity of this Settlement in a great measure depends on the protection afforded to that most important branch of our commerce which is carried on by the various classes of natives who resort hither from many parts of the continent of Asia, and from all the ports of the Malayan Peninsula and of the Eastern Archipelago, with the produce of their respective countries.

That piracies and murders have for a long time past been of frequent occurrence in the vicinity of this Settlement, and of late they have increased to such an alarming extent as to threaten the native trade with total annihilation, boats and junks having been cut off within a few miles of the anchorage.

That if this species of depredation be not immediately and effectually checked, it must very shortly altogether drive the native trade of the Settlement into other channels where more efficient protection is afforded.

Your Memorialists therefore pray that authority and the necessary means may be given to the Local Government with the least possible delay, to enable them to take such measures as may be deemed best adapted to put an immediate and effectual stop to the evil complained of.

And your memorialists will every pray &c. &c.

The want of an Admiralty Court at Singapore having been found to interpose great difficulties in repressing piracy, by rendering it impossible to bring the pirates to justice when taken, the

following petition was at the same time addressed to the King in Council.

To the King's Most Excellent Majesty in Council.

The humble Petition of the undersigned Merchants and Inhabitants of Singapore.

Sheweth,

That for a long time past, acts of piracy and murder have occasionally taken place in the vicinity of this Settlement, but that within the last two months they have been of such frequent occurrence, and of such atrocious character, attended with so serious an amount of loss of life, as to threaten the native trade of the place with total annihilation. In proof of which your petitioners beg to annex copies of depositions made by such survivors as have been fortunate enough to escape on several recent occasions.

That it appears to be the practice of these piratical marauders to murder every soul on board the boats and prahus they attack, no doubt with a view to prevent evidence coming forward against them.

That the Court of Judicature of the United Settlements not having Admiralty Jurisdiction, our government in the event of the pirates being taken could not try them on the spot, where only punishment would be effectual in preventing repetitions of such crime, but would be compelled to send them to Calcutta, at an enormous expense and at very serious inconvenience, not to say total ruin of the parties who would have to appear against them.

Your Petitioners therefore most humbly pray, that an order in council may be immediately issued, or such other means adopted as will give Admiralty Jurisdiction to the Court of Judicature of the United Settlements accordingly.

And your Petitioners as in duty bound will ever pray &c. &c.

As we have given the substance of the depositions appended to this petition in our previous pages, it is unnecessary to reproduce them here. The brig *Mavis* from Calcutta while passing the Carimons on the 18th May, was chased by seven pirate prahus which followed her for some time but the breeze freshening she got away from them, the pirates on relinquishing the pursuit firing a gun at the brig. Another pukat with a valuable cargo was cut off in May near Pulo Tingi and all the crew murdered. The brig *Catharine* on her way to Singapore from Malacca was chased by two prahus, who came on beating their gongs but the breeze springing up she was enabled to distance them. The H. C. schooner *Zephyr* on a voyage to Pahang in May, while near the Romania Islands witnessed a prahu attacked and captured by two piratical boats, without being able to lend assistance owing to the lightness of the wind. On at last reaching the spot the prahu was found deserted and plundered, and having been injured by the shots fired at her she soon afterwards sank. The pirates escaped, pulling away round Point Romania before the schooner could get

within firing distance. The crew of the prahu were afterwards discovered on the shore, some of them severely wounded. The pirates at this time appear to have been active in the neighbourhood of Pinang. Three Achinese prahus bound to Pinang were attacked near the south end of the island by a fleet of about thirty small boats. One of the prahus sank with all hands on board, another was seized by the pirates, who commenced krissing the crew for having offered resistance. The nakoda alone escaped by jumping overboard, in doing which his left hand was chopped off, and swimming to the remaining boat which effected its escape. An armed prahu captured a Chinese boat in Pinang harbour and also attacked a Malay boat, but the latter offering resistance, and the police hastening to give assistance the pirate was beat off. A girl aged eighteen who was in the Malay boat was shot through the heart on the first fire. Captain Low, Superintendent of Province Wellesley, while coasting in a boat along the south shore of the Province in company with the gun-boat, fell in with a large piratical craft, which after some resistance was taken possession of, the crew flying into jungle. She was well armed and papers were found on board fully proving her piratical character, and that she belonged to a large fleet.

The Dutch schooner *Catherina Cornelia* while off Pulo Tingi on her way to Pahang on the 21st July, was menaced by nine large prahus, which retreated on seeing that the vessel was armed and prepared for resistance. In the latter part of August the commander of this schooner saw two Siamese junks in the possession of nine large prahus steering towards the Redang Islands. The rice which formed the cargoes of the junks was afterwards sent into Kalantan river and sold at dollars $1\frac{1}{2}$ per picul while the commander of the schooner was selling his cargo of rice at $2\frac{1}{2}$ dollars per picul. These piratical prahus were stated by the natives to be from Burong Island on the north-west coast of Borneo. They rendezvoused at Pulo Tingi, being relieved at intervals by other divisions of prahus from Burong. A vessel belonging to the Rajah of Tringanu fell into their hands but was immediately released on the production of a paper proving her ownership, the property taken from her being also restored. A Chinese tope bound to Malacca from Singapore while becalmed off the Carimons was attacked by four prahus with which she maintained a contest for some hours, but a breeze springing up she at last got away from them. The vessel received considerable injury and several of the crew were wounded but no lives were lost. A Kling vessel from Pinang to Singapore was captured near Lukut. About this time a barque and a brig under Dutch colours on their way from Batavia to Rhio were attacked near Lingin by pirates who plundered them and murdered nearly the whole of the crews. In November several native boats passing between Singapore and Rhio were taken by pirates, and from thirty to forty persons

murdered. In the beginning of the month of December the pirates were extremely active in the harbour of Pinang, slaves being apparently their principal object. They took people from the boats and fishing stakes and landed at several villages in Province Wellesley carrying away the inhabitants. Upwards of fifty persons were reported to have been kidnapped in the course of one week. Boats were sent out from H. M. S. *Winchester* which was lying in the harbour and several prahus bearing evidences of a piratical character were seized.

(To be Continued.)

GAMBIER, AS A PRESERVATIVE OF TIMBER.

ALTHOUGH much has been written upon the best means of preserving timber immersed in sea-water from the ravages of barnacles and other descriptions of molluscous worms, and even patents have been taken out for the more effectual extirpation of these formidable little enemies of our ship-owners; yet hitherto it must be confessed all has been in vain, and Messrs Barnacle & Co. work away as merrily as ever, heedless of scientific broadsides, and even seem to be endued with redoubled energy when they approach our settlement, as some of our ship-owners have had reasons to deplore. May I hope that we possess the antidote to this bane of the Indian seas, and *that* in one of the staple productions of this settlement,—*Gambier*.

From some conversation lately with Mr Clunis, Shipwright in this settlement, I am induced to believe that the employment of this substance in solution will prove highly efficacious; and although the following facts and experiments adduced by Mr Clunis, are too few in number and too limited in duration to be deemed conclusive on the subject, yet they are, I consider, sufficient to entitle him to the credit of being the first to observe and practically to apply a solution of gambier as an antiseptic and as a preservative of wood or other substances immersed in sea-water, from the action of barnacles or sea worms.

It appears that in December 1848, the *Ocean Queen*, on her voyage from Singapore to London with a general cargo, of which gambier formed a principal part, was wrecked on the N. E. Coast of Lingin and sank in 9 fathoms water. Mr Clunis visited the wreck in April of the ensuing year, and remained, with one or two intervals, until the end of December last. Upon his arrival he found that the upper deck, although it had only been 4 months under water, was riddled with barnacles. A piece brought up by the divers, he described as all alive and emitting a humming sound caused no doubt by the insects in boring. Commencing operations by breaking out the gambier from the hold, the water all round the vessel soon became a strong solution of gambier which had the effect of killing every insect it came in contact with. A piece of the same deck, after a further period of 8 months immersion, was examined by Mr Clunis in December. All the barnacles had disappeared from it and not a vestige of life remained in the cavities.

Having observed the effects related above of the gambier solution in destroying the worms, Mr Clunis in August practically tested this discovery by paying the bottom of a Jolly boat with a composition of gambier, dammar oil and chunam. The boat was in constant use at the wreck for 4 months, and on his return to Singapore in December Mr Clunis having turned her bottom up, had the satisfaction to find that neither barnacles nor

even grass had adhered to the bottom in a period of 4 months during which boats payed with blacking or even chunamed, become foul and require scraping, as every one conversant with the subject knows.

On his return in December Mr Clunis brought with him specimens of some wood and gunny bags which had been upwards of a year in the gambier solution. The wood exhibited no marks of barnacles and the bags were as sound as when new and a good deal tougher. Any one desirous of personally satisfying himself may do so by inspecting these specimens at Mr Clunis's who will be most happy to shew them.

Mr Clunis further states that so convinced is he of the powerful effect of gambier upon the sea-worm that he has moored a buoy at New Harbour which he has payed over with a composition of gambier, lime and dammar oil, and he will be happy to submit the same to examination after a sufficient period of time, say two years, shall have elapsed.

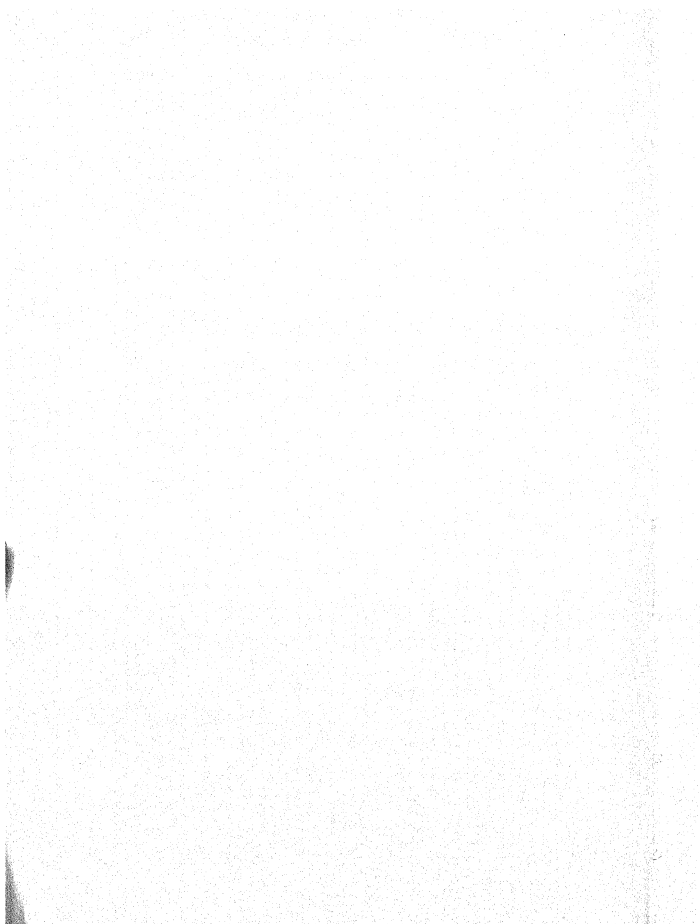
From these details we may infer—1st, that wood or canvas may be preserved in a solution of gambier for a period of at least 12 months, subject to a temperature averaging 80° of Fahrenheit.

2ndly—that a composition of gambier, dammar oil and chunam laid on a vessel's bottom will preserve it from the ravages of barnacles, and even from the usual deposition of slime and grass, for a period of at least 4 months.

On considering the protective qualities of Clunis' composition of gambier, the employment of that substance by ship-builders (it appears to me) would be for their advantage, especially at butts and on the outside of the timber previous to planking. House-builders might also try it as a protector from the white ants, which are so destructive in all warm climates.

T. C. DRYSDALE.

Singapore, 15th February, 1850.



THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

NOTES ON THE HEAD OF COUNTRY LYING BETWEEN THE HEAD
OF THE ZIMMI RIVER AND THE SOURCE OF THE
KAUNDRAN, ADJACENT TO THE SIAMESE
BORDER PROVINCE OF RYOUT RAUNG.*

By E. O'RILEY, Esq.

AFTER several unsuccessful attempts to recover a baggage elephant lost from my halting place near 3 Pagodas, I resolved on proceeding across the country in as direct a line as possible, keeping as near the base of the range of hills (hitherto designated the border range) as the route would admit. It was also my wish to trace this range so as to be enabled to define its correct geographical position, and by ascertaining the true watershed into the Kaundran and Zimmi, provide such indisputable data on the subject of the boundary between these provinces and Siam as might lead to the easy adjustment of a question, which, sooner or later, from the encroachments of the latter power in this direction, will demand the attention of the British government.

In all maps extant of this part of the country a well defined range of hills is delineated, a continuation in fact of that branch of the Himmalaya which separates from the main range in the northern extremity of Bhautan and connectedly, is made to pass through the tributary Shan states, and thence in a direct line

* Extracted from a Report.

through these provinces and the Malay Peninsula. That this is an important geographical error, I have pointed out in a former memoir on the geological character of these provinces, from data supplied by the late Dr Richardson during a journey into the Shan states some years since, and I have now to corroborate that statement from personal observation of the country forming the subject under notice.

The 3 Pagodas,* otherwise three masses of stones barely recognizable from the broken ground on which they are placed, are situated upon the base of a low hill which forms the southern extremity of a congeries of broken, irregular and low sandstone hills, which have no particular direction and appear to be isolated from the higher formations to the northward by rocky vallies of considerable extent, the water courses plainly indicating the drainage to be into the Kroon Katau on the south, and on the N. E. into the Megatta, the two streams which at their junction form the Zimme as shewn in the map of my route.

Proceeding in the direction of the higher ranges of hills to the north-east of the above position, for the purpose of ascertaining the point of divergence in the water courses, I crossed several low ranges of the secondary formations consisting principally of a soft grey sandstone and a highly ferruginous clay slate, which accompanied by limestone in the bed of the vallies appeared to be the general conformation throughout, and from the highest part of one of these ranges, I could plainly distinguish the main system of hills at a considerable distance to the northward, from which point the same irregular masses as spurs from that range appeared to extend in every direction. I had proceeded thus far within the Siamese district of Kyouk Aung without meeting with any distinct traces of a southern watershed or that flowing into the Siamese territory, but on descending I found a dry watercourse with a declivity to the S. E. and was informed by my Karen guide that it was one of the small feeders of the Mee Tsan, the latter being a branch of the Menam or Bangkok river, and that the upper source of the Mee Tsan approached very near to the source of the Thoung-yeen, the northern boundary river.

The absence of continuity in the main range of hills having thus been established, the subject of a well defined boundary at this distant point of the Tenasserim provinces, if confined to prominent natural land marks, or arranged upon the subordinate position of the three Pagodas, must present many obstacles to a speedy adjustment, but, as being preferable to all system of other boundary partitions, especially in a country of such irregular mountain masses as that described, I would respectfully suggest that the question be based upon the *natural drainage solely*, and thus by conforming to usages known to the native governments which surround us, place a lasting

* The boundary mark.

barrier against their encroachment, and obviate the necessity for the adoption of any ulterior measures of a nature likely to disturb the amity which at present exists between us.

It was my intention to have penetrated from this point to the source of the Kaundran, but was informed that the route was quite impracticable for elephants, and from the total absence of villages was rarely visited by any of the people from the boundary districts; I was therefore reluctantly compelled to retrace my steps to the point of junction of the Megatta with the Zimme river, and at a distance of two days march *within our boundary* effect a passage across to the Kaoundran—this I accomplished, as will be seen on reference to the map of my route; the distance throughout being across successive ranges of hills of from 2 to 3,000 feet height. Little expecting to have found vallies of such considerable altitude as those which formed the halting places, I was quite unprepared for the excessive cold which prevailed during the nights, and as we experienced several days of heavy rain, the fatigue and discomfort of this portion of the journey were excessive.

In the most inaccessible parts of these mountain vallies, on streams falling into the *Megatta* and *Kaundran* rivers, I found several extensive locations of Karens who had fled from the border Siamese provinces to these secluded spots, to escape the tyranny and oppression of the Siamese Government, and as from this point I subsequently traced the unwarrantable encroachments of that government for several days journey down the Kaundran, I shall refer to the following extracts from my diary for the particulars as noted at the end of each day's march.

The extract from the diary omitted until passing the Siamese village of Mee Que on the Kaundran.

"During the march to-day passed the village of Mee Que on the small stream of that name which falls into the Houndran. The encroachments of the Siamese Government extend within the British territory as far as this village; and for this unwarrantable exercise of jurisdiction, the only reason assigned is that the whole of the Karen population down to this point are emigrants from within the Siamese border districts and that not having as yet been recognized by the local authority at Maulmain, its *protection* has been continued to these people, under the more politic system however of being less oppressive than that which drove them into these provinces, the whole functions of administration so far as I could learn consisting of a rigid collection of the poll or family tax, and affording protection to the vagrant Shans and Siamese who in the character of elephant hunters, lose no opportunity of stealing the tame ones belonging to the Karen settlements, from which source the principal emolument of office of the border government authorities, is derived.

"The Karen locations since crossing the Mee Que Khong, contrast most favorably with those higher up the stream subject to

Siamese authority. Instead of annual clearings for new Toung Yas and houses of the poorest materials as with the latter, those under British control have well stocked gardens of oranges, plantains, jacks and sugar cane surrounding houses upon which considerable care has been bestowed, evincing at once a comfort and security, to which their less favored brethren are strangers. Owing to the extreme fertility of the soil, which is a rich loam well adapted to many species of cereal cultivation, the paddy lands for the most part although used for annual crops of Toung Ya grain, are perennial, upon which are also raised crops of tobacco, maize, cotton and indigo, from the sale of which to supply the Maulmain market the Karens as derive a considerable income—subject to the Siamese government however, such a display of resources would certainly induce an augmented rate of taxation."

In addition to the above extracts I may state, that every attempt on my part to ascertain the probable number of Karen refugees to whom the above remarks apply was met by the most palpable falsehoods, on the part of the head men; a good data however was afforded in the extent of the clearings, which, for the whole space of my route down the Kaundran extended in a nearly unbroken line on both banks of the river, and this area apportioned to settlements of the description met with, would at the lowest computation give a population of from 1,200 to 1,500 souls, who, as dwellers far within our boundary are still subject to the control of a government from whose oppression they have hitherto vainly sought a refuge.

Having performed the journey on foot throughout this central portion of the valley of the Kaundran and prosecuted with care an examination of its geological conformation, soil and capabilities, I can affirm with the greatest confidence that it is by far the richest portion of the provinces I have hitherto seen. Its soil in a general character is as before stated; a rich loam many feet in depth, as exhibited in the water courses and banks of the Kaundran, its component of lime being formed from the decay of the calcareous rocks which crop out at the surface in disseminated masses and combined with its other ingredients derived from the disintegration and partial decomposition of rocks of the secondary formations in which the oxide of iron has been a prominent feature, and consequently the active agent of the rapid decay of such formations, has thus formed a soil whose astonishing fertility was manifest in the luxuriant state of all descriptions of vegetation at the period of my visit, although several months had passed without a single shower of rain.

In conclusion, I should consider my duty but imperfectly performed if, in pointing out the merits of a hitherto totally neglected portion of the provinces, I withheld any suggestions which a long experience empowers me to make, tending to secure that

improvement in our present limited resources which is so much to be desired, and with this sole object in view I respectfully submit that the period has now arrived when the necessity for extending the practical functions of government to our frontier instead of confining them as hitherto to the coast settlements, has become imperative, the more so as the decadence in our commercial resources is becoming annually more apparent. The first steps then to the attainment of this object should be directed towards the effectual arrangement of the boundary question, which at the northern extremity of the provinces has on several late occasions demanded the attention of the local authority. It must be sufficiently evident from what has been advanced that this important point once settled, and subordinate native officers of government established in the vicinity of the boundary, an inducement would be held out to emigrants from the Siamese and Shan provinces which would be availed of by numbers who at the present period are held back by the circumstance, that the numerous emigrants already established within our territory, derive as yet no particular advantage from the change, but, with the same supervision extended to these distant tracts as that exercised nearer head quarters, and with a direct communication with the chief authority in charge by means of the periodical visits of that officer, the settlement of this fine country would speedily follow the extension of that protection to it which all the surrounding governments respect; and an opportunity would thus be afforded for the introduction of improvements both in articles of their present cultivation i. e. tobacco, indigo, cotton, flax &c. and in others which in after years would prove a valuable acquisition to the exports from these provinces.

I have every reason for the impression that this portion of the provinces is rich in mineral deposits which would be found useful as articles of commerce. I was fortunate enough to discover several deposits of a rich ore of antimony (see specimens) and traced the existence of both lead (Galena) and a sulphuret of copper, but from the refusal of the Karens to assist in a more minute exploration, I was compelled to relinquish the undertaking, but I ascertained that numerous sites of valuable metallic deposits are known to the Karens, who, until placed within the sure security of the British protection, would not be induced to reveal their several localities.

Amherst, 1st June, 1849.

A VISIT TO THE CITY OF CHIANG CHAU.

By the Rev. A. STRONACH.

As the large inland city of Chiang-chau has been but seldom visited as yet by any European, a short account of a visit which I paid to it lately may not perhaps be altogether uninteresting. That city lies in a westerly direction, or west by north, about 35 or 40 miles from the city of Amoy, and is the chief city of the large district of Chiang-chau in the province of Hokkien. This was the second time I had been there, so the scenery which presented itself to my view, though still full of exciting interest, appeared divested of much of the strangeness which its whole aspect bore on my first visit.

It was on the morning of Friday the 28th of December last, that with a few friends I went before daylight on board a Chiang-chau fast boat which we had previously engaged, and at once we commenced sailing up the inner harbour of Amoy. When day began to dawn we found ourselves opposite Pagoda Island, and already passing it lying on our left. The wind and the tide both being in our favour we soon left the island far behind us, and were proceeding rapidly in a westerly course across the expansive bay towards the mouth of the Chiang-chau river. Our boat-men knew the course well, otherwise we should have been somewhat at a loss to know whither to steer, as nothing appeared before us for a long time but a seemingly unbroken boundary of land. But on approaching nearer, the river gradually opened out before us, the winding direction of its course behind the rising ground having previously hidden it from our view. While proceeding up the river we saw traces all along of its having formerly spread itself over a wide extent of ground lying at each side of its course. But now extended embankments keep it within narrower limits, and the recovered land is usefully employed in the production of paddy, or of a long sort of grass from which ropes and mats are made. Still sailing rapidly with the tide up the river, we soon arrived opposite the large and picturesque-looking town of Hai-teng; and after about another hour's sailing we reached the town of Chioh-bey. This town lies about half way between Amoy and Chiang-chau; and both it and Hai-teng are on the south side of the Chiang-chau river. Chioh-bey is a long and narrow but very populous town, the houses generally forming nearly parallel rows running along in the direction of the river. I have been twice visiting the people of that town, and have found them,—like the generality of the inhabitants of the towns and villages around Amoy,—always very affable and friendly. In increasing crowds they followed us walking along their streets; eagerly they accepted the Christian tracts or books in their language which we had taken

with us for distribution; and as a dense living mass they stood still and listened eagerly to us while we preached to them the gospel.

Leaving Chioh-bey on our left, after having proceeded about two miles farther we saw the town where the famous pirate Koxinga used to reside. At the northern bank also, the ruins of what was once a fort belonging to him still meet the passenger's eye as he goes up or down the river.

The views of the country which presented themselves to us all along our course were full of varied beauty. Green hills were all around, some low and gently sloping, others higher and more abrupt, while some of them were adorned with pine trees ranged in rows up to their very summits, appearing, as seen between us and the clear blue sky beyond them, like earth-weaned pilgrims travelling upwards towards heaven.

But the most interesting feature of the landscape was the perpetual recurrence, at short intervals of distance from each other, of those clusters of green shady trees which always indicate the locality of a village, or of a smaller or a larger town, showing that the whole district was densely peopled by members of the family of *man*.

We proceeded by water till we came to within two miles of the outskirts of the ancient and still flourishing city of Chiang-chau. It was then about one o'clock P. M. when we found that the tide had receded so much as to leave the water too shallow for our somewhat bulky boat getting any further up at that time, so taking with us a large supply of Chinese tracts, we landed and walked the rest of the way by the river side.

On arriving at the suburbs of the town we walked straight on without meeting with any sort of hindrance to our progress. Many persons came near and gazed at us as we passed, and soon we were surrounded and followed by large companies of people; but their words and their looks evinced only feelings of pleasing wonder; and the wonder and the pleasure which they manifested visibly increased when they heard us speak to them in the familiar tones of their own language. We distributed many tracts among the more intelligent looking of the people who crowded upon us eager to receive them; and repeatedly we stood on high steps in front of the warehouses and preached to them of Him whose grace our tracts unfold.

Having passed along several streets and under two or three high arched ornamental stone gateways, commemorative of famous men or of virtuous women of olden times, we arrived opposite the court of the chief magistrate of the city. There two or three of the city police came forward and offered to conduct us to any place which we might wish to see; but it was evident enough that they wished us to make our stay in the city as short as possible. We told them we wished to walk along the top of the city walls, as we knew we should be less crowded and could more pleasantly

look around us there. We ascended above the eastern gates and walked over half the extent of the city's boundary walls, looking down upon the crowded streets, the various public buildings, and the more secluded dwelling houses of the rich: and towards the west of the city our eyes were gratified with a sight of some beautiful parks and fruit and flower gardens.

Passing out of the city by the western gate, we ascended a gently rising hill beyond it whence excellent views may be obtained of the city and the country around. This hill is called K'aigwan; it has three separate summits at short distances from each other, and each of them is surmounted by a covered porch. Standing under those porches, and enjoying the pleasing shade which they yielded us, we contemplated in various aspects the city which lay opened out to our view as a vivid picture, and we looked with much interest on the widely extended prospect before us. The plain on which the city is built stretches far to the northward and to the eastward before it reaches the high hills by which it is bounded; and over that wide plain we traced towns and villages almost innumerable.

From the fact that the cities of China are all built after one model, we feel that the sight of one makes us acquainted with what all the rest are like; some cities are larger and more opulent than others, and the scenery around each has its own specific character, yet the general appearances of the houses, the shops, the public buildings, &c., are so much alike, that the impression of mysteriousness may pass off from our minds in thinking of the multitude of cities in the interior of China to which no foreigner has yet had access.

But the more we see of the real state of the people, who, in numbers almost without number, are spread abroad over the face of this vast land, the more fervently should our desires ascend to heaven for the speedy evangelization of China.

Amoy, 8th February, 1850.

ON THE LEADING CHARACTERISTICS OF THE PAPUAN, AUSTRALIAN, AND MALAYU-POLYNESIAN NATIONS.

By G. WINDSOR EARL, Esq., M. R. A. S.

CHAPTER IV.

THE MALAYU-POLYNESIANS.

MOLUCCAN TRIBES.

The Serwatty Islanders---Division into castes or classes---The Marna or Priest-Ruler caste---The Uhur or Landholder caste---The Ahka or Serf caste---Idolatry---The Bulan Mas or Golden Moon---Cause of the disappearance of coin from the circulation---Porrok or triennial feast---Human Sacrifices---Kidnapping at Wetta---Ancestral relics---Porcelain Bangles---Elephants tusks---Funereal customs---Corresponding ceremonies of the Nagas of Assam---Mistake of the early navigators---Manufacture of iron---Peculiarity of the Cotton manufacture---System of Agriculture---Palm Sugar---Fruits---Weapons---The Sumpitan or blow-pipe---Tattooing---Tradition of Kissa.

In the preceding chapter I have alluded to the singular spots selected by the Serwatty Islanders as sites for their towns and villages, a peculiarity which is calculated to arrest the attention of a stranger on his first arrival among them. A closer acquaintance brings to light a social peculiarity which I never observed among the aboriginal tribes of the western parts of the Archipelago, but I am of opinion that distinct traces of it will be discovered when attention is called to the subject. The entire population is divided into three castes or classes, the separation between which is maintained so scrupulously that intermarriages between individuals of the different castes are of very rare occurrence, and then only in parts of the group where foreign influences have in some degree broken up their ancient institutions. These are called respectively *Marna*, the ruling caste; *Uhur*, the proprietor or landholder caste; and *Ahka*, serfs or bondsmen.* No difference can be detected between the two last as far as regards personal appearance, but it struck me that the members of the *Marna* caste were generally physically inferior to the others. This is particularly apparent on the island of Moa, where the chiefs are a most ungainly set of men, with large heads, short bodies, little crooked legs, and dark complexions. This personal inferiority, so different from what is met with in other parts of the world, where the privileged classes are generally better proportioned than the others, is difficult to be

* In the Malayan dialect of the Moluccas, which is the polite and commercial language of these Islands, the castes are called respectively *Marna*, *Bruah*, and *Budak*. The last term, which signifies *slave*, is very inapplicable to the native-born members of this caste, and probably originated in the circumstance of the slaves that are imported occasionally from Timor being considered as members of this inferior caste;---indeed the Malayan language has no term calculated to express the peculiar position in which the *Ahkas* are placed.

accounted for, unless it may have arisen from the circumstance of the *Marna* caste at Moa being very small in number, which has produced frequent intermarriages among families; for at Kissa, where the *Marna* forms a more numerous body than on any other island, this inferiority is not so apparent, although it certainly exists.

The *Marna* is a privileged, indeed a sacred caste. It could not otherwise have maintained its position with regard to the *Uhur* or proprietors, who are virtually the rulers, although no others than those of pure *Marna* descent can be elevated to the chieftainship. The priests are also selected from this caste, and in those islands where the ancient pagan rites are maintained in strict purity, the offices of Chief Priest and Orang Kaya, or political chief, are combined in the same individual.

The *Uhur*, or proprietor caste, forms a very influential body and although no member of this caste can aspire to the chieftainship, it struck me that they carried matters pretty much their own way on all occasions in which I had an opportunity of witnessing their deliberations. All questions of national importance are decided by public meetings, held generally under the great tree, but sometimes, especially when the weather proves unfavourable, in the house of the chief, or in some other building sufficiently capacious for the purpose. Influential members of the *Ahka* caste are not excluded from these meetings. I have heard that very noisy and violent discussions sometimes take place, but the only occasions on which I had opportunities of witnessing their deliberations were when they were called upon to decide whether they would open a commercial intercourse with us, and as this would enable them to dispose of their live stock and provisions, of which they had abundance, in exchange for articles which they much wanted, there was no probability of there being any great difference of opinion upon the subject.

The *Ahka*, or serf caste, is generally the most numerous, but not always, as I shall have occasion to mention below. I could never rightly understand the position of this caste, except that they owed personal service on certain occasions, and at certain times of the year, seed time and harvest, for example, to the proprietors, whether *Marna* or *Uhur*, on whose lands they were located. Some individuals of the tribe are in very comfortable circumstances, and I was informed that the Orang Kaya Bakker of Kissa frequently had occasion to borrow from some of his principal *Ahkas* when he wished to make any extensive purchase. Domestic service is always performed by slaves, generally brought from Timor, who, although numbered with the *Ahka* caste, do not actually belong to it, indeed some of the *Ahka* have domestic slaves of their own.

At Kissa the *Marna* are very numerous, indeed Wannili, the town situated nearest to the anchorage, is exclusively occupied by them and their domestic slaves, whence it is often called *Nigri*

Marna. At Letti, the next island to the eastward, the *Marna*, are nearly extinct, and on more than one occasion the inhabitants have had to obtain an Orang Kaya from Kissa, it being a custom for the villagers to borrow a *Marna* from a neighbouring town or island when their own race of chiefs has become extinct. At Luan and Baba, again, the *Marna* are numerous enough.

The Serwatty Islanders, at least those who retain their ancient form of worship, are decided idolaters. Their idols, which are exceedingly numerous, consist, for the most part, of rudely carved wooden images of figures in a sitting posture, with the knees close to the chin, and the arms crossed over them. (A) Others consist of mere bunches of leaves tied up together, and others again of long stones which are stuck upright in the ground. But the emblem that receives the greatest amount of respect and adoration is a plate or disk formed of precious metals, sometimes of pure gold, but generally of gold and silver mixed, which is intended to represent the sun or moon, I could not exactly ascertain which, but the name by which it is known, *wolli mahe*, or in Malayan, *bulan mas*, signifies "Golden moon." The highest ambition of a chief is to accumulate sufficient bullion during his life time to form a golden moon, but it generally requires the united efforts of several generations before a sufficient quantity is collected. The islands themselves furnish neither gold nor silver. Formerly both these metals were imported from Amboyna and Banda in the shape of Dutch coin, as payment for live stock and provisions, but latterly these settlements have obtained their supplies elsewhere. The Dutch gold ducat is still more highly prized than any other description of coin, owing to the purity and ductility of the metal, which admits of its being more readily melted down than coin containing more alloy. The Serwatty Islanders are not singular in their taste for the more ductile of the precious metals. The preference shewn by the natives of Sumatra for the old Carolus or Pillar dollar, and the total disappearance from the circulation of the immense quantities that have been imported, especially at Acheen and the Pedier Coast, have often excited the surprise of visitors. This preference, which, indeed, amounts to the absolute refusal of any other description of dollar by the aborigines of the interior in exchange for their produce, is also on account of the superior purity and ductility of the old coin, this also being required for the purpose of melting down. What object the Battas may have in thus running down the dollars I am not prepared to say, but perhaps some of the numerous readers of this Journal may be able to furnish the information. As I shall have occasion to revert to this subject below, I will dismiss it for the present.

Sacrifices of buffaloes, pigs, goats, and fowls are offered to the idols on occasions when an individual or the community is about to

undertake an affair or expedition of importance.† The carcasses are devoured by the devotees, which ensures a respectable attendance when the offerings are numerous. A grand ceremony termed *Porrok* takes place at intervals of about three years, when the decayed idols are renewed and the damaged ones renovated. As far as I could discover no fixed period is assigned for this ceremony. Its ostensible purport is to trim the *Au-numu* or sacred Waringin tree, (B) which cannot be lopped, or otherwise molested at any other time, and as the priests alone decide as to when this trimming is required, of course they can fix the time for the *porrok* according to their pleasure. Human sacrifices or rather the heads of victims who have been slaughtered for the purpose, still continue to be offered up on these occasions at several of the eastern islands of this group, more particularly Sermattan and Baba, but at Kissa, Letti and Moa, this practice has been discontinued at the instigation of the Dutch authorities of the Moluccas, who, whatever may have been the results of their policy elsewhere, have appeared among these islands only in the light of genuine benefactors. On the occasion of my first visit to the south coast of Moa in the year 1838 an assembly of the chiefs whom I had invited to meet me at Patti was delayed several hours awaiting the arrival of the Orang Kayas, Alexander and Paulus, of the Klis towns. They informed me of the cause of their delay, which was as follows:—During the previous year a party of warriors had sailed from Sermattan for Wetta, a large island near the north side of Timor, for the purpose of obtaining some heads for a *porrok* that was about to be held. The Wetta people beat them off, and on their return home, the party touched at the north side of Moa, which part of the island is almost uninhabited, where they met with two herdsmen of Klis who were tending their flocks in the neighbourhood, killed them, and took away their heads. This proceeding on the part of the Sermattans had apparently not been approved of by their friends at home, for on the evening previous to the day fixed for our meeting ambassadors had arrived at Klis from Sermattan, bringing a golden moon, a quantity of bee's-wax and other valuables, as a compensation for the massacre they had been guilty of. A public meeting had been held in the morning, and so indignant were the people of Klis, that the Orang Kaya Paulus had the greatest difficulty in preventing them from tearing the ambassadors to pieces on the spot. The generous little man was quite hoarse from his efforts to restrain the impetuosity of his people, but he had succeeded, after several hours noisy discussion, in inducing them to accept the compensation, and the ambassadors had already departed for their own country. It is not a little singular that Wetta has been from time immemorial the island selected to furnish the victims for their

† I was informed by an intelligent native of Kissa, who was several years in my service, that at his island the buffaloes are not offered as sacrifices, but are merely slaughtered to furnish food to those who attend the ceremonies.

human sacrifices to all the islands of the Serwatty group. I find that the same occurred among the groups of the Pacific when human sacrifice was prevalent there. One island of each group was always hit upon to furnish victims for the rest.

These festivals, if I may so call them, are the only occasions on which human sacrifice is practiced by the Serwatty Islanders, or I believe, by any of the Moluccan tribes. I have certainly heard other instances attributed to them; the annual sacrifice of a virgin, for example, by the people of the south end of Timor, but they are not well authenticated. The wholesale sacrifice practiced by some of the tribes of Borneo and the Phillipines has never obtained here. It is singular enough that at the Arru Islands, where the natives appear to be a mixture between the Papuan and Malayu-Polynesian races, this practice has never been heard of, although their customs generally, are decidedly of a Malayunesian character. The same remark is applicable to the Tenimber or Timorlaut group, although the natives are the most turbulent and warlike of the eastern tribes, but here our information is too scanty to enable us to come to any decision upon the point.

The Serwatty Islanders are remarkable for the care with which they preserve relics of their ancestors. Every chief, indeed every head of a family has his store of precious articles which have been handed down from father to son from the remotest times. These are generally kept in a cave on some hill side, the mouth of which is closed by large stone, and so sacred are these depositaries considered that instances of their being plundered are unheard of. Among the most highly prized of these relics are certain bangles or rings, intended to be worn on the wrists and ancles, made of a composition apparently intermediate between glass and porcelain. These articles have an immense artificial value fixed on them, in which particular they do not yield to the famed jars of the Dyaks of Borneo. I see that old Valentyn mentions the circumstance of the Dutch East India Company having during the earlier part of their career, procured a number of similar bangles to be made in Europe, with the view of using them as articles of trade, and that although the imitation seemed to be perfect, it would not satisfy the practiced eye of the natives, and the speculation failed.

But the most singular of all these relics consists in *elephant's tusks*, and so great is the demand even now for these articles that Siam and India seem scarcely to afford a sufficient supply, for I see by late commercial returns that the Dutch are importing African tusks from Europe for traffic with the Moluccas.

I remember many years ago, when these remote islands were less known than they are at present, having listened with almost incredulous surprise to the tales of the Eastern traders, who stated that the Islanders hoarded up these valuables without making any ostensible use of them, and gave prices which enabled the traders to buy up these articles at Singapore on any terms, in fact to

command the market. The importation of elephant's tusks is now confined almost exclusively to the Arru and Tenimber islands, where the pearl and trepang banks enable the natives to accumulate sufficient wealth to purchase them. The only purpose to which they are applied is to grace the funereal rites of the individual to whom they belong. At the western islands of the Serwatty group, where many of the *Marna* have become Christians, the custom is falling into disuse, and at Kissa I saw a tusk in the hands of a native turner, who was making boxes from it. As no elephants are known to exist nearer them the continent of Asia, this matter assumes a considerable degree of interest, especially when the tenacity with which these islanders hold to their ancient customs is taken into consideration. The only clue to the mystery that I have been able to discover is contained in an account of the tribes of South Eastern Assam which I have already alluded to, and a notice of which, remarking the great resemblance which many of their customs bear to those of the Malayunesian tribes, appeared in a recent number of *this Journal* [Vol. II. p. 236.] This account states that a tusk elephant and some hundreds of buffaloes and pigs are slaughtered on the death of a chief, after which the body is deposited on a platform raised in the forest, where it is allowed to decay. The entire process there described is adopted with perfect exactitude by the inhabitants of the Eastern Serwatty Islands of the present day, with the sole exception of the slaughter of the elephant. Throughout the Molucca Seas, the bodies, when they have ceased to become offensive, are deposited under the roofs of the houses. These customs seems to have come under the notice of the very earliest European visitors to the Moluccas, for Galvano, the historian of the discoveries of the Portuguese, who wrote about the year 1550, states that Serrano and D'Abreu, the first Portuguese explorers of the Moluccas, observed the custom at Guliguli, on the south side of Ceram, where they loaded their cargo of cloves; and deduced from it that the natives were cannibals, supposing that the bodies were kept for food. Probably many of the tales of anthropophagy with which the narratives of the early navigators are crowded had no better foundation.

The Serwatty Islanders are not unacquainted with the manufacturing arts. They are skilful in forging iron into swords and parangs or chopping knives, which are remarkable for their temper. The fuel employed is charcoal, and the bellows is precisely similar to that used by the aborigines throughout the Indian Archipelago, consisting of two hollow tubes of wood, closed at the bottom, and placed upright beside each other, having orifices at the lower part which communicate with a single tube leading to the fire. A piston, composed of bunches of feathers fixed to the end of a stick, is fitted into each tube, and the blower, by pumping with each hand alternately, produces a constant current of air. But the manufacture in which they display most skill and intelligence is

that of cotton cloth, which is carried on to considerable extent not only at the Serwatty Islands, but on the neighbouring island of Timor. The cotton is grown on the islands, and is spun into thread by means of a simple spindle consisting of a stick fixed into the centre of a small circular plate of lead. The thread is dyed before it is woven, and by tying up certain portions with vegetable fibres before it is thrown into the vat, they are enabled to produce figures on the cloth with a distinctness and regularity that is calculated to excite no small degree of surprise. The texture of this cloth, which is extremely durable, is totally distinct from that of the cloths manufactured by the Malays, Javanese, and the coast tribes of Celebes. A specimen of this cloth is to be seen in the Singapore Museum, and a few moments inspection will convey a better idea of its character than any description. I see that I am not alone in my estimation of this singular and striking manufacture, for M. Muller, the author of one of the volumes of the splendid national work on Netherlands India, recently published under the auspices of the King of Holland, has given coloured drawings of several specimens which he met with on Timor. The texture is a kind of hard, coarse, twill; and the colours, although not bright, are exceedingly lasting, in fact it holds the same position with regard to cotton manufactures that Persian carpets hold with regard to woollens.

With the view of showing the difficulties that sometimes attend the prosecution of these enquiries, I will enter into some particulars as to the events that befel me in endeavouring to trace out the origin of this peculiar manufacture. On my return to Port Essington, after my visit to the islands, with several specimens of this cloth, one of the officers of H. M. S. Alligator, who had been employed during many years on the South American survey, recognized it as South American Indian cloth, and on comparing it with his *poncho* which he still retained, we found it to be precisely similar both with regard to its texture and the colour of the dyes. The subject naturally excited some interest, and on referring the matter to the commandant, who had spent many years in Portugal, he suggested that they both resembled the coarse cloths manufactured by the natives of that country. As the Portuguese had settlements both at Brazil and at Timor, in the immediate neighbourhood of the spots whence each specimen had been obtained, we naturally concluded that the manufacture had been introduced by the Portuguese at both places; and it was not until some years afterwards, when I had opportunities of comparing it with a specimen of Batta cloth from Sumatra in of the United Service Museum in London, that I detected the error we had fallen into. The Batta cloth, and also that of the Dyaks of Borneo, is precisely similar in every respect to the Serwatty Island cloth, but both the former are much inferior in point of texture. I have since seen a *tally pinding* manufactured by the aborigines of Celebes, which is also

of a similar description. I have entered into this digression as it tends to show that the manufacture of cotton was known in the Archipelago previous to its introduction by the Hindus, and by following up the enquiry we may ascertain to what people of Asia the Archipelago was indebted for the introduction of this important art.

The system of agriculture in use among the Serwatty Islanders is exceedingly simple, indeed the nature of the country, which is rough and rocky, is not calculated to invite improvements. The soil, which is rich, although sometimes scanty, is turned up by means of wooden stakes, hardened in the fire, and sometimes pointed with iron, one of which is held in each hand of the labourer. The principal articles cultivated are maize, millet, yams, sweet potatoes, and a root which appears to resemble the manioc. Several varieties of climbing beans are also produced, but these can scarcely be said to be cultivated, for they seem to spring up spontaneously near the houses and gardens, and overspread the neighbouring trees and fences. The use of the plough is unknown, indeed it does not seem to have extended further to the eastward than Sumbawa, and probably Sumba or Sandal-wood Island, but I am not quite certain as to its being in use at the latter island. It has evidently been introduced into the Archipelago from western India. Rice is occasionally cultivated on the low lands near some of the European settlements on Timor, but the ground is prepared there by driving a herd of buffaloes to and fro over the ground until it is worked up into a paste-like pulp highly favourable for receiving the seed. Wheat is also cultivated on the elevated Table Lands inland from the Portuguese settlement of Delli, on Timor, but this has been introduced by Europeans, to whom the use of the grain is almost solely confined.

The Islanders do not usually reside on their *apaké* or farms, which only contain a small hut for the men who watch the crop when such superintendance is required; but at seed time and harvest almost the entire population, male and female, issue out of the towns to the plantations, where they work night and day until the seed is planted or the crop gathered.

The produce of the plantations does not always suffice to furnish the Islanders with food until the coming of the next harvest, in which case they subsist chiefly on the liquid sugar, which is obtained by boiling the juice extracted from the *lontar* or *tuak* palm by tapping the flower-spathe, until it attains the consistency of treacle. Periods of great scarcity sometimes occur, especially at Kissa, which, from its contiguity to the high land of Timor, is sometimes deprived of its share of the tropical rains brought by the westerly monsoon.

Fruits of the descriptions common to the Indian Archipelago are abundant, with the exception of the *durian*, which as far as I have been able to ascertain, is unknown. Its place, however, is supplied

by the bread-fruit of the Pacific, and its name "*uru*" is identical with that by which it is designated at the Society Islands, but it by no means takes a prominent position as an article of food.

The weapons of the Serwatty Islanders are short swords with curved blades and broad blunt ends similar to those of the old Turkish scymeters, so that they cannot be used for thrusting; spears with broad iron heads; and long arrows, which are projected by means of powerful bows of bamboo or *nibong*, but these last have been superseded in a great measure by the English musket, which has been introduced in great numbers both here and on the neighbouring island of Timor. They have also the *Sumpitan* or blow-pipe, by means of which small darts of split bamboo are projected to a great distance, but these are only used for the chase. The blunt ends of the darts are fixed in small cylindrical pieces of pith, which exactly fit the bore of the tube, so that the entire force of the air emitted from the lungs acts upon the dart when it is projected. The kris or dagger of the Malays and Bugis is unknown, indeed they have no weapon smaller than the spear that is calculated for stabbing.

Tattooing, or drawing figures on the skin by means of punctures, is practiced, but by no means generally. The colouring matter employed is extracted from the seeds of a plant which resembles wild indigo, the leaves of which furnish also a blue dye for their cloths. This custom is only prevalent among the more barbarous tribes. It is scarcely ever met with at Kissa and Letti, where the natives, on all great occasions, are clad in cottons of their own or of European manufacture; indeed tattooing seems to disappear everywhere before civilization, which enables them to adorn their bodies with far brighter colours than any they can produce upon the skin.

NOTES.

(A)

The extent of my information will not authorize me in attempting to give a clear view of their system of divinity, in fact it did not appear to me to be clearly understood even by the priests themselves, but the following seem to be the leading points of the system as far as regards their idols. Luli, the principal idol, is intended to represent the father of mankind. Among the minor idols, Aukara maintains the chief position, but wherefore I am not prepared to say. The others seem to represent the ancestors of their particular tribes or families. The following particulars concerning *Loiroho*, *Taiasa*, *Tilhai*, and *Mauhai*, four of the principal ancestral idols of Obousa, the most populous town of Kissa, situated on a hill near the centre of the island, were related to me by the intelligent chief of that place, who, although a Christian, seemed to hold the memory of the persons they were intended to represent in high respect. I must premise that Kissa, although so small an island, is occupied by two distinct tribes of the same race, who have very little intercourse with each other, in fact use dialects so different that they can only communicate through the medium of interpreters. The smaller tribe occupies the south western end of the island, where they have four large villages. The tradition goes to state that these *Oirata* people, as they are called, came to the island long after it had been occupied by the others, being a tribe that had been driven out of some country to the westward, and that

the old settlers tried hard to prevent them gaining a footing on the island, but without success, the new comers being invariably the victors. While this contest was going on, four men arrived at Kissa from *Maupéhi Melai*, an island near the south side of Timor, who, after a violent struggle were bound by the people of Wanrili and kept as prisoners, but were released on promising to assist them against the intruders of Oirata. They kept their promise, and in the next encounter that took place performed prodigies of valour, killing several hundreds of the enemy with their own hands, and so terrifying them that they have never attempted since to extend themselves beyond the spot they occupied on their first arrival. In return for this act of kindness, the Orang Kaya of Wanrili, who seems to have been then as now the chief potentate on the island, offered them any spot that they might choose as a place of residence. They selected the beautiful hill which is now crowned by the town of Obousa, and having taken to wife four maidens of Wanrili, became the progenitors of the present inhabitants of Obousa. It is scarcely necessary to say that these four men were the individuals whose names have been handed down to posterity as deities.

This tradition is borne out by the present condition of the island, and especially by the cordial friendship that is always said to have subsisted between the people of Wanrili and Obousa. I have some doubts, however, about the locality of *Maupéhi Melai*, as I found that on all the other islands the people had some superstition connected with the south coast of Timor: This island is the largest piece of land known to them, and the south coast is almost a *terra incognita*, so that all places with whose exact locality they are not acquainted, are invariably referred to the neighbourhood of the south coast of Timor. Simon, the brother of the Orang Kaya of Obousa, who is distinguished as a bold and intelligent navigator, made an attempt a few years ago to reach *Maupéhi Melai* in a cora-cora, but it is said that when within sight of the island a strong southerly wind arose which blew him back to Kissa.

(B)

In the preceding chapter I have called this tree the "Ficus Indica," and it is so written in my notes, but I cannot at this distant date recall to mind the particulars that induced me to come to this conclusion. I suspect, however, that I have gone farther than my limited botanical knowledge authorized me in doing, for on referring to modern works on this science, I find that the number of varieties of the "Ficus" genus is so great, and the distinctions between them so minute, that only an experienced botanist is fitted to decide the question. The magnificent Waringin trees at the Batu Tulis, near Buitenzorg in Java, which are known in Europe by the painting in the Museum of La Haye, are stated by Count Hogendorp in his "Coup d'oeil sur l'Isle de Java" (p. 197) to be the "ficus benjamina." Blume, the celebrated botanist, designates these identical trees "Ficus microcarpa" (*Lindley's Vegetable Kingdom* p. 267.) Where such confusion exists respecting trees so well known as these, and which are inspected by almost every stranger who visits Batavia, it becomes evident that much laborious investigation will be required before the numerous varieties of this genus are systematically classified. The Malayan name, "Waringin" appears to be that of the genus, for it is commonly applied to all the larger varieties of the "Ficus" from Sumatra in the west, to New Guinea in the east, indeed wherever the Malayan language is spoken. The Amboyna variety of the Waringin struck me as being identical with that of the Serwatty Islands, and it was probably there, the scene of the labours of the great Rumphius, that I obtained the information which led me to class it as the Ficus Indica. *Au-nunu* ("Au" signifies "tree") is the name by which it is known at Letti and Kissa, and, I believe, throughout the Serwatty group. It seems also to be identical with the "Ficus" which is found in the small patches of oriental jungle scattered over the northern coasts of Australia, and which have evidently originated in drift cast up by the sea. There is a superb specimen on the shores of Knockers Bay, Port Essington, which appears to be of great antiquity. It is called by the natives, who have many superstitions concerning it, "*qalli imburaburra*," or "tree of the spirit." Robert Brown, the eminent botanist who accompanied Flinders, must have met with specimens of this variety, but I have not his work to refer to.

ON THE WORDS INTRODUCED INTO THE ENGLISH FROM THE
MALAY, POLYNESIAN AND CHINESE LANGUAGES.

By JOHN CRAWFURD, Esq.

I read before the British Association last Autumn at Birmingham a paper on the Oriental words adopted in English, and the present communication is that portion of it, which with some corrections, comprises those taken from the Malay, Polynesian, and Chinese languages. The original paper has not been published with the exception of a few extracts in the *Athenæum*.

Malay Words.

(*Bamboo.*) My friend Professor Wilson informs me that this word belongs to the Canarese, but it is certainly used in the western side of Sumatra, and Mr Marsden inserts it in his Dictionary as good Malay, with the orthography of Bambu. It is, however, unknown to the Malay language, except in Sumatra. The Malayan name is Buluh and the Javanese Priuṅ. Still it is more likely that the word found its way into the English, and other European languages from Sumatra, than from Canara, with which the early adventurers had very little intercourse.

(*Bankshall.*) The name given by Europeans to the office of the Master Attendant, or Intendant of a Port. It is most probably taken from the Malay word Banṅsal, a shed, an outhouse.

(*Bantam fowl.*) Bantam in the island of Java, correctly Bantân, was one of the first ports visited by the Dutch and English. It was, at the time, an emporium, and frequented by Chinese and Japanese junks. Here our countrymen found the small breed of fowls, with which we are now familiar. They had been imported from Japan, of which alone they are natives, but our countrymen, finding them at Bantam, proceeded at once to call them by the name, which they have ever since borne. In my time, there was not a single bantam to be found in the kingdom of Bantam.

(*Bird of Paradise.*) This is certainly not an Indian word, but it is meant for a translation of one. The name of the bird in the Malay is buruṅ dewata, or manuk dewata in Japanese. Buruṅ in Malay is bird, or fowl, and manuk is the same in Javanese. Dewata is Sanskrit, and is a god, or gods, the compound of course meaning "bird of the gods," no doubt on account of its beauty. The birds of paradise are natives of New Guinea, and not known in any part of the Archipelago west or north of it. The Malays and Javanese, who conducted the carrying trade of the islands on the arrival of Europeans in the East, gave these birds their own name, which bears no impress of an indigenous one. In the language of the Negroes of New Guinea, who catch and preserve these birds, they are called manbefor. A pair of birds of paradise

brought home by the companions of Magellan after the first voyage round the world, and presented to Charles the 5th, were the first brought to Europe. This was in 1522.

(*Camphor.*) Sanskrit, Kapura. Malay, Kapur. Arabic, Kapur. The original word is probably Sanskrit. The Spaniards have had it from the Arabs, as the form of the word Alcamphora shews. We most probably took it from the Malays.

(*Caddy.*) Very probably the Malay word Kati, from the small boxes of fine tea containing one or two catties weight, or from a pound to two pounds and two-thirds.

(*Catechu.*) Catechu, or Terra Japonica, in Malay Kachu, Hindi Kath, the inspissated juice of the dark-coloured heart of the Acacia Catechu. To judge by its form, and sound, it seems to have been taken by us from the Malay, and not from any Hindu language.

(*Cockatoo.*) Malay Kakatuwah—a vice, a gripe, and also the name of the bird, no doubt referring to its powerful bill. Some of the Papuas of New Guinea, who catch these birds, and sell them to the traders, call the common cockatoo with yellow crest (the most common of the family,) Mangaras, others give the cockatoo the name of Akia. It frequently happens, indeed, that the name given by the trade prevails over the native, as in the names for the clove, the nutmeg, pepper, cubeb, camphor, bird of paradise &c.

(*Compound.*) A word in constant use with the English in India, meaning the yard or enclosure round a dwelling house, the quarter of a town, a village because enclosed.

(*Creese.*) Malay, Kris. The generic name for a dagger or poniard.

(*Gamboge.*) Our word is from the Malay Kamboja, the name of the country, which is the chief source of production. The Portuguese have two names for this production, Gomma rom, and Gomma gutta. The former is nearly correct, for the last part of it is evidently the Malayan name rong, and the first merely the word gum. The last part of the second name is the Malay for gum, viz. gatah; so that the gum is in two languages. One of two Spanish names is the same with this last Portuguese one. The other is Gutta gambo which seems to be the Malay word Gâtah, gum, and something like one-half of the word meant for Gambodia, correctly Kamboja. The French have gomme gutte, which makes, literally translated, gum-gum!

(*Gambir.*) The produce of the Uncaria Gambir, long known as a masticatory to the inhabitants of the Indian Archipelago, and of late years very largely introduced into this country for dyeing and tanning.

(*Godown.*) In the language of the English in India, a warehouse, a store; Malay, Godung, a house built of stone and mortar. This word, although very likely introduced from the Malay, belongs properly to the Telinga or Tâlugu, the language of the people known to the early European travellers and adventurers, as Gentoos.

(*Gutta Percha.*) Malay, Gatta-Pârcha, the gum of the Pârcha tree. I was at first disposed to think, that the last part of the word was pârchah, but this word ending also in an aspirate is Persian, and by no means likely to enter into the name of an indigenous plant, the product of which had not been an object of foreign trade.

(*Japan, Japanning.*) Malay, Jâpun. The word used by the classic writers of Queen Anne's time, as Swift, Pope and Gay. Johnson calls it a low word in the sense of "blacking shoes," but this was not the case with Pope.

..... The poor have the same itch
They change their weekly barber, weekly news
Prefer a new Japanner to their shoes.

The art of varnishing wood or basket-work is extensively practised in some countries of the East. These are Birma, Tonquin, China and Japan, but with by far the greatest skill in the last. From the middle of the 16th century (1543), Europeans must have been through the trade of the Portuguese familiar with the beautiful lacquered work of Japan. That of Tonquin, inlaid with mother-of-pearl, must also have been greatly admired; for I find from Dampier that household furniture made in England, used to be sent to Tonquin to be lacquered. There is, at present, no necessity to send out tables, chairs, trays or standishes to Tonquin, for Japanning is as well understood in Birmingham, as in Tonquin, and almost as well, as in Japan itself.

(*Junk.*) Malay, Junġ, ajonġ. The word means a large vessel of any kind, distinguished from a boat, or other small craft, and in this sense it was used by Sir Thomas Herbert and other early voyagers. How Jung came to be converted into Junk, I do not know, but, most probably, English sailors, who are known not to be scrupulous about names, and pronunciation, and who are familiar with the word in the sense of old rope, and salt beef, had a share in it. The word in our language is as old as Lord Bacon.

(*Loory.*) Malay, Nuri, which is the generic name for parrot.

(*Mango.*) Sunda, Manġga. This word belongs to the language of the Sundas of Java, and was probably picked up by our voyagers at Bantam, of which country the Sunda is the indigenous tongue. The other nations of Europe have taken the name apparently from the same source, and carried both name and fruit to the New World, of which the tree is not a native.

(*Muck, a-muck.*) Malay, amuk. The "a" which precedes it in English is not the English indefinite article, but part of the word itself and should be joined to it. There is no such word in Malay as muk, and still less the word written with a superfluous "c." Amuk (the 'k' at the end is mute) is the radical, and means a desperate and furious charge, or onset, either of an individual, or body of men. From this we have such derivatives as the following, Mâuġamuk, to make a

furious charge, or assault, *Māṅamukkān*, to charge some object furiously; *Bāramuk-amukan*, to charge furiously and mutually; *Pāṅgamuk* one that makes a furious charge. When the English infantry charged with the bayonet at Waterloo, a Malay might with propriety say the English ran a-muck; when the French charged over the bridge of Lodi, he might say the same thing. Marshal Lannes would be considered by a Malay as an illustrious *Pāṅgamuk* and Sir Thomas Picton another. Dr Johnson says he "knows not from what derivation is made to mean to run madly, and attack all we meet." He might, however, have discovered it, if he had read Dampier as carefully as Swift, who is said to have made his style the model of some part of his *Gulliver's travels*. The Rev Mr Todd, in his edition of the Dictionary, has a long explanation of small value running over nearly a whole quarto column. His chief authority is Tavernier, whose account is full of mistakes. In one place he writes the word *Mocca*, and in another *Moqua*. He states the kris, with which the muck is run, to be poisoned, which I never heard to be the case. He says it is the Mahomedans on their return from the pilgrimage to Mecca, who run a-muck, but the natives of the Eastern islands ran a-muck before they ever heard of the Mahomedan religion, and the unconverted natives at the present day equally run a-muck with the converted. The Rev Mr Pegg is next quoted by Mr Todd out of the *Gentleman's Magazine*, and Mr Pegg charges the practice to excess in cock-fighting, and the loss of property including wife and children. When this crisis arrives, the loser, according to Mr Pegg, begins to chew a root, what is called bang, which the Rev Gentleman takes to be the same thing as opium, and it is after that, that he runs a-muck. This is all a fable, and the great probability is that no such case, as that stated by the Rev Gentleman ever occurred. The truth is that running a-muck is the result of a sudden and violent emotion wholly unpremeditated. There is, therefore, no poisoning of daggers, no swallowing of opium, which instead of rousing would set the party asleep, and no eating of bang, which was unknown to the islanders at the time in which Mr Pegg wrote. Moreover bang and opium are not the same thing, for the first is the produce of the common hemp-plant, and the last of the white poppy. Finally, Mr Todd quotes a note of Malone to the prose works of Dryden, in which he asserts that the word a-muck, written as one word, is an adverb, equivalent to "killingly," which is even more wide of accuracy, than the account of Mr Pegg himself, and his other authority Tavernier. Warton in a note to Pope repeats the same mistake about gaming, and smoking opium, before running a-muck. Sir Walter Scott's note in his edition of Dryden is little more than a repetition of Malone's. He speaks of the loss by gaming, of the intoxication with opium, and says that "*Amocco*" means "to kill." "He is, at last, he says," "cut down, or shot like a mad dog," which is true. Of a very different character from the gossip of Tavernier

and the rest, is the account given of the Amok by Dr Oxley in this Journal. I had not the advantage of having perused it, when I read my paper at Birmingham, or I should have quoted its intelligent and authentic statement at length. The amok appears from it to be in many cases mere instances of monomania, taking this mischievous form, and, when they are not so, they are traced by the writer to the true character of the Islanders. One fact stated in it I was not before aware of, that the amok is most frequent among the Bugis. This is also the case in Java, but then it has been ascribed there to the ill-usage of this people in a state of slavery. I should conceive that of all the Islanders it would be found the least frequent among the Javanese. Instances of it did certainly occur during my six year's residence in that island, but they were by no means frequent. Amongst the Javanese of Singapore, it is probable that in 30 years no example has occurred. Dryden first made the word classic by using it in the third part of the Hind and Panther, the application being to Bishop Burnet.

“ Prompt to assail, and careless of defence
 “ Invulnerable in his impudence,
 “ He dares the world, and eager of a name
 “ He thrusts about and jostles into fame,
 “ Frontless, and satire-proof, he scours the streets
 “ And runs an Indian muck at all he meets.”

Pope followed him in the well-known lines, which are evidently an imitation :—

“ Satire's my weapon, but I'm too discreet
 “ To run a-muck and tilt at all I meet,
 “ I only wear it in a land of Hector's
 “ Thieves, super-cargoes, sharpers, and directors.”

The Directors here referred to are those of the famous South-Sea bubble, and the Super-cargoes probably the Agents of the East India Company.

(*Ourang-Outang*.) Malay, Orāng-utan, literally man of the woods, or forest, but correctly, wild man, savage, clown, rustic. As applied to any species of monkey, it is not known to the Malays. The accent in Malay words is almost always on the last syllable but one, or the penultimate. The naturalists have established a class of monkey under the name of the Orangs, but the propriety of the term is rather questionable, seeing that Orang means a human being, and is equivalent to the Latin “homo.” Some of the wild races of Borneo call the animal Miás, and the Kayar, the most numerous and civilized nation, “Orāng-tuan,” which in their language means “man of the woods” or “wild man.” I take this word from the Vocabulary of Mr Burns, the only copious and satisfactory one of a Bornean language yet given to the public. The Malays of Borneo, with whom alone our early voyagers had any communication may possibly have translated this name in

their own language, and furnished it to their European visitors.

(*Paddy.*) Malay, Padi. Rice in the husk. When husked, it takes the name of bras, and, when boiled, that of nasi, which last is also equivalent to our word bread.

(*Pron.*) Malay, Prau. The most general term for any kind of sailing, or rowing vessel, from a boat to a ship, but generally used for small craft.

(*Rattan.*) Malay, Rotan, from the root "*raut*" to pare, to trim, and meaning the object that is trimmed and pared, in allusion probably to the process by which the rattan is peeled and prepared for use.

(*Sago.*) Malay, Sagu. The pith of a palm, growing in swampy lands in many islands of the Eastern Archipelago. It is the bread of the Molucca Islands, but as it comes to us is edulcorated and granulated, or prepared as flour. The process by which it is now made, it may be mentioned, was the invention of a Chinese of Malacca about 35 years ago. Nearly all that is imported is manufactured in Singapore, the raw article being brought to that place from the Eastern coast of Sumatra.* By far the most detailed and satisfactory account of it ever rendered has been given in this Journal by its editor.

(*Sapan Wood.*) Malay, Sâpan. This red dyeing wood, the produce of *Cesalpinia Sappan* is chiefly imported from Siam and the Philippine Islands, but there can be no doubt, but that our name is from the Malay.

(*Shaddock.*) This is certainly not a Malay word, but the object, the gigantic orange, nearly as large as an infant's head, is Malay. A certain Captain Shaddock traded to the East and West Indies about the time of Queen Anne, and was of the class of persons called at the time "interlopers." This meritorious contrabandist found the pumplenoos at Batavia, which is probably its native country, and he conveyed it to the West Indies where it continues to be called by his name. The Javanese name means Tiger Orange, and the Malay is *Kâdanġsa*, but the worthy Captain Shaddock, fortunately for his little fame, was most probably ignorant of Malay and Javanese.

Most of the names of places coming within the range of Malayan geographical knowledge seem to be taken from the Malay;—as Amboyna, Ambun;—Ava, Awa;—Bantam, Bantân;—Bencoolen, Bânġkâulu;—Birma, Bârma;—Borneo, Brunai;—Cambodia, Kamboja;—Champa, Campa;—Cochin-china, Kochi;—Japan, Jâpun;—Java, Jawa;—Malacca, Malaka;—Malay, Mâlayu;—Martaban, Maritanau;—Moluccas, Mâluka;—Pegu, Paigu;—Siam Siyâm;—Sunda, Sunda;—Tanasserim, Tanasâri;—Tonġquin, Tonkin. Even China, although in Persian and Arabic respectively *Cin* and

* It is also now very extensively imported from Borneo, forming the dead weight or bulk of the cargoes of the numerous square-rigged vessels trading between Singapore, and Bruni, Sarawak, &c. The native puluh from the north west of Borneo likewise import it largely into Singapore.---ED.

Sin, has, very probably, found its way into our language from the Malay, China, which is in fact our own word.

Polynesian Words.

(*Kangaroo.*) It is very remarkable that this word supposed to be Australian, is not to be found as the name of this singular marsupial animal in any language of Australia. Cook and his companions, therefore, when they gave it this name, must have made some mistake, but of what nature cannot be conjectured. I have this on the authority of my friend Captain King, R. N., who has lived so long in Australia, and is so intimately acquainted with the country.

(*Taboo.*) The word, as written by Archdeacon Williams in his New Zealand Dictionary is Tapu, which he explains by the adjective "sacred," and the nouns "sacred rite," "sanctity," "holiness." The meaning which we give it is to indicate a place under an interdict.

(*Tattoo.*) The word was first used by Captain Cook as taken from the Polynesian, but no such word is found to exist. The word, which the Archdeacon gives for "to Tattoo" is Ta. In the same work I find the word "Ta" to mean, among other things, "manner or kind of," so that the two words combined might mean manner or kind of tattooing. Cook made a few flagrant blunders in his Polynesian Vocabularies, and the wonder is he did not make more.

Although we have thus but 3, or correctly only 2 words borrowed from the Polynesian languages, a very different effect has been produced upon the Polynesian languages by our own tongue. In the Abbé Mosblech's French and Oceanic Dictionary, an unquestionable authority in such a matter, there are not fewer than 100 English words, from the defects of Polynesian pronunciation, of course, greatly mutilated;—thus for sheep, we have hipa; for ox, hifa; for wheat, potato; for paper, pepa; for penknife, penikula. A good many of the words point directly at the source, from which they have been derived, as riches, mamona; angel, anela;—school, kula;—ink, inika. The ascertained fact of the manner in which English has found its way into the languages of the Society and Sandwich Islands, is chiefly valuable in reference to Malayan philology, as indicating the probable manner, in which Sanskrit, Telinga, Arabic, and Persian have found their way into the Malay, and other languages of the Archipelago. They are only less corrupted in these, because the recipients are themselves more perfect in structure, than the Polynesian tongues, and because the foreign Eastern languages approach more nearly the genius of Malayan pronunciation, than that of our mother tongue to the Polynesian.

Chinese Words.

(*Bohea.*) From the name of a district of the province of Fokien

called Vu-e, as we might say of Wine, Burgundy, &c. The teas first brought to England were black and the produce of this district, and hence the name. It was, at first, given to the finest kinds of black, as we find from the writers of the time of Queen Anne. Thus Pope makes the fashionable heroine of the Rape of the Lock to talk of Bohea, which we now ascribe only to washerwomen

Where the gilt chariot never marks the way

Where none learn ombre, none e'er taste Bohea.

I do not know how the word Bohea came to be degraded from the highest to the lowest place, but it probably arose out of the introduction of many new varieties, recommended to use by their novelty, as the consumption of tea began to spread. The London tea-brokers have treated Bohea still worse, for of late they have expelled it altogether from their price-currents; yet they still sell it under the name of inferior Congou.

(*Congou.*) Is a corruption of the Chinese word Kun-fu, "labour" or "assiduity." The bulk of tea consumed in this country comes under this designation, and from this Chinese labour or assiduity the British exchequer gets yearly some £3,000,000.

(*Hyson.*) This is the corruption of two Chinese words Hy-san, meaning "flourishing spring." The finest tea consists, whether black or green, of the youngest leaves, and hence the name.

(*Mandarin.*) Obviously not a Chinese word, since the Chinese have never acquired the art of joining even two syllables together and this has three. The word is from "Mandar," in Portuguese to "command" from which to express a Chinese chief in authority the Portuguese themselves, for the word occurs in their Dictionaries, have coined the word Mandarin or Mandarim.

(*Nankin.*) From the city of Nanking in the province of Kanganan.

(*Tea.*) Chinese, Cha. Malay, Te. The first tea imported into England was brought from Holland, and then from Bantam, and not improbably both the Dutch and English obtained their earliest supplies from Java, and not direct from China. If this be so, then probably the name came to us through the Malay in which it has long existed nearly in the form, which we, the French, and the Dutch have adopted. In Chinese, the name of the plant is Cha, which has been adopted by the Portuguese and by the Oriental nations. The Malay pronounce the word, as the uneducated Irish do, and it may even be suspected, that people of fashion once did the same thing. Thus Pope makes it rhyme with obey in the following couplet of the Rape of the Lock:—

Here thou, great Anna, whom three realms obey,
Dost sometimes counsel take, and sometimes tea.

Tea was first introduced into England about the same time as Coffee, or 1650, and ten years later an excise duty was levied on every gallon of the decoction. It was a rarity in 1664, for in that

year the East India Company bought two pounds and two ounces of it as a present to King Charles the II. It cost 16s a pound, and was without doubt what now we should call Junk tea, which may readily be imported at 6d the pound. This was the commodity, which was intended for the beverage of Queen Catharine, the Dutchess of Portsmouth, Lady Castlemaine, and Nell Gwynn. Since the day, in which 2 lbs and 2 ounces, were thought a fit gift for a King, our consumption has mightily increased. 100 years ago, it was 1,000,000 pounds, and last year it was lbs 48,735,971. This yielded to the Exchequer more than the whole revenue in every branch of any second-rate Kingdom in Europe.

December 31st 1849.

PULO AUR.*

Its double peaks had reared their blue heads above the horizon for the several days that we had viewed them from the shores of the Malayan Peninsula at a distance of nearly 40 miles. They often attracted a glance, and each glance renewed our desire to become acquainted with a spot that had been the subject of our conjectures. The time at length arrived when our curiosity was to be gratified. We lay at anchor in the spacious bay of Sidili on the evening previous, and five o'clock of the 15th July 1849, found us with the anchor of our small schooner weighed, when, with a strong land wind, we shaped our course towards Pulo Aur. Our soundings gradually deepened from 5 and 6 fathoms to 20, but the wind fell calm, and by noon we had only made an offing of 12 miles from the shore. This brought us abreast of the small rock called Tokong Yu or shark rock, which would imply that its surrounding waters abound in that ferocious monster of the deep, but it is likewise known to the few who have visited it as being remarkable for the immense flocks of pigeons that frequent it. A south-west breeze sprung up in the afternoon and carried us merrily on our course; by 5 P. M. we could easily distinguish the cocoanuts for which Pulo Aur is famous, raising their heads amongst the cliffs and eminences, and at six we dropped anchor in the south-west bay at a distance of 300 yards from the reefs in 20 fathoms water. We were visited by many of the natives whom curiosity attracted to the unusual visitors, but they seemed shy of communication until we had waited on the chiefs of the island on the following morning. At six o'clock we reached the shore and landed under the lee of a small quay that has been roughly constructed of coral and conglomerated shells, amongst which the gigantic bivalve called the Gebang was conspicuous. We first proceeded to the house of the hereditary Imam, or high priest of the island, where there were great crowds of natives waiting to receive us. We found him sitting on an old rusty 24 pounder, several of which were lying on the beach pointed seaward and said to have belonged to a brig that was cast away on the reef 30 or 40 years ago. He conducted us to his palace which is built on posts and covered with leaves, carpets were spread for us in the principal room apparently appropriated to the male visitors, and from which the apartment of the women was divided by a screen or an apology for one which, when sitting, admitted of view and communication from room to room, through a horizontal opening guarded by bars. Through this opening our host pointed out one young lady, handsomely dressed in a red vest, probably the belle of the place, as about to be married to the nephew of the To Kaya or chief of the island. She was pretty, and maintained a stolid immobility of features. To attain the fixity of a statue would appear to be an essential part of the manners of a young Malayan lady. The

* Pulo Aur of the Charts.

majority of her companions were ill-favored and their figures were not improved by being incased in a long baju or species of bottomless sack which envelopes the whole body, and flattens, distorts or conceals the shape. Sweet-meats and rose water were placed before us, but we found them of so suspicious a character that we could do little more than taste them, particularly as we observed that they were taken from a shelf where sundry doctor's bottles and pill boxes from a Singapore dispensary were huddled in confusion.

From the house of the Imam we were escorted to that of the To Kaya whose title is To Kaya Prang. He received us standing at a considerable distance from his house, which was of a very wretched description and from a near approach to which he showed an evident wish to keep us. He was a man of about forty years of age, of shabby appearance and unmeaning countenance, the result of intemperate habits in opium smoking. He has never left the narrow precincts of his native island, and is said to be miserably poor and often in great distress when during the north east monsoon no communication can be had with Singapore, from whence he derives his supplies. To this isolated potentate, who, like Robinson Crusoe, was monarch of all he surveyed, the Imam, a man of the world in comparison, introduced us in a consequential manner, no doubt flattering to the dignity of so important a personage. He had little to say to us, and as we perceived our enquiries were thrown away, we wasted no time upon him, but proceeded to examine the island during the short period that was allotted to us.

Pulo Aur is the south eastermost of a belt of islands that stretch themselves with the same direction as the coast of the Malayan Peninsula, and from which they are distant 30 geographical miles. The most prominent of these islands are Tioman, Pemangil and Aur. Pulo Aur has 3 small proximate Islets, two on the north-west shore called Pulo Lang and Dyang, and one on the south-east shore called Pulo Pinang. These, like the larger island, are covered with cocoanuts. Pulo Aur, though measuring only 3 miles in length and little more than $1\frac{1}{2}$ miles in breadth, contains 1,400 inhabitants. These are settled in 12 bays that lie between the rocky projections around the island. The principal settlements are on the south-west, north-west and north-east sides. The bays are fringed with tall cocoanuts of most luxuriant growth, and the trees do not seem restricted to the deeper soils for we found many existing amongst rocks and stones where little or no soil was perceptible. The tree is cultivated to the height of 1,000 feet above the level of the sea, at which height, I was informed, they were sufficiently productive to repay the expense of their culture. The formation of the island is granitic and the soil is red, nor has it the appearance of being fertile, otherwise than in the production of cocoanuts. There are two eminences or peaks on the island, one on the north-west rising 1,521 feet and the other on the south-east 1,805 feet above the level of the sea. The principal objects of geological interest are in the

numerous grooved rocks, which being blanched by the weather look not unlike the ruins of Grecian Doric pillars confusedly heaped together, and in the Beralla China, a curious and magnificent rocky pillar that towers over the narrow deep harbour or gut that separates Pulo Dyang from the main island. From some directions this object takes the most fantastic shapes, and in one presents an inimitable likeness of the Iron Duke in a reclining position. The inhabitants possess fine fruit groves, amongst which the durian, the prince of fruits, and mangoostin abound.

Pulo Aur is immediately subject to Pahang to which it pays tribute annually. It produces 70,000 cocoanuts and 5,000 gantangs of oil, which form its principal exports, and it consumes the following imports,—30 coyans of rice, 40 kranjangs of tobacco, and 3 buku of opium. We found the small pox raging at the time of our visit, so considered it unsafe to enter the various kampongs. The Imam, who professed great solicitude and anxiety about this matter, begged a passage to Singapore in order to procure the vaccine virus which he said he understood how to apply; so humane a purpose could not meet with denial. His request was consequently readily granted. We were informed that fevers amongst the natives of the island were not very prevalent but that about 7 in 10 of all strangers were attacked, should they remain above a fortnight on the island. The natives generally are of small stature and puny appearance which led us to conclude that there were some local cause of unhealthiness. Should Dr Little's coral theory be a correct one, I would be strongly inclined to point to the coral reefs that surround the bays as the cause, for there are no marshes on the island and the adjacent vallies are well-cultivated and clear of forest, the inhabited parts of the island are consequently free of the usually assigned malarious influences.

I was informed that the natives during sickness or troubles had recourse to many superstitious rites. A Kramat on the top of the higher peak is considered very efficacious and is often had recourse to. The Lanuns in former years were in great dread of it and never attacked the island from an awe of its influence. The Beralla China already noticed also forms an object of superstitious worship not only to the Chinese as the name would imply, but to the natives notwithstanding they are professed Mahomedans. The Chinese junks in passing the island in sight of this Beralla always offer up incense to the spirit of it. Many wonderful tales were told of the locality. The natives believe it to have been a Chinese junk which was wrecked on the coast and they name the various parts of it—such as the mast, the prow, helm &c.; these they pointed out to us but they scarcely bore a fanciful resemblance. They also assured us that the cabin could be entered by favored individuals, where plates, dishes and chop sticks were to be found arranged in order. To appear to disbelieve them was sacrilege in their eyes, we therefore forbore from doing so. Not far from the Beralla

China, a Batu Boyah or stone alligator was also pointed out on the rocks close to the shore. This is a favorite fancy with the Malays, for there are many Batu Boyahs in the Malay Peninsula, the most famous one near Malacca is situated at Pankalan Tampui.

The more wealthy of the natives during sickness "puji hantu" or propitiate the evil spirits to whom they attribute the cause of the disease, in the following manner;—they cause a model of a prow to be constructed, complete with masts and sails, in which they place rice and other eatables; into this the friends assembled beseech the unruly imps to be so good as enter and leave the body of their friend, in whose bowels they believe they have taken up their abode—this they do with various incantations, and when they think their cajolings have been so successful as to dupe the evil ones, they carry the prow from out the dwelling and cast it into the sea so that it may sail away with the imps and never return. Persons possessed of angry devils, so they express themselves, frequently have recourse to large entertainments to assuage their wrath. On these occasions a large feast is prepared for the neighbourhood at the house of the sick person, where he is laid in the centre of the room or hall, dancing girls are engaged to dance around him to the music of tom toms, gongs and sulings, when much noise and mirth is indulged in. A miniature mosque is at the same time prepared which being carried to a solitary place, they deposit some grains of rice for the spirits to feed upon, and though it is allowed that the grain is not consumed still they believe that they appropriate the essence.

On the death of a person his near relations wail during the whole night to a slow melancholy air, when they call on the deceased to arise and resume his usual labour and employments, they recount his former deeds, name the objects which gave him pleasure, and so forth.

The inhabitants of Pulo Aur are composed of free men and slaves. In former years the island formed a mart for the sale of captured men and prows, and was frequently visited by the Lanuns once so formidable on these coasts. The small harbour it contains possessed great advantages to these rovers—here they could easily dispose of their booty and take in provisions for their voyage, without much chance of molestation. The destruction of these pests to civilization on the eastern coasts of the Malayan peninsula, which was so vigorously undertaken by the Government about 12 to 15 years ago, has had the most beneficial effects both on the morality and humanity of these islanders. The shipwrecked or distressed mariner now, on being cast on their mercy, has no perpetual slavery to fear at their hands as formerly was the case, but they are immediately forwarded to Singapore, where the Government authorities, by holding out liberal rewards for any services rendered to seamen of whatever nation, give every encouragement to the natives in pursuing so humane a course.

Pulo Aur being situated in the great route between India and China, has frequent claims upon its inhabitants from these castaways, who a few years ago instead of succour and protection would have met a very different and very miserable fate in death or slavery. Within these few years the inhabitants of Pulo Aur have been the means of saving many individuals from a watery grave. The most remarkable instance was in the case of some Chinese who escaped from a foundered Junk, and navigated a great part of the Chinese sea without food in a square box or water tank, the only remains of the unfortunate vessel, till at length, when quite exhausted and after submitting to many horrors, they were descried by some fishermen belonging to the now friendly shores of Pulo Aur.

I may conclude this trifling sketch by venturing on a personal description of the Imam who was a passenger on board our small vessel for 20 days. I thus had many opportunities of observing the most prominent traits of his character. He described himself as the High Priest of the island, the holder of all ecclesiastical authority: he possessed several papers written in English, and amongst the rest a number of the *Free Press* of Singapore, of which he was evidently very proud; in these he is styled the Prince of Pulo Aur, uncle of the Rajah &c. Amongst the scraps are a rude portrait of himself, and a certificate of his good disposition towards the English; above all these he places a rude advertisement that he sells the best wood and water to be procured at Pulo Aur and solicits the custom of Captains visiting his jurisdiction. It will be correctly surmised that his title of head of the church would convey rather an erroneous idea of the subject to the western reader. He possesses the cast of countenance that is very prevalent in the Johore country, and is rather more swarthy than the common run of Malays. He possesses the round head and prominent cheek bones of the Mongolian, and a dark twinkling restless eye would announce a more stirring and intriguing disposition than is found generally in a true Malay. His small native island has not afforded scope for his versatile tastes, and he has traded from one end of the vast East Indian Archipelago to the other—from the Pâpuas of New Guinea to the Battas of Sumatra. He has also acted the courtier at the palaces of Pontianak, Pahang and Linga. As a warrior he has fought against the King of Palembang and the Rawas of the Malay Peninsula. In his conjugal ties he has had varied experience. He has stood at the hymeneal altar seven times. As his first love he claimed a daughter of his native island, but forsook her for a fair one at Pahang. He next espoused a lady attached to the court of Pontiana. Her he deserted for a belle of Siantan in the Anambas group, the mother of his only child. Next he transferred his affections to a fair one of Sidili. Another he courted and won at Palembang, and lastly he married a slave of Wan Syed of Pahan, but when we found him he was living with the spouse of his younger days at Pulo Aur.

To visit all his wives a journey of several thousand miles would have to be undertaken. With all this he was not backward in narrating his experiences amongst the nymphs in the purlieus of Singapore. He must notwithstanding be accounted as a fair specimen of the trading Malays who are to be found established at all the ports and rivers of the Malayan Peninsula and adjacent countries. Few of this class will be found to differ much either in character or mode of life. It is with them that the European first comes in contact. It is from them, should he look no deeper, that he derives his judgement of the Malayan character, and it is therefore no wonder that we find their race almost universally stigmatized as deceitful, cunning, rapacious, treacherous, and mean. It is the interest of this class of Malays, in an equal degree with the Arabs, to oppose the advance of the European. They are the traders and pedlars who monopolize the productions of their countrymen, and restrain their communication with foreigners. Once the barrier that they have erected has been dissolved, they know that their power and profit is in a great measure curtailed. This barrier when dissolved discloses the inhabitants of these Malayan countries in all their native and rude simplicity. In these the direct and frank address of the European creates immediate confidence and sympathy.

On the first day of our taking the Imam on board, and before our close quarters had made us better acquainted we anchored in the Bay of Joara on the east shore of Tuman. As we were dropping anchor the Imam accosted me "Sir, as I am the chief of this kampong and as I am also high priest, it will be necessary for you to fire a gun and send your boat to acquaint the people that the Tuan Imam Ahmat Bin Abdullah of Pulo Aur is here who desires them to wait on him." This was refused but he was told he was at liberty to accompany the commander who was going on shore. He remonstrated, stating that such a proceeding was not becoming his dignity, hat these people were slaves and menials of his, and it was not consistent with his position to visit them. Seeing he could not gain his purpose he said "well, at all events I shall go and prove to you in what high estimation I am held here, they are all followers of mine and as I have taken no followers from Pulo Aur perhaps they may wish to escort me to Singapore. You will I hope at all events allow the whole population to come and visit me on board." With this he proceeded on shore, but the poor Imam came back alone much down hearted, having only been able to wring out of his beloved subjects two very small and lean chickens. These he carried in his hands and remarked that they would do very well as a present to his English friends in Singapore.

He was fond of repeating Arabic texts from the Koran (a very common cloak to ignorance in other parts of the world) which he did not understand; his calendar of prophets included Adam, Moses, Christ and Mahomed. He was very superstitious and

inwardly held the Hantus and Kramats of his native island in greater fear and reverence than the dogmas of Mahomedanism which he professed to believe. Thus one day, on his describing the forms to be observed in approaching their famous Kramat, I was led to ask him why seeing he believed in Tuan Allah he should also trust in peris, dewas and mumbangs, for is not Allah greater than these? To this he replied "it is very wrong certainly but we must respect the customs of the men of old who had converse with these demigods, a thing that is denied to us ignorant children of the present age."

As time drew on our Imam settled down to his wonted habits. The finery in which he arrayed himself on first acquaintance he threw off piecemeal, his garments at last counted two in number. A pair of light canvas trowsers not too carefully buttoned in front gave shelter to the nether man, while an old flannel jacket borrowed from a Singapore acquaintance decorated the upper; bare-footed and bald pated he crept about the deck. In this habit I found him busy one day plucking a fowl, in which, with the assistance of goggle spectacles, he was occupied with great intensity. "Well Imam what is this you are doing?" "Oh, only cleaning a fowl which that satan of a Kling is too lazy to pluck." "But this is not proper employment for a man of your dignity." "I would condescend to any thing for my white friend,—besides what are we but Moniet and Kra (apes and monkeys) such employment becomes us."

As our voyage drew near to a close his humility and attention increased. One day he appeared to be more intently desirous of pleasing than I had before observed. At last he edged nearer and remarked: "How kasihan is the Orang Puteh! dyaorang tau boang wang sajah"! He proceeded to inform us that his friend General——of the Dutch service was very much taken with him in the Palembang war and munificently rewarded him with a lanchang complete with mast, sails and oars, but added he, "my present friend, whom I have conducted through so many difficult straits and inlets and made acquainted with the bays and headlands of the Malay peninsula, will know better how to reward the services of a poor man who has obeyed his call and thrown himself friendless into a foreign settlement." "But you did not know the name of a head land, rock or bay, from Pahang to Tanjong Penyusoh, so how can you claim a reward for which you have not worked, and of which you had no promise. We did not ask your assistance to pilot the vessel. We allowed you to accompany us at your earnest request in order that you might procure vaccine virus." "That is true. I am a poor man and would like to have some money to buy a little opium." "Is not the consuming of intoxicating drugs forbidden by the religion whose minister you profess to be?" "That is true, but where is a penniless man's conscience when the belly is empty." "Have you not been well fed for twenty

days gratuitously, and do you mean to say that you have no money in your box below?" "Satu duit tidak, not one pice. [He had 60 Spanish dollars] I had trusted entirely to the usual generosity of the Orang Puteh (white man) so came away penniless. I will be glad to take 5 dollars or 20 dollars, whatever your honor's kasihan (kindness) may dictate." "So the procuring of vaccine virus to allay the misery of your suffering countrymen was not your object in coming to Singapore?" "Ha, ha, ha,—who would have believed that? God takes whom he likes and what would I gain for my trouble by a voyage for such a purpose." J. T. T.

The question may arise, why the effect produced by known operating causes is not of a homogeneous character? and its solution will be found on chemical examination of the subject acted upon; where the various proportions of "silica" "alumina" and the "alkalies," combined with the same variety in the proportions of the oxide of iron, will serve to explain the slaty, vascular and compact nature of the changed rocks. I have observed however that the effect upon sandstone of a loose structure similar to specimen No. 4, is almost invariably to produce a vascular and slaty "laterite" on the surface, while on those of a more compact and quartzose form a denser rock is formed approaching the magnetic iron oxides in external character, and nodular and highly indurated where the surface has been long exposed. With the specimens enumerated, I have enclosed two of a conglomerate sandstone which forms the principle rock in the island of "Madremacan" opposite Mergui; the larger specimen is highly ferruginous but owing to its quartzose structure little altered from the combination.

Amherst Town, 8th December 1849.

INDICATIONS OF COPPER ORE IN TORRES STRAITS.

THE Editor's attention has been called to a paragraph in Flinders's Voyage to Terra Australis (Vol. II. p. 120) relating to Good's Island, near the western entrance of Torres Strait, which assumes a certain degree of importance now that an establishment is required in that neighbourhood to serve as a Coal depôt for the line of steamers about to be laid on for the Australian colonies. The paragraph runs as follows: "Good's Island is between one and two miles long, and resembles the rest of the cluster in being hilly, woody, and rocky, with small beaches on the leeward side. The stone is granitic and brittle; but there is also porphyry, and in one place I found streaks of verdigrease, as if the cliffs above had contained copper ore." It should be observed that Good's Island lies in the close vicinity of the northern termination of the great mountain range which extends along the entire eastern coasts of Australia from Wilson's Promontory, the southern extremity of the continent, and in which veins of copper ore have recently been discovered to the eastward of Sydney, the only part of the range which has been closely examined. This range is abruptly cut across by Torres Strait, a circumstance well calculated to display any deposits of metallic ores that the range may contain. It is singular that no attempt appears to have been subsequently made to trace out the origin of the phenomenon observed by Flinders. His work has certainly become scarce, but every expedition sent out to survey the Australian coasts is supplied with a copy. At all events so important an announcement, coming from so high a quarter, would justify any voyager passing that way in stopping a few hours to ascertain the particulars, and the delay would not probably be greater, for Good's Island lies within a mile or two of the track usually pursued by vessels passing the Strait.

LEGENDS OF ISLAM.

By Lieut-Col. JAMES LOW, C. M. R. A. S. & M. A. S. C.

Animals.

LIZARDS are not here regarded with the dislike shewn to them by the Mussulman although certainly beheld in association with superstitious impressions.

The followers of Mahommed shew great respect to the spider because he on a certain occasion, when the prophet was concealed in a well, wove a dark web over him. But the foresight, as they express it, of the spider was rendered unavailing by the heedless conduct of the lizard which made the clacking sound peculiar to itself and thus induced the enemies of Mahommed to look into the well and discover him. The Guana is the king of the tribe on land as the alligator is at sea. He is amphibious too but is feebly armed and depends for subsistence on his agility, his capacious mouth and superior tact at swallowing. Like the snake tribe he does not masticate his food—and when grown to full size, which sometimes reaches to six feet in length and three in circumference, he will quietly sieze fowls or other birds, or crawling under water suddenly catch an unconscious duck and gulp it down. The Tokhe lizzard is found in most of the Indo-Chinese countries and is there named from the noise it makes, a loud and distant sound like ventriloquism, as if repeating the syllables takké takké or as the Siamese say tapké tapké.

The common color is a dark brown mixed with grey but it possesses also the property of changing color like the chamelion. Its back is arched and furnished with a saw like edge. In Rangoon and Tanasserim they abound on the houses and are very noisy although harmless. The Siamese believe that it is afflicted with the liver and that it thus calls aloud to another and smaller animal to come and relieve it by entering its mouth and descending to the deceased part, eating it up and returning. They have their legend too respecting the tokké. There was a devotee called *Nontheok* whose abode was in the glorious heaven of the thunderer Indra. Unfortunately he fell in love with the angelic maids whose task it was to gather flowers in the garden of Iswara. For this imprudence he was condemned to the task of washing the feet of the bright spirits who resorted to the throne of that mighty god. In process of time he so far ingratiated himself with the latter as to be endowed with the miraculous power of destroying any one by merely pointing his finger at him. This power he occasionally exercised in revenging himself on certain of the Devatas and spirits for slights and insults received. This conduct lost him the favor of Iswara who is the supreme ruler of Gods and men. Phra Narai (*Narayan*), who afterwards became Rama, was

therefore instructed to punish the guilty spirit. He assumed the form of a beautiful female devotee with whom Nontheok immediately became enamoured, but Narai checked his ardour until he had as a preliminary step to the advancement of his suit exhibited his proficiency in a certain graceful angels dance. In this dance the performer's forefinger is frequently directed towards his own body. The intoxication of love overcame Nontheok so that, forgetting his preternatural acquirement, he began the fatal dance. No sooner had he pointed with his finger towards his own person than he fell down dead.

The freed soul of Nontheok fell down to the earth, and was born again under the form of a Rakhsha. In process of time he was born again as Kistsakan or Ravan, the ten handed tyrant of Ceylon styled Lanka. In the plenitude of his power he determined again to visit the heaven of Indra, that he might enjoy the company of the beautiful damsels who trip over the fields of that bright yet half earthly Elysium. Forthwith ascending to the starry sphere he reached the portal of the resplendent palace of Indra. It was closed, but on looking up he beheld a sentinel in the form of Tokke with whom he entered into conversation. The latter informed him that Indra had shut the adamantine gates by the most powerful spells. Ravan flattered and threatened by turns the over communicative lizard, until he had extracted from him the awful words. No sooner had he pronounced them than the gates flew wide open and Ravan, assuming the figure and look of Indra, entered. It happened that Indra was absent in attendance on Iswara in Kailas—the mount of Heaven. Before he had returned, his personator had usurped his state and been received as their lord and master by the glorious galaxy of female Dewattas. He had however retreated to the earth. Indra opened the window of his Heaven and beheld the robber of his rights walking the plain. He asked the Tokke how he had dared to betray his trust, and then cursed him saying "Hereafter at stated periods a small green snake or reptile shall enter thy body and devour thy liver and heart." Indra complained to Iswara of the injury he had received. Iswara divided his soul into two parts. One of these animated his heavenly frame and the other was born again of the Queen of Nassany, King of Ayudya or Oude, and was afterwards incarnate in the person of Sri Rama who conquered Lanka.

ERUPTIONS OF
MOUNT SEMIRU, IN JANUARY 1845.*

By M. ZOLLINGER.

No mountain in Java has so much reminded me of the mountains of my father-land as Semiru, not that it agrees more in its form than others with the granite mountains of the Alps. This resemblance on the contrary is less than in some of its brethren, but the circumstance that it is the highest of them calls back to my memory Mont Blanc, with which it agrees in another circumstance viz. the change of colour in its light according to the position of the sun. Above all its appearance is ravishing in early morning shortly before and at the up rising of the sun. The grey land that covers the top of the mountain then shews a rose-red glow, just as in the autumn at sunset the snow covered summits of the Alps, and above all those of Mont Blanc and Mont Rosa. If we have the fortune, shortly before the rising of the sun, to see one of the smoke clouds rising, which are expelled nearly every half hour or hour, we shall never forget the glorious sight. Slowly rises the cloud, slowly it spreads itself upwards by the development of the column turning spirally round the centre, until finally it appears to form a gigantic tree which depicts itself, rosy-red and indescribably beautiful, on the firmament, and is gradually lost in golden crowned flakes. So long as I remained in Lamajang it was particularly active. It expelled very frequently these smoke columns in such large volumes that in calms they in a short time wholly covered the mountain to a great depth beneath its top. With the fall of night, when all was become still, we could plainly hear a sound in the direction of the mountain like that of dull distant thunder, which sometimes lasted without interruption from 6 to 10 minutes. In the night of the 20th January, by clear moonlight I went in a small prahu from Pugor to Nusa Baron. About midnight I saw a large column of fire rise up out of the crater of Semiru (distant from me about 16 miles N. N. W.) which elevated itself for some time and finally sunk into itself. This column must have consisted principally of glowing stones, for after it had fallen in, I saw, along the outermost slope of the mountain, sparks descending with lightning rapidity, and now disappearing and again appearing. This was certainly glowing stones rolling along the mountain, now concealed in the small isolated thickets and then again coming into view on the naked sand. How much more beautiful still would this sight have been without moonlight. It is remarkable that the Lamongan and the Bromo have for a long time remained unusually quiet. The crater of that mountain now

* Translated from the Tijdschrift voor Nederlands Indie.

evolves with difficulty some pillars of smoke. During an excursion to the south east foot of Semiru, I first saw that the eastern summit of this mountain, only possesses a crater, but in three deep clefts which open from its ruin, towards the south east, it has three solfataras, all of which emitted very much vapour and smoke.

NOTE. It appears that some persons doubt whether Mr Clignett reached the top of Semiru but I have not the slightest doubt on the subject. One of my guides had also accompanied Mr Clignett to the south west summit. On my interrogating him he immediately shewed me a small pyramid of stones in which I found a small bottle which Clignett had left behind. It was an eau de cologne bottle with a still smaller one in it for scented oil. In the small flask there was a letter which I did not read because I did not allow the bottle to be opened, but replaced it uninjured where I had found it. The old man who accompanied Mr Clignett, and myself, has, it is said, ascended the mountain eleven times.

Postscript. End of July 1845. The mountain still labours as heavily, as I am assured by credible eye witnesses who have lately visited the foot of the mountain. Even by day its roar is distinctly heard at many miles distance. The Lamongan and Bromo, on the other hand remain constantly as quiescent and inactive as when I visited it.

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

GENERAL REPORT ON THE RESIDENCY OF SINGAPORE, DRAWN
UP PRINCIPALLY WITH A VIEW OF ILLUSTRATING ITS
AGRICULTURAL STATISTICS.*

By J. T. THOMSON, Esq. F. R. G. S., Surveyor to Government.

The annexed Statement A

Contains the nature of the cultivations of the various holdings, grants and allotments as shown by the reference book that accompanies the district survey executed in the years 1842, 3, 4 and 5.†

Statement B

Contains an estimate of all the lands of the Residency of Singapore cultivated and uncultivated, and was constructed in the following manner; viz., in the surveyed districts each of the items was extracted from the reference book and where two or three cultivations existed in one allotment, their extent was calculated from the

* Continued from p. 143.

† We have omitted this table as it is very voluminous, and all the facts of general interest which it contains are repeated in Statement B.—ED.

topographical map of the districts. In the other parts of the island which have not been surveyed in detail the first item gambier was estimated by the ratio which the gambier cultivation of Amokiah, Toah Pyoh and Toah Pyoh Lye, which have been surveyed, bore to the remaining quantity of land in those districts. This proportion being found, the extent of the remaining part of the island, which is occupied entirely by gambier plantations, exclusive of a space all round of $1\frac{1}{2}$ miles adjoining the coast, was then calculated, and the above proportion applied for finding the number of acres under gambier cultivation. The other small items were estimated by the number of trees in the various kampongs or villages and plantations. The item of pepper is found by the general ratio that it is found to bear to the gambier cultivation, in the surveyed districts, which it always accompanies. On the small islands that depend on Singapore the estimate was easily obtained from sketch maps made while prosecuting the survey of the general map. In the town of Singapore the items were calculated from the large survey of it. After all the smaller items were obtained, the remaining and largest portion under jungle was calculated by subtracting these from the whole area of the Residency. The details of these items have not a pretension to the accuracy of an actual survey, but can only be offered as close approximations in order to obtain a general view of the topographical statistics of the Residency.

Statement C

Containing an estimate of the extent of cultivated lands together with their annual gross produce and value, is drawn up by the following means viz. the extent of nutmeg cultivation is obtained mostly from the plan of the districts surveyed. Those that do not come within the limits of that survey are estimated by the number of trees grown, allowing 60 trees to an acre, on an average. How the number of trees have been found, together with their produce and value, has been already stated under the head of *nutmegs*. The extent of clove cultivation has been obtained from the land surveys, and as these trees are generally planted at 15 feet apart, this gives 196 trees to the acre, from which the number is calculated; the produce and value is merely nominal. The extent of cocconut cultivation has been taken from the land surveys, and where they do not come within this limit one acre has been assigned to each kampong in the various parts of the Residency. In estimating the number of trees 49 trees has been placed to an acre on European plantations, of which there are 1,200 acres, the trees being between 30 to 40 feet apart, partly planted in equilateral triangles; the native plantations have their trees planted in squares 15 feet apart or 196 trees to the acre—the estimate of the produce has been obtained by reckoning 30 nuts per tree per annum for the plantations of Europeans, who have 14,000 in bearing, and 20 nuts per

tree per annum to those of natives of which it is reckoned there are 33,000 trees in bearing. The extent of betelnut cultivation is obtained from the land surveys, and in those parts to which the survey has not extended, $\frac{1}{4}$ of an acre has been assigned to each gambier plantation (where only they are to be found in any extent), which I found to be a fair average. They are very irregularly planted, but 12 feet may be taken as the general distance of one tree from another; there will therefore be 289 trees to the acre, from this the number of trees in the Residency has been obtained. The produce of a tree in a year has already been stated in calculating that of the Residency; half the trees have been reckoned not to be in bearing and the remainder estimated to give 80 nuts per tree. The extent of the fruit has been obtained from the land surveys, and 100 trees are reckoned to the acre on the average of the whole, though there is much variety in the distances at which the various kinds of trees are planted. The produce in money is obtained from Mr Charles Scott's data which gives 36 dollars 90 c. per acre. The mode of obtaining the extent of gambier plantations has been already stated and the produce and value has been estimated by Mr Uchin, a Chinese merchant already mentioned, who is intimately connected with this cultivation. The mode of obtaining the extent of pepper has been already stated. The vines are planted at 8 feet apart, giving 676 to the acre, from which the number of vines in the residency is obtained; one vine is calculated to bear $1\frac{3}{4}$ catties which gives the produce. Mr Uchin estimates 3,000 plants to a gambier bangsal, of which he says there are 600 in full operation, this gives 1,800,000 bearing vines whose produce he estimates at 30,000 piculs and value at $3\frac{1}{2}$ Spanish dollars per picul which nearly agrees with my estimate. I am indebted to Mr Whampoa, another Chinese gentleman, for the estimate of the consumption of vegetables; the sum can be relied on as he has great facilities in knowing the exact quantity consumed, and he took the trouble of making out a list of each kind consumed, with their weight and value (vegetables are sold by weight in the markets.) Of sere or pawn there are 3,000 vines to the acre, which at 10 bundles per vine gives 660,000 bundles as the produce of Singapore, which at \$1.60 per 100 bundles, the price paid to the grower gives the produce in value. Mr Uchin values the produce at 10,800 Spanish dollars. Of sugar cane cultivation 160 acres are estimated to be under cane and 50 under fallow, the former giving an average of 10 piculs per acre which gives the produce of the settlement in sugar; 32 acres are estimated to be cultivated for consumption in the bazaar, which at 15,300 stalks to the acre gives the quantity consumed in this way, and 1 cent per stalk, which is the price paid to the grower, gives the value. The estimate of the production of rum is by Mr William Montgomerie. The quantity of pine-apples consumed in Singapore is estimated by Mr Whampoa as also their value to the grower. Mr Uchin estimates the same

at 9,000 Spanish dollars per annum. In rice the yield of Singapore is very small; a quarter of the lands only are under cultivation which do not yield above 200 gantons per acre. Pasture in Singapore yields no rent. The produce of the dairy has been estimated for me by a native connected with the trade, but I cannot say how much reliance can be placed on it; it is probably too high. The total annual gross produce of all lands in Singapore will be seen to amount to 323,711 $\frac{4}{5}$ Sp. dollars.

Value of Lands.

The lands of Singapore have two distinctions to which separate government regulations have been applied, as will be seen hereafter;—these are building lands, and lands occupied for agricultural purposes, the former being confined to the limits of Singapore town, and the latter to all other parts of the residency. The value of the lands within the town boundary vary according as they are near or distant to the centre of traffic, or as they possess more or less local advantages such as water communication, river frontage &c. In the commercial part of the town the allotments generally have a frontage of 18 feet and an area of 1,800 to 3,000 square feet. Those in the most valuable localities, such as Market Street and Boat-Quay, exclusive of buildings on them, would sell for 1,600 to 2,000 Spanish dollars or even more; in the more distant parts from the centre of commerce, such as in Hokien, Chinchew and Amoy streets, the value of unbuilt allotments stands at from 100 to 400 Spanish dollars; this is also the value of the contiguous building allotments of Campong Glam and Rochor. Allotments for separate dwelling houses of 150 feet frontage by 150 to 250 feet in depth, vary in value, according to local circumstances, from 150 to 500 Spanish dollars; in sea beach frontages the value of these would be nearly 1,000 Spanish dollars. The agricultural lands of the residency, where not possessed of any local advantages, such as close proximity to town, have only a nominal value, unless when there are hills which afford the requisites of sites for country villas, such as commanding height and fine prospect; these bring a price independent of their agricultural value varying from 300 to 800 Spanish dollars. Lands of average fertility possessing no local advantages are valued by the trees upon them, and consequently vary as these are more or less productive. This rule obtains almost universally, the only exception being in the annual cultivations such as those of rice and vegetables; these when situated within two miles of the town are sold for 5 to 10 Spanish dollars per acre before a grant is taken out, and 10 to 15 after a title has been obtained. Jungle lands within the same limits have been sold by public auction for 7 Spanish dollars per acre after a government title has been obtained, and lands under low brushwood and lalang at 15 to 20 Spanish dollars, though I think the former the more

valuable of the two. Beyond the limits of two miles from the town, where the value is not affected by its proximity, nor where there are any peculiar local advantages, the value of unclaimed and uncultivated lands is, as has been stated, only nominal; the government have consequently only placed a sufficient price on these lands on their transfer to the occupier or squatter, to prevent land jobbing and its concomitant evils. Land, where already occupied but having no productive trees or plants on it, sells for 1 to 2 Sp. dollars per acre, when the seller does not possess a grant. Jungle lands not held under grant have no value unless to the party who wishes to clear and cultivate them. There is very little jungle land held by private individuals under grant from government. The hill soils and alluvial soils of Singapore are in most cases, when not affected by local circumstances, of equal value; the former are adapted to nutmeg, clove, betelnut, and fruit tree cultivation, the latter to that of coconuts, betelnuts, fruit trees, vegetables, sugar and paddy. Singapore is different in this respect from the other Straits settlements of Pinang, Province Wellesley, and Malacca, where, though in the case of hill soils the same rules apply, the alluvial soils by their rice and sugar cultivations possess a high value, these in the best districts selling for from 20 to 50 Spanish dollars per acre and yielding a rental of 2 to 3 Spanish dollars per acre per annum, and double this if the rent be taken in kind.

Land Revenue.

This as will be seen by the following statement taken from official records, is principally derived from quit-rents, levied on town lands. The transfer fees are paid for the drawing out and registering of conveyances of landed property from one individual to another. The land sold on building leases are allotments in town, which are from time to time as occasion requires put up at auction, and sold to the highest bidder, who engages besides, to build substantial houses and pay a certain annual quit-rent for a term of years: at present that term is 99 years. The sum received for land sold for agricultural purposes is obtained from the occupiers or squatters on the transfer of their allotments in perpetuity from the government to them. The price fixed by government is 10 rupees per acre for all lands within 2 miles of the town boundary, and 5 rupees beyond that limit, no lands being alienated at a less sum than the latter.

*Statement of the income and disbursements connected with the Land Revenue Department of Singapore,
for the years 1844, 1845, 1846, 1847 and 1848.*

	1844.			1845.			1846.			1847.			1848.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Quit-Rents.....	14,456	12	2	27,796	10	7	17,384	3	3	17,791	0	3	20,935	9	6
Transfer fees under Act 10 of 1839.....	1,570	11	11	1,905	15	2	986	13	2	1,465	14	11	1,069	7	1
Land sold on building leases.....	16,514	6	10	41,515	2	774	10	3	298	10	1	2,725	6	2	
Land sold for agricultural purposes.....	6,716	10	8	01,574	3	2	6,341	9	2	9,270	7	4	2,331	2	4
Surveying fees.....	..	..	..	..	..	..	..	..	..	..	..	..	158	15	6
Total Gross Income.....	39,258	9	9	40,426	12	1	25,487	3	10	28,826	0	7	27,220	8	7
Revenue Department including Salaries of Survey and Land office.....	7,140			10,062	9	6	8,163	12	8	8,080	13	1	7,961	1	3
Nett Land Revenue.....	32,118	9	9	30,364	2	7	17,323	7	2	20,745	3	6	19,259	7	4

Land Regulations.

I am indebted to the courtesy of the Hon'ble T. Church, Esquire,

Resident Councillor, for access to the public records, from which the following sketch of the land regulations of Singapore, has been drawn. Singapore became a British possession on the 6th of February, 1819, as has been already stated, and the first land regulation that was promulgated was on the 1st of January 1823, by which time the infant settlement had been occupied by numerous settlers of various nations; this was entitled regulation, No. 1 A. D. 1823, and the following are the principal features. In the preamble it is stated that it had become expedient for the protection of property, and the prevention of disputes hereafter, that a general register should be kept of all appropriations of land as well as of the transfer, mortgage or disposal of immoveable property in general, for which purposes the Honorable the Lieutenant Governor of Fort Marlborough and its dependencies was pleased to pass the following rules and regulations to have effect from the same date:—1st, that a Registrar should be appointed to conduct the business of the Land office. 2nd, that appropriated lands should be registered in this office. 3rd, that the land retained by the Sultan and Tumungong be not considered transferable, or to be appropriated otherwise than for their own benefit and immediate dependents, and forbidding all British subjects to have dealings therein. 4th, that all the grants be made under signature of the chief authority according to the established forms. 5th, that all applications relating to lands be made through this office and all grants to be issued from it. 6th, that no title be admitted of lands not occupied by due authority. 7th, that no alteration of the original register be made without express authority from the Resident. 8th, that all parties in possession of lands make their claims known before the 1st of February 1823, in failure of which the claim would be considered forfeited. 9th, that all quit-rent be payable on the 1st of January of each year. 10th, that a separate register be opened for transfers and mortgages. 11th that all such transfers and mortgages be registered within one month of the date of execution. 12th, that the registrar may demand 1 Spanish dollar for each grant and each transfer. 13th, that these rules be considered provisional until confirmed by the Governor-General in Council of Fort William. This regulation was signed by Sir T. S. Raffles. A notification of the same date approves of the disposal of various lots of building ground, and authorizes the registrar to issue grants under the terms of the above regulation; the annual quit-rent on each is fixed at 3 Spanish dollars, the buildings are ordered to be exclusively occupied by Chinese and constructed on a general plan approved by government. On the 8th of January of the same year further disposals of building lots are made by public notification, the annual quit-rents are fixed at sums ranging between 30 to 2 Spanish dollars, the grantees are further bound to raise the land, as it was submerged at high water, under penalty of revocation of their grants. Several notifications to the same effect, granting

building lots in town, were issued until the 14th of February of the same year—the first disposal of agricultural lands took place on the 18th of the same month and year. The advertisement is to this effect—that the survey of the Salat road having been finished, the Government intend to dispose of lots of convenient size of from 50 to 200 acres. The lots were to be put up for the highest quit-rent that may be bid. The holders of the land were besides to make a road 50 feet wide in front of their various allotments, to be completed in 6 months, and which they are also bound to keep in repair. These conditions were also inserted in following grants. Various notifications to the same effect appear under the authority of Sir T. S. Raffles, until the 20th June 1823, when Mr J. Crawford, Resident of Singapore, authorizes by advertisement—the issuing of location tickets to squatters, or persons desirous of occupying uncleared lands. The following are the principal items in these :—that the party shall apply at the office of the Registrar and specify the number of acres he wishes to clear, that the land if not cleared within 2 years from the date of the ticket shall be resumeable by Government, that such grounds shall be subject to the same terms at which uncultivated government lands shall be sold during the 1st year after the orders of the superior authorities shall have been received regarding the destination of the settlement of Singapore. That the charge of surveying shall be borne by the occupier, the terms of which are stated, and that the whole of these terms and conditions shall be subject to the sanction and approval of the Governor-General in Council. On the 20th April, 1826, the first permanent lease for 999 years was issued for town lands, under powers from the Supreme Government, contained in letters dated 27th October, 1825, and 2nd February, 1826, from Mr Secretary Mackenzie, in exchange for the original location tickets or grants, previously issued by the local authorities, which were considered by the Advocate-General in 1823 little more than leases at will usually construed to be leases for one year. The next Government Notification of importance occurs on the 25th September, 1826, by which all persons holding location tickets for occupying lands, are required forthwith to produce the same at the office of the Surveyor, for the purpose of being registered, preparatory to the issue of regular grants, and all location tickets not so produced at the expiration of one month would be considered to be forfeited. A Government Advertisement appeared on the 9th of January, 1827, by which all persons holding lands on the island of Singapore, under grants issued by Sir T. S. Raffles, Lieutenant-Governor, or under authority of location tickets received from the late Resident Mr Crawford, and who have complied with the conditions of the same, are required to return the documents into the office of the Land Surveyor, when they will be furnished with fresh grants authorized and confirmed by the Right Honorable the Governor General in Council. 2nd, that all persons who had failed in fulfilling

their original contracts were required to do so before the 1st of the ensuing May, in default of which these lands would revert to the Honorable Company. 3rd, that no disposition of land would in future be made by the Resident Councillor without the sanction of the Honorable the Governor of Prince of Wales Island, Singapore, and Malacca. On the 1st September, 1827, the first lease for agricultural lands, called a periodical lease for a term of 15 years, was issued under authority from the Supreme Government and the Governor in Council of Prince of Wales Island, Singapore and Malacca.

In the year 1830, a Regulation termed No. 1 of 1830, passed by the Honorable the Governor of Prince of Wales Island &c. &c. and approved of by the Honorable the Court of Directors &c., was promulgated with the view of enforcing the taking out of regular grants of lands &c. &c. In the preamble to the regulation it is stated, that whereas by virtue of a treaty concluded between the British Government and the Sultan and Tomungong, the actual sovereignty and proprietorship of the Island of Singapore and dependent Islands having been conferred on this government, no grant or title whatever can be valid for the holding of any lands on the island except such as emanate from the Government or its officers duly authorized, and whereas it is expedient that rules should be prescribed for the issue of such titles and for the due registry of all such as have already been or may hereafter be granted, for the due registry of all transfers that may from time to time be made; and also for the registry of all mortgages of such titles—wherefore this regulation has been passed &c. This regulation was to take effect from the date of promulgation, and the following were the main provisions;—that an office should be established for the superintendence of lands, that persons desirous of clearing lands should apply to the superintendent, that the superintendent should report applications to the chief civil authority, who will grant a permit to clear, under certain conditions. On the land being cleared the holder of the permit should be entitled to a lease, whose conditions were—one Dollar per acre on a lease of 15 years duration, on expiration of first lease another lease would be given for 15 years more at a rate not exceeding 3 Sp. Drs. per acre; on the expiration of the 2nd lease, a 3rd for 15 years would be granted at a rate not exceeding 6 Dollars per acre; on the expiration of the 3rd lease, a fourth would be granted at a rate not exceeding 10 Dollars per acre per annum.—Government might resume the land with all buildings thereon in the event of refusal to accept leases on the above terms, ten dollars per acre per annum was fixed as the maximum rate for all lands beyond the town limit. It was made optional for lease-holders to demand permanent leases for 999 years at the rate of 10 dollars per acre per annum, all permits and periodical leases were to be signed by the chief civil authority and all permanent leases were to be signed by the Secretary to Govern-

ment. All grants and location tickets issued by the late Lieutenant-Governor of Bencoolen or late Resident were to be exchanged for leases on the above terms, unless forfeited by non-conformity of the holders to the several proclamations recalling such titles. The same course as above was to be adopted with regard to lands held without title beyond the limits of the town. All previous location tickets &c. in the town were to be exchanged for leases of 999 years, at the rate of 45 Spanish dollars per acre, and all land-holders within the same limit were to have similar leases granted them, unless forfeited by non-conformity with previous regulations. All permits were to be registered and none considered valid, unless so registered; all leases likewise were to be registered; the above rules were also to apply to lands beyond town. All leases, periodical or permanent, were to be transferable under certain rules which are given at length in the regulation. Mortgages were also to be registered, and unless so registered were not to be admitted as valid in the Court of Justice; on these fees of 2½ per cent were to be levied. Copies of deeds could be had by the persons deposing on oath to the loss of the original, and lastly all fees levied were to be carried to the credit of Government.

No agricultural lands have been held under the terms of the above regulation by squatters or other occupiers of lands.

The next Act relating to the lands of Singapore was passed by the Governor General of India in Council, on the 22nd May, 1837, and is styled Act No. 10 of 1837. It is principally to this effect: that regulations 1 and 9 of 1830 passed by the Governor of P. W. Island &c. and likewise regulation 1 of 1831 relating to Pinang lands should be repealed, and one or more commissioners should be appointed to examine into land claims &c. in the Straits Settlements, who shall have power to deal with all claims and applications then pending before the local authorities. It gives power to the commissioner to cause surveys to be made, to summon persons before him, and examine them on oath, touching any landed rights or interests, to lay additional assessment on parties that may occupy more lands than stated in their grants, to decide upon all claims for lands, to require the production of documents, to impose fines on persons neglecting to obey his summons &c., the fines not to exceed 50 rupees, which, if not paid, were to be commutable by imprisonment not exceeding one month. It further enacts, that whoever shall resist the commissioner unlawfully, shall, on conviction before a magistrate, be punished with imprisonment for a term not exceeding one year, that whoever knowingly affirms to a falsehood before the commissioner shall be deemed guilty of perjury, that the decrees of the commissioner relating to lands shall be final, provided always, that if any party objects to any decree on the ground of legal right to lands, that party may within six weeks after the making of such decree, move the Court of Judicature of P. W. Island, Singapore and Malacca, to quash such decree &c.,

that the said court shall not decide on such cases except when the Recorder be sitting. That no decree or order of the commissioner shall be executed until six weeks shall have elapsed from the date of such decree or order, and that in case of application to the Court of Judicature, no decree or order shall be executed until finally disposed of by the said court, in case of no such application the execution of the commissioner's decrees or orders shall be proceeded with, lastly every commissioner appointed under this Act shall be guided in the performance of the duties confided to him under the provisions of this Act by such instructions as he shall from time to time receive from the Governor of Bengal.

On the 1st of January, 1838, leases for 60 and 99 years were first issued for town lands used as building lots, in accordance with instructions received by Mr Commissioner Young, in a letter from the Supreme Government dated the 24th May, 1837.

The last Act relating to lands in the Straits, is entitled Act 16 of 1839, passed by the Honorable the President of the Council of India in Council on the 10th of June, 1839, with the assent of the Right Honorable the Governor General of India, and was promulgated for general information. The design of the Act was to regulate the collection of rents payable to Government in the settlements of Prince of Wales Island, Singapore and Malacca. The principal provisions of the act were to declare all occupied lands not held under grant, subject to assessment &c., unless declared free by competent authority. It renders it lawful for the collector to eject parties refusing to engage for, or to remove from the land so occupied; to be taken possession of on the part of Government, but should such parties file a claim to exemption from Assessment the process shall be stayed until their claims shall be determined by competent authority. It requires all magistrates and police officers to aid the collector in the due exercise of the power of ejectment, and renders abettors in resisting the collector liable to a fine of 1,000 rupees or 6 months imprisonment if convicted before a magistrate. It requires all persons desirous of clearing lands to make application to the collector of land revenue, who is authorized to measure, grant a lease, and assess the land, or if by reason of jungle or other obstacles, a survey be impracticable, to grant only a permit to clear. Leases are not to exceed 20 years in duration, renewable for a further period of 30 years. It requires applicants to set up solid land marks and to keep them in repair, in failure of which the collector may cause them to be made, levying 3 times the cost of such repairs on the land holders, and gives him power of free access to the land for the purpose of effecting such repairs. All applications to hold lands beyond the term specified are to be submitted to the Governor of Bengal, all leases granted are to be entered in a register kept in the collector's office. It allows of the subdivision of lands, provided all arrears of rent be paid up. It orders the payment of rents to be made at the office of the collector

and provides for the recovering of arrears due, the process of which is given at length in the act under 14 different clauses; mutations by act of party, or by succession in titles to land taking place after the 1st of January 1840, are to be registered under certain rules given at length in the act under five different clauses. It is lastly provided, that nothing in the act contained shall apply to such cultivators and resident tenants of Malacca, as hold their lands by prescription subject only to a payment to Government of one-tenth part of the produce in kind.

To this act is appended a government notification issued by Mr Bonham, the then commissioner, under date 21st August, 1840, in which the public are informed, that leases for 20 years renewable at the expiration for a period of 30 years at the option of the lessee, will be issued to persons occupying or wishing to occupy ground under the following terms:—

Rent free for two years.

from 2nd year to 5th year at 4 annas per acre

„ 5th „ 10th „ 8 do. do.

„ 10th „ 20th „ 1 Rupee

the maximum rate for the next 30 years to be 3 rupees per acre per annum.

At Singapore, there were no applicants desirous of holding lands on the above terms, notwithstanding they were exceedingly moderate, in comparison with the term offered in regulation 1 of 1830, so like that act no leases were issued to the various occupants and squatters. The causes of the unwillingness of the agricultural inhabitants of the residency of Singapore, to hold lands for limited periods, may be attributed to the following circumstances—1st the nominal value of lands until cleared and cultivated. 2nd, the large outlay required for all the permanent cultivations making the ground only valuable for the trees upon it, which as has been shown under the head of agricultural statistics, do not commence to yield returns, until the 10th and 15th year after commencement, and at which time the most valuable of these do not yield the usual interest after they came to their highest point of bearing, consequently the original outlay of the cultivators is never returned to them. If the property after a limited period were to revert to Government, the result of their skill, toil and attention for many years would not only be lost, but their original capital also, to them or their families. 3rd, the almost universal nature of the above cultivations, (the others, such as annual cultivations of rice, vegetables, sugar cane &c. being of small extent and of little value in comparison) and the evanescent character of the remainder, such as pepper and gambier, whose cultivation if taxed would be carried to the inexhaustible forest lands of Johore, in which lands alone, this cultivation can be followed with success.

Mr Crawford, formerly Resident of Singapore, and eminently known as author of the history of the Indian Archipelago, writing

to the Supreme Government under date the 9th January 1824, says "In the disposal of lands it appears to me, that the principal to be held in view, will be to confer upon the purchasers such permanent and certain interest in the soil, as will draw a legitimate share of capital to its improvement, secure to government such rights and profits as can fairly and legitimately be derived from it, and simplify the tenure on which it is held in such manner, that formalities and technicalities which are incident to the alienation and descent of real property in Europe, and which in an infant and commercial settlement where the proprietors consist of a great diversity of nations could not but prove both intricate and prejudicial;" the later local authorities have fully coincided with Mr Crawford's views regarding the expediency of giving the agriculturist "permanent and certain interest in the soil"—while the "rights and profits" legitimately to be derived by government have since his time till the last instructions of government given below regarding the disposal of lands, had an experience of 20 years as a guidance, in apportioning them—these instructions were contained in a letter from the officiating secretary to the Government of India under date the 12th October 1844, to the Honorable Colonel Butterworth C. B. &c. Governor of the Straits Settlements, of which the following is an extract: "The Governor General in Council is now advised does not perceive the utility of maintaining in any case the legal fiction of a lease for 999 years. The transfer of the land outright was intended in all cases and a bill of sale therefore would be the proper instrument. I am accordingly instructed to state with reference to paras. 4 and 5 of Colonel Butterworth's letter, that the object of the Government being to relinquish their right in the soil for ever, not so much with the view of securing an immediate and adequate pecuniary return, as for the purposes of creating improving proprietors, a bill of sale may be granted in every case, and that the distinction originally contemplated in the proposed grant of leases for 999 years to existing lessees and squatters, may be avoided as needless. His Honor in Council is further of opinion that in settlements like those of the Straits, useless English legal technicalities ought not to be inserted in writings and that the deed of sale should be drawn up with the utmost conciseness compatible with clearness and the insertion of the requisite conditions."

Since the above instructions the difficulties that were found to accompany all previous acts of government regarding agricultural lands, arising from their inapplicability to the peculiar position of land holders or squatters have been set at rest, after a period of nearly 25 years, during which time much attention was given to the subject both by the Governors and Residents—as witnessed by the many long and able reports to be found at various times in the Official Records. The occupation of agricultural lands under titles from government, has since progressed steadily, the sums

received for which, have been already given under the head of Land Revenue. The objects and intentions of the government while not requiring immediate returns have been fully attained in the creating of improving proprietors, and the minimum rate at which lands are alienated, viz. 5 rupees per acre, while it acts as no bar to those who wish to cultivate the lands, for which they apply, is sufficient to prevent the absorption of large tracts of uncultivated land by monied speculators, to the exclusion of the smaller occupiers, who retain only what they can clear and keep under cultivation.

Singapore, 1st June, 1849.

STATEMENT B.

Estimate of the Lands cultivated and uncultivated of Singapore Island and its Dependencies for the year 1848.

	Gambier.	Fruit Trees.	Nutmegs.	Cocoanuts.	Betelnuts.	Cloves	Lalang.	Brushwood.	Vegetables.	Fresh Swamps	Pasture.	Burying Ground.	Serees.	Houses.	Mangrove.	Sugar	Brickery.	Pine Apple.	Paddy.	Jungle.	Pepper.	Total.
	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R P	A. R R	A. R P	A. R P	A. R P	A. R P
Surveyed Districts	2,241 00 00	887 1 00	1,064 00 00	2,493 00 00	201 3 00	28 00 00	1,260 2 00	2,951 00 00	309 1 00	616 3 00	402 2 00	283 1 00	22 00 00	27 1 00	1,042 00 00	182 00 00	201 2 00	90 00 00	210 1 00	7,494 2 34	397 00 00	22,414 3 34
Other part of the Island.	21,979 00 00	60 00 00	108 00 00	56 00 00	194 00 00	00 00 00	00 00 00	00 00 00	70 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	7,000 00 00	00 00 00	00 00 00	200 00 00	50 00 00	77,068 3 24	2,217 00 00	109,060 3 24
Islands Dependent	00 00 00	70 00 00	00 00 00	96 00 00	10 00 00	00 00 00	185 00 00	560 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	1,380 00 00	00 00 00	00 00 00	1,170 00 00	00 00 00	8,046 2 00	00 00 00	11,517 2 00
Town of Singapore.	00 00 00	20 00 00	20 00 00	3 00 00	40 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	871 00 22	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	00 00 00	954 00 22
Total	24,220 00 00	1,037 1 00	1,190 00 00	2,648 00 00	445 3 00	28 00 00	1,445 2 00	3,521 00 00	379 1 00	616 3 00	402 2 00	283 1 00	22 00 00	808 1 22	9,422 00 00	242 00 00	201 2 00	1,460 00 00	280 1 00	92,810 00 18	2,614 00 00	143,947 2 00

STATEMENT C.

Estimate of the extent of cultivated lands in the Singapore Residency together with their Annual Product and Value for the year 1848.

Lands under what cultivation.	Extent.		Number of trees or plants.	Produce.		Price.	Gross annual value.			
	Acres.	R P		Weight in piculs.	In number or measure.		Sp. Drs	C.	Co's Rs.	A P
Nutmeg Trees.	1,190	00 00	71,400 trees	525 piculs Nutmegs	7,016,105 nuts	60 Sp. Drs per picul	31,500 00	70,728 00 00		
				181 " Mace		60 " " "	7,860 00	17,648 5 1		
				5 piculs		20 Sp. Drs per picul	100 00	224 8 6		
Clove do.	28	00 00	5,488 do		1,080,000 nuts	1 Sp. Dir per 100	10,800 00	24,240 9 7		
Cocoanut do.	2,648	00 00	342,008 do		5,152,900 nuts	2 Cents per 100	1,030 50	2,313 15 2		
Betelnut do.	445	3 00	128,221 do			Sp. Drs 36.00 per acre	9,538 63	21,484 12 2		
Fruit do.	1,037	1 00	103,725 do			1 Sp. Dir per picul	80,000 00	179,626 10 3		
Gambier Bushes.	24,220	00 00	80,000 piculs			8 1/2 Sp. Drs per picul	108,250 50	243,013 8 8		
Pepper Vines.	2,614	00 00	1,787,064 vines	30,923 piculs			34,875 00	77,856 14 10		
Vegetables.	22	00 00	66,000 vines				10,560 00	23,710 11 6		
Serees or Paan Vines						Dir 1.50 per 100 bundles	6,400 00	14,370 2 1		
						4 Sp. Drs per picul	4,806 00	10,993 2 4		
						1 Cent per stalk	4,400 00	9,879 7 5		
Sugar Cane.	242	00 00				40 Cents per gallon	7,900 00	16,390 14 11		
						1 Cent each	399 36	876 7 9		
						3 Cents per ganton	5,000 00	11,250 10 8		
Pine Apple.	1,460	00 00				5 Cents per bundle	4,000 00	8,981 5 4		
Rice or Paddy.	260	1 00				8 Cents per chupa	2,000 00	4,490 10 8		
Pasture.	402	2 00				25,000 chattas Butter				
Total Agricultural Lands.	34,949	00 00				Total Gross Value of Agricultural Produce	328,711 06	738,065 13 4		

N.B. A picul is equal to 133 1/2 lbs.



SOME ACCOUNT OF THE ORDER OF BUDHIST MONKS
OR TALAPOINS.

By M. BIGANDET.

THERE is no religious system in the world, acknowledged and professed by a greater number of men than Buddhism. Its votaries comprise nearly one-fourth of the whole human race, and are spread all over Eastern Asia, including the Japanese Archipelago. The fact of the extraordinary diffusion of this creed, however erroneous it may be, is alone sufficient to attract and fix upon it the attention of every inquiring mind. But the compound nature of its doctrines is no less deserving of observation. With the grossest and most revolting errors, Buddhism teaches an astonishing number of great and fundamental truths; from the abyss of its almost unfathomable darkness, it sends forth several rays of the purest light; anything therefore that is connected with this system, appears to be almost essentially invested with some interest. It is under such an impression that the following pages have been written with the intent of throwing some light on the Buddhist priests or recluses, or rather, to speak more correctly, on that society of individuals, professing to observe in their perfection not only the precepts but even the counsels of the Budhistic law. A personal intercourse of five years with those pious devotees, and an attentive perusal of their best works, purporting to give accurate notions regarding their order, its rules and regulations, are the sources from which I have derived my information. I will not consider that society in an abstract point of view, but I will look upon it in connection with the religion it has sprung from, and as affording a practical illustration of its highest maxims and general tendencies, and of the real nature and true spirit of its creed. In order to take a comprehensive view of that religious order of devotees, known to Europeans under the appellation of Bonzes or Talapoins,* I will examine the real nature of that institution, and the great object its members aim at securing the possession of. I will next consider the constituent parts of that body, or its hierarchy, describing at the same time the various ceremonies observed on the solemn occasion of admitting individuals into the religious society, and exposing succinctly and briefly the rules that direct and regulate the whole life of a professed member, as long as he remains in the brotherhood. It will not be found amiss to inquire into the motives that induce the votaries of Buddhism in Ceylon, Burmah, Siam, Thibet &c. to show the greatest respect and give unfeigned marks of the deepest veneration to the Talapoins. This notice will be

* The word Talapoin, imported into Europe by the writings of early Portuguese authors in the East Indies, derives its origin probably from two Pali words Tala pat meaning the leaf of the palm tree. These two words coupled together are used by the Siamese to designate the large fan made of palm leaves, set in a slender wooden frame, which Talapoins carry with them on certain occasions when they go abroad.

concluded with a short account of the low and degraded state into which this order has fallen in those parts I have visited.

1. *Nature of the Religious Order of Talapoins.*

He who has not studied the religious system of Buddhism, nor acquired accurate notions of its doctrinal principles, is scarcely capable of forming a correct opinion of the religious order of those austere recluses, whom Europeans, with a mind biassed by educational influence, denominate Priests of Budha. Were we to apply to the members of that order the notions generally entertained of a priesthood, we would form a very erroneous conception of the real character of their institution. For, in every religious system admitting of one or several beings superior to man, whose providential action influences his destinies either in this or the next world, persons invested with a sacerdotal character, have always been considered as mediators between men and the acknowledged Deity, and offering to the Supreme Being, on all public occasions, the prayers and sacrifices of the people, and soliciting in return His gracious protection. When in the early ages of the world, the sacerdotal dignity was coupled with the patriarchal or regal ones, when in the succeeding ages there existed a regular and distinct priesthood, such as subsisted under the Mosaic dispensation, or among the Greeks, Romans, Gauls &c., the priests were looked upon as delegates of the people in all that related to national worship, carrying on in their names, the mysterious intercourse that links heaven to earth. Priesthood, therefore, necessarily implies the belief in some Being, superior to man, and controlling his destinies. The moment that such a belief is disregarded, the very idea of priesthood vanishes. Buddhism, such at least as it is found existing in Ceylon, Burmah, Siam and other places, is a purely atheistical religious system, and presents the solitary instance, at least as far as my information goes, of a religious creed, admitted by various nations, the doctrines of which are not based upon the notion of some Supreme Being, controlling more or less the affairs of this world. In support of an assertion that may appear to many somewhat hazardous, I will briefly lay down the leading tenets of the Budhistic doctrine.

According to that system, matter is eternal. The existence of a world, its duration, destruction and reproduction, all the various combinations and modifications matter is liable to, are the immediate result of the action of eternal and self-existing laws. Through life man is submitted to the continual but successive influences of his good and bad deeds. This double influence always attends him through his numberless existences, and inevitably awards him happiness or unhappiness according as the respective sum of good or evil predominates. There exists an eternal law, which, when obliterated from the memory of men, can be known again, and, as it were, recovered only and thoroughly understood,

by the incomparable genius and matchless wisdom of certain extraordinary personages called Budhs, who appear successively and at long intervals during the various series or successions of worlds. These Budhs or Budhas announce that law to all the then existing rational beings. The great object of that doctrine is to point out to them the means of freeing themselves from the influence of passions, of becoming abstracted from all that exists; that being thereby delivered from the action of evil influence, which causes mortals to turn incessantly in the whirlpool of never ending existences, they may obtain the state of Neiban or rest, that is to say, a situation wherein the soul, disentangled from all that exists, alone with herself, indifferent to pains as well as to pleasures, folded, as it were, upon herself, remains for ever in an incomprehensible state of complete abstraction and absolute rest. A Budh is a being who, during myriads of existences, slowly and gradually gravitates towards this centre of an imaginary perfection, by the practise of the highest virtues. Having attained thereto, he becomes, on a sudden, gifted with a boundless genius, wherewith he at once discovers the wretched state of all beings, and the means of delivering them from it. He thoroughly understands the eternal law which alone can lead mortals in the right way, and enable them to come out of this circle of existences, wherein they have been unceasingly turning and moving in a state of perpetual agitation opposite to that of fixity or rest. He preaches that law whereby man is taught the practise of those virtues which destroy gradually in him every evil influence, every affection for all that exists, and brings him at last to the end of existence, possession of Neiban. His task fulfilled, Budh dies, or rather to use the language of Budhists, he enters into the state of Neiban. In that situation which is truly inexplicable, he knows nothing of, and enters no wise into, the affairs of this world. He is as if he was not, or had never been. Budhists venerate three precious things, Budha, his law, and the assembly of the just or perfect, in the same sense as we venerate and admire what is morally good and beautiful, such as virtue considered abstractedly and the acts originating from it. The statues of the last Budh Gaudama, are honored by his followers, not with the idea that any powers or virtues are inherent in them, but solely because they are the visible representations of Budh, who desired that the same honor should be paid to them, as would be offered to his person, were he yet living among them. This faint outline of the Budhistic creed is sufficient to bear out the above assertion, that it is in no wise based on the belief in a Supreme Being, but is strictly Atheistical, and therefore that no real priesthood can ever be found existing under such a system. It may prove too of some assistance for better understanding what is to be said regarding the subjects of this notice.

The Talapoins are called by the Burmese Phonghis, which

term means great glory, or Rahans, which means perfect. They are known in Ceylon, Siam and Thibet, under different names conveying nearly the same meaning and expressing either the nature or the object of their profession.

What induces a follower of Budha to embrace the Talapoinic state? What is the object of his pursuit in entering on such a peculiar and extraordinary course of life? The answer to these questions will supply us with accurate notions of the real nature of this singular order of devotees. A Buddhist on becoming a member of the holy society, proposes to keep the law of Budha in a more perfect manner than his other co-religionists. He intends to observe not only its general ordinances obligatory on every individual, but also its prescriptions of a higher excellency, leading to an uncommon sanctity and perfection, which can be the lot of but a comparatively small number of fervent and resolute persons. He aims at weakening within himself all the evil propensities that give origin and strength to the principle of demerits. By the practice and observance of the highest and sublimest precepts and counsels of the law, he establishes, confirms and consolidates in his own soul, the principle of merits, which is to work upon him during the various existences he has as yet to go through, and gradually lead him to that perfection which will qualify him for, and entitle him to the state of Neiban, the object of the ardent desires and earnest pursuit of every true and genuine disciple of Budha. The life of the last Budh, Gaudama, his doctrines as well as his example, he proposes to copy with scrupulous fidelity and to follow with unremitting ardour. Such is the great model that he proposes to himself for imitation. Gaudama withdrew from the world, renounced its seducing pleasures and dazzling vanities, curbed his passions under the yoke of restraint, and strove to practise the highest virtues, particularly self-denial, in order to arrive at a state of complete indifference for all that is within or without self, which is, as it were, the threshold of Neiban. The Talapoin fixing his regards on that matchless pattern of perfection, would fain reproduce, as far as it lies in his power, all its features in his own person. Like Budha himself, he parts with his family, relatives and friends, and seeks for admission into the society of the perfect; he abandons and leaves his home, to enter into the asylum of peace and retirement; he forsakes the riches of this world, to practise the strictest poverty; he renounces the pleasures of this world, even the lawful ones, to live according to the rules of the severest abstinence and purest chastity; he exchanges his secular dress, for that of the new profession he enters on; he gives up his own will, and fetters his own liberty to attend through every act and all particulars of life, to the regulations of the Brotherhood. He is a Talapoin, for himself, his own benefit, to acquire merit which he shares with nobody else. On the occasion of certain offerings or alms being presented to him by some benevolent admirers of his holy mode of life, he will repay his benefactors by repeating

to them certain precepts, commands and points of the law, but he is not bound by his professional character to expound the law to the people. Separated from the world by his dress and his peculiar way of living, he remains a stranger to all that takes place without the walls of his monastery. He is not charged with the care of souls; and, therefore never presumes to rebuke any one that trespasses the law, or to censure the conduct of the profligate. The ceremonies of the Buddhistic worship are simple and few. The Talapoin is not considered as a minister whose presence is an essential requisite when they are to be performed. Pagodas are erected, statues of Budha are inaugurated, offerings of flowers, tapers, and small ornaments are made, particularly on the days of the new and full moon; but on all these solemn occasions, the interference of the Talapoin is in no way considered as necessary. So that the whole worship exists independently of him. He is not to be seen on the particular occasions of births and marriages. He is, it is true, occasionally asked to attend funerals, but he then acts not as a minister performing a ceremony, but as a private person. He is present for the sake of receiving alms that are profusely bestowed upon him by the relatives of the defunct. The Buddhists have three months of the year, from the full moon of July to the full moon of October, particularly devoted to a stricter observance of the practices and ceremonies of the law. Crowds of people of both sexes resort to the Pagodas, and often spend whole nights in the bungalows erected close to those places: the most fervent among them, fast and abstain from profane amusements during that period, they devote more time to the reading of their sacred books, and to the repetition of certain formulas calculated to remind them of certain important truths or intended to praise the last Budh Gaudama, and the law he has published, alms more abundant are pouring into the peaceable dwellings of the pious recluses. During all the time, the Talapoin quietly remains in his place, without altering his mode of life, or deviating in the least from his never changing usages and ordinary habits. He enjoys as usual, the good things which his liberal co-religionists take pleasure in proffering to him. On two occasions I have, however, seen in different places two or three Talapoins, withdrawing during the three months of lent, to some lonely place, living alone in small huts, shunning the company of men, and leading an eremetical life, to remain at liberty to devote all their time to meditations on the most excellent points of the law of Budha, combatting their passions, and enjoying in that retired situation a foretaste of the never troubled rest at Neiban.

In many respects the Talapoinic institutions may be assimilated to those of some religious orders that appeared successively in almost every Christian country previous to the era of the reformation, and that are up to this day to be met with amidst the churches of the Latin and Greek rites. Like the monk, the Talapoin

bids a farewell to the world, wears a particular dress, leads a life of community, abstracts himself from all that gives strength to his passions, by embracing a state of voluntary poverty, and absolute renunciation of all sensual gratifications. He aims at obtaining by a stricter observance of the law's most sublime precepts, an uncommon degree of sanctity and perfection. All his time is regulated by the rules of his profession, and devoted to repeating certain formulas of prayers, reading the sacred scriptures, begging alms for his support &c. These features of exterior resemblance common to institutions of creeds so opposite to each other, have induced several writers little favorable to Christianity, to pronounce without further inquiry that Catholicism has borrowed from Buddhism many ceremonies, institutions and disciplinary regulations. Some of them have gone so far as to pretend to find in it the very origin of Christianity. They have however been ably confuted by Abel Remusat in his *Memoir* intituled Chronological Researches into the Sarnic Hierarchy of Thibet. Without entertaining in the least, the presumptuous idea of entering into a controversy entirely foreign to my purpose, I will confine myself to making one or two remarks calculated to show that the first conclusion is, to say the least of it, a premature one. When in two religious creeds, entirely opposed to each other in their ultimate object, there are several minor objects, equally set forth by both, it will necessarily happen that in many instances, means nearly similar shall be prescribed for effectually obtaining them, independent of any previously concerted plan or imitation. The Christian system and the Budhistic one, though differing from each other in their respective objects and ends, as much as truth from error, have, it must be confessed, many striking features of an astonishing resemblance. There are many moral precepts equally commanded and enforced in common by both creeds. I will not even shrink from asserting that most of the moral truths prescribed by the Gospel are to be met with in the Budhistic scriptures. The essential, vital and capital discrepancy lies in the difference of the ends the two creeds lead to, but not in a variance of the means they prescribe for the attainment of them. The Gospel tends to reunite man to his Maker, points out to him the way he must follow for arriving at the possession and enjoyment of Him who is the great principle and end of all things, and teaches him as a paramount duty to conform his will and inclinations to his commands. Budhism tends to abstract man from all that is without self, makes self his own and sole centre, exhorts him to the practices of many eminent virtues, which are to elevate to imaginary perfection, the acme of which is the incomprehensible state of Neiban. If the end aimed at by the followers of Budha is widely different from that which the disciples of Christ strive to obtain, the means prescribed for the attainment of these two ends are, in many respects, very much similar to each other. Both creeds teach man to combat, controul and master the passions of his

heart, to make reason predominate over sense, mind over matter, to root up from his heart every affection for the things of this world, and to practice the virtues required for the attainment of these great objects. Is there any thing surprising that persons having in many respects views nearly similar, should resort to means or expedients nearly alike for securing the object of their pursuit, without having even seen or consulted each other? He who intends to practice absolute poverty, must of course abandon all his earthly property. He who proposes renouncing the world, ought to withdraw from it. He who will lead a contemplative life, must look out for a retired place far from the gaze and agitation of the world. To control passions, and particularly the fiercest of all, the sensual appetite, it is required that one should keep himself separate from all that is calculated to kindle its fires, and feed its violence. Every profession has its distinctive marks and peculiar characteristics. Hence peculiarity of dress, manners and habits, in those who have adopted a mode of life differing from that of the rest of the community. He who has bound himself to the daily recitation of certain prayers or devotional formulas, a certain number of times, will have recourse to some instrument, or devise some means for ascertaining the number of times he has complied with his regulation in this respect. He too who is eager to acquire self-knowledge and to carry on a successful war with himself, will apply to a guide to whom he will lay open his whole soul, and ask spiritual advice to overcome the obstacles he meets on his way to perfection. These and many other points are common both to him that intends observing not only the precepts but also the evangelical counsels of the Budhistic law. Causes being the same in many instances in both systems, consequences almost analogous must inevitably result therefrom. Religious institutions always bear the stamp of the religious ideas that have given rise to them. They, together with their rules and regulations, are not the principle but the immediate consequence or offspring of religion such as it is understood by the people professing it. They exemplify and illustrate religious notions already entertained, but they never create such as are not yet in existence. When the learned shall have collected sufficient materials for giving an accurate history of the origin, progress, spread and dogmatical revolutions of Budhism, it will not be uninteresting to inquire into the causes that have operated in communicating to two religious systems, essentially differing in their respective tendencies, so many points of resemblance. In reading the particulars of the life of the last Budh Gaudama, it is impossible not to feel reminded of many circumstances relating to our Saviour's life as sketched out by the Evangelists.* Having endeavoured to explain the nature

* The origin of the close affinity between many doctrinal points and maxims common both to Christianity and Budhism, having been ascertained, it will not be difficult to find out and explain how the votaries of both have come to adopt so many practices, ceremonies, observances, and institutions nearly similar.

of the institution of the Talapoins, and the object aimed at by its professed members, I will now proceed to examine its systematical organization, or sacred hierarchy.

2. *Hierarchy of the order.*

It is somewhat surprising to find in the middle of half civilized nations, such as the Burmese, Siamese, Cingalese, and Thibetans, a religious order, with a distinct and well marked Hierarchy, constitution and regulations, providing for the admission of members, their occupations, duties, obligations and their mode of life, forming as it were, a compact, solid and perfect body, that has subsisted almost without change during several centuries, and survived the destruction of kingdoms, the fall of royal dynasties, and all the confusion and agitation produced by political commotions and revolutions. It is in Thibet, that the order is found existing in the greatest perfection, under the fostering care of the Great Lama, or High Priest, who combines in his own person the regal as well as the sacerdotal dignity and power. In the city of Lassa, a Pontifical Court, an elective sacerdotal chief, and a college of superior Lamas, impart to the order dignity, decency, respectability and stability, which insure its continued existence, and more or less extend its influence over its members living in distant countries, ruled by a foreign sovereign. The period of the introduction of Buddhism from India into Thibet, is very uncertain, if not quite unknown, but it appears certain, that the establishment of a Pontifical chief or sovereign, with royal prerogatives, was set up by one of the grandsons of the great Tartar warrior Gengis, in or about the middle of the thirteenth century. In other countries, where the order has no connection whatever with the civil power, we expect to see it surrounded with an equal splendour, or subsisting in the same state of perfection, regularity and fervour. Extraordinary indeed would be its vital energies, were the remotest parts of this great and far spread body to receive the same impulse and exhibit the same symptoms of vitality as those nearest to the heart or principle of life. Having never met with any detailed particulars regarding the Thibetan Monks, I must remain satisfied with laying before the reader, an account of all that relates to the constituent parts of the order, such as I have found them existing in Burmah, and developed in their sacred writings.

The whole fraternity is composed, 1st of young men who have put on the Talapoinic dress, without being considered professed members thereof, or having hitherto passed through a certain ordeal somewhat resembling an ordination; they are called *Shüing*: 2nd, of those who having lived for a while in the community, in a probationary state, are admitted professed members with the ceremonies usually observed on such occasions, whereby the title and character of Talapoins are solemnly conferred—they are denominated *Pazin*: 3rd, of the Heads of each House or

community, who have the power to control all the inmates of the house : 4th, of a Provincial, whose jurisdiction extends over all the communities spread over the towns and villages of one Province or District : 5th, of a Superior general, residing in the capital or its suburbs, called *Haiu-Dau** or great master, having the general management and direction of all the affairs of the order throughout the Empire. Let us say something upon each of these five degrees of the Buddhistic Hierarchy.

It is an almost universal custom among the Burmese and Siamese to cause boys who have attained the age of puberty to enter for a year or two some of the many Talapoinic houses, to put on the yellow dress, for the double purpose of learning to read and write, and of acquiring merits for future existences. On the occasion of the death of some persons, it happens sometimes that a member of the family will enter the community for six months or a year. When a young lad is to make his first entrance into a house of the order, he is led thereto, riding on a richly caparisoned pony, or sitting in a fine palanquin carried on the shoulders of four or more men. During the triumphal march, he is preceded by a long line of men and women, attired in their richest dresses, carrying a large quantity of presents destined for the use of the inmates of the *Kiaong* (such is the general name given to all the houses of the fraternity in Burmah) the young postulant is to reside in. The procession in this stately order, attended with a band playing on various musical instruments, moves on slowly and circuitously through the principal streets of the town towards the monastery that has been fixed upon. This display of an ostentatious pomp is on the part of the parent and relatives an honor paid to the postulant who generously consecrates himself to so exalted a calling, and on the part of the youth a last farewell to worldly vanities. He has no sooner descended from his splendid conveyance and crossed the threshold of the *Kiaong*, than he is delivered by his parents into the hands of the superior, and placed under his care. His head is instantly shaved ; he is stripped of his fine secular dress, and habited in the plain and humble yellow garb ; he must lay aside every sort of ornament, and remain contented with the unassuming simplicity, becoming his new position. The *Kiaong* is become his home, and its inmates are substituted in the room of his father and mother, brothers and sisters. The duty of the young *Shüing* is to minister to the wants of the elders of the house, to bring and lay before them at fixed times the usual supply of water, the betel box, and the daily food ; to attend them on some pious errand through the town, or the country. A portion of his time is devoted to acquiring the art of reading and writing, and occasionally the elements of arithmetic. There are five general precepts obligatory on all men, but the *Shüing* is bound to the obser-

* *Zarado* according to Sangermano. ---Ed.

vance of five additional ones, making ten altogether, by which he is forbidden—1st, to kill animals, 2nd to steal, 3rd to give himself up to carnal pleasures, 4th to tell lies, 5th to drink wine or other intoxicating liquors, 6th to eat after midday, 7th to dance, sing, or play on any musical instrument, 8th to color his face, 9th to stand on elevated places, not proper for him, 10th to touch gold or silver. The trespassing of the five first precepts is visited with expulsion from the Kiaong, but that of the five last may be expiated by a proper penance. The young Shung, as before observed, do not remain in the Kiaong beyond the period of one or two years; they generally leave it and return to a secular life. There are however, some of them, who, fond of the easy and quiet life of Talapoins, or actuated by other motives, prefer remaining longer in those places of retirement. They betake themselves to the study of the duties, rules and obligations of a professed member of the society; they pay more attention to the reading of religious books, and endeavour to obtain the required qualifications. Being sufficiently instructed on all these points, and after having attained the age of twenty years, they are solemnly admitted among the professed members of the brotherhood, under the name of Patzin. The interesting ceremonies observed on the occasion shall be hereafter fully described. The state of Patzin is, therefore, properly speaking, that of Talapoins. Every other step or promotion in the sacred hierarchy, is purely honorific, in so far that it does not impose upon him who is so promoted any new duty or obligation, different from what is obligatory on every professed member, but it confers a power or jurisdiction for commanding, controlling and governing all the brothers under his care. In virtue of such distinctions, a superior how high soever his rank may be, is bound to the observance of the same rules, duties and obligations as the last Patzin; his sacred character is not enlarged or altered, he is only entrusted with a certain jurisdiction over some of his brethren.

The Talapoin is bound to his community, so that in every Kiaong or House of the Order, there are ordinarily to be met several Patzins, and a good number of Shungs. Each Kiaong has a chief who presides over the community, under the appellation of Tsain. He is the head of the house, has power over all the inmates, and every one acknowledges him as his immediate superior. He has the management of all the little affairs of the community, enforces the regular observance of the rules and duties of the profession, corrects abuses, rebukes the trespassers, spurs the lazy, excites the lukewarm, keeps peace and maintains good understanding amongst his subordinates. He receives in his official character, the pious visitors who resort to his monastery, either for the sake of making voluntary offerings, presenting him with some tokens of their respect for, and admiration of his eminent sanctity, or for conversing with him on some religious subjects, which, let it be said quietly out of deference to human frailty, sometimes make

room for those of a worldly character. If the alms-givers or advice-seekers, belong, as it often happens, to the fair and devout sex, they must remain at a distance of six or twelve cubits, as the place may allow, from their pious adviser. It is supposed that a near proximity might endanger the virtue of the holy recluse.

In every town a considerable number of Kiaongs are found either in the suburbs or within the walls, in a quarter reserved for the purpose; in every village the Kiaong is to be met with, as the parson's house in our villages of Europe. These various communities are placed under the jurisdiction of a general superior or a provincial, named Tsaiodan or great master; they form under his authority a province of the Order; a division much similar to that of several religious orders in Europe. He enjoys a large share of public respect and veneration. His Kiaong outshines the others in splendour and decorations. The first and wealthiest inhabitants of the place are proud to call themselves his disciples and supporters, and to supply him liberally with all that he may require. His chief duty is to settle disputes that not unfrequently arise between rival communities. The demon of discord often haunts these abodes of peace and retirement, the authority of Provincial interferes to put down feuds and contentions which envy and jealousy, the two great enemies of devotees, excite not unfrequently. When a Talapoin is accused of incontinence or other serious infringement of the vital rules of the profession, he is summoned to the tribunal of the Tsaiodan, who, assisted and advised by some elders, examines the case and pronounces the sentence. Superior intellectual attainments do not appear to be the essential qualifications for obtaining this high dignity. I have met with two or three of these dignitaries, who, in my opinion, were vastly inferior to many of their subordinates in talents and capacity. They were old and good natured men who had spent almost all their lives within the precincts of the monastery. Their dress, manners and habits were entirely similar to those of their brethren of minor order.

In the kingdom of Ava, the key-stone of the Talapoinic fabric is the *superlatively* great master residing in the capital or its suburbs. His jurisdiction extends over all the fraternity within the realm of his Burmese Majesty. His position near the seat of Government, and his capacity of king's master, or teacher, must have at all times conferred upon him a very great degree of influence over all his subordinates. But his power now is merely nominal—the effects of his jurisdiction are scarcely felt beyond his own neighbourhood. Such, however, was not the case in former times. Spiritual commissioners were sent yearly by him to examine into and report on the state of the communities throughout the provinces. They had to inquire particularly whether the rules were regularly observed or not, whether the professed members were really well qualified for their holy calling or not. They were

empowered to repress abuses, and whenever some unworthy brother, or *black sheep*, was found within the enclosure of the monastery, he was forthwith degraded, stripped of the yellow garb, and compelled to resume his secular course of life. Unfortunately for the welfare of the order, these salutary visits no more take place; the wholesome check is done away with. Left without a superior control the order has fallen in the lowest degree of abjectness and degradation. The situation of Talapoins, is looked upon now as one fit for lazy, ignorant and idle people, who being anxious to live well and do nothing, put on the sacred dress for a certain time, until, tired of the duties and obligations of their new profession, they retire and betake themselves anew to a secular life. This practise, as far as my observation goes, is pretty general, if not almost universal. There are, however, a few exceptions. Though labouring under many serious disadvantages, the society continues to subsist with all its exterior characteristics, the various steps of its hierarchy are as well marked and defined now as they appeared before under more favorable circumstances. Its frame work remains entire, but the materials composing it are somewhat imperfect and unsound.

(To be Continued.)

INVESTITURE OF THE KING OF COCHIN-CHINA BY AN ENVOY
OF THE EMPEROR OF CHINA IN 1849.

LAST year I sent you an account of the funeral of the king Thien Tri. This year I shall give you some details regarding the investiture accorded to the new king Tu Duc by the Emperor of China.

According to a custom or law prevailing from time immemorial, the kings of Cochin-China must receive investiture from the Emperor of China. Although this investiture consists in a simple formality, since the Anamese kingdom is altogether independent of the Chinese Empire, yet to this day the kings would consider that something was wanting to their royalty, if they had not obtained a diploma from the Emperor of China, and the people also, would not regard as altogether king a sovereign who had not been instituted by a foreign power. Down to the present time the ceremony of investiture has taken place at Kê Cho, the old capital of the kingdom and former abode of the kings, and since Tonquin and Cochin-China have formed only one state, of which the capital is Hué in Northern Cochin-China, the kings have still repaired to Kê Cho and there met the Chinese ambassadors. This journey of the king is made with great pomp, great fatigue for the mandarins and soldiers, and great cost for the people; for in this country it is the people who pay for all. Besides the taxes which they are obliged to pay regularly, if there is anything new or unusual, duties are imposed upon them, or they are obliged to bear all the expenses. When the king Tu Duc ascended the throne, some mandarins directed his attention to the burdens which would be imposed upon the people if he went to Kê Cho as usual, and solicited him to request the Emperor of China to send his ambassadors to Hué. This reason of the mandarins was only a pretext, for, as I shall presently shew, the people were more oppressed than if the king had gone to Kê Cho. The true motive was that they wished to save themselves the trouble of the journey. However this might be, they succeeded in persuading the king, who besought the Emperor of China that the ambassadors of the Celestial Empire should come to his Capital to give him investiture. It even appears that he was not disposed to submit to this formality, if the Emperor had refused his request. After some negotiation, China acceded to the demand, and as soon as certain intelligence of this concession was received in Cochin-China, every thing was put in train to give the coming deputies of China a great idea of the Anamite kingdom. For this purpose the population which bordered the road by which they must pass were obliged to set to work, and had to labour during four or five months. It was decided that the ambassadors should only make a short journey each day, so that they might be a long time on the road, and be persuaded that the kingdom was

immense. At each interval of 12 or 15 miles, palaces were built to receive the ambassadors and all their suite. The people were obliged to bear the cost of the wood and other materials, and to supply the workmanship for all these buildings. All the roads were newly repaired, all the streams were cleared out, and at a later period when the ambassadors passed, it was still the poor people who were obliged to furnish everything necessary for them, and in the greatest profusion. The people were thus unusually oppressed, perhaps four times more than if the king had gone to Kê Cho. The king it is said gave some money to pay the people, but the mandarins of the provinces kept it all to themselves.

At the 6th moon the ambassadors after having been many times announced, entered the kingdom by the most northerly part of Tonquin, and it took them more than a month to travel from the borders of China to Hué. They loitered, but not as had been wished, for the Chinese were accompanied by sorcerers or astrologers who decided if the water or the air of the country in which they found themselves were salubrious. It therefore often happened that on the decision of the sorcerers they passed through three or four stations in the same day. When they had stopped, and wished again to proceed the astrologers determined if there was nothing in the stars which opposed the journey, and they performed charms. They also frequently offered sacrifices. The Chinese never travel without all these superstitions. The caravan consisted of about 140 persons. At the head was a Chinese mandarin of the 2nd order, who was the first ambassador, besides three other inferior mandarins, an interpreter and four or five sorcerers or astrologers. The rest were soldiers. On the confines of the kingdom many Chinese vagabonds seeing that it would be profitable to be in the suite of the ambassadors, joined it as if to serve as escort. The Chinese professed a great contempt for the Anamites, and during the journey frequently subjected them to all kinds of annoyances. The soldiers and the vagabonds who followed the embassy, made the Cochinchinese carry them, and they proved themselves exacting and cruel. The king had given orders to treat the Chinese well and not to cross them in anything. Thus the Cochinchinese were obliged to submit to all. The people were constrained to furnish provisions of all kinds, and the Chinese wasted them in a strange manner. What they could not use, was thrown into the fields or into the rivers. However their natural voracity was not wanting; at each station they weighed themselves, to ascertain if they had lost any of their good condition, and if they were a little reduced in their weight, they stopped to repair by eating what they had lost. At the station near where I was, in two days they caused an expense of at least 3,000 ligatures, which with the Cochinchinese is the same as 3,000 dollars to other people. Wherever the embassy passed, the mandarins of the provinces came to do it honor, and

when it approached the capital, the king sent mandarins, soldiers, elephants and boats to meet it.

On the 17th of the 7th moon the ambassadors arrived at the capital, and were received by many mandarins of different grades with great ceremony. They were conducted to a house built for the occasion near one of the gates of the city. The 1st ambassador sat down in the centre of the house, and the Cochin-Chinese mandarins saluted him by prostrating themselves, and six cannons were at the same time fired. The ambassadors then seated themselves in palanquins carried by soldiers and entered the city with great pomp; they were accompanied by Cochin-Chinese mandarins, by three thousand men bearing arms and standards, and there were also elephants and horses. All proceeded in regular order and arrived at the house which had been prepared for them with great care in the exterior city.

The capital of the Anamite kingdom, called Hué or Thua Thien or Phuxuan, is composed of two cities, the one exterior, the other interior. The city which is styled *exterior* is surrounded by walls and a considerable river, and is fortified in the European manner. It is entered by 10 bridges corresponding to 10 gates. This city which is very large contains what is called the *interior* city, which is in the middle, the different public offices, the houses of some near relations of the king, barracks, prisons, magazines and granaries. Some persons of the people also live there, but they are poor, and are petty traders who sell rice, betel, and other commodities required by the soldiers. This is perhaps the capital which offers the most dismal aspect in the whole world. All groan under the tyranny of a despot who imagines that he is the only person in all his kingdom who ought to be happy, and of mandarins who only study to deceive the king, and to oppress the people for their own profit. The city called *interior*, in the middle of the exterior town, is also surrounded by walls. It contains the palace or seraglio of the king into which no man is permitted to enter except some eunuchs, the palace of the mother of the king, the house in which the king receives the mandarins and a guard-room for the soldiers who mount guard at the gate. The royal kitchens are in the exterior town.

The 22nd day of the moon was the day fixed for the ceremony of investiture, and the place was the house in which the king receives his mandarins. In the morning six cannon reports announced that the ambassadors had set out from their house, and immediately afterwards 9 other guns made known that they had reached the gate of the interior town. The king had already repaired to the place where he was to receive his diploma; he advanced beyond the gate to receive the ambassadors; when the latter perceived this, they descended from their palanquins and all entered together, the king on the right, the ambassadors to the left. The diploma was laid upon a kind of estrade or altar in the midst of perfumes.

Then the Mandarin, minister of ceremonies, invited the king to approach, and the king came in front of the altar, and saluted by prostrating himself five times; while he remained on his knees the 1st ambassador took the diploma, and standing in the middle of the estrade, turned towards the king, he read it through, and then gave it to the king who holding it above his head prostrated himself once. The diploma was then delivered to one of the princes near him, and the king again saluted it by prostrating himself five times. This done the king conducted the ambassadors beyond the gate, and they returned in the same order in which they had set out.

On the next day, the 23rd of the moon, the ambassadors went to a kind of temple or pagoda, built in the exterior town in honor of Thien Tri, father and predecessor of Tu Duc, to offer a sacrifice to him and to raise him definitively to the rank of a god. Cannon again announced their departure and their arrival at the pagoda. The king had also repaired thither, and he came out to receive the ambassadors. When they had entered the pagoda, the ambassadors placed upon a kind of altar of perfumes, the rescript of the Emperor of China which elevated the defunct king to the rank of celestial spirits. The king Tu Duc then advanced and saluted the altar by prostrating himself five times. He then stepped a little aside, and left the ambassadors to offer the sacrifice. It was the Chinese only who offered this sacrifice, which consisted in making prostrations, burning incense, offering meats and other eatables, and there were amongst other things whole buffaloes and pigs. The ceremony which was performed on this day, is a sequel of that of the day before, because the old king in virtue of the investiture which he had formerly received, must necessarily become holy and god. When therefore he is replaced by another upon the earth, it is proper that he should be assigned a place in the superior regions.

Of such consists the ceremony of the investiture of the kings of Cochin-china, which has a religious rather than a political aspect; and it is probably a remnant of primitive traditions, greatly disfigured by the superstition and the passions of men. However in countries even the most barbarous an innate and natural sentiment seems to indicate that man cannot have power over other men, if it is not communicated to him by a superior order; and this is what the Christian doctrine expresses by these words of St. Paul — *non est potestas nisi a Deo.*

The ambassadors had sent presents to the king, who only accepted pencils, paper and ink. The king also offered to the 1st ambassador 10 bars of gold and fifty bars of silver, but he accepted nothing. The other ambassadors and the soldiers, however, took not only all that was given to them, but they even carried away everything that was of value in the houses which had been prepared for them both in the capital and on the road. They also required five thousand soldiers for the return, to carry their baggage and to

protect them in case of attack. And they perhaps had some reason to fear; for the Anamite people, already so poor, could not view with a favorable eye those who now despoiled them of the little they had.

There has occurred this year another event in this country which has caused universal consternation; namely, the invasion of the cholera morbus. This cruel malady has traversed all the provinces of the kingdom, and death which accompanies it has struck down numerous victims. In the month of September the plague commenced its ravages in the royal province and it advanced rapidly towards the north. It was most terrible in the month of October; since that time the malady has lost its intensity, but on certain days it breaks out again with a new vigour, and I cannot say when it is likely to cease. There are those who assert that the royal province alone has lost a hundred thousand inhabitants, but this number is evidently exaggerated and must be reduced to twenty thousand. Each of the other provinces has also lost perhaps ten or fifteen thousand inhabitants. All are agreed in saying that the Christians have been visibly protected. The number of deaths amongst them is, in proportion, infinitely smaller than amongst the pagans. During the epidemic every one could see, by evidence, the difference which there was between the idolaters and the Christians. For whilst the first, in spite of the respect which they outwardly profess for the dead, a respect which approaches to idolatry, and has the force of religion with the greater number, abandoned the dead and the dying; the Christians, on the contrary, trusting in God, practised all the works which Christian charity prescribes. Some very horrible things have happened amongst the pagans; corpses were thrown into the rivers, and obstructed the windings; men attacked by sickness, but still full of life, were very quickly cast out of the houses, and interred or thrown into the rivers; many are pointed out who had strength to save themselves and are still alive; infants some months old only were left near the corpse of their mothers, who had sometimes been covered with a little earth, and have there perished after crying for a few hours. The Christians were able to save some of these poor creatures. It is thus that God visibly punishes this people who have contended against him in persecuting his Holy Religion, and in putting to death its ministers and faithful servants; and punishes in particular, perhaps, the edict which appeared last year, in which it was said that Christians took no care of their dead, and which condemned the European priests to be cast into the sea.

Disease has not been the only scourge which has afflicted this kingdom during the present year. Famine has also prevailed there. The heat and the drought have been dreadful. There was no rain for nearly six months, and the atmosphere was constantly heated from 36 to 40 degrees centigrade (96° to 104° fahr.) in the

shade. The rice could not germinate; and where by dint of labour they were able to form some rice fields and the plant came up, the torrents of rain which afterwards ensued, swept all away. I am assured that in some provinces men were reduced to feed themselves on banana leaves, which they do not even give to animals except when they have nothing else. Since the commencement of the epidemic the king has remained shut up in his palace, and gives audience to no one; the great mandarins for more than a month have attended to nothing, and are sunk under the weight of an absorbing dread. May they open their eyes and labour to repair the evil which they have done. The people know well that it is God who thus punishes; but nothing appears to indicate in the great who govern any sentiment of amendment.

Northern Cochin-China, }
14th December 1849 }

P.

THE
TRADING PORTS
OF THE
INDIAN ARCHIPELAGO.

THE want of a small work of reference on the Ports of the Indian Archipelago, calculated to serve as a hand-book for voyagers traversing these seas, is so generally acknowledged, that any lengthened comments on the subject would be superfluous, but I think it necessary to enter into some details respecting the circumstances that have induced me to undertake the task of furnishing one. The greater portion of the information that will form the basis of the present work was collected during the existence of the naval settlement at Port Essington, to which I was attached by the Home government from its foundation in 1838, chiefly for the purpose of obtaining particulars respecting the resources of the eastern islands of the Archipelago, which were supposed to present openings for the extension of our commerce. The necessary enquiries were carried on under very favourable circumstances, a small vessel of war having been constantly stationed at the settlement up to the period of my departure for England in 1845, which afforded me repeated opportunities of visiting all those ports in the eastern parts of the Archipelago which from being the resort of native traders, became of interest to the commercial world. A portion of the information thus collected has already been published in Parliamentary Reports and Papers, but documents of this description do not obtain a very extensive circulation, while at the same time a considerable amount of arrangement was required to render the details practically useful. I had therefore embodied them in a general work on the Fields of Commerce in these Eastern countries, which was announced in 1846, but circumstances called me from England before the manuscript was in the hands of the printer, and I withheld it in the hope of being able to add further information on my return to the settlement. That event has never come to pass, and as I have now retired from the public service, and the settlement at Port Essington is in the course of being abandoned, it is not probable that I shall ever again have an opportunity of increasing my stock of personal experience respecting the Eastern Islands. I can therefore have no further reason for delay in bringing forward the information I have become possessed of and although it is by no means so full as the importance of the countries noticed deserves, still it may prove useful as a commencement. I shall make no apology for intruding my labours on the public, for my doing so is a point of duty as much as of inclination.

The idea of embodying my materials under the present form

struck me soon after leaving England in 1846, and I have been confirmed in my views by the favourable opinion of the plan entertained by Mr J. R. Logan, who has kindly offered me the advantage of pre-publication in the *Journal of the Indian Archipelago*, which will materially enhance the value of the book when published in a collected form, from the favourable opportunity it affords for correcting the numerous errors which must always creep into a work of this description, especially when there is so little published information to compile from. This plan also gives me another advantage. I am not without hope that before this pre-publication is completed I may receive additional information from those who are still actively employed in traversing the neighbouring seas, concerning the new Ports which are yearly springing into notice, and which are almost unknown, even here, except by name:—For example, who knows anything of *Koonpoot*, except that it is a port somewhere in Cambodja, which has been visited by native square-rigged vessels for some years past? Its name is not to be found in the charts, and, I believe, has never appeared in print except in the Singapore shipping reports. Yet we have a greater trade with that port than with any other in the Gulph of Siam, excepting the capital of that kingdom itself.

The volume in which I propose to collect these papers when their publication in the "*Journal*" is completed, will be illustrated by small plans of the different ports that require such particulars, for which there is abundant material, although so scattered that it is almost the labour of a life to collect it. I propose also to add some details respecting the monsoons and currents, especially those of the Eastern parts of the Archipelago, which will prove serviceable to the European trader, for whose use they are more especially intended.

By adopting the present form I shall often become indebted for information to the published works of authors who have had more favourable opportunities than myself for collecting information concerning certain ports, among whom I may mention Mr Anderson, formerly of the Straits Civil Service, whose valuable work on the Northern ports of Sumatra is everything that a seeker after information could require, and if all the other countries of the Archipelago had been similarly described, the compilation of such a work as this is intended to be would have been a labour of comparative ease. Perhaps it will be as well to add that the information collected during the period in which I was employed on the public service is published by permission of the proper authorities.

GEO. WINDSOR EARL.

Singapore, April 24, 1850.

ABAI (*Borneo*.) A small port or harbour in Lat. $6^{\circ} 23' N.$ situated about 40 miles S. S. W. from Tanjong Sampan-mangaio, the north extreme of Borneo. The harbour is formed by the small peaked island Usukan, which extends in a north-east and south-west direction along the main-land, having a channel within it for prahus and small craft, but the island must be approached with caution, as some outlying rocks and reefs have recently been discovered by H. M. S. *Samarang*, and there may be others in the neighbourhood. A river of the same name, the mouth of which lies nearly S. E. from the centre of Usukan, has 12 feet on the bar at high water. A bend of the river, which is navigable by prahus for about 20 miles, brings it within a short distance of the Tampassuk, a river of considerable size lying to the north, on the banks of which a piratical settlement of Lanuns had been established for many years, until destroyed by one of the recent expeditions against the Borneo pirates. The town, or rather village, of Abai, was formerly a great resort for trading prahus, but the establishment of the Lanuns in its close vicinity so cut up its trade that it now has only a scanty and impoverished population; nor is its prosperity likely soon to revive, since Ambong, a port lying only a few miles to the south, which has recently been surveyed by Sir Edward Belcher, affords access to vessels of the largest size, and has its reputation established as a port friendly to strangers, from the circumstance of our ships of war employed upon the coast having for some years past obtained their chief supplies of stock and refreshments there. For details respecting the natural productions see Ambong.

ACHEEN. (*Sumatra*) *Achi* of the Malays *Atsjin* of the Dutch. Lat. $5^{\circ} 22' N.$ Long. $95^{\circ} 46' E.$ (Anderson). The capital of a kingdom of the same name, situated near the N. W. extreme of Sumatra, and formerly one of the principal trading ports of the Indian Archipelago, its position, near the entrance of the Straits of Malacca, enabling it to command the navigation of what was then the only channel of communication between the Islands of the Indian Archipelago and the countries of the West. Every vessel entering the Straits was then obliged to call at Acheen to obtain a pass, but the arrival of Europeans in these seas, who were by no means inclined to acknowledge the authority of a sovereign who was looked upon as a barbarian, set at defiance the assumed authority of the kings of Acheen, and it has gradually decreased in importance until the present time, when it has become a mere trading station, and inferior in this respect to many ports within its own dominions.

Topography. The town of Acheen is situated on the banks of a river, which, after traversing a broad plain bounded on each side by ranges of hills, forms a delta and falls into the sea by several mouths. The roads are tolerably secure, especially from April to November, when the south-west monsoon prevails, and blows

usually off the land. During the remainder of the year, north-west gales are sometimes experienced, but the islands in the offing afford considerable shelter, and a ship well found in ground tackle, is not likely to incur any danger of being driven on shore. The usual anchorage is in from 9 to 15 fathoms, with the principal mouth of the river from S. to S. E., and about 2½ or 3 miles off shore.

Population. The people of Acheen, although the Malayan language is their native tongue, differ considerably from the real Malays in having a darker complexion and in speaking the language with a peculiar broad intonation which is not altogether agreeable to unaccustomed ears. They have evidently had considerable intermixture with the people of the Malabar and Coromandel coasts, who have kept up a constant intercourse with Acheen for many centuries, and which is maintained, although not, perhaps to its former extent, at the present day. They are active and industrious, and shew much mechanical ingenuity, but are not remarkable for scrupulousness with regard to their commercial transactions. The Acheenese are strict Mahomedans, and great numbers resort in the Arab vessels to Mecca, with the view of becoming Hadjis or Pilgrims, which entitles them to high respect among their compatriots on their return. The Arabs, from their supposed sanctity, had formerly great influence among the Acheenese, but this has subsided of late years, owing to the turmoils which their selfish chicanery produced in the state. The most influential individuals now are the "Padries" a species of religious fanatics, chiefly Malays of the Menangkabao states of the interior, who have been for many years past occupied in opposing the encroachments of the Dutch in the interior of Sumatra, but are now chiefly congregated in the kingdom of Acheen, as the last hope of their race.

Commercial History. Acheen was not only one of the principal trading ports of the Archipelago, but also one of the most powerful kingdoms, on the first arrival of Europeans, and its naval expeditions continued to be a source of great annoyance and alarm to the Portuguese as long as they continued in power. Its decline, however, had already commenced before the English and Dutch first visited the Indian Seas towards the close of the 16th century, chiefly owing to the efforts of the Portuguese to concentrate the trade of the Archipelago at Malacca. Acheen has since continued to decline until its capital has become a port of minor importance even within its own territories. The nominal boundaries of the kingdom still continue to be much the same as formerly, namely, Baroos on the west coast, and Batu Barra on the east coast, but the encroachments of the Dutch on the one hand, and the spirit of independence displayed by the petty Rajahs on the other, have reduced the actual authority of the Acheenese kings to limits which scarcely extend beyond the immediate neighbourhood of the capital.

Natural Productions. The natural productions of Acheen and its neighbourhood, although not equal in point of value to the agricultural, are still of sufficient importance to excite interest. They include gold-dust, which is chiefly procured by washing the sands of the rivers; camphor, which goes by the name of "Baroos camphor," and is highly prized in China; sapan-wood, bees-wax, dammar and rattans. Cattle are abundant, and also small horses of an excellent breed, (the best, indeed, in the Archipelago with the exception of those of Bimah in Sumbawa) which are exported in considerable numbers to the settlements in the Straits of Malacca, especially Pinang, where some very favourable specimens of the breed are to be met with. The better kind have fine crests, and good strong shoulders, in which latter particular, as well as in height of wither, they differ very much from the horses of Java and the islands to the eastward, which are generally deficient in these points. Sheep are almost unknown, the nature of the grasses being apparently unfitted for them. The coasts abound in fish, which the Acheenese are very expert in taking. A sort of mackerel is caught in large quantities at certain seasons of the year in the deep water of the offing, floating nets, resembling the herring nets of the coasts of England, being employed in taking them.

Agricultural Productions. These are of far greater value than the former, owing to the industrious habits of the Acheenese, who seem to be rather an agricultural than a maritime people, although by no means unenterprising navigators. Rice is grown in large quantities on the alluvial lands which lie between the mountain ranges and the sea, the plough, drawn by oxen, being employed in the cultivation. Pepper is also produced, but not to a great extent, a large portion of the pepper exported from Acheen being collected by small trading prahus among the northern "Pepper ports" of the West Coast of Sumatra. Although rice must be considered as the staple production of the country about Acheen, that of the coast on which it lies, the "Pedier Coast," as it is called, is betelnut, of which many ship loads are exported every year, chiefly to China and the Continent of India.

The soil of the uplands, and, consequently, of the plains, in the neighbourhood of Acheen, is exceedingly rich, and being constantly moistened by rains, highly productive. All the principal fruits of the Archipelago; mangustin, durian, mango, pine, and lansat, orange, lime, and many smaller fruits are produced, and of a quality rarely equalled and never excelled in the East. The great beauty of the country in the neighbourhood of Acheen, the green hills backed by the lofty Golden Mountain, and the sea studded with islands, must have made a very favourable impression upon the early navigators, to whom Acheen was generally the first spot that presented itself; and their expectations concerning the richness of the Archipelago must doubtless have been extravagant, when they found so fertile and productive a country lying at its very threshold.

Manufactures. The Acheenese manufacture cotton cloths of very durable texture, and also small quantities of silk taffetas, which are handsome, but so excessively dear, that they can only be purchased by the wealthier people, and are seldom exported except as curiosities or as presents. The material of the cotton cloths is of home growth, but the raw silk is imported from the Continent of India. The Acheenese are also expert workers in gold, and were formerly skilful in casting small brass cannon or "lelahs," but the manufacture of these articles is now confined almost exclusively to Palembang, on the east coast of Sumatra, where it was introduced by settlers from Java.

Commerce. The port of Acheen is now very rarely visited by European vessels for purposes of trade, although it is often resorted to by ships bound to Calcutta or Pinang which have become short of water or provisions from having met with baffling winds in the neighbouring seas, which are very likely to occur at certain seasons, especially towards the close of the year. Its commerce is carried on; 1st, by brigs and small vessels from Pinang and Singapore, chiefly from the former, which proceed to the Pedier coast in the betel-nut season (June, July and August,) to the number of 15 or 20, only a few of which however, are likely to proceed to Acheen. 2ndly, by Kling vessels from the Malabar and Coromandel coasts, ten or twelve in number, which touch at Acheen on their voyages to and from Singapore. 3rdly, by five or six Arab vessels with Pilgrims, which visit Acheen on their voyages to and from Mecca. 4thly, by a few stray vessels from the coast of India, chiefly Surat, which bring dates, salt, and Surat cloth. 5thly, by small junks and topes belonging to Chinese of Pinang, which generally come for cargoes of rice. 6thly, by a host of small prahus of singular construction belonging to the Acheenese themselves, which visit the Straits settlements in May, June, and July, being generally loaded with rice, and sometimes with betelnut. Their numbers vary every year. It seems that the Acheenese dispose of as much of their agricultural produce as they can at home, and that they only send out their prahus in great numbers when a productive season, or a smaller number than usual of foreign traders, leaves on their hands a large portion of the produce, which they cannot otherwise get rid of.

As is usually the case in all misgoverned Malayan countries, the Rajah or King, with his principal nobles, endeavour to monopolize the trade, a state of affairs which has probably contributed in a great degree to deter European vessels from resorting to the port. There are no fixed duties, arrangements being generally made by traders with the Shahbandar, or Port Master, a government officer who superintends all matters connected with foreign commerce. The following extracts from a letter of Johor Ul Alum Shah, the late King of Acheen, which is inserted in Mr Anderson's "Acheen," a work containing a large amount of information concerning

Sumatra, will shew the amount of duties levied in 1820; and the Captains of trading vessels would do well to insist upon, at least, equally favourable conditions.

“Relative to ships hoisting the English flag, and having an English Captain, bringing merchandize to Acheen, the duties thereon are $6\frac{1}{2}$ per cent, except on opium, cotton and tobacco. On the first the duty is 40 dollars a chest; on the second $1\frac{1}{2}$ dollars a bundle; the third six dollars a behar.”

“If a Chuliah, Arab, Malabar, Chundradewa, or Surat vessel, the duty is $8\frac{1}{2}$ per cent; if *Kumbal Mas* (a sort of fish from the Maldives) constitutes the cargo, the duty is 6 dollars per chest.”

“If the ships of Chuliah Nakodas trade, not having their Nakodas &c. living on shore, as is the general custom with them, the duties are no more than on Europeans.”

The following is the amount of export duties on certain articles which are most likely to attract European traders, as extracted from the above mentioned document, which will also give an idea of the descriptions of produce that will be met with there:

Sugar.....	$6\frac{1}{2}$ per cent.
Edible Bird's Nests.....	} $6\frac{1}{2}$ per cent.
Brimstone.....	
Earth-Oil.....	
Bees-Wax.....	
Treping or Sea-slug.....	
Sapan wood.....	} $2\frac{1}{2}$ per cent.
Sala wood.....	
Sandal wood.....	
Betelnut (husked).....	Two laksas or 20,000 nuts on every quantity of \$24 worth.
Sago.....	„ 4 per koyan
Ejoo, or Gumuti rope.....	„ $2\frac{1}{2}$ per behar.
Coir, or cocoanut fibre rope.....	„ do do

The chief imports at Acheen are opium, British piece goods and cotton-yarn, piece goods from the Malabar and Coromandel coasts, iron, muskets and gun-powder, and China goods of many descriptions. The larger vessels which resort to Acheen or the Pedier coast to obtain betelnut, are generally supplied with a sufficient amount of Spanish dollars to purchase their cargoes, and rarely carry any merchandize except, perhaps, a chest or two of opium. The dollars must all be what are called “Pillar dollars” from two pillars, supposed to represent the “Pillars of Hercules” which are stamped on the reverse of the coins of Carolus 3rd and 4th; for the coinage of the independent states of South America, and even those of Ferdinand 7th of Spain, are only current at a considerable discount. This circumstance has long excited much speculation, and the following explanation will probably

be new even to many who have been in the habit of visiting the coast. Almost the entire exportable produce of Acheen and the Pedier coasts is raised by the Battas and other nations of the interior, who sell it to the Malays of the coast, who, again, re-sell it to strangers. The Battas, like many other of the brown complexioned tribes of the Archipelago, have a singular custom of melting down the precious metals they obtain into circular plates, which are connected with their religious superstitions. The "Pillar" dollars probably owing to the superior purity of the metal, are more easily melted down than the Mexican dollars, which require a degree of heat that the Battas are unable to produce. The Anglo-American traders who visit the west coast have lately hit upon the system of melting down the Mexican dollars in the United States, and coining them into "Pillar" dollars, so that an equalization in the value of these coins is likely soon to take place; but as the Battas require the dollars almost solely for the purpose of melting down, it may be doubted whether this new system may not materially affect the production of exportable articles.

Currency. The Spanish "Pillar" dollar is the standard coin. The smaller currency consists in little home-made gold and silver coins of uncertain value, and in copper tokens the manufacture of Birmingham, but there are still many of the old doits or half stuyvers of the former Dutch East India Company in circulation.

Weights and Measures. The weights are the catty, picul, and behar or bahar. The catty is 20 oz. avoirdupois; 100 catties make a picul, and 3 piculs a behar, but scarcely two *dachins* can be found, which yield the same results, so that it will be necessary for the foreign trader to use his own steelyards. The measures are of similar capacity to those of all the neighbouring Malayan countries, and as the chupah, or half shell of the cocoonut, rules the entire scale, they cannot be depended upon, and are rarely, if ever, used by traders. Betelnut is purchased by the laksa of 10,000 nuts.

Port Dues. There are no port-dues on British vessels in any of the ports subject to the King of Acheen, at least, there should not be any according to the treaty of 1819. By article 3rd. "His highness the king grants to the British government the free trade of all his ports, and engages that the duties on merchandize, levied at those ports, shall be fixed and declared, and shall also be probable by the resident merchant. His highness likewise engages not to grant or authorize a monopoly of the produce of his states by any person whatever."

ADENARA, *see* SABRAO.

ADI ISLAND, (*New Guinea*) *Pulo Adi* of the Malays, *Wessels Eylandt* of the Dutch, in Lat. 4° 19' S. Long. 133° 47' E. (East Point), *Moderu*. An island about 25 miles in length, lying to the N. N. E. of the Great Keh distant about 60 miles, and being the south-westernmost of a group of high islands which, until lately, were considered as forming a part of New Guinea. The inhabitants are Papuans or Oriental Negroes, and as they do not bear a very high character among their neighbours, they are rarely visited except by traders from Goram and Ceram Laut, who have found means to conciliate them. The sea is unfathomable at a short distance from the island, but there are several indifferent anchorages on the north side. No vessel should attempt to visit the island for purposes of trade without previously obtaining a pilot at Goram, who will also act as interpreter, the natives not being acquainted with the Malayan language. Wild nutmegs, trepang and tortoise-shell are to be obtained here, but not in sufficient quantities to tempt an European vessel to visit the island for purposes of trade, particularly as these articles can be obtained more readily at some of the adjacent ports of New Guinea. Red calico, parangs or chopping knives, coarse cotton shawls and handkerchiefs, with iron, Java tobacco, muskets, and gun-powder, are the principal articles in demand. The chief traffic is in slaves, which are distributed among the neighbouring islands of the Archipelago, and are sometimes carried as far as Bally and Celebes. This probably accounts for the deficiency of other articles of export. *Pulo Adi* is separated from the large island of which Cape Katomoun forms the S. W. extremity, by a strait 8 miles wide, which seems to be full of dangers, and should only be ventured upon with the greatest caution.

AI ISLAND (*Moluccas*), *Pulo Ai* of the Malays, *Pulo Way* of the British. One of the Banda Islands, situated about ten miles to the west-ward of Lonthor or Great Banda. The island is about 8 miles in circumference and moderately elevated, its entire surface consisting of nutmeg plantations, this spice being its sole exportable production. It has no port, and is entirely dependent on Banda for its supplies of grain, which are brought in coro-coros, or large boats, propelled by paddles. The town lies on the N. W. side of the island, and consists of several large Government buildings, constructed in the old Dutch style, which have a very striking and imposing appearance when seen from the offing. The population consists of officials in the employ of the Dutch Government, of "perkeniers" or planters, and slaves, the aboriginal population having long ago been exterminated or driven away. The first reside in the Government buildings which constitute the town, and the others at the *perken* or plantations with

which the island is covered. Communication with strangers is prohibited as strictly as in the time of the old Dutch East India Company, when it possessed the monopoly of spices throughout the world. The island is very deficient in fresh water, the supply of which scarcely suffices for the inhabitants themselves, and during a dry season it becomes necessary to obtain this necessary from Great Banda, while the cattle and goats are forced to drink sea water, which singularly enough, seems to have no injurious effect upon them. For further particulars see BANDA.

AIDUMA (*New Guinea*) an island on the S. W. Coast of New Guinea, near the entrance of Triton's Bay or Warangari in Lat. 3° 53' S. Long. 134° 15' E., *Moderata*. The island, which is 7 miles long and 2½ to 3 miles wide, is separated from the mainland of New Guinea by a narrow but unfathomable strait, through which the tides run with great rapidity. The chief, if not the only anchorage is in a small cove on the north side of the island, in 25 fathoms sandy bottom. The bank is so steep that it is necessary to carry a warp on shore to prevent the vessel from being driven into deep water when the wind is off the land. A narrow valley, covered with cocoanut trees, among which are the habitations of the natives, runs inland from the head of the cove between steeply rising hills. The chief exportable productions of Aiduma are wild nutmegs, several kinds of odoriferous bark, ebony, and kayu-buku; which with tortoise-shell and small quantities of trepang, form the return cargoes of the Ceram, and sometimes Macassar *prahus*, which visit the port annually for purposes of trade. European vessels visiting this or any other port on the southwest coast of New Guinea should always take the precaution of providing themselves with a native of Goram or Ceram Laut, (the former are the better) who can always be obtained at those places for a very trifling remuneration, and who will not only afford material assistance as a pilot and interpreter, but also prove no small protection, since vessels are rarely molested in any way when there is one of these people on board. If he is rewarded with a yard of calico, or a yellow-handled knife for every picul of nutmeg that is obtained, in addition to his fixed remuneration, the trader will find it to his advantage.

AIOU OR YOWL. (*New Guinea*) a group of islands situated about 70 miles W. N. W. from the Cape of Good Hope, on the W. coast of New Guinea, and 30 miles N. E. from the island of Waygiou. The group, which consists of 16 islands, is surrounded by an extensive coral reef, nearly a degree in circumference, the south-western portion of which is separated from the main reef by a narrow but deep channel. Aiou Baba, the largest of the group, lies on this detached portion of the reef and is about 7 miles round and 500 feet in elevation. The north-eastern or larger reef, which

contains the islands of Abdon and Konibar, with several coral islets, is said to have an opening on the N. W. side which admits large vessels within the reef, but if this be the case, the harbour is not frequented, there being no temptation in the way of refreshments to induce large vessels to put in there. The inhabitants, who are Papuans, are few in number and occupy themselves almost exclusively in fishing and catching turtle, with which the lagoons within the reef abound. The chief exports are tortoiseshell of good quality, which is obtained here in large quantities, and trepang. These are purchased by Chinese and sometimes European traders from Ternate, in the Moluccas, the king of which place assumes supreme authority over all those parts of the Coast of New Guinea which his subjects have been in the habit of visiting for purposes of trade. The traders to Aiou all employ small vessels, which alone are adapted for going within the reef of Aiou-Baba, their chief resort. They bring red and white calicoes, thick brass wire, old clothes, glass beads, and all sorts of ornamental finery, which the negroes of New Guinea delight in as much as those of Africa.

The natives, who are few in number, are tolerably friendly to strangers, but must not be trusted too much, as they are inclined to be treacherous and revengeful, which is the case, indeed, with all the Papuan tribes. A vessel visiting these islands for purposes of trade should always be provided with a native of Ternate or Tidore to act as pilot and interpreter.

ALBANY Islands and Port (*Torres Strait*) situated a few miles to the south-east of Cape York, the N. E. extremity of Australia. The islands, which lie close to the main-land, are moderately elevated, and slightly wooded with gum trees, but covered with grass, which assumes a brown tint during the dry season. They have been long known, and their eastern side was examined by Captain King, the celebrated Australian Hydrographer, but it was not until a few years ago that the strait which separates them from the main-land was surveyed by H. M. schooner *Bramble*, tender to the surveying ship "*Fly*." The strait was found to be clear of dangers, with an average depth of 14 fathoms. The favourable opinion expressed by the officers of this expedition as to the capacity of Port Albany as a harbour of refuge, and as a depôt for carrying on trade with New Guinea, has led to an inclination on the part of the inhabitants of New South Wales to have a settlement formed there, in which case it is likely to become one of the coal depôts for the steamers carrying the mails between Singapore and Sydney, whenever that line may be established. H. M. S. *Alligator* Captain Sir Gordon Bremer, with a hired transport in company, anchored within the north end of these islands, when on her way to form the settlement at Port Essington in 1838, and a large party landed on the main to take formal possession of Cape York

and the adjacent territory. Many natives were seen, but they declined communication. An opinion has long been entertained that the natives of the north-eastern parts of Australia are less friendly to strangers than the other tribes of this continent, which has been confirmed by the massacre of Mr Kennedy; and the greater portion of his party, when exploring the country between Rockingham Bay and Cape York. Ships requiring a supply of fresh water when passing the strait should therefore take every precaution to prevent surprise.

ALLAS (*Sumbawa*), a town on the east end of Sumbawa, in Lat. $8^{\circ} 42'$ S. Long. about $116^{\circ} 45'$ E. which gives its name to the strait that separates Sumbawa from Lombok, and which is much frequented by ships outward bound to China by way of Macassar Strait or the Eastern Passages, chiefly on account of its having soundings at moderate depths on the western side, where vessels can anchor either to await the turn of tide, or to obtain refreshments from the villages on Lombok. Whatever may have been the former importance of Allas, it is now the most insignificant port in the strait which bears its name, and is rarely, if ever, visited by European vessels; Talewang bay, a little to the south of Allas (a plan of which, by Mr Leisk, has been published in Singapore,) and Pijow and Labu Hadji on the opposite coast of Lombok, grossing all the foreign traffic.

ALLAS (*Timor*), a village on the south coast of the island, in about Lat. $9^{\circ} 23'$ S. Long. 123° E. This place can scarcely be called a trading port, since the produce of the neighbouring territory, which consists chiefly of bees' wax and sandal wood is carried overland to Dilli, the capital of the Portuguese possessions, which lies on the N. W. coast of the island in a due north direction, distant about 50 miles; or to Atapoupa, a settlement of the Dutch, also on the N. W. coast, and somewhat nearer than the former. Allas is chiefly remarkable for giving a name to one of the loftiest mountains on Timor, which is said to be 12,000 feet high.

AMANOUBANG (*Timor*), an independent territory situated towards the south-west end of Timor, immediately to the eastward of the Dutch territory of Coepang. Its limits are unknown, and probably vary as the power of the chief becomes increased or diminished. It is the best organized and most powerful of all the petty states of Timor, and is the only one that can give uneasiness to the Europeans whose establishments are scattered along the north-west coast of the island. A few years ago, the chief of this territory took offence at some act of aggression on the part of the Resident of Coepang, the principal settlement of the Dutch on Timor, and kept that town in a constant state of alarm by incursions of horsemen armed with spears, and mounted on the small, but hardy horses of the country, cutting off the supplies, and killing or carry-

ing away the inhabitants from the very skirts of the town, until means were found to appease his hostility. The Bay of Amanou-bang, the "Bay of the Pearl Bank" of the charts, is a deep bight situated 45 miles to the east-ward of Point Ousina, the S. W. extreme of Timor. It is bounded by Butu Puteh, a steep white rocky head-land, 800 feet high, on the west, and Point Oubelou on the east. The head of the bight consists of low-land, covered with the "tuak" or Lontar Palm. The chief trading port of the territory is Outouké, about 15 miles to the east of Point Oubelou, to which heading the reader is referred for particulars concerning its commerce and productions.

AMBLAU (*Moluccas*) an island near the S. E. extreme of Buro, from which it is separated by a strait 6 miles wide, which is clear of danger, but rarely used. Lat. $3^{\circ} 52'$ S. Long. $127^{\circ} 10'$ E. *Dumont D'Urville*. There is a small government establishment on the north side of the island. For further particulars see Buro.

AMBONG (*Borneo*) in Lat. $6^{\circ} 18' 26''$ N. Long. $116^{\circ} 15' 33''$ E. *Sir E. Belcher*. A very snug harbour on the north-west coast of Borneo, which appears to have been unknown to Europeans, except by name, until examined by Sir E. Belcher, of H. M. S. *Samarang*, a few years ago. The town of Ambong, if it can be so called, is situated at the head of the deep, narrow inlet, which forms the harbour, and consists of a few huts inhabited by Malays, who are chiefly dependants of the Sultan of Borneo or his Pangerans. The famous mountain Kina Balu lies in an E. S. E. direction from the head of the harbour, distant 27 miles, and adds much to the beauty of the neighbouring scenery. The trade of Ambong is at present inconsiderable, owing to the influence the Lanun pirates have maintained upon the coast for many years past. When this nuisance is entirely removed, Ambong is likely to become a place of considerable trade, as the "Orang Dusun" or aborigines of this part of Borneo reside close to the coast, and are more accessible here than on any other part of the island, from the circumstance of the scanty number of the Malayan population presenting but a slight obstacle to their direct intercourse with European traders. As yet it is chiefly remarkable for the excellence of the port, which affords shelter to vessels of the largest size, and for the cheapness and abundance of the supplies of provisions and refreshments to be obtained. Bullocks of a good breed, (which are not met with in the southern parts of Borneo, where the buffalo is the only description of horned cattle) can be obtained here in illimitable numbers, and at a very moderate rate. Bees-wax is at present the only article of commerce that can be obtained in any abundance, but when the resources of the country come to be developed, many other articles will be added which have not hitherto been produced for ex-

port from the utter impossibility of getting them to market. These will probably consist of hides, camphor, pepper, cassia, and perhaps cotton, in fact the agricultural habits and skill of the Dusuns may be easily led to produce articles of tropical growth which are yet unknown to them. The imports most in demand consist in the coarser descriptions of goods which are current among all the more uncivilized tribes of the Archipelago, red and white calicoes, iron, parangs or chopping knives, brass wire, salt, and Java tobacco. The trade for provisions and refreshments has usually been carried on by barter. The Spanish dollar is not unknown, but the use of it in purchasing articles increases their price nearly three-fold, as the trade then passes through the hands of the Malays, who alone can appreciate their value.

The only objection to the port lies in the difficulty of obtaining fresh water towards the end of the dry season, September, October and part of November.

Erratum. p. 245, 4th line from the bottom, for "probable" read "payable."

THE ETHNOLOGY OF THE INDIAN ARCHIPÉLAGO :

EMBRACING ENQUIRIES INTO THE CONTINENTAL RELATIONS OF
THE INDO-PACIFIC ISLANDERS.

BY J. R. LOGAN.

FROM the time of Captain Cook's voyages, an impression has prevailed that a certain degree of relationship connects all the Oceanic tribes from Easter Island to Sumatra, and, reaching directly across the Indian Ocean, embraces the people of Madagascar. This has led to many investigations into the extent and cause of so remarkable a circumstance, but it will suffice at present to advert to those of Marsden, Crawford, Humboldt, Bopp and Hale which have been directed almost entirely to philological evidence, and to those of Lesson, one of the ablest of the original enquirers into the analogies of a physical kind. The first held the opinion that all the races were offshoots from one stock, the language of which, the Great Polynesian, originating probably in Sumatra, was preserved to a certain extent by each, while separation had produced all the great and numerous differences which we now find. Mr Crawford, on the other hand, believes that each originated in a rude horde speaking a language of its own. The more barbarous races retain original and peculiar languages, while the more improved, still preserving their ancient tongue as the basis or radical portion of their present one, have incorporated with it a number of foreign elements, all of which he resolves into the great Polynesian language, the language of the adjacent tribes, Sanskrit, Arabic, a few words of other Asiatic languages, and a still smaller portion of the languages of Europe. The Great Polynesian language he considered to have been that of an indigenous civilized nation which, in various degrees, disseminated its language and civilization over the rest of the Archipelago, while only a few insulated and corrupted words reached the distant islanders of the Pacific. From the evidence of language he drew several conclusions respecting the state of civilisation of this nation, ascribing to them some progress in agriculture, the use of iron and gold, loom weaving and the possession of the domesticated cow, buffalo, hog, fowl and duck. They had considerable maritime skill, and had probably attained a calendar and the art of writing. All these arts he considered to be of native origin. William von Humboldt, the greatest of all general philologists, concluded from an examination and comparison of all the languages of Oceanica for which he had materials, some of the most valuable relating to the Javanese and Malay being supplied by Mr Crawford, that they belonged to one family, having essentially the same structure and a large resemblance in words and roots. His glossarial analysis was chiefly

directed to 130 words in nine languages, which he has presented in a comparative table. Humboldt also believed that the Malayo-Polynesian languages would be found to be primitively monosyllabic, and that the Polynesian in particular had great grammatical resemblances to the Chinese. In the Tagala he found the peculiar forms of the Malayo-Polynesian structural system most fully and elaborately developed, and he considered that the other languages had degenerated from a similar state, while the Tagala preserved the original organism in full vitality and operation. Professor Bopp, one of the most justly celebrated philologists, has recently endeavoured to prove, chiefly from an examination of numerals and pronouns, that the Malayo-Polynesian languages are disintegrated Sanskrit. Sir William Jones had long before concluded, with a confidence arising from ignorance of the subject, that all these tongues were derivatives from the Sanskrit.* The races and languages of these regions have attracted the attention of many other less original enquirers, but I shall only notice the opinions of Dr Prichard and Chevalier Bunsen. Both have adopted the views of Marsden and Humboldt.† Prichard considered it as established that there is one Malayo-Polynesian race which, at a period before the influx of Hinduism, existed nearly in the state of the present Tahitians and New Zealanders and spread over all the islands of the Indian and Pacific Oceans, having the centre of its mental culture, or at least of the development of its languages, in the northern part of the Philippine Archipelago. He was of opinion that Bopp had failed to prove the Sanskritic derivation of the Oceanic tongues, or even to establish a family relationship between them and the great eastern representative of the Indo-European languages. The resemblance he declared to be even much more remote than that between the Iranian family and the Semitic. Dr Prichard did not himself undertake any original enquiries into the Oceanic languages nor form any independent conclusions respecting them. As in other parts of his laborious and valuable work, his attention was chiefly attracted by the physical part of ethnology and its bearing on the theory of the unity of the human race.

The two opinions respecting the internal history of the Malayu-Polynesian races to which I have adverted, may be considered as still before the public in all their antagonism, for no attempt has been made by the advocates of either to modify or reconcile them. I am not aware that any Malayan philologist has critically gone over the same ground as Humboldt. Mr Crawford

* With equal facility he declared, at another time, that the Malays were the descendants of Arabian traders and mariners after the age of Mahamad.

† Sir Stamford Raffles also embraced Marsden's views, but his philological knowledge was too scanty to admit of his being referred to as an independent authority on this subject.

has recently returned to the subject with a great accession of important facts derived from a laborious comparison of entire dictionaries of the Javanese, Malay, Bugis, Tagala, Bisaya, Tahitian, New Zealand and Malagasi.* His opinion remains unaffected by the researches of Humboldt.

The history of the Polynesian tribes has frequently been made the subject of separate enquiry and speculation. Different writers derive them from America, the northern part of the Pacific, and the Indian Archipelago. Amongst recent enquirers Mr Williams has strongly and ably maintained their Indonesian† origin, and Mr Hale, to whose important and valuable labours I shall afterwards fully advert, has adopted the same views. Following up Mr Williams' connection of the Society with the Sandwich Islands, through the identity in the name of two islands, Hawaii, he has shewn that this name may be traced throughout all the greater groups, applied to important islands in which the race is located, to a traditional land of origin, or to a lower region the abode of departed spirits. Mr Williams in his work had inferred that the Society were peopled from the Sandwich islands, but when Mr Hale mentioned to him the probable use that might be made of this name in referring back the different tribes to their original seat, he told him that he had long entertained the opinion, that the Samoan islands were the source of the population of the other groups of Polynesia. Mr Williams was not aware that the name of the largest island of the latter group is Savaii, which Mr Hale concludes to have been the original of all the other Savaiis throughout Polynesia. † In his chart of Oceanic migrations he does not allow any line of connection from Micronesia to Polynesia, but abruptly cuts off on the N.E. verge of Melanesia the stream that, according to him, peopled the western groups of Polynesia and thence flowed to the S., E., and N. clusters. He conjectures however that the

* "On the Malayan and Polynesian Languages and Races" Jour. Ind. Arch. vol. II. p. 183.

† The name Indian Archipelago is too long to admit of being used in an adjective or in an ethnographical form. Mr Earl suggests the ethnographical term Indonesians but rejects it in favour of Malayunesians, (*ante* p. 71). For reasons which will be obvious on reading a subsequent note, I prefer the purely geographical term Indonesia, which is merely a shorter synonym for the Indian Islands or the Indian Archipelago. We thus get Indonesian for Indian Archipelagian or Archipelagic, and Indonesians for Indian Archipelagians or Indian Islanders. I have no affection for the multiplication of semi-grecian words, and would gladly see all the *nesias* wiped off the map if good Saxon equivalents could be substituted. The term has some claim however to be located in the region, for in the slightly different form of *nusa* it is perhaps as ancient in the Indian Archipelago as in Greece.

‡ The regular phonetic changes which the word naturally undergoes in the different dialects are:—

Samoan dialect	- - - - -	Savaii.
Tahitian	- - - - -	Hawaii.
Sandwich I.	- - - - -	Hawaii.
Raratongan	- - - - -	Avaiiki.
Nukuhivan	- - - - -	Hawaiki.
New Zealand	- - - - -	Hawaiki.

Bulotu or Purotu of the Tongan and Samoan islanders, a large island to the N.W. where their race originated and where the souls of the deceased nobles and matabulais live as gods, is Buru, one of the Amboyna group, and he considers it within the bounds of probability that this is the spot in the Indian Archipelago from which the Polynesians emigrated.

Lesson, reviving the opinions of La Gobien, separated the Philippine and Micronesian islanders from the Malayo-Polynesians, and, deriving both directly from the Mongolian (Mid-Asian) race, bestowed upon them the appellation of Pelagian Mongoles. Lutke, who, at a later period, explored Micronesia, differs entirely from Lesson's conclusions, maintains that the inhabitants could not have been derived either from the Mongolian part of the Continent or from Japan, and assigns to them an Indonesian origin. He admitted, at the same time, that many of their arts and customs were not Polynesian, but were evidently derived from the Chinese or Japanese. Mr Hale has remarked that the Micronesian tribes are nowhere to be found in a pure state but always with a greater or less mixture of the Malayo-Polynesians, to whom they are superior in character, as well as in many arts evidently derived from a higher civilization than any that has been indigenous in the islands of the latter. He concludes that while the semi-civilization of the Polynesians has been attained by bringing to perfection the rude arts and institutions natural to the savage state, that of the Micronesians has resulted from simplifying and adapting to more restricted circumstances, the inventions and usages of civilization. He entertains no doubt that, by a comparison of language, physical traits, customs and traditions, the origin and migrations of the Micronesian tribes may be traced out, and adds that few more important fields now remain open for ethnographical research. Dr Prichard considered it evident that these tribes were a branch of the Malayo-Polynesian stock, probably more nearly allied to the Philippine than to the Polynesian people, and that their manners had been modified by some foreign intercourse.

The relation of the Malayo-Polynesian tribes to the peoples of other regions has never been systematically investigated. Bopp alone has endeavoured to connect them with the ancient Iranian races. Bunsen merely indicates a belief that the Malay "bears the characters of the not-Iranian branch of the Japhetic family," but he does not advert to Bopp's enquiries nor enter on the subject himself. To Leyden the Malay seemed in its original formation to have been monosyllabic like the Indian languages. He considered that one of its three glossarial portions was connected not only with the other insular languages but with some of the monosyllabic, as the Burmese and Siamese, while the majority of the words, at least in the maritime dialects, were borrowed from the Sanskrit and the Arabic, the simpler and more essential being however indigenous, or rather corruptions

of the ancient eastern tongues. He also remarked an analogy between the structure of the Malayu and that of the monosyllabic languages. Marsden, at a later period, declared, with reference to Leyden's opinion, that the main portion of the Malay was original, that is not traceable to a foreign source, its affinity to any Continental tongue not having been shewn, and least of all could it be supposed that it was connected with the monosyllabic or Indo-chinese. Dr Prichard, on the authority of Mr Norris, has thrown out a suggestion that the Australian have some connection with the old Indian languages, which however, in his report to the British Association, he treats as still more conjectural than Rask's reference of the latter group to the Turanian family.

The Papua languages are not to be understood as included in the preceding remarks.* They are, as Dr Prichard reported to the British Association, for the most part unexplored. "One observation," he adds, "to be made respecting them is that they often partake more or less of the Polynesian. Whether this arises from the adoption by the Papuans of the Polynesian vocabulary has not been determined, though most persons incline to this last opinion." Bunsen considers that the Papua is an anterior and very primitive formation, and that it will most likely prove to be a degenerated one. Mr Crawford has declared that the negro tribes of the Archipelago have different languages and that they all differ completely from those of Madagascar. A strong physical resemblance between the Papuas and the natives of Eastern Africa has long been remarked, and it has naturally led to the conjecture that the former were derived from the latter. M. Lesson considered that the remembrance between the Papuas and the Malagasis was so strong, not only in person but in habits and traditions, as to shew them to be of the same race. According to him the Polynesians were in occupation of the Archipelago before the migration of the Papuas to it. Mr Crawford, on the other hand, declares that while all the Malagasis are merely varieties of the African negro, they do not bear any physical analogy to the Malayan race or to any section of the Oriental Negro. It is not unusual to view the negro tribes of Oceania as one race, but Dr Prichard concludes that their history, and more especially that of their languages, is as yet too little known to justify any assertion as to their mutual relations in a general point of view to each other; and that, though they have many moral and physical qualities in common, these do not amount to a proof of real

* By many writers the Negro tribes have been considered as the aborigines of the Archipelago, and it has been concluded that in the more eastern parts at least they preceded the Malayu-Polynesian race who have partly displaced them. On this subject the reader may consult Mr Earl's excellent description of the Papuas contained in the numbers of this Journal for November and January last, to which I shall hereafter particularly refer.

kindred, and that the question of their affinity must be left as a subject of future investigation. By several French authors a hybrid Malayu-Papuan race has been described as found on the north coast of New Guinea. Mr Earl maintains that there is not the slightest ground for this opinion.

A class of tribes figures in Dutch, French, and many English works under the title of Arafuras or Alfurs.* The name is still applied by the Dutch to the inland lank-haired people of the eastern islands and occasionally to those of Borneo. This section of the Malayu-Polynesian race was considered by Lesson to be the aborigines of the great islands of the Archipelago and to have preceded the Papuas. He seems to have believed that the people of the Arfak mountains in New Guinea and the Australians preserved the primitive type of this race. Prichard, while separating this people from the so called Alfurs or Malayu-Polynesian inlanders of the west, believes with Lesson that they are a distinct Oceanic people and constitute one of the most remarkable varieties of mankind.

The only remote language with which the Malayu-Polynesian tongues have been connected is that of Madagascar. The connection, which was remarked by the early Portuguese and Dutch writers, is limited to a slight verbal resemblance by Crawford, who explains it by supposing that Malayan praus may have been driven by storms across the Indian Ocean to Madagascar. Humboldt adopts a similar explanation of the origin of the connection, but declares that it is not confined to a few words but extends to the entire structure of the language, which preserves the full Malayan characteristics of the Tagala to a much greater extent than any of the languages of the Archipelago itself. To account for this remarkable fact he considered that a Malayan colony must have planted itself in Madagascar. Prichard, who adopted this opinion, had previously remarked that the Malagasi was more nearly connected with the Tagala than with any other Indonesian language. The physical and social resemblances of some of the tribes of Madagascar to those of the adjacent regions of Africa are striking and have long been recognized. The facts which connect Madagascar with Africa on the one side and Oceanica on the other, have been explained by the hypothesis that some of the tribes are of Malayan and others of African origin. A comparison of the Malagasi dialects with the African languages gives no confirmation to this opinion according to Dr Prichard. It has been declared by many other writers, and repeated by Dr Latham in his recent report to the British Association, that the Malagasi language is not African. Mr Ellis, the historian of Madagascar, conjectures that the Hovas, the dominant tribe, are a colony from Java.

The physical characteristics common to the Burmah-Chinese

* See Mr Earl's explanation of the origin of the term, *Journ. Ind. Arch.* Vol. IV. p. 2.

and the insular tribes have often been remarked as strongly favouring the supposition that they belong to one family, and coincidences in manners and customs have from time to time been noticed, but not of sufficiently decided a character, or numerous enough, to lead to any positive inferences as to community of origin. Sir Stamford Raffles considered it probable that the tide of population originally flowed towards the islands from that quarter of the Continent lying between Siam and China.*

Dr Prichard makes the following general remarks on the subject of the relation of the Oceanic tribes to those of the Continents. "The tribes of people who inhabit the widely spread tracts of this Great Oceanic region differ among themselves and from the rest of mankind in physical and moral characters. Some of them bear certain traits of resemblance to the bordering nations of the coasts which surround the Great Ocean on different sides; but none of these traits are so strongly marked or of such a kind as to identify the insular tribes with those of the adjacent main-lands, or to afford satisfactory proof that the islanders are descended from the continental nations. We can neither deduce the tribes of the Oceanic isles from the races of people who inhabit the Peruvian Cordillera on the eastern border of the great basin of the ocean, nor from the inhabitants of the South African mountain-ridges which enclose it on the western side. The only continental region where human tribes exist plainly allied to the native races of the islands is the south eastern extremity of Asia, on the remarkable promontory which may be regarded as a southern prolongation of that continent into the Indian Ocean. There,—namely in the peninsula of Malacca,—tribes of wild people inhabit inland tracts, who are different from each other in physical characters, and who bear a resemblance to more than one of the races of the Great Ocean. It is possible that this may have been the point from which all these races originally came. It must however be observed that the inhabitants of the Malayan coast, who are known to be allied to the natives of the adjacent islands, are believed, apparently on sufficient grounds, to have been originally colonies from the islands." Mr Crawford was still more impressed with a sense of the extreme darkness of the early history of the tribes of the Archipelago. He remarked in 1820,—“In the present state of knowledge, I fear we must pronounce that the origin of the nations which inhabit the Indian islands seems buried in unfathomable obscurity, and hardly appears less mysterious than that of the

* In previous papers in this Journal I have referred the primary lank-haired Indonesian tribes to S. Eastern Asia generally, See “The present condition of the Indian Archipelago” Vol. I. p. 10; “Customs common to the Hill tribes bordering on Assam and those of the Indian Archipelago” Vol. II. p. 229-236; “A general sketch of Sumatra” Vol. III. p. 362, 2. In the second of these papers I remarked the prevalence of Indonesian civilisation and customs up to the northern boundary of Ultra-India. It will be seen in the sequel how far a comparison of the languages, and a more extended comparison of customs, has tended to confirm the views indicated in the above papers.

indigenous plants and animals of the country they inhabit."

An attempt has recently been made by M. D'Eichthal to give Polynesia an entirely new place in the ethnology of the world. He declares that the Polynesian civilisation is original, and apparently the earliest in the world, that it spread to the east and west from its focus in Polynesia or in a continent situated in the same region but now submerged, that it reached America on the one side and Africa on the other where it embraced the Fulahs, Copts, Mandingoes and other races, while towards the north it penetrated into Asia. He even throws out the suggestion that a germ, emanating from this Polynesian cradle and falling into the valley of the Nile, originated or fecundated the ancient Egyptian civilisation.

I believe I have indicated the more important as well as the more striking of the opinions that have been placed before the world respecting the origin and affinities of the Oceanic races. Others there doubtless are, and perhaps there are few possible solutions of most of the difficulties of the subject, that have not been thrown out in one shape or another. This is at least a proof of the great curiosity which the region and its people have universally excited, and it affords some assurance that the labour of attempting to lay a broader and, if possible, a better defined basis for future research, will not be wasted.

As this fertility of speculation has arisen chiefly from a barrenness of facts, it is obvious that an extension of our data is the true means of removing the subject from the field of conjecture, in which every writer claims a license to wanton. Under this conviction I have for some years endeavoured to collect more information, and as language is the foundation of all sound ethnology, my principal attention has been given to it. The labour of making vocabularies is a very slow one, and I have only been able, up to this time, to complete large ones containing from 2,000 to 6,000 words of six languages of Sumatra, two of the Malay Peninsula, one of Borneo, six of Celebes, five of Java and the adjacent islands, and several of the Transjavan chain mostly on a smaller scale. I have derived from Dutch authors many others not generally known, and to these I have lately been enabled to add several large dictionaries of the Philippine languages by Spanish authors. In pursuing my enquiries into the languages and other peculiarities of the insular races, I was struck by a number of resemblances amongst themselves and with other human families which did not appear to have been noticed before, and which led me to think that a full comparison even of the facts already known, might lead to more definite notions respecting the true requirements and difficulties of the subject, and serve as a useful preparation for further research. The task proved to be larger than I had anticipated, and it has somewhat retarded my main pursuit. With a view to ascertain generally the position

of the insular languages with reference to others, I compared the structure of those of which I had some knowledge with the Burmah-Chinese, Tartarian, Tibeto-Indian, Older Indian, African and American groups, and made a comparative vocabulary of a little more than 300 words of 135 of the Indo-Pacific languages. These I have partially compared with each other and with about 150 of the Continental languages that appeared to have connections with them.* This vocabulary I intended to publish with an essay on the comparative structure of the different groups, as a sequel to my second essay on the languages of the Indian Archipelago† which appeared in the number of this Journal for November last. The time likely to be occupied in printing it is so much greater than I expected, and ethnological matter of other kinds has so much accumulated on my hands, that I have been induced to alter my plan. Reserving a more full examination of the languages until I can accompany it by this vocabulary, I shall proceed to give the results of a general preliminary survey of the ethnology of the Archipelago and of the regions with which it appears to have positive connections. The enquiries which this has suggested, and the many directions in which they diverge, prove that the subject as a whole is far beyond the grasp of one person, and I think I shall better aid in the progress of our knowledge by laying the general facts and conclusions at once before my readers, instead of waiting for years till the completion and comparison of more full data shews to what extent they are to be modified or extended. Even to draw all the results from the small vocabulary which it is capable of yielding, requires much collateral enquiry for almost every word. When I have finished its analysis, the inferences that have already been obtained, will, I believe, become considerably more definite and positive. Although the facts that I shall proceed at once to lay before the reader, will maintain their interest and value in all our future inquiries, it will not, I hope, be overlooked that the present series of essays are essentially preparatory.

In briefly adverting, as I have done above, to the state of opinion respecting the insular languages and races, my object has been not only to shew the necessity that exists for more extended observation in the Archipelago itself but to avoid frequent allusions to controverted points. The cause of truth will be best served by taking up the whole subject as independently and freshly as it is possible to do, after the mind has been familiarized with previous researches. If therefore I may less frequently allude to the labours and opinions of such men as Marsden, Crawford and

* I have not been able to insert more than a few words in several of the languages which are not accessible to me. For several manuscript vocabularies which have been presented to me due acknowledgment will be made when they are published.

† Preliminary Remarks on the Generation, Growth, Structure and Analysis of Languages—*Journ. Ind. Arch.* Vol. II. p. 637.

Humboldt than occasion may seem to call for, it is from a fear that the respect I entertain for them might unconsciously interfere with the free and unbiassed expression of the opinions which I may be led to form, or at least necessitate a more detailed examination of their arguments, when I do not adopt their conclusions, than there is space for in this Journal. The explanation of my own views and their grounds, when completed, will I trust be found to meet most doubts that may, in such cases, occur to those who are familiar with their works. At the conclusion of the enquiry I shall review the history of the progress of our knowledge of Oceanic ethnology, when I shall endeavour to form a just estimate of the opinions of each writer with reference to the body of facts of which he was in possession at the time of promulgating them; and I believe the new data which I shall by that time have communicated, will tend, in a considerable measure, to reconcile some of the more important opinions where they are discordant. An opportunity will also be thus afforded of doing justice to many other able English, Dutch, French, Spanish and German writers, much of the more essential matter of whose contributions will be embodied in the ethnographic part of this enquiry.

It may be gathered from what we have said that no endeavour has yet been made to investigate Malayu-Polynesian ethnology as a whole, and with the aid of all the kinds of evidence which are available. The languages have been partially compared, and the physical data, which lie more upon the surface, have been sufficient for a more full examination of that portion of the subject. But, although admirable descriptions of the arts, religions, manners, customs and other characteristics of the Malays, Javanese, and Polynesians have been given, they have not been treated as a whole, nor have those of all the tribes, barbarous and civilised, been compared with a view to ascertain whether any positive fundamental connection can be traced amongst them.*

As a sufficiently distinct and comprehensive idea of the objects of ethnology, and the nature and difficulties of its enquiries, is not very generally prevalent, for indeed it has hardly yet been brought into shape, it will be necessary to offer some remarks on the subject, with special reference to the Indian Archipelago, and as a preparation for the task before us. It will save much digression hereafter if the mind of the reader embraces, at the commencement, a more enlarged conception of the scope of such enquiries than many are accustomed to entertain, and if he can bring himself to contemplate the possibility of the history of the Archipelago proving to be more ancient and complex than he may have hitherto supposed.

Ethnology, in its etymological and narrowest sense, is the science

* Mr Crawford's History of the Indian Archipelago contains a number of ethnological essays, more original and more ingenious than any others of the kind in the English language, but they refer chiefly to the more western portions of the Archipelago.

of nations.* It investigates the characteristics and history of the various tribes of man. The time seems to be already come when we may venture to define it more comprehensively as the science of the Human Race. From the investigation of the peculiarities and histories of particular tribes it rises to the conception of mankind as one race, and combining the truths which it gathers from every tribe, presents the whole as the science of the ethnic development of man. Those who may consider it premature to unite all nations in the notion of one race, can still accept the definition as indicating the science that results from a comparison of

* Vague or erroneous notions are frequently entertained respecting the aim of ethnology, and no good definition has yet been given of it. Dr Prichard sometimes explains it to be the history of nations,---taking history in its widest scientific sense,---at other times he declares it to be an attempt to trace the history of tribes and races of men from the most remote periods which are within the reach of investigation, to discover their mutual relations, and so arrive at conclusions, either certain or probable, as to their affinity or diversity of origin. In his latest production he comprises under the term "all that relates to human beings, whether regarded as individuals or as members of families or communities," thus mixing up what the French term Anthropology, or the science of man generally, with that of nations, and evincing his ultimate conviction of the necessity of resting ethnology on a thorough study of human nature and human development. The object of the Ethnological Society of Paris is "to establish what are in reality the different human races," while the American Ethnological Society declares that "its objects shall comprise enquiries into the origin, progress and characteristics of the various races of men."

Ethnology, according to our conception of its distinctive aims, considers every thing relating to mankind that affects his national tendencies, characteristics and developments. It is *comparative* human physiology, psychology, philology &c. in their national and progressive aspect. It pre-supposes a scientific knowledge of man as an individual, and if in any case this has not been furnished to it by the cultivators of the absolute human sciences, the ethnologist must go aside from his comparative labour to supply the deficiency as far as he can. For the knowledge which he takes from the former he gives them an equivalent, because man as an individual cannot be known well and truly till he is viewed with reference to mankind as a race. It is only then that he can be fully understood physically, intellectually, morally or religiously. The whole truth of his position, development, tendencies and ends cannot be learned without the aid of ethnology. Still the ethnologist deals with special human sciences incidentally and not directly. He is interested in every law of growth and change in individuals that affects or illustrates national life,---that produces, or is capable of producing, diversities of form, disposition &c. His primary school is therefore the Family.

The constituents of the science appear to us to be 1st, the principles of ethnology as the science of the developments and varieties of mankind; requiring mental and corporeal investigations of many kinds and a study of the influence exerted on him by external nature, by particular kinds of configuration and climate and by physical geography generally.---In other words an enquiry into the causes of all the phenomena of variation, change and progression which man exhibits or is capable of exhibiting. 2nd, the history of particular developments, i. e. of each nation separately. 3rd, the ultimate history of mankind as a whole. There is no doubt that another and more elementary science must grow up at the threshold of ethnology before it can be prosecuted without constant digressions. This is the science of man, of which most of the component parts have been long studied separately, and for which even now large materials exist, only requiring to be united. It is partly psychological, partly physiological and partly physical. It must begin with the human germ,---man on his first entrance into the world,---and examine the mode in which the tendencies and powers that he possesses are developed and directed by external influences. It must explain the multiplex variations of human nature, and of all its outer manifestations, and shew how the succession of generations modifies them and causes new ethnic developments.

nations and their developments.* Whether all men are descended from one stock or not may be placed apart as an enquiry by itself for those who think it worth while to pursue it in the present state of our knowledge. All are agreed that man is of one kind. If the millions who now people the earth had some hundreds of progenitors instead of a single pair, the science which the definition comprises will remain unaffected, for in every nation that has been discovered, human nature is found to be fundamentally the same, and the phenomena which are exhibited by the most distant tribes preserve the same relations to ethnic development. The general idea which we form of man as a race, plastic within certain limits to physical nature, time and the influence of his own kind, or essentially variable and progressive, and our conclusions as to the nature and laws of his variation and progress, are the same whether we investigate the Oceanic, the African or the European nations.

It is thus obvious that although a complete ethnology cannot be attained until all tribes have been ethnically described and compared, most of the human elements of its essential laws,—that is, so much as relates to man only and not to the physical character of the habitable globe,—must be discoverable from the study of even a single people, if pursued with a due combination of mental and physiological science. In every nation causes are incessantly operating which would be capable of producing all the varieties of man, if circumstances favoured instead of counteracting or confining their influence. But there is always a great tendency in the minds of observers to one of two extremes. We either cannot separate the cause from its peculiar action amongst the people we are observing, and so cannot rise to the ethnic view of the facts at all;

* Descriptions of particular races belong to Ethnography, which I would consider as a subordinate portion of Ethnology rather than a distinct science. The latter being necessarily based on the former may be viewed as including it.

† I may state here, once for all, that ethnology can only be pursued as a scientific study by viewing the Hebraic religious development and the Hebraic records in their human aspect, that is, as entering into the ethnic development of the Aramean race and of the world. The supernatural element, and all the discussions respecting the kind and limits of inspiration and the methods of interpretation, belong to theological science, and amongst all the discordant systems of theology that only can be true which is in harmony with the truths established by an observation of God's works. Ethnology can never be opposed to theology, but only to erroneous views of theology. Like every other science it must assist the mind in acquiring true conceptions of God and all His mundane revelations of His being and providence. In tracing connections between the Hebrew and other moral and religious developments, ethnology neither seeks to establish nor to deny supernatural agency in the former. She does not question the possibility of a prophetic announcement or reannouncement of truths or particular forms of truths, which the natural advancement of mankind nevertheless necessarily reveals, and which she observes in the minds of other races. The ethnologist only claims the right to an independent development of his science, without which its results will lose all value to the theologian himself. I have said a little more than the text calls for, but I wish to avoid all future reference to the subject, and all discussions connected with it. Those who desire to satisfy their minds still further, can consult the numerous works in which both divines and men of science have incidentally vindicated the independent prosecution of natural science from all doubts and hindrances of a theological kind.

or we generalize too much or too abstractly, and draw purely psychological instead of ethnic conclusions. All will therefore best avoid the risk of rash generalisations by making the comparison of races the main basis of the science.

For the ethnology of any given region the first requirement is a full and accurate description of each tribe in it and in the adjacent and connected regions, as it exists at present and has existed in recent or historical times. This embraces the geographical limits and the numbers of the tribe, the physical geography of its location, and its relations of all kinds to intermixed, surrounding and more distant tribes. The environments of the race thus ascertained, the Individual man must be described in his physiological and mental characteristics and in his language. The Family in all its peculiarities of formation and preservation, the relative position of its members, its labours and its amusements, must next be studied. The agglomeration of families into Communities united socially but not politically is also to be considered. Lastly, the Clan, Society, Tribe or Nation as a political unity, either isolated, confederate or subordinate, must be investigated in all its institutions, customs and relations. To each of these unities, individual, family, social and national, belongs appropriate arts and usages, including those of religion, all however springing from, or coloured by, the characteristics of the individual.

Although I have placed the physical and mental character at the head of the ethnic traits, as being that which constitutes the race, preserves its identity throughout all changes of manners and customs, and gives to these a distinctive aspect, it must be borne in mind that it has not a primary normal existence capable of being ascertained, but results from all the conditions under which the race has lived, and can only be tolerably well known through as much of these as are not lost to us in the past. The physical character of a race is only less complex than the mental, and indeed they are mutually dependent; the first, with every new individual in the continuous reproduction of the race, giving the primary form or tendencies to the latter; and the latter, from generation to generation, reacting on and modifying the former.* We cannot get a true and deep insight into national mental character as a whole, save as the result of a complete knowledge of all other national characteristics and of all that is preserved of the national history. The principal element in the investigation of

† By mental character I do not intend to express something purely spiritual, but merely a variety in the mental manifestation of the organic unity, -man. What is mind, has it an existence independent of matter, are questions which, if they can be brought within the domain of human reason at all, belong to the physiologist and the psychologist. The ethnologist has only to consider the mind of man in its actual mundane manifestations, and be its essence and origin what they may, he sees it, in its action, as a function of the organism of man, and dependent for its varieties on differences in that organism. External conditions permanently affect the mental character through the organism, either in a direct and subtle manner by their sensorial action, or indirectly from degeneration or improvement of the whole organism by climate, food, habits of life &c.

the intellectual character and the course in which it has been developed, is a thorough acquaintance with the language, not merely philologically, though that goes a long way, but as it really exists in the mouths of the people. We must listen to their speech in play and business, both in its every day form, and in the more measured and artistic one which it assumes in orations, songs, poems, narrations, and in literature where it exists.

When we attempt to enquire into the cause or origin of any of the facts presented by an ethnic monograph of the kind we have indicated, we find that very little light is to be obtained in the history of the particular tribe. It suggests numerous enquiries but can answer only a few. If we confine our attention to it, the great mass of its characteristics are soon lost in a dark and seemingly impenetrable antiquity. But although each race, when thus taken by itself, vanishes along its separate path, it assumes an entirely new aspect when we compare it with other races. The great ethnic unity which it forms at the present epoch, disintegrates and decomposes as we carry back our researches. We see many traits of civilisation gradually disappearing, and are at last impressed with a conviction that each of the ethnic constituents of the race has its history, sometimes merely forming a chapter in that of a general indigenous development, but often leading us to other races and regions. We find it necessary, at an early stage of our enquiries, to recognize for many races a probability, and for all a possibility, of their physical, linguistic, moral and artistic or formative traits having each their history, which, at some era in the past, separates itself from that of the others. We must even be prepared to find races which preserve nothing of their stock save certain primary physical peculiarities and mental tendencies, and which derive their language, customs and habits from numerous distinct sources. There is great complexity and as yet some confusion in our glimpses into pre-historic times, and at present there is no reason to expect that the cloud will ever be entirely lifted. But much is even now being accomplished which will throw light on the ancient movements and relations of races, and no man who considers what geology was at no distant date, and what has been done for it in a single generation, will indulge in any feeling but that of a confident expectation of a similar advance in ethnology before the present generation has closed its labours. If the whole science be a necessary result of the nature with which man is endowed and the very varied physical characteristics of the globe, if its laws be in constant operation wherever human tribes, or families,—which are undeveloped tribes,—exist, it is clear that our researches will bring to light no facts which a science based on observation of the present and historical times, will not account for and surround with a number of other facts. As far back as the world was possessed by numerous races as it is at present, they must have had mutual relations, near or more remote, so that facts

clearly established in the pre-historic time of any one nation give us, as it were, a footing in that era of the world. We may be surrounded by darkness which faint glimmerings only may pierce for a time. But when we have made advances to other points or from other directions, and scattered our lights over the ancient world, we shall find them numerous and near enough at particular places to shew us, in faint outline, the old nations and their connections.

The only entrance to this ancient world is through the present. We cannot understand the true value or bearings of archaic facts, unless our minds be imbued with a just sense of the nature and operation of the various ethnic forces which are ruling mankind now, as they must always have done. We must begin by making ourselves acquainted with the causes and extent of the influences which physical geography exercises on nations, and which nations exercise on each other.* Although the historic period is a very contracted one in the Indian Archipelago, it happens, from the great number of distinct tribes and the favorable position of many for receiving and communicating influences, that it presents a peculiarly rich and interesting field for the observation of modern ethnic phenomena. In no other part of the globe are so many races in mutual contact. In none probably has there been a more constant and various succession of foreign influences. Commerce, piracy, conquest and religion have each produced the most extensive disturbances and changes. Civilizations of indigenes and foreign origin have caused particular races to expand till the old balance of power, or rather of barbarous impotence and inertia, has been destroyed, and wide spread conquests and colonisations have been the consequence. Tribes have been enslaved, exterminated or forced to retire from the open ethnic stage and its civilising influences into the obscurity and barbarism of nomadic jungle life, while other remnants of the ancient possessors of the land have sought a precarious home in lonely creeks, coasts and islets. Civilisations, and the languages and arts of civilised races, have also had their conquests of a quieter and more lasting kind. No fact in human history is more striking than the mode and extent of the engraftment of the religion, and much of the language, of ancient India, upon the races of eastern Java. It is one of those great and peaceful revolutions of which we have a few parallel instances in other parts of the world in historic times, and which, happening in such a region, renders it necessary to bear in mind the possibility of similar events having taken place in more ancient periods. At present a very great variety of ethnic phenomena is presented by the Archipelago. There can hardly be a circumstance in its historic and archaic times that has not a commentary

* We have confined ourselves in the following pages to a general statement of such of those influences as have most operated on the Indonesian tribes. The subsequent special papers contain a mass of illustrative facts.

in some fact that is now happening. Ethnic operations are slowly going on in our presence which must have the most important influence on the future condition of all its races. Social changes, movements of families to new localities, hundreds of varieties of intermixture of blood, the slow engraftment of foreign habits, ideas and languages on preexisting ones, the still more subtle and complex influence exerted by the mere presence of foreign colonists and traders more powerful and civilised than any indigenous race, all this is in progress before our eyes, and its right observation and description will supply a great body of ethnic phenomena capable of illustrating all past times, and without which we cannot duly estimate the whole bearings of the facts that our archaic researches may bring to light. From the great extent and varied character of the insular region, it presents remarkable combinations of open and secluded districts, so that while every successive foreign influence has been spread over large tracts, no stage of ethnic development that has ever existed in it, is wholly obliterated. The animal life of the earliest savage tribes and the literary and religious culture of the Hindu era, are now contemporary with Arabic and European civilisations. In no other region does the present so fully preserve the past, and in none therefore does the observation of the one offer so broad and safe a foundation for a knowledge of the other.

The influences of physical geography are amongst the most important of all those that enter into ethnology. It is by these that the natural tendency of population to radiate on all sides from a nucleus or centre is checked, and particular paths and directions given to it. It is by these that man, although essentially one, physically and mentally, is maintained, even if he were not originally moulded, in all the varieties which give rise to an ethnology. If the whole habitable globe had been as uniform in surface and climate as some of the great plateaus are, there might have been several human tribes but they would have been physically alike, and the facility of mutual intercourse would have prevented any considerable and permanent deviations in intellectual culture and manners, or even in language. By the actual disposition and structure of the land, the diversity and consequent development of mankind have been as effectually secured as if many families had been created in every region, and each been sent forth provided with a distinct, inspired language. While man remains in a state of ethnic infancy, as he still does in many places, every mountain valley becomes the cradle of a tribe and the nursery of a language. In regions like those of Eastern Asia every geographical extension of a tribe, every separation of families, is equivalent, in this era, to a new creation. The growth of communities beyond a few families is impossible save in rare spots which confine wanderings within narrow limits, and at the same time favour the growth of population. Whether therefore there was originally but a

single pair or many distinct families speaking one language, or there were numerous stocks with as many languages, the action of the physical character of the surface of the globe would, in the course of time, have predominated and moulded the ethnology in conformity with itself, unless we draw again on imagination and suppose the counteracting influences of arts and civilisations to have been inspired, or developed with supernatural rapidity.

The observation of the existing operation of terrestrial physics on races, is not confined in its results to a knowledge of general laws. Geology has demonstrated that the present aspect of the globe's surface is essentially the same as that which it must have had for many thousands of years, and from a period antecedent to the existence of man. We are thus enabled to carry back the great causes of the actual distribution and diversities of mankind, to the remotest period to which any ethnic evidence can possibly conduct us. Whatever influences of this kind we can now observe in any region, the same operated on its human inhabitants in all past times. We can pronounce positively what the effects of a particular country and climate would be on an uncivilised tribe long inhabiting it at any epoch of the past.*

The basis of all our enquiries is thus an ethnic geography, which, while it has hardly any appreciable changes from natural causes, is capable of the utmost variation from human ones. The separate ethnic districts of one epoch and civilisation become united or still further subdivided in another. The old districts may retain all their primitive character in one part of a region, while they are obliterated by civilisation in other parts. The relation between man and the region in which he is placed, which determines the extent of particular ethnic seats or locations and their mutual influences, varies with his development. Every art, every intellectual impetus, alters it. The acquisition of fire, a spear, a knife, or a canoe changes the position and distribution of the race, and enlarges the bounds of its separate locations. Whatever adds to the power of man over nature diminishes that of nature to confine him. Every discovery in the archaic era† whether of mechanical appliances, the power of domesticating and using animals, or of cultivating grain, must have produced a revolution in the relation of the tribes to the region and to each other. Amidst the great differences thus existing contemporaneously from inequality of civilisation, or caused by the lapse of time, it is necessary to have some unit as the base of our scale of ethnic seats. This can only be that of the lowest condition in which a tribe has been found living in a state of freedom. In this man is still nomadic and no

* The changes in climate effected by the human race itself are to be taken into account.

† This era touches the present in many districts. Civilisation may lift it, and degeneration lower it again, in different periods of the progression of the same tribe.

society beyond that of a few families is formed, but his wanderings are confined to a limited tract. It has greater advantages than other places he may have visited or than surrounding tracts, or he cannot leave it without severe exertion to overcome natural obstacles. The difficulty of egress may be greater than that of ingress,—or having, from some strong temporary impulse, or necessity, forced himself into it, the recollection or tradition of the difficulties, exaggerated by the lapse of time, may prevent his attempting to leave it,*—or the tribe may be debarred by the proximity of jealous or hostile ones from pursuing their migration. If in the course of its wanderings, it has encountered strange tribes and suffered from their attacks, it may voluntarily remain in a tract which it finds to be secluded. The boundless nomadic spirit which is inconsistent with any location and any development, and in which man has no more relation to a particular district than the tiger who journeys through it lingering for a time if he finds food to be abundant, is thus early checked either by the character of a particular locality or by the proximity of other tribes. The locations fitted to become primary seats by the operation of either of these causes, vary with the nature of the region and the increase of population.

In Eastern Asia and Oceanica there are probably several thousands of such primary locations of tribes. In the vast mountainous and hilly tracts covered with dense forest, these seats are exceedingly circumscribed. On open steppes and grassy plains they are far wider. Some are so small and difficult of ingress and egress, that the families which first wandered into them probably founded isolated tribes. In others, while the obstacles to constant or regular mutual intercourse are great, none exist to hinder occasional or accidental contact. In these, different clans or branches of one family at first preserve a considerable alliance, but with the growth of jealousies and quarrels, increase of numbers and weakening of the bond of consanguinity through the lapse of time, estrangement and hostility are produced. Mutual interest and fear lead to the restriction of each clan to a particular range.

The secondary seats are the margins of inland lakes and of navigable rivers, after canoes have come into use. The extent of the latter depends greatly on the character of the river, some having so strong a current as to present a considerable obstacle to the maintenance of a constant intercourse between families settled at distant points on their banks. Lakes and portions of rivers which have

* Amongst the finest illustrations of this are those furnished by the band of lofty mountains the passes of which lead from the great Asiatic plateau to the plains and valleys of India, Ultralandia and China. Tribes having once descended must have been prevented from re-ascending, because the difficulty of doing so, great in itself, would be increased by the climatic enervation, and the temptation to do so would be diminished. Even the descent of the Ahoms from the eastern highlands into Asam six centuries ago, soon became mythical. They were fabled to have come down from heaven by an iron ladder.

much of the character of lakes, are so favourable to this, that, when other natural advantages are not wanting, we naturally look to them as the earliest cradles of civilisation in most regions.

When at this early stage we direct our attention from particular primary locations to wide regions of the land, we see that many seats, although sufficiently separated to produce distinct tribes, are united by the practicability of stragglers and fugitives gradually wandering from one to another. These are the regions of the dispersions and migrations of the same family, and consist of plateaus, river basins, sea shores, sea basins and oceanic or monsoon districts. Even although there may, originally or successively, be more than one stock in such a region, the constant operation of the dispersing or migratory causes will, in a long period of time, give a general resemblance to the tribes which inhabit it, faint in some places and more marked in others, until new tribes are poured into it and the process of assimilation has to be recommenced. Well marked and bounded as the great physical districts generally are, few of them are so completely walled in as to prevent families occasionally emerging from them. If the wanderers do not find their way into inhabited seats, where they will be changed, absorbed or destroyed by the tribes in possession of them, they will sometimes found new tribes, which, if the region be of a different character from the one they have left, may acquire peculiarities strongly distinguishing them from the parent stock.

There are thus, even in this normal state of mankind, several degrees of mutual influences,—that of families constituting the same tribe or clan,—that of different tribes or clans, which may be friendly or hostile,—and the absorption of persons of one clan or tribe by another. Some of the relations thus established are of a permanent and regular kind. Others are involuntary, accidental and rare. Yet it is a necessity of the region, and the condition of its races, that the latter shall from time to time take place. Their frequency varies with the character of the region and the habits of the race. But everywhere they must exert a certain influence, sufficient, in many districts, to preserve from age to age a degree of mutual action of the intellectual development, languages and customs of the different tribes, while, in others, so slight as to produce little appreciable results. Sometimes the influence, whether regular or occasional, is reciprocal, or radiates and crosses in many directions. Sometimes the structure of the land only allows it to have one direction. It flows from one tribe or region of tribes to others, but no current ever brings a knowledge of the latter to the former.

With civilisation the physical geography of the region assumes a new aspect. Features formerly ethnically inoperative, or having only an indirect or general influence, now become of great importance. A new series of districts arises of which the extent and boundaries are determined, in great measure, by the nature of the

civilisation, and the mental character of the tribes who possess it. The more regular expansion of these districts is caused by the gradual improvement of the arts, the birth of commercial navigation, the growth of knowledge, and the consequent loss of the prejudices and timidities which are nursed by isolation or confined geographical experience. But arts are advanced far more rapidly than science is acquired, or boldness and enterprise substituted for fear and the tyranny of habit. Hence the expansion of the district is exceedingly slow. Nations often remain for ages endowed with the power, without acquiring the will, to take possession of it in all its extent. There are other less constant and more powerful influences than arts and the desire of traffic, which not only accelerate, although they may also retard, the enlargement of the district, but give it different boundaries from those which it has for commerce and colonisation. The predatory spirit, ambition and religion incite to great enterprises, which often carry the civilised nation beyond the range of its commercial world, and bring it in contact with tribes which commerce alone would never, or not till later ages, have sought out.

Each development thus enlarges the ethnic worlds and obliterates many of the ancient geographical barriers, but even when boat navigation has reached its utmost limits, and an intercourse has been established between different great regions, so that they are united although possessed by distinct races, physical geography still keeps the globe divided into several distinct human regions.* It is not until ships have been built, and navigation has improved with other arts, that these last boundaries disappear. The globe is circumnavigated and civilisation advances by sea and land to embrace all races and all realms in its powerful and assimilating influence. The ethnic dispersion and division of mankind has done its appointed work in peopling the earth, and developing the human soul by the quickening effect of the contact and mixture of races and languages. A more active and powerful process of assimilation now commences which must proceed by moral and physical means, until all mankind become one in intellectual and scientific culture, and every new advancement that genius achieves will be made not for a nation but for the world. It is only at this era, when it first becomes possible to understand the distribution and characters of races, and when, at the same time, the conversions, absorptions and exterminations of barbarous tribes by civilised nations or their colonies, shew that the work of assimilation and obliteration is rapidly proceeding, that a science of ethnology can exist. Many tribes have already been swept away. Others, in the course of a single generation, have lost many of the habits of thousands of years. Before Captain Cook's work is seventy years old, the language, religion

* All or many of these however, in the course of great periods, must become penetrated by influences successively emanating from sources in particular regions:

and manners of England meet us in the Indian Archipelago in the persons of Polynesians, who have received them through America.*

We have considered physical geography as prescribing the seats which nations occupy in different stages of advancement, the communication between different seats, and the gradual merging of many into one, but to gain a correct idea of the operation of geography as a whole on mankind as a whole, we must view the subject historically and with special reference to the movements of races. We then see that while in every considerable region there are retired districts and tribes which long remain unaffected by all the changes that go on in the more open and accessible seats of population, there are also great highways of ethnic intercourse and advancement which have determined the lines of migrations, and exercised a paramount influence on the history of man. These are certain of the same tracts that first connect races or serve as wide seats for kindred clans. The more permanent consist of all open spaces capable of being traversed by man, but incapable of being continuously inhabited by him. A great plateau like a sea connects distant tribes on its margin. With these may be ranked large rivers. A second class of highways consists of the coasts of continents and islands; a third, of chains and groups of islands and traversable mountains. Before the use of boats the mountains of the Malay Peninsula afforded the only route by which it could be traversed. Of all these highways the most important are the oceanic. It is these only that are capable of giving to an advanced civilisation effective and universal dominion. In earlier ages the oceanic highways are marked out by monsoons and prevailing winds. In every considerable maritime region the ethnologist must make himself thoroughly acquainted with these. The winds and currents, whether periodical or irregular, that now carry the prau or canoe where its occupants wish, or hurry it away out of its course, exerted the same motive power in all periods of the human history of the region. The certainty of the occasional transportation of men into distant districts by this power in every age must be born in mind. The limits of the regular winds and currents must be ascertained, because each marks out an ethnic highway; and it is equally necessary to know the irregularities to which they are subject, because each of these establishes a temporary route in an unusual direction, by which it is possible for boats to be carried out of the regions of monsoons, trade and other regular winds. One accident of the kind in many centuries might suffice to give a population to a district previously uninhabited, because a single pair can originate a race. We are yearly obtaining more facts in Oceanica respecting this cause of the dispersion of mankind. It has been

* I lately saw some Honolulu youths in Singapore for the first time. Their thoroughly English dress, manners and speech were calculated to make a strong impression after a perusal of the account of Cook's reception and death at Hawaii in 1779.

far more influential than was formerly supposed, and it is now quite certain that in the earliest stage of maritime art, that of rude canoes or even rafts, families may be borne to sea and saved on distant coasts. Reduce the proportion of race-producing castaways as we may, the lowest will suffice to people all the shores and archipelagoes of the Indo-Pacific Ocean.*

As it is essential to a correct understanding of the method in which I intend to treat the ethnology of the Archipelago, that the above views of the necessary dispersion of mankind and multiplication of separate tribes, and of their necessary reunion, by natural causes, should be kept constantly in mind, I will recapitulate them in a more abstract form.

The habitable surface of the globe being of limited extent, and mankind being capable of multiplication by geometrical progression, it follows that whatever number of normal centres be assumed, their expanding circumferences must meet and successive centres of assimilation be formed, from the more powerful of which influences will radiate till the whole human mass become ethnically homogeneous. After all allowances are made for physical impediments, diversities of organism and character, and destructions of tribes, a certain average rate of progression must remain, and the results will be ultimately the same however much the rate be diminished. The great work of assimilation is never interrupted. Particular civilisations may cease to be contagious, particular races may become secluded or perish, but others propagate or receive new influences, or keep in action the old. A uniform covering of ideas, religious, social, scientific and artistic, that has become fixed over half the globe, may be rent and its continuity broken, but the very energy that shattered it, barbaric as its first character may be, will become the cradle of a new and higher civilisation which may in its turn, overspread the world.†

Of the lowest ethnic locations which must at one time have filled the Archipelago and Eastern Asia, many still remain in the possession of secluded tribes who have hitherto been little affected by the revolutions that have happened around them, or, by the partial or occasional influence of more civilised tribes. It is probable however that none now exist who have entirely eluded this influence,

* It is hardly necessary to remark that the influence of these highways in originating races is greatest in the infancy of navigation, because when man was first born out by the tides or currents of rivers, to the open Indo-Pacific sea, or ventured to trust himself upon it, the islands were uninhabited. A certain proportion of all the pairs that did not perish and reached a new coast would found tribes. But as population spread, the castaways would generally be absorbed or killed by one of the insular communities.

† It must never be overlooked that every kind of ethnic district from the primary seats to wide regions, and every kind of human development from the simple and savage to the elaborate and refined, have contemporaneously existed for the last 6,000 years and probably for a long period previously. Division and segregation as well as contact and assimilation have always been variously operating in different parts of the world, and frequently in the same district.

and that the moral seclusion of the most retired and unaltered tribes, has been owing more to fear or antipathy than to positive and uninterrupted isolation. In every such tribe of which I have been able to examine the language and customs, I have found evidence of considerable acquisitions having been obtained from other tribes. The only places where anything like perfect seclusion is now to be sought, are towards the heads of great river basins in jungle covered and thinly peopled districts. The commercial, predacious and migratory spirit of the more civilised Indonesian races leaves none of the smaller islands and river basins unexplored. They indeed tell us of wild races in the interior of the Malay Peninsula and of Sumatra whom they rarely see and who fly from their sight. But the consistency with which different narrators, in different countries, furnish them with iron hands and other supernatural characteristics, shews that these exist only in traditionary faith. There are however some races so very timid and wild, that even the Binua have but a limited intercourse with them. It is more probable that some of the tribes near the great watersheds in the interior of Borneo will be found to be in a considerable degree isolated, although even this is doubtful. The aborigines of the interior of the great Kahayan basin do not, I believe, know any tribes more inland save those of the Daya' Pari who, they say, have tails, but who are certainly not isolated, for a predacious intercourse constantly subsists between them and their southern neighbours, and though heads are the chief booty, living women may be occasionally made captive. In Sumatra all the best lands of the interior have long been occupied by civilised tribes, and the less favorable tracts are nowhere so extensive and secluded as to place barriers between the scattered families of Lubu, Kubu, and Abung and the cupidity of the Malay and other races. The Philipines preserve more interesting examples of an approach to the normal condition of the region. In many parts of the mountainous interior the obstacles to a mutual intercourse of the spiral-haired tribes are considerable. Every valley contains an independent tribe, and so much is the surface broken into small ethnic seats in the more rugged districts, that each family with a separate location has a peculiar dialect, while a few families scattered over a limited space form a nation. Many of the smaller islands not only in S. E. Indonesia but along the west coast of Sumatra, are each inhabited by several independent tribes, but the civilisation is too great in most of them to admit of the existence of isolated families; and the islets which, from their position, have not attracted colonies of the improved races, and remain in the possession of rude tribes like the Telanjangs, are either occasionally visited or habitually frequented for trade by Bugis or Malayan praus. The interior of S. Eastern Asia presents wider blanks than the Archipelago, but there is no reason to believe that any completely isolated tribes will be found in it.

Every wild or alpine region which it contains is surrounded, and often partially penetrated, by clans of the four great civilised peoples who are spread over all its more favoured and much of its more mountainous and inhospitable tracts. Some of the Khunung and other wild tribes towards the north and north-east of the basin of the Irawadi, may be completely mountain-locked and shut in from all access, but it is more probable that even they are everywhere directly or indirectly in contact with the Tibetans or Mung-fan on the one side and the Singfu and Kluanti on the other. The valley of the Manipuri contains several tribes speaking distinct dialects, and it is probable that other districts in the less known parts of the mountain lands between the Irawadi and the Brahmaputra, as well as in the upper basin of the former, present a similar linguistic divergence. But we have already learned enough to be certain that isolation cannot exist in this region. In the nomadic tribes of Australia we have instances of a certain degree of isolation combined with a considerable geographical range, but still retaining the character of primary seats, the increased limits of the wanderings being naturally and perennially prescribed by the character of the region. It is to the eastward that we must look for tribes that have been longest isolated. The seclusion of every Polynesian tribe is evidently modern, and it is only amongst the Papuanesians that an ancient isolation is possible. We know too little of them to pronounce that none such will be found, but the character of the region, both as to lands and winds, tends to counteract the maritime rudeness of the race, and it will be extraordinary if the usual consequence of a better acquaintance with an insular people, the discovery of an intercourse between it and other islands, does not follow in the case of every tribe of a race which has spread itself over all the limits of the southern monsoon.

The larger or secondary locations, which result from the possession of canoes, are still so common in the Archipelago that we must reserve their enumeration till we describe the different tribes. It is principally in the upper navigable portions of rivers that they preserve much of an original character, but many small rivers are still chiefly in the occupation of distinct tribes. The most fertile river and lake basins have immemorially been the seats of large and united communities, and every principal river basin, even in the less productive regions, has served to assimilate the families by whom it has been occupied, and to transmit foreign influences far into the interior. Save in Java, each considerable river basin in the Archipelago has still so much that is peculiar in its history and present population, as to demand a distinct place for itself in the ethnography of the region.

The next districts are eminently those which have determined the internal migrations of the region and the diffusion of foreign races or their influences. These are the seas of the Archipelago, which are again united into wide regions by winds. For all our

more important enquiries they are of paramount importance. Their number, variety and connection, have exercised a great power over the human history of the region. On the one hand, they break up and separate the habitable land into a vast number of distinct human seats of varied character and extent,—some only sufficing for the maintenance of a few families, and others combining an insular with a continental character,—while, on the other hand, they fit the whole to be embraced by a lower stage of maritime art and civilisation than that which any other region of equal extent would require to unite it. These peculiarities, combined with those of its position with reference to the shores of the great oceans on either side, give its ethnology an interest possessed by that of no other region peopled by tribes in the same stages of advancement. Amongst the sea basins whose ethnic influence has been in operation during all historic times and is uninterrupted at the present day, we shall particularly advert to the China, Malacca, Java, Mangkasar, Solo, Mindoro, Molucca, Banda, Papua, Jilolo-Papuan, Papua-Australian and Papua-Micronesian seas, and the archipelagian seas of Johore, the Transjavan or Timorean chain, the Bisayan group, the Moluccas, Eastern Melanesia and of the different Polynesian and Micronesian groups.* All these basins

* *Note on the necessity of having distinct Geographical and Ethnographical Names, and on the system that will be adopted in this series of essays.*—Two sets of names are required, the one purely geographical and the other purely ethnographical. The first should merely be a name for a definite portion of the Earth's surface to which all facts, ethnic, physical, &c., can be locally referred. To give one ethnographical name, and above all to extend the name of a particular tribe, to a region inhabited by distinct races, produces confusion and error. The name of every such region should be purely geographical, and when it receives an ethnic application it will be fully understood that it embraces all the tribes in the region and predicates nothing of them save this geographical connection. Where a region with a distinct name is inhabited by one tribe or one race, the geographical name with its ethnic postfix will inevitably become ethnic, e. g. Polynesia, Polynesians; Arabia, Arabians. It is to be wished however that even in these cases the names were distinct, because in ethnic history we must often view such a region as the seat not of one tribe but of a succession of tribes, or of several contemporaneous tribes, and a purely geographical name unconnected with any of them would save periphrases and the risk of misconception. It has been usual amongst all races to derive geographical names from the tribe inhabiting a country and to extend the names of dominant tribes over regions inhabited by several others; and names that have thus been long settled by mankind cannot be disturbed. But if geographers and ethnographers would agree in recognizing the necessity of the two kinds of nomenclature, some errors that have been propagated in recent times might still be destroyed in the bud, and whenever there is room or occasion for new names the old error might be avoided.

In the eastern seas we are fortunate in possessing many purely geographical names, such as Sumatra, the Philippines, Celebes, the Molukas, Australia, New Guinea, &c. But the names for all the larger groups which it has been found necessary to class together for particular purposes, are defective. Oceanica, Australasia, the Malay Archipelago, Malaisia or Malaysia, Melanesia v. Kelenonesia, Polynesia, Micronesia, are all liable to objections. I fear it is impossible to obtain purely geographical names without retaining many of such compounds and increasing their number, however we may dislike them. The Germans and Dutch have a great advantage in the license which the habit of their language allows in the formation of native compounds. Like the French we are driven to classical compounds, which cannot be applied to places without offending English taste. The fundamental ethnic error of confounding all the races of the Archipelago, save

exert a two-fold influence. They provoke a constant intercourse between the rivers of their opposite margins or the islets scattered through them, they bring the whole under the operation of foreign civilisations, and, opening as they do into each other, they are as broad highways traversing the whole Archipelago in different directions, and uniting it, both for foreign navigators, and for the more advanced and enterprising of its native communities.

the negroes, with a single western race, the Malays, should be abolished, and all geographical names tainted with it should be discarded.

Until some reformation be introduced by European ethnographers, I shall endeavour to designate the different geographical districts which must frequently be referred to, by terms as purely geographical as I can find, and with due regard to uniformity of system. A system of naming is indeed more wanted than particular names, for the districts on which our attention is successively fixed in pursuing ethnic researches, repeatedly enlarge or contract their boundaries, and the names must be capable of the same changes, and such that their varying applications can be at once understood. I think the best is that which couples the names of two districts lying on the opposite sides of the region indicated, but entering into it, the first being contracted or euphonically changed, when there is room for it, in order to give a degree of unity to the compound name. The most important districts for the ethnographer are those embraced by a river and its feeders, or river basins, and if these be designated by the name of the river, a set of purely geographical names of the most valuable kind in ethnographical writing will be obtained. Thus we have the Indragiri-basin, the Kahayan-basin, the Menam-basin. These may be indicated without the reference to *physical* geography by substituting *land* for basin, or shortly by the usual local postfix, Indragiria, Kahayania, &c., and as the names of the rivers are frequently descriptive and therefore polysyllabic, it may be advisable to restrict the postfix to them, and reserve the word *land* for race-districts, the names of races being frequently short. The word basin again may be in general restricted to sea and oceanic basins, which must also be frequently mentioned. In those cases where the name of the river has already become that of a place, district or country not coincident with the basin, the latter must be used, thus Palembang-basin, Brunai-basin.

All ethnic regions should be named from the tribes that inhabit them, and the name of one tribe should never be extended to lands which it does not possess. Where several tribes are scattered through a district, the name of one should never be applied to it, unless it has a very decided numerical preponderance. But the true principle is to understand nothing by an ethno-geographical name but the land possessed by the tribe or race indicated, so that every such name will be quite consistent with the joint occupation of the same region or particular parts of it by several tribes. Thus by Malayu-land I understand all districts, whether geographically united or not, that are possessed by communities of Malayus, and by Malays or Malayus I understand men of the Malayu race and language. So by Jawa-land I understand all the lands of the Jawa race; so Sunda-land, Wugi-land, Batta-land, &c.

Compound ethnic names and their appropriate regions I would designate in the same mode as the compound geographical regions, but with this necessary provision that where there are intermediate races, those only which belong to the same alliance or family with the two named, are to be understood as included,—thus, Malayu-Jawan, Malayu-Tagalan, Malayu-Polynesian, Malayu-Timorean, each compound indicating a different ethnic grouping and therefore embracing different tribes.

For the compound insular districts which must be most frequently mentioned, it is very desirable that single geographical names should be used. Until unexceptionable ones are suggested we must continue to speak of the Sumatra-Philippine islands, the Moluko-Timorean, &c. The Indian Archipelago must remain, but the shorter form Indonesia may be usefully employed on many occasions, for the reasons mentioned in a previous note. The principal divisions to which I shall most often find it necessary to refer will be designated. 1st, *Western* or *W. Indonesia* i. e. Sumatra, the Malay Peninsula, Borneo, Java, and the intermediate islands. 2nd, *North Eastern* or *N. E. Indonesia* i. e. Formosa to the Solo Archipelago and Mindanao, all included, and embracing the Philippine and Bisayan groups, &c. 3rd,

By the coasts, winds and currents of the Indian and Pacific Oceans the Archipelago again forms a part of a still wider ethnic region, or rather it enters into two. On the one hand, it is but a continuation of the eastern shore of the Indian Ocean, the coasts of which connect

South Eastern or S. E. Indonesia, from the East coast of Borneo to New Guinea, including the western Papua islands and the Keh and Aru archipelagoes. 4th, *Southern or S. Indonesia*, the great southern or *Transjavan* chain between Java and New Guinea or from Bali to the Timor Laut group. The different portions of the first division are sufficiently distinguished by the names of the great lands of which it is composed. The only portion of the 2nd division which has not a distinctive name is the Southern chain which has a close ethnic connection. As it is throughout the great seat of piracy in the Indian Archipelago I shall term it Piratania, including under that name Mindanao, Solo, and the crowd of other islands extending from Mindanao to the N. E. coast of Borneo and separating the Mindoro from the Solo sea. In the 3rd division, S. E. Indonesia, we may distinguish as subordinate groups, *the Molukas*, -Halamahera, Ternate, Tidore, &c. (*N. Molukas*), Banda, Ceram, &c., (*S. Molukas*)-and the *Keh-Arus*. The sea basins, that is the seas with the marginal basins of their affluent rivers, which are districts of the greatest importance physically as well as ethnographically, I shall name after the seas. The basin of the Java sea will be the Java-basin, so the Mangkasar-basin, Celebes-basin, China-basin, (better China-Malayan) &c.

A name more wanted than any other is a single one for the countries between China and India. The ancients termed it India beyond the Ganges. Leyden included it and the Indian Archipelago under the name of the Hindu-Chinese countries Malte Brun calls it Chin-India. Ritter, the greatest of geographers, preserves the German name Hinter-Indie. I propose to use in preference to a double name like Further India, Transgangetic India, the Eastern Peninsula of India, &c., the single word *Ultraindia* which admits of the ethnic and adjective forms of *Ultraindian* and *Ultraindians*. *Transindia* may be also used. The Indian influence has been so considerable to the S. E. as to warrant the retention of the classical extension of the term. In our nomenclature the whole Indian region, consisting of the continental portion bisected by the Bay of Bengal, and the eastern islands as far as Indian influence reached directly, will thus be comprised under the three names of India, *Ultraindia* or *Transindia* and *Indonesia*. The earlier and wider connection of *Ultraindia* with China will be best indicated by embracing both under the term S. E. Asia.

The great divisions of Asia will be North, Mid, and South, the 1st comprising all the river basins that discharge their waters into the North Sea, and also the N. E. Peninsula (the *Indijirka* basin and the other countries beyond it to the E. being termed N. E. Asia); the 2nd embracing central Asia with the western basins that have outlets into the Caspian, Black Sea and Mediterranean and the eastern basins from the Sea of Okhotsk to the Gulf of Leatung; the 3rd embracing all the remainder of Asia from that Gulf to the Red Sea, the countries to the W. of the Indus being designated S. W. Asia.

The postfix *nesia* should be confined to the great divisions of the Indo-Pacific insular region, *Indonesia*; *Melanesia*, (New Guinea, Australia, and all the eastern Papua islands); *Micronesia* (all the islands between Melanesia and the Luchu and Japanese chain); and *Polynesia*, all the islands of the Pacific to the east of Micronesia and Melanesia as far as Easter island. *Papuanesia* may be occasionally used to distinguish the northern Melanesian islands, inhabited chiefly by spiral-haired tribes, from Australia.

As *Oceanica* includes all the Indo-Pacific islands, I shall use the word *Asianesia* to indicate the great S. E. insular region, which has intimate connexions, geographical and ethnic, with Asia. It will include *Indonesia*, *Melanesia*, *Micronesia* and *Polynesia*, but not the N. E. chain that lies along the Continent, because it forms a distinct and well-defined geographic and ethnic group. I shall call it *Ainojapanesia*, and it will include all the Japanese and Aino islands from Formosa to Kamtschatka.

Composite or mixed races, when without a distinct name, will be formed by giving the less predominating race-name an adjective form and making it precede and unite with the radical race-name, thus *Javanindians*, *Malayjavans*. I shall use all new names, and especially compound and composite ones, as seldom as possible.

it with Africa, Arabia, Persia, India and Burmah. On the other it advances as a great insular band far into the Pacific, merging in the remote and wide Polynesian region and fronting the whole eastern coast of Asia, with which its connection is assisted by the numerous islands of Micronesia stretching up to the Japanese Archipelago, while by the Formosa-Philippine chain it unites with the coast of the Chinese empire in forming the western boundary of the North Pacific. Although we are far from thinking that the ethnic relation of Polynesia to America is of the nature maintained by some authors, we must not overlook the fact that the western coast of America is connected by the Pacific basin with all its other bounding lands, and that, as in other great ethnic regions, the whole is united by alliances, direct and indirect, some proving communications before the historical period between particular districts now apparently isolated from each other, and others indicating mutual actions still more remote, and having a far wider operation, ethnically if not geographically. The region embraced by this class of alliances, uniting the oceans on each side of the Indo-Polynesian islands, may be termed the Great Oceanic region. The continents of the Old and New Worlds surround it on all sides save the south, and it includes directly the countries lying on its borders, and indirectly all those that are ethnically connected with them. As ethnology advances it will probably be found that this region will enlarge, till its influence reaches the ancient northern tribes of the Euro-Asiatic continent through the highway of Mid-Asia, and thus becomes coincident with the habitable part of the globe. Researches into the Finnish and earliest Mediterranean languages already point to this result.

These great basins have several subordinate ethnic regions to which it is necessary to advert if we desire to trace to their sources the successive foreign elements that have been introduced into the Archipelago. The principal one in the North Pacific is that which is surrounded by the Japanese, Luchuan, Meiakoshima, Formosa, Philippine, Palos, Oluthy, Marianne, and Bonin groups. On the S. E. it merges in the Micro-Polynesian basin; on the S. W. it constitutes a portion of the Indian Archipelago; on the N. W. it forms the outer boundary of the China-Corean basin; on the N. it connects itself with the basins of the Japanese and Okhotsk seas, and is thus brought into direct ethnic union or close connection with the E. districts of M. and N. Asia. The China Sea unites the Indian Archipelago primitively with the great ethnic region of S. E. Asia by the districts of the Hong-Kiang, Tongkin, Mekong and Menam basins, and the marginal Chinese and Anam districts,—the Malay Peninsula, which forms the western bounding district, being ethnically a common portion of the archipelago and the continent. This Peninsular district again enters on the west into the twin basins of the Salwin and Irawadi, which are themselves closely connected more inland with all the previous basins, as well as with

the great eastern one of the Yang-tse-Kiang. The latter is intimately connected with that of the Hoang-ho, and forms with it the twin basin to which the most advanced and powerful eastern civilisation owes its development.

The Tibetan district* unites all the preceding ones, connects them with the great plateau of Mid Asia, and abuts on the eastern extremity of the primitive Iranian region.

The next ethnic region of the Indian Oceanic basin is that of the Bay of Bengal or Indo-Malayan Sea which unites the western margin of the China-Malayan basin with the eastern sea board of India. As the rivers of the Indian Peninsula connect it closely with the western marginal districts, the watershed being near the Indo-African sea, while the basin of the Ganges has its head nearly in the same longitude, we may consider the whole of India as a portion of this region. It contains therefore the district of the Malacca Straits, the marginal districts of the northern part of the Malay Peninsula, and the basins of the Salwin, Irawadi and Koladan all which appertain also to the eastern region. The districts that are peculiar to the Indo-Malayan basin, some however being common to it with the Indo-African basin, are those of the Brahmaputra, Ganges, Godavery, Kishna and Nerbudda, with the secondary districts between the Ganges on the one side and the Nerbudda and Godavery on the other, the great Dekhan and Singalese projection and the western marginal districts. India is connected with the Tibeto-Indonesian region, landward by the passes of the Himalaya, the Asamese valley, and the eastern margin of the lower Brahmaputra basin, and oceanically by the coasts and winds of the Bay of Bengal. By the latter it has also a direct and independent connection with the insular portion of the first region.

The next region is that of the Indo-African sea,† with the districts of the Indus-basin, the marginal district of Beluchistan, the great longitudinal one formed by the Persian Gulf and the basin of the Euphrates, the southern Arabian district, that of the Red Sea, and the marginal or Trans-Nilotic one of E. Africa. Of these the Euphrates and the Red Sea are of especial importance, for by them the ancient civilisation of the Mediterranean and the Nile spread their influence into the Indian region, while the former was itself the seat of a great archaic development of intellect and art. By the Indo-African sea and its winds all these districts are connected, directly and indirectly, with each other and with the western coast of India. The Indian Peninsula, enter-

* The relations of this important district (central ethnically as well as geographically) to all S. E. Asia and to Asiaesia will be considered in an early paper.

† That portion of the Indian Ocean extending from its N. W. boundary to the Mozambik Channel and including the Persian Gulf, Arabian Sea and Red Sea. It has had much influence on the ethnology of Eastern Africa. The corresponding eastern portion of the Indian Ocean may be termed the Indo-Australian sea. Important ethnic considerations relating to the Oceanic winds, make it necessary to distinguish these two regions from the middle one.

ing into both the eastern and western basins, and advancing into the middle of the ocean that separates the Transindian from the African region, is placed so as at once ethnically to attract or be attracted by both, and to be affected by the great developments and movements along the southern continental districts from the Ganges to the Nile. The ethnic region of the Indian Ocean may thus be considered as embracing at all periods the eastern districts of Africa and all the south western districts of Asia. Its more usual northern boundary is the great middle plateau of Asia, but this boundary is far from being a permanent one, and the southern region has many connections with the rest of western Asia, as well as with the Euro-African basin of the Mediterranean. We shall not stop to attempt any more precise investigation of the various kinds of districts, and their different relations to each other, although we shall hereafter give a general classification of them with reference to their comparative inaccessibility and seclusion. Some, like many of the Arabian table lands, from the remotest times to which either history or ethnology can yet go back, have confined and sheltered the same tribes. Others are so open, either from being easy of access, or from lying on or near the ethnic highways, that they have been incessantly exposed to the intrusion of foreign influences. Some, guarded by formidable barriers and almost inaccessible on one side, have great passes and vallies, mountainous isthmuses or seas, which connect them with the adjacent districts on the other. The relative geographical positions often differ widely from the ethnic. The connection between the races at the two extremities of the vast plateau of Asia, is greater than that between the Tibetans of the Upper Indus basin and their neighbours the Siah Posh of the Hindu Kush; and, to take a somewhat different illustration supplied by the genius of Europe, Singapore is ethnically nearer to all the principal rivers of the Archipelago, and even to numerous countries over the whole globe, than to the Sabimba, who live within twenty miles of us in the jungles of Battam. So in early ages while, in many regions, the people of the seaboard districts and lower river basins could have had hardly any knowledge of the inner highlands and their wild and scattered men, their relations with each other must have extended over long lines of coast, and their influence been carried, from time to time, to new worlds washed by the same sea which had nurtured their infant navigation. At present it is enough to draw attention to the fact that numerous varieties exist both in the character and extent of the districts and in their relations; that the latter at any one time, and far more when considered historically, are often exceedingly complicated; that the Indian Archipelago is connected more or less directly with the whole of the region of the Indian Ocean; and that this connection is of such a kind that it must have begun to affect the eastern islands at a very early stage of civilisation, and even while maritime art was in its infancy. As soon as boats began to creep along its coasts, the links of the ethnic chain which

binds the whole were formed. By the gradual extension of this intercourse between adjacent shores, and by occasional involuntary voyages across the open sea, the primitive isolation of the various districts must have been destroyed, the man of one been led or cast into another, and language and customs been diffused far and wide. To the Indian ethnologist it must be left to trace out the net work of radiating ethnic lines which spread over that great central region in early times; to shew, if it be possible, where not the primitive but the present non-Iranian occupants first set foot in it; what districts they have longest occupied; and how and where that civilisation arose which, before the entry of the Brahmanical race, had given a common language to so much of southern India. With every step that is made into the past by the explorers of the ethnology of any portion of southern Asia, we shall gain some new light for that of the Indian Archipelago.

The next section of ethnic geography relates to the comparative influence of the climate, vegetation and scenery of the different regions and districts, on the physical and intellectual character of their occupants. It is to this influence that every tribe owes its fundamental peculiarities of mind and person. The subject is still obscure, but the power of physical geography in developing ethnic varieties is well ascertained, and we must attribute most of the apparent anomalies to the exceeding slowness with which it operates, and to the different degrees and modes in which tribes, coming from dissimilar regions and bringing with them dissimilar constitutions and characters, are affected by it. As on all other sides of ethnology, so here also we see the national growing out of the individual developments, so that the elements of a sound knowledge of the relation of the national characteristics to the national region, must be drawn from a science that has hardly yet received a form:—that embracing the development of the infant mind by contact with the external world,—the results of the different aspects and active influences of nature in different native seats,—the gradual modifications of hereditary organism thus induced,—and the varying limits of its perpetuation after migrations to the many strongly contrasted regions which the world affords. The subject is vast, complex, and subtle, but it must yield to the spirit of modern research and the appliances of modern science.

Among the wider ethnic enquiries connected with this part of the subject, there is one which demands in every region our attention. At all periods the continents and the larger islands have been the seats of two distinct kinds of ethnic life, the inland and the maritime. To the inlanders the sea is either unknown or a subject of wonder and exaggerated fears. The pursuits and mode of subsistence of the two peoples are widely different, and their habits and ideas acquire an equal divergence. In the earlier developments the inlanders appear, on the whole, to be more elevated physically and mentally, and in most countries are the first to lose their wild

habits, to congregate, and to attain constant supplies of food and other benefits of civilisation. The tribes of the sea board are almost uniformly savage, half animal, often half starved, ichthyophagi. After the whole land has been pervaded by civilisation, there is still a strong distinction between the inland and seaboard characteristics,—the latter however being shared by the cities and marts on the highways and at the foci of the interior. The former are generally more purely native, and possess a much higher moral power. We do not everywhere find the great contrast that is displayed by the Semitic race in its two developments,—in Sidon, Tyre, Carthage, Babylon, and probably in Aden, great art and luxury,—in the plains of Idumea a Job, in Palestine a David, and over all the Arabian table land a fervid poetical and religious spirit, a bold and earnest barbaric life, and an intense scorn of the trading towns and their corruptions. But the Archipelago has its contrasts too, and none are more striking than that of the two capital national developments of the Malayu race, one on the lake of Sinkara amongst the Sumatran mountains, and the other on the shore of the great highway of the Malacca Strait, the second historical, the first partly so, and both long since arrested and destroyed.

Having endeavoured to lay a good geographical basis for our ethnology, we may next proceed to consider the different facts involved in human developments in the Eastern regions, and to ascertain which spring immediately from our common nature and are repeated or reproduced spontaneously in different countries and times, and which have an ethnic character, derived from some peculiarity in the region or race where they arose. The first step in this direction will be to investigate each great ethnic characteristic by itself, following it through all the tribes in the region, and thus gaining a comprehensive idea of the modes and varieties of its developments, and, as far as possible, of their causes and relations. The facts observed in the being and life of each separate race, are now to be viewed together as revelations of the same principles, illustrating each other and the nature of the common human tendencies in which they originate. It is obvious that this connected and comparative knowledge of many varieties of each ethnic trait, is an essential preliminary to all satisfactory enquiries into the histories of particular races. Without it we cannot judge of the weight and bearing of a characteristic, or combination of characteristics, which we may find in any race that becomes the subject of our special investigation. A structural form, a word, or a custom, that seems to group together several tribes of the Archipelago and to separate them from other races, loses this segregative value taken by itself when we find it in distant regions.

After giving general descriptions of the physical, mental and linguistic traits, religions, manners and customs of the races of Eastern Asia and Oceanica, noticing the more marked resemblances

to other nations which have struck me, I will endeavour to determine the geographical extension of the more important ethnic traits and their various forms, and to trace each to its source. This enquiry connects itself closely with the history of the civilisation of the Archipelago. At the end of this enquiry we shall be better able to understand the respective values of the different kinds of ethnic evidence. There is a great difference of opinion on this subject. Some writers exhibit a strong tendency to find in every similarity or coincidence in custom or language, between remote and mutually isolated tribes, a convincing proof of their descent from a common centre, and of the primitive unity of the human race. Others again only view such resemblances as proofs of the tendency of the formative or artistic activity of human nature to work in certain moulds or follow certain types, which are fundamentally implanted in it, or necessarily result from its intellectual development. As in all such cases the reaction of the one tendency against the other widens the breach, and removes both to a greater distance from the medium in which I believe the truth is to be found. I shall also say something on the art of comparing languages, for the real value of such comparisons, and the conditions necessary to preserve them from degenerating into mere speculations, are far from being generally understood. I need do no more here than allude to the great assistance given to all our most archaic researches, by that primitive chronology of mankind preserved in the structure of languages. The true place of the Asianesian languages has never been determined. Duponceau omits them altogether in his ideologic classification, and, as we have seen, Prichard and Bunsen include them in their Turanian and Japhetic alliances somewhat distrustfully. I shall endeavour to shew what their place is, and, at the same time, consider what value the linguistic chronology can claim. At present I shall only add that no real progress can be made in ethnology without resting our conclusions on a combination of every available kind of ethnic evidence. Connections and relations can be discovered by pursuing one branch of the subject by itself. But no approach can be made to a historical ethnology without an accumulation of evidence respecting all the traits we have mentioned.

The next division of the subject consists in a brief description of each race and its country, its history and traditions, and its relations to other tribes at the present and during historical times,—following it as far as we can in all its migrations, till we lose it in another tribe, or find that all further traces of its earlier life are obliterated. As the histories of particular tribes are sometimes found to disconnect themselves from the district which they now occupy, it is necessary not only to follow each into its older locations, but to trace back the history of the country itself. Every tribe and land has a twofold history, one special, and the other common to it with several other parts of the Archipelago, or with the Archipe-

lago as a whole. In the course of thousands of years many of the ethnic seats of the Archipelago must have been subjected to numerous foreign influences, some special, others embracing many shores and tribes, some feeble and others deeply penetrating. As the common or wide spread influences vary as to duration and extent in different seats, this, combined with the succession of special ones, must ultimately give a great peculiarity to the vocabulary of each people.

Lastly we must view the region and its nations as a whole, and gather together the existing evidence tending to throw light on its ethnic history, on the origin and civilisation of the different races that have flourished in it from primeval times or come into it from foreign lands, and on the influence that has been exerted on it from time to time by new ethnic developments and civilisations, whether indigenous or imported. Here also we shall be able to bring into one view the leading types of the insular developments, and show why some tribes have remained in a stagnant savage condition for thousands of years, while others near them have been changed and civilised by a succession of influences, foreign and native.

Our review of the facts already available for the ethnology of the region will be guided by that conception of the requirements of the subject which we have thus indicated in a general manner. To recapitulate, it will consist of the following heads: A. A general account of the ethnic characteristics arranged thus: I. The Individual,—§ 1. physical character; § 2. mental character; § 3. language; § 4. religion; § 5. arts; § 6. food; § 7. dress; § 8. houses. II. The Family. III. The Village, Clan, or Society, both socially and politically,—including government, social grades, distinct professions, amusements &c.. IV. The Tribe or Nation with its government, institutions, laws, war &c. B. The Ethnic Geography of the region. C. The Ethnology of each people, including, in addition to the subjects contained in A and B, a section on the characteristics and influence of its location and on its numbers, and a section on its History, embracing an enquiry into the original seat of its primitive and secondary stocks, their migrations, intermixtures, engraftments of foreign people and ideas, affinities with other nations in form, customs, language and other characteristics* D. The Ethnology of the region as a whole.

Having placed our readers in possession of this summary of the facts already known and drawn from it such conclusions and suggestions as it appears to afford, they will be in a position to accompany us in a fresh and more full observation of particular

* As there are hundreds of minor rivers and other localities in the Archipelago each of which has its own history and presents some variations or peculiar characteristics, I propose hereafter to comprise the whole in a short Ethnographical Dictionary, and to give in it not only the names of those places of whose history something has been ascertained, but also all known names of places and persons, with an explanation, when possible, of their origin or meaning. The comparison of geographical and personal names is in itself an important chapter of ethnology, as it often

racés. I shall endeavour to supply for a few of the Indonesian tribes those facts which I have pointed out as essential for the ethnology of every region (*ante*, page 264.) I have selected for this more ample enquiry the Bugis of Celebes, the Kahayans of Borneo, the Battas of Sumatra and the Philippine islanders. The great Javanese and Malayan races will, I have reason to believe, soon receive further illustration from Mr Crawford, whose familiarity with the Archipelago, profound knowledge of the languages of these races, and genius for comparative philology, render him of all men the best qualified for the task.

That I may not raise too high expectations of succeeding in many of the enquiries which our review will necessarily suggest, let us advert briefly to the difficulties of the subject. When we view the ethnic history of the world as a whole, we are impressed with a conviction that our knowledge of it embraces only recent periods. No rude unlettered nation can go back with any accuracy many centuries or even generations, save those few which systematically preserve genealogies; and the many discrepancies and great blanks in the best of these, the Hebrew and the Arabian, prove how little they can be depended upon. Before the art of writing was discovered or adopted in S.W. Asia, the tribes located there, although considerably advanced, must have been in the same position as other unlettered tribes were then and are at present. We only shift our position by going back to the verge of the use of letters by any tribe, or by the tribe which first discovered them. Looking back from it we see the same causes of ignorance and error regarding the past, that now prevail in rude tribes, prevailing then over that tribe and over all the world. Every thing is lost in darkness. At the remotest period to which authentic history can anywhere reach, the same phenomena meet us, so that we have, 1st, a historic, and, 2nd, a prehistoric or archaic era. If we include in the historic time all that is authentically recorded, graphically or traditionally, and in the archaic all that can be positively proved by the evidence of customs, arts, &c., we must recognize a more remote or primordial period, anterior to the development of the civilisation in which these customs arose, but to which we can give a certain embodiment by the evidence of language. Of the duration of even the archaic era ethnology can tell us nothing positive. It tells us however that it must have been great, and, we should naturally be led to conclude, far greater than that of the historic period, because at the dawning of the latter, we find that every considerable nation of the higher historic antiquity had already assumed a fixed location and form.

These two great ethnic eras vary in different regions. The preserves records of the earliest inhabitants of a region after they themselves have disappeared. In Humboldt's Euskarian and Prichard's Celtic researches it yielded results of the greatest interest, and from the peculiar character of the ethnology of the Archipelago it is here likely to prove of more than ordinary importance.

base of the historic time is level. It is everywhere the present. Its summit, the base of the archaic time, is more full of inequalities than the surface of the globe itself. In most parts of the Indian Archipelago it descends close to the present. In some countries it is several thousands of years in height, and is being slowly lifted still higher by modern research. It is obvious that before there is a considerable development of civilisation, there can be no remains capable of assuming a historical character after the lapse of some thousands of years. Every extension backward of the historical era is therefore accompanied by a corresponding ascent of the dim ethnic era beyond. Now if we can prove the continuity or identity of the Egyptian race up to a higher historic time than any other people reaches, and establish a strong probability of no revolution having happened in its language, it carries back with it all other races whose languages can be directly connected with it; and if it be true, as it becomes yearly more probable, that all existing languages are related by a principle of progressive development, it follows that when we can carry any race back unbroken into a new and more remote era in the past, all the others that are distinct and equally or less developed are lifted with it.* But without at present dwelling on this more antique period, let us confine ourselves to the position, that a comparison of languages enables us to conclude with certainty, that every other existing language whose form has the same degree of distinctness and independence as the Chinese, the Egyptian, the Arabic or the Sanskrit, was also the language of a distinct family of mankind at the dawn of the earliest historic time, for no one of the latter was generated by another in that time. The cases therefore in which we can trace back a distinct family of tribes and languages to its origin must be very few, if any. The members of the European stems are merely recent admixtures or modifications, in which the different elements remain little changed,—so with Bengali, Kawi, &c. We have nothing in historic times like the formation of a new language with a strong individuality, such as that possessed by the Egyptian when compared even with the adjacent Arabic on the one side and the African on the other, or by the Chinese when compared with the neighbouring Mongol or ancient Indian. The same remark applies to the older forms of the Indonesian languages. They carry us back to a time anterior to the development of the great families of languages, and this must long have preceded the historic age. There is therefore great danger of error in attempting to explain the whole ethnic history of the Archipelago, and the changes and affinities of its languages, with reference to the facts of the historic time only, to nations now in contact or connection with it, or which have influenced it during

* The inference is much more extensive as we shall find, but it must be stated with the proof.

that time. The antiquity of mankind and the advance that has already been made in ethnology, warrant the conclusion that in every considerable region there has been a great succession of foreign ethnic importations, physical, linguistic, artistic &c. We cannot say positively or even conjecture how far back the human history of any particular region reaches. The historic time also by its far greater civilisation, amplitude in known events, and brightness of colouring, not only tends to hide the past, but, by its occupation of the mind, indisposes it to a free and earnest enquiry into the archaic era.

There is no region of which we can say that its present race, or any known previous one, is its earliest. In most regions there are remains or traditions of older races whom the present occupants consider to have been different from their own. This is the case in Europe, India, Siberia, Madagascar, America, &c. In the remotest Polynesian island such remains are found. In our own vicinity many illustrative phenomena are observable now. If the present influx of the Rawa from Sumatra into the interior of the Malay Peninsula is not checked, the Binua will be destroyed and absorbed, and all the south of the Peninsula present only Sumatran tribes. In all rude nations the past rapidly becomes dim, confused, exaggerated or wholly obliterated. To attempt therefore to prove that any tribe is the first that ever occupied a given region seems hopeless.

The difficulties attending ethnic research into the past are chiefly owing to the impossibility of confining ourselves to the particular district or region whose history we are exploring, and the necessity of carrying with us, at every step of the ascent, a knowledge of the contemporaneous condition of the prevailing races and civilisations in the rest of the world, or a large part of it. In this consists the extreme complexity and laboriousness of the subject. When we arrive at a period when new ideas or habits appear to have been introduced into the district, or when, having reached the limit of our explorations, we seek to determine the connections of the most archaic period to which we can go back, we have two sources of difficulty. Some indigenous development, of which the foreign germ was slight, may have spontaneously produced characteristics analogous to what have elsewhere originated from similar independent causes. If we satisfy ourselves that they have too specific a resemblance to foreign customs to admit of its being accidental, we must often find the same customs prevailing in several foreign countries with which intercourse was possible at the period. Again, the tribe which immediately bestowed the new acquisition may have since changed its seat, become greatly modified itself, or been obliterated. The movements of tribes tend constantly to alter the ethnic aspect of the influencing regions. A people at one time in close relation with the district, either by proximity or commercial intercourse, may, in the lapse of a few centuries, be

separated from it by revolutions in which the district is not involved, and of which its ethnology preserves no direct record. On land and at sea the historic times present us with several successive displacements of one race or one civilisation by another. There was doubtless a period when the Ultraindian countries were peopled by tribes in a very different state with respect to commerce, political position, external power and influence, and civilisation generally, from that which their present occupants enjoy, and so with China, India, the Euphrates, Egypt. Each has undergone great changes. Each, from time to time, has advanced, stagnated or retrograded. Every change of the race that occupies or prevails in any of the connected regions, each passing of the supremacy in navigation, power, art, and the active development of influential civilisation, from one people to another, complicates the ancient history of the Indian Archipelago.

The influence and activity of the indigenous Indonesian navigation and civilisation vary with the character of the foreign commerce. In the hands of one race the latter may prove only stimulative and beneficial. In the hands of another it may destroy the freedom, unity and power of the native trade. It is not necessary that the intruders should be more civilised than the old races in possession of the commerce, although this has generally happened in the Archipelago. In the history of the world we constantly find races of more vigour and courage depriving others more advanced in art than themselves, of their local supremacy and lucrative monopolies. Thus timid Egypt was sealed up in the Nile by the vigour of the Canaanites, the latter faded before the Greeks, the western Indian and African trade before the hardy and rapacious Arabs, the later Javanese before the Malays and Bugis.

In general, dominant maritime tribes repress and tend to extinguish the commerce of the feebler navigators. The Bugis, the Lanuns and the Malays, as they advanced, must have destroyed the navigation of numerous less powerful tribes, by their monopolising and predatory spirit. At present on the east coast of Celebes one or two states engross the navigation, and they do not now go beyond the adjacent islands, because the bolder and more enterprising Bugis and Ternatis come to them. Thus too the maritime Bajos of Minado are becoming extinct from the depredations of the Mindanauans. When the colonies of the superior maritime race have occupied and monopolised the coasts and navigable rivers, those portions of the older race which are not absorbed in furnishing wives to the new comers are driven into the interior and lose their maritime habits. Hence in so many islands we find inland tribes who have long lost all knowledge of navigation, and dread the sea. Unless we believe that each was created where we find it, with a marvellous likeness in person, language and customs to foreign tribes, we must allow that the first insular

patriarchs came by sea and were in general habituated to a maritime or fluviatile navigation, however rude it may have been.

None of the great revolutions or civilisations can have occurred in the regions connected by the Indian Ocean and the Mediterranean, without affecting the Indian Archipelago directly or indirectly, nearly or more remotely. The old developments of the Euphrates, the Nile, Syro-Arabia, and Iran, all taking place in a limited region between the two Oceans, not only mutually influenced each other, but were diffused indirectly and carried by families of the races themselves, to distant countries. Europe felt them on the one side and India on the other. If the Syro-Egyptian developments in the west and the Chinese in the east preceded those of the Iranian and Indian races, their influence in the earliest era of their predominance, when no other existed to obstruct and limit it, must have been different from what it became afterwards. The effect of every new revolution in the distribution and prevalence of races is to destroy the evidence of the previous state of things. The successive movements of Iranian tribes west and east must have gradually swept away older races or metamorphosed them by a large infusion of Iranian blood, ideas and language. The ethnology of the Mediterranean must have been once revolutionised by the maritime rule of the Phœnicians, and again by the destruction of that rule and the rise of the great Iranian dominions on the European shores. The Indian Ocean may have seen similar changes. There may have been African and Indian maritime powers before the southern Semitic people extended themselves to the Himyaritic region, and, borrowing the art of navigation from their kindred tribes on the Mediterranean, gave to Aden the maritime dominion of the Indo-African ocean. One early human development pervaded all Africa including Egypt. This is evident amidst all the diversities in form, colour, civilisation, and language of the people of that continent. Did this far spread development abruptly stop on the side where an African race, whether of exotic origin or not, was endowed with genius and inventiveness and erected the most ancient western civilisation, and along the seas and at the isthmus where highways were open for its extension to the east and north? Is the common African a more ancient civilisation than the Egyptian?

These are not merely possibilities to be taken into account, in order that any conclusions respecting the archaic period of the Indian Archipelago may be drawn with the greatest caution. When we bring into one view the leading facts in the ethnology of the world, we are struck by certain prominent features. The further we go back, instead of finding ethnic characteristics more diverse, we find them more uniform. It is true that, even with respect to the great civilised nations of antiquity which still exist, or did so in the historic period, we cannot reach to the actual commencement of their civilisations. But with most we can

ascend to a simpler culture, and one in which they appear to stand out less prominently from the other nations of the world. We can also trace most of them to confined seats immemorially occupied by them, and in which their culture was received. The permanence of the general character of their languages, and a comparison of these with the other languages now existing, prove that races speaking the latter, or older forms of them, had a contemporaneous existence. If we withdraw from the world the ideas and the customs generated by these civilisations, or in other words, go back to a time anterior to their development, we find a wonderful uniformity pervading the greater portion of the inhabited globe in religion, and in customs of many kinds. If we abstract from Africa all that she owed to the higher development of Egypt, blot out from the Asiatic region between the Mediterranean and the northern shore of the Indian Ocean, the Phœnician, Hebrew, Arabian, Assyrian, Babylonian and Iranian civilisations, from India all she owed to the Arian race, and from the region between the Bay of Bengal and China all that it derived from Iranian India and from China, we leave an older and far ruder development which is nearly the same throughout. That it embraced the tribes in which the higher developments afterwards took place, is evident from their retaining many of its traits. In the general character of the more active human developments of this era, we find almost a dead level, not of the negations of which the lowest ethnic stage consists at present, as it has always done, but of positive social forms of a barbarous nature. We also find that numerous traits of a specific kind may be traced over extensive regions, or identified in widely separated tribes. This general uniformity, combined with a sameness in many particulars, leads to the inference that the archaic world was connected. But the immemorial diversity in physical character and language, proves that this connection was accompanied by a distinct separation of races, as at present. We are therefore led to believe that mankind was even then very ancient, and that the prevalence of the same traits was owing either to the derivation of most races or their mother-races from a common centre in which the primitive civilisation was developed, or that an extensive intercourse existed, by means of which these traits were diffused, subsequently to the dispersion of the various races. The wide spread of any race shews that at one period its diffusion was unimpeded by the presence of races of higher civilisation and power, that is, it was the prevailing race of the region. If traits of a common civilisation are found over a large space, the same conclusion may be drawn. The nation with which they originated must have been the highest in influence at the time of their diffusion. All developments unconnected with that of the imaginative and abstractive powers and their productive action, are simple, and easily diffused even amongst the rudest tribes. They are therefore far more universal

in their influence than the civilisations properly so called. The latter are incommunicable to tribes at a great distance below their possessors.

We may select, as a great western type of this archaic development, that of the Nile, which was apparently the same as that of Africa generally;* as a central one, that of India; and as an eastern one, that of Asianesia. Populous nations in Egypt and India produced higher developments of this barbaric civilisation, if we may so call it. The Himyaritic nation of Southern Arabia or Saba, with its sun worship, human sacrifices, fetishes, ferocious wars, vindictiveness, grossness of the sexual relations, infanticide &c., appears to have come into existence while this ancient civilisation still predominated, and to have participated in much of its character, as was to have been expected from its proximity to the basin of the Nile and intimate commercial intercourse with its inhabitants. Saba presents itself as reflecting much of the civilisation both of Egypt and Phœnicia. Its great antiquity is vouched by its being mentioned in the enumeration of the ancient patriarchs (i. e. tribes) in Genesis, and its constant association with Cush indicates a connection of an intimate kind with the Ethiopians. With the recoil of cultured intellect† from the brutality of the earlier civilisation, and the necessity of maintaining itself above the corrupting influence of the gross animalism of the surrounding tribes by strong prohibitions and demarcations, Hebraism, Brahmanism, and Buddhism are connected. The religion of interdictions and exclusivism, and the later reactions against it of the levelling principle inherent in ethnic development,‡—which always ultimately re-asserts itself when most departed from,—pervaded India, Ultraindia, and a portion of the eastern islands. But Africa and much of the insular region have until now retained the ancient barbarous manners.§ In other parts of the world we trace the same great archaic development in proportion as we find the Hebraic, Budhistic, Brahmanic, and Chinese civilisations wanting or imperfectly diffused. Thus in the ancient Iranian races of Europe, such as the Celts, and in several of the more advanced tribes in middle and northern Asia and in America, we recognize the same barbarous character and many of the same specific customs. It appears to be hardly doubtful that all the shores of the Indian Ocean were surrounded by races in this stage before the seeds of a higher

* Vide post. The archaic era of the Nile cannot be placed lower than 7000 B. C.

† Whether that culture be natural or supernatural.

‡ It is in vain that man attempts to place barriers around nations and classes. The great ethnic powers, sexual and intellectual, which always break through them, will ultimately fashion the human family in accordance with the design of God when he first fixed these powers in the human organism.

§ None of the great regions are without abundant remnants of this ancient ethnology, preserving their primitive character intact, subsisting as heresies beneath the surface of a later civilisation, or blended with it in many forms and degrees. In India the mixture and co-existence of the two developments can be best studied.

civilisation germinated in the basins of the Nile and the Euphrates, and that they were influenced by the more powerful and populous nations of the Nile and southern India long before the later and slowly descending Iranian civilisation touched them. These races included navigating tribes, otherwise they could not have spread themselves over every habitable island of the eastern Ocean from Madagascar to the Fiji group, if not throughout Polynesia also. To account for this extension, it is not necessary to suppose that they had larger boats than those in which in modern times the Papuas have been accustomed to make descents on Ceram, and the Sakalavas on Comoro and the coast of Africa. But the far higher maritime art of southern India appears to be one of the most ancient in the world. It was certainly not derived from the Brahmanical tribes of the northwest, and it was too much in advance of the Himyaritic to have been borrowed from them. There are abundant reasons for believing that India, before the prevalence of Brahmanism, was at least as civilised as Africa, and nations who had reached this stage, were as capable of perfecting a navigation of their own as the Chinese, and far more so than the Arabs, who wanted the nurseries which the large eastern rivers gave to India.*

Although I have reserved the subject of language, I will add here that a general view of linguistic facts also presents some prominent and remarkable features, which are far from being opposed to the evidence of customs and civilisations. One is, that all known languages are capable of arrangement according to a certain gradation of development. Another is, that over wide spaces they have a common character. It cannot but be that these facts have a valuable ethnological import and are mutually connected. A third circumstance that arrests our attention is, that the more organic development of language does not continue to connect itself with that of the civilisation of the race that speaks it. The predominance of certain advanced ideas and arts, tends to arrest and fix the organism of a language over a considerable space, although its further glossarial and literary expansion is intimately dependent on the progress of civilisation. This operation of a high civilisation is mainly owing to the extension which it gives to the tribes that possess it, and to its influence on the minds of adjacent less advanced tribes. But the fixation of language as a general ethnic phenomenon is not dependent on civilisation, nor is civilisation dependent on an advanced language. The concurrence of circumstances necessary to produce a civilisation may do so in a region occupied by a people of any organic and linguistic development. But the character of the civilisation and the degree of fertility, advancement and refinement which it can attain, compared

* The earliest glimpse we have of the vessels of the east coast of India is at a comparatively recent period, 1800 years ago, but it is strongly in favor of an indigenous art.

with the civilisations of other races, will for ever depend on the prevailing national organism.

All these phenomena appear to be susceptible of simple and rational explanation. The earliest forms of language were necessarily simple. As soon as they were sufficiently developed to serve the purposes of speech, they were fixed by habit. Every subsequent new development or partial change of form must have been the effect of some change in the organism, position or habits of a family* and the tribe into which it expanded. Separation from the main stock must have preceded every such change, because proximity keeps up a community of habits and ideas. A new physical geography operating on the senses, the imagination and the organism, exciting to a fresh inventiveness, pouring in a flood of new ideas, and leading to a dominion of new habits, must powerfully aid the transition. At all events, before there can be a new development of language there must be a mental revolution, however brought about. It can hardly ever be very rapid. It would rather seem to be analogous to that slow operation of physical geography which produces

* I shall have occasion hereafter to examine the admirable discourse of Bunsen, to which I have referred in a previous paper on the generation &c. of languages, (ante Vol. III p. 637.) He contemplates the formation of new languages in nations and communities, attributing them to colonisation, political disruptions and dissolutions &c. In the text I chiefly look to a successive excision from tribes, of single pairs or families with different intellectual organisms, and their exposure to new stimulants. In every tribe many kinds of organism are produced in each generation, which would naturally lead to various intellectual developments, if the parental and social influences did not destroy freedom of growth, and impress the same national mould upon all. We know in civilised countries how great is the struggle of genius to free itself from the thralldom of conventional ideas and expressions, and shape out for itself an original embodiment of its inspirations. But if an individual organism, before it has lost its youthful impressibility, escape from the national prison, which can only happen in ruder lands, and obtain, in a new scene, mental independence and fresh impulses, considerable changes in ideas, habits and language may be produced, which will shew themselves in a more matured and distinct form in the next generation. The old language must be imperfectly known or greatly lost, to allow of a new development. The more fully the parents preserve the former, the less original will be the elaboration of the latter by the children. If an intellect of great vitality or originality happen to be born amongst the latter, a large stride in a new direction may be made. It is by a succession of such steps, each requiring an extraordinary combination of favourable circumstances, which can in general only occur at long intervals, that a new language is ultimately attained. The intervals of fixation are never wholly so. A slow change goes on even in the most fixed languages, so that each fresh step is taken from a somewhat different level from that reached by the preceding one. But a tribe can never effect an organic change in its language, which must remain the same in all ideological essentials so long as it retains its independent existence. The language of every intact tribe has preserved its organic identity since its character was given to it by the single pair who originated it. It is not because the Chinese letters are ancient that their languages have retained their identity, but because the races have continued to exist while hundreds of others have been destroyed or transformed. So the Iranian Siah Posh have preserved theirs by the aid of position,--so the Copts, Siamese, Formosans, Welsh &c. A mixed tribe may make a mixed language. But organic changes belong to segregated pairs and their children. I do not overlook the slow change to which the language of every nation is subjected, and to which I have already drawn attention. (See *On the generation, growth &c. of languages*, ante Vol. III. p. 671.)

diversities in the physiological characters of races. The ethnic history of the world must present a succession of developments, fixed forms of civilisation, and revolutions producing new developments and destroying the predominance of the fixed forms. All this requires much time. Each successive development is of extremely slow growth. When fixed, it necessarily endures long, because, without the possession of great power, it could not have grown up at all, and the very cause of fixation is a cause of perpetuation. Every gradation in the structure of language appears to be connected with a revolution of the kind indicated. It marks a conscious or unconscious revolt, or an accidental deliverance, of the mind from the shackles of habit and antiquity, the dawning and prevalence of new ideas, and the formation of new phonetic and ideologic habits. The main task of the ethnologist is to discriminate these developments, to ascertain the extent of their influence and operation, and, if possible, to trace them to the locality and the tribe, for we can never reach the family, in which they originated. It would follow from what we have said on ethnic geography, that at different times in the primordial era, there may have been several developments and revolutions occurring contemporaneously in districts secluded from each other. But the majority of human races have a far greater tendency to stagnate than to advance, and accidents and revolutions capable of engendering new languages are rare and powerful in their operation. When they happen they tend to transmit themselves far and wide, though slowly, and to embrace numerous stagnant tribes in their progress.

A strong beam of light is cast into this obscure era by the certainty that powerful civilisations arose at a very early period. The Chinese civilisation, by protecting the language of the Hoang-ho, has at once preserved a remnant of a very early language, and a record of its own extreme antiquity. The Egyptian civilisation has perpetuated another of the earlier developments of language. The geographical distance at which the two are placed affords an additional presumption that no other linguistic developments were then much in advance of them. It is probable therefore that a certain intellectual level then prevailed over the world, and that the revolutions in which the Indo-European languages originated, occurred subsequently to the beginning of the civilisations of China and Egypt.* The prevalence of particular kinds of language over considerable tracts becomes of great importance, if each family of languages be thus the record of an ethnic revolution and development, and its extent be a measure of the force and predominance of the tribe in which it took place.

Every great civilisation, intellectual or material, tends to increase population and to extend itself on all sides where physical

* Strictly we can only conclude that in origin the Chinese ideology preceded the Egyptian, and the Egyptian the African and other more advanced ideologies of the same harmonic class. The organic change that produced the distinctive

barriers do not exist. If it has not extended far, it is either young or not so strong as the older civilisations, which can hardly ever happen, because in its origin, it is, in most cases, an advance on one of these, or a reanimation of it. The Chinese civilisation must have early exerted a predominating influence to the southward and westward, and repressed all tendencies to new developments of ideas and language within the range of its power. Amongst the many ruder tribes that saw in it the acme of intellectual and constructive power, no idea could arise capable of generating a higher or even a different civilisation. As the lower African tribes speak of the higher as gods, as every nation has at one time cherished the belief that its governing class, royal, noble or sacerdotal, is divine, and remained intellectually paralysed the while, so the moral atmosphere of the Utraindian nations has continued to be loaded with the idea of China and its greatness. On the evidence of language we may conclude that the present more western monosyllabic tribes or their prototypes were in existence when Chinese civilisation arose. Insurmountable difficulties oppose the hypothesis of their having been derived from any of the languages of China after the dawn of its civilisation.* Whether they were founded about that time or had long previously existed contemporaneously with the Chinese tribes, as is most probable, the subsequent subsistence of their languages for some thousands of years in a similar organism to the Chinese, however it may be attributed in some measure to the influence of the latter, must be taken mainly as a conclusive proof that neither the Chinese letters, as Neumann maintains, nor even the Chinese civilisation, were directly the cause of the preservation of monosyllabic languages in the world.

While the Chinese civilisation protected a primitive linguistic organism, a succession of new developments took place beyond its vast mountainous boundaries,† each of which had an important place in the history of mankind. One of the most widely extended of these connects itself with the prevalent barbaric development which we have been considering. Nearly all the languages spoken

Chinese intellect and language ultimately induced its distinctive civilisation when fostering circumstances arose, but the precise character of the Chinese ethnic development at the time when the Egyptian linguistic prototype arose, cannot be determined.

* There is some evidence that the most prevalent Utraindian monosyllabic tribes descended from Yunan, as we shall see in a subsequent paper.

† It is impossible at present to ascertain whether the earlier of these developments took place before or after the Chinese civilisation. I think the evidence is in favour of their anterior origin, or at least of that of their mother-tribes. A very long period must have elapsed after human families were planted in China before the pressure of population induced an abandonment of nomadic habits, a fixed agriculture, and a slow discovery of different arts. Although therefore a first impetus and direction was doubtless given to the Chinese mind before the more advanced languages arose, it may have long retained a still cruder linguistic form before its higher artistic and logical development began. During this normal era greater linguistic advances may have been made by human tribes in other regions. Neither the language nor

by the races in which the barbaric element remains prominent, or did so into the historic time, have strong resemblances, sufficient of themselves to suggest the belief that there was a considerable sameness in the intellectual development with which they originated. They connect themselves on one side with the Burmese and Egyptian and on the other with the Iranian, the latter being in fact the Turanian linguistic type somewhat changed by a higher mental energy and art. They are all primarily dissyllabic, strongly intoned and harmonic, mostly vocalic,* possess much phonetic fluency, euphonic mutability, attraction, and reflection, are ideologically crude, and express abstract relations by prefixes, infixes, postfixes and by phonetic unions and changes.

The conclusion I would draw from the evidence of moral character and customs, that this development of mankind was of vast extent and long duration, is thus confirmed by an examination of languages. The more advanced material civilisations of the Nile and the Hoangho appear as partially secluded ethnic spots on the globe, which every where else presents this general uniformity in all its higher national developments.† At a late period we see the superior organism and intellectual energy of a few tribes breaking through the level of this fixed barbarism. Those tribes were by no means offsets from the more ancient civilisations of Egypt and China. They were genuine members of this second and hitherto most extended of all human developments. The Iranian family, as they spread over the region of the barbaric culture, must, as we said, have destroyed great numbers of tribes and languages,

the intellect of the Chinese exhibit evidences of having ever undergone any considerable change after the reception of the earliest utilitarian bent. Both display a total want of imagination, the source of all intellectual revolution and elevation. That stirring of the mind which lays the foundation of the linguistic developments and a certain progress, must not be identified with the artistic and scientific civilisation to which it may eventually lead. The organic and psychologic change which induces and preserves the linguistic one, may not for thousands of years display itself in art, science or any other elaborate culture, but it will do so whenever favourable circumstances arise, because the capacity always exists. In this as in most things, it is with tribes as with individuals. The Indo-European race, after having acquired their organic and intellectual expansion, might still have remained in the material condition of the ancient Teutonic tribes or even of the Sialh Posh of the present day, if circumstances had not aided the native energy in producing a great development in population and power. For the highest as well as the lowest organisms are subject to the great law of habit and fixation. It must also be borne in mind, in connection with this subject, that advanced languages which could only have originated in higher organisms, may be communicated to tribes of a lower development without thereby improving or altering them. So most discoveries and inventions are simple to all intellects when once clearly announced, although only a few minds could have originated them. When we compare the Chinese intellect, languages and civilisation with those of other Asiatic nations we shall enter at large into this important subject, which is only little understood because it has been little attended to.

* Compare Kafir, Malgasi, Sauhili, Bugis, Australian, Telugu, Japanese, Mongol, &c. But there is a large consonantal class also. And the two phonetic tendencies are found in other families of language.

† We have not yet sufficient evidence to except the Euphrates. Although China and Egypt were protected by their position, their influence on other nations must have been considerable and they were doubtless always exposed to attacks.

but must also have assimilated many.* It is only now that the civilisation of the Indo-European tribes, after a struggle of more than four thousand years,—certainly far more, but how much we cannot yet conceive,—is giving decided token of being destined entirely to displace the barbaric civilisation, and thus acquire a dominion as universal as the latter had obtained at the dawn of the former. The latter still prevails over considerable regions, and what is remarkable, it is most persistent in that in which it appears to have been earliest developed, and which is nearest the great seat of the highest activity and advancement of the former.

The reader will bear in mind that I do not allege that all the harmonic languages were the result of one development in one family. *A priori*, or rather if we looked at the nature of language alone, we should expect that the passage from the monosyllabic, being a natural one, took place independently wherever the tones decayed. Again, although every early language must be strongly intonated, there is no proof that all were monosyllabic to the extent which Chinese is. It is the tendency of the mass of human races not to change their ideologic habits, but to remain fixed in their intellectual condition, that renders it possible that there may have been fewer independent linguistic developments than we should otherwise have thought probable. I do not here give any opinion as to the number of sources of the harmonic languages. This subject we shall soon examine when comparing their ideologies. All that I desire at present is that the reader will recognize the importance for our ethnic researches of these two facts, 1st, that the great majority of human tribes of the lower developments tend to remain entirely bound down by habit and unsusceptible of internal ideologic change (a glossarial change is inevitable every where,) and, 2d, that when an ideologic change does take place in a tribe or rather family, it marks a fresh intellectual energy and inventiveness, depending probably on an improved organism, or at all events becoming permanent through the latter, however first stimulated; and this very vigour in which it originated, tends to extend the power and influence of the tribe and of the language. It must not be overlooked that, in the course of thousands of years, as a tribe extends and generates numerous distinct tribes, placed in different ethnic and geographic circumstances, the same general linguistic structure may come to characterise nations in very different stages of civilisation and presenting great physical and intellectual contrasts; just as we find amongst a people of the highest mental and linguistic developments numerous individuals with low organisms, and stupid, savage minds, who, if

* Dr Prichard concludes from linguistic data that the Iranian mother-race had made little advance in arts, and supposes that it was nearly on a level in most respects with the nomadic Tartarian race, although its mental culture was much greater.

surrounded by abetting instead of counteracting influences, might originate barbarous and stagnant tribes.

There is another point of view in which intellectual transition states have an importance for ethnology. When the mind once rebels against the dominion of habit and ceases to look upon everything ancestral as sacred, when it thirsts for freedom and can only find it in deep draughts of the new, it has passed to a state of susceptibility and inventiveness, which is capable of seizing and assimilating every hint that is presented to it. This is the condition in which all ethnic developments or rather their germs, individual developments, originate. If an advanced and elaborate foreign civilisation be offered to the mind so excited, it will expend its energy in adopting or adapting it. If only some detached fragments of such a civilisation reach it, these will become the germs of fresh indigenous forms of civilisation, because when it has raised itself to the conception and adoption of these fragments, it has, at the same time, acquired a new direction for its activity, and a tendency to give a practical form to the suggestions that constantly radiate through it from every new idea, as necessarily as light does from flame. In the Indian Archipelago we shall find abundant illustrations of this indigenous germination of foreign ideas, but generally with that low degree of vitality, and imperfection of results, which were to be expected from the comparatively feeble and sluggish organism and intellect of its tribes.

In every great era after the earliest there must have been many stagnant and a few progressive tribes. It will probably prove that most of the existing tribes and languages have been derived from the latter, many of the more ancient stagnant or more barbarous tribes having been successively destroyed and transformed or assimilated by them,—and that most of the present barbarous tribes belong to some of these early civilisations, their long stagnation arising from their having become partially isolated, and so secluded from the operation of later civilisations. That the prevailing civilisations of the world have proceeded from a few foci of light successively kindled in the onward march of mankind, is, I think, now capable of being satisfactorily proved. That the prevailing languages have also derived their organism from a few intellectual revolutions, becomes yearly more probable.

It appears likely that there will prove to have been one great development of intellect in S. W. Asia,* consequent on a more

* There can hardly be a doubt that the intellect which civilised the Nile-basin was not of African but of S. W. Asian origin, as Dr. Morton believes. When the Egyptian civilisation arose, the S. W. Asiatic culture must have been comparatively rude, because it had either not freed itself from the earlier barbaric culture, or readily adopted a great portion of the barbaric African forms, if African tribes previously existed. It is quite possible, and indeed probable, that the first stimuli to the great development which produced the Indo-European languages and culture, may have been derived from the Nile. There is nothing yet to show that art was earlier or as early in the Euphrates-basin as in that of the Nile. When

refined organism than the human race had previously produced, and necessarily leading to freer, bolder, more earnest, more reverential and therefore truer and more comprehensive views of nature. The science, material and spiritual, which had already dawned upon man in Egypt and appears to have been in an advanced state six thousand years ago, must, for a time, have had that intensely stimulative influence on the higher Asiatic mind, which all great discoveries or revolutions exert. Up to the period of Egyptian culture the races of mankind throughout the world participated in the comparatively barbaric development which we have indicated above. Over all Africa, Europe, northern and middle Asia, Oceanica and America, and, there can hardly be a doubt, over southern Asia also, save it may be in China, the prevailing uniformity marked the winding up of a great era in the history of mankind, for only a vast lapse of time could have allowed one development to embrace the world, and overcome all the impediments to its diffusion arising from the rudeness of arts. In S. W. Asia and the Nile a new activity of intellect broke through the universal stagnation, and the scientific era dawned with a series of discoveries, any one of which is sufficient to attest the fact that a higher organism had been gradually developed in this corner of the world,—theism, purer ethics, poetry, a more advanced astronomy, letters, architecture, sculpture, ships, and improved arts of many kinds. Egypt by its language and partly by its organism, character and customs belongs to the earlier development, from which all its organic advancement never entirely freed it. By its higher organism and its civilisation it associates itself with the present era, of the culture, but not the genius of which, it was the mother.

I need hardly remark that I consider the opinion maintained by many Germans, and, in our own country, by Dr Prichard and other writers, that there was a kind of supernatural energy in mankind during the early developments, to be entirely imaginative

the Egyptian language is better known, and its words of arts are compared with the oldest Euphrates words, some light will be thrown on this. It is clear, not merely from strong probability but from evidence of all kinds, that the Nilotic race was not isolated from the S. W. Asian races. The more developed African languages present no difficulties, as we shall explain hereafter. At present the reader may refer to the remarks contained in the note to p. 296. The Egyptian language must have received its organic form at a period long anterior to the time when the pressure of population in the Nile-basin began to produce a higher artistic and scientific culture. The language of Egypt first took its characteristic structure in a family, whose locality we know not, although it was probably in Asia. Its arts were elaborated by a nation who filled the valley of the Nile. The Asiatic tribes who attained higher linguistic developments, probably in all ages received successive stimulants from the older and greater civilisation of Egypt. The seeds of science and art imported from the Nile, and germinating in a more capacious and fertile mental soil, gradually advanced some of the Indo-European tribes to a higher character than that of the Egyptians. On the other hand the Nile appears, from Dr. Morton's researches, to have repeatedly or constantly received an influx of the higher organism of S. W. Asia.

and unphilosophical. The contrasts afforded by different races in our own day are more striking than any that the world ever witnessed before. If we compare the English with the Papuas we ought, in the same way, to consider the former as a divine race. Looking up from the Papua level of humanity, the intellect and the formative power of a Goethe, a Humboldt or a Smeaton have the same appearance of being supernatural, if we cease to regard as natural all developments of which the human organism is susceptible. The source of the error in question is the vast magnitude assumed by the near or the historical, and the dimness and apparent diminutiveness of the archaic and primordial eras beyond. The mind refers to a few centuries, numerous ethnic and linguistic developments, while the last 4,000 or 5,000 years have not perfected one, and to account for this marvellous circumstance, it assumes that the infant human intellect possessed a gigantic power and activity. The only conclusions that a comparison of races and their languages justifies us in drawing are, that, in the earlier eras of human history, the segregation of families in seats of which the ethnic geography was new, happened more frequently than it could do when men were spread over the world, and that most linguistic developments may have taken place during these eras; * that the more developed a linguistic organism becomes, the less susceptible is it of striking changes; that the first complete transition from the tonic or monosyllabic to the harmonic or polysyllabic organism, was so great a revolution that it must have been attended with intellectual excitement and fresh energy, although there is no reason to believe that it was not very slow in its progress, and by a succession of developments in different tribes; and that no change save an exceedingly slow and comparatively superficial one, is possible in languages that have become fixed by the prevalence and permanence of one kind of development or civilisation, whether progressive or not. But the most simple as well as the most developed organisms are liable to become fixed, and every successive organic development appears destined to endure for thousands of years.

The extensive spread of any language must have occupied a great period of time. If we imagine migrations proceeding from one family, before the earth was occupied by previous human inhabitants, a prodigious time must have elapsed before one of these primordial streams could traverse some thousands of miles, when every natural obstacle and enemy was formidable in proportion to human ignorance, timidity and want of art. † Migratory streams proceeding in later eras from more developed centres would proceed more rapidly, but they would everywhere be opposed by the prior occupants of the lands on which they moved. This would cause

* But the first spread of mankind over the globe, if from a single centre, must have occupied an enormous period.

† Moreover as long as man remained in this condition, his intellect, and consequently his language, could receive little development, save in a few favoured spots.

longer pauses, and many centuries would often elapse ere they displaced the older inhabitants of particular districts, and began to extend themselves into the next. When we consider how small the impression is that has been made on the ethnology of the world, by the known changes in races and languages that have taken place since Egypt was populous and civilised, we must conclude that the whole of this period belongs to the recent history of mankind, and that the more ancient history, in which the numerous races and languages organically distinct, were developed and spread over the face of the earth, occupied a far longer period. It is at present impossible to say that 8,000 or 10,000 years or even a less period, would not be sufficient, and it is equally impossible to say that even the greatest era that geology will allow for man's residence on the globe, is too much.* In connection with this subject, it should be remarked that the obliteration of tribes has been going on in all historic times, and we must therefore conclude that it has always characterised mankind, and that the existing races preserve only a few of many languages that prevailed in the remote archaic and primordial eras. Each leading tribe expands, and spreads its men and language, at the expence of others.† It does not follow therefore that when we have classified the known languages of the world, we shall have continuous series and ramifications of developments. Numerous blanks and abrupt transitions must exist. It is so in all organic series, but fortunately geology is continually supplying some links that were wanting in those of the botanical and zoological. The important blanks in language and letters which the monuments of Egypt, Assyria, Persia and India have recently helped to fill up, make us keenly regret that there is no probability of finding more fossil languages.

It would greatly assist our researches in the Indian Archipelago, if we knew, with any degree of certainty, what the succession of leading events had been in the archaic ethnology of the Continental portion of the Indian Ocean. Connections are easily established, but their origin, and the directions of ethnic movements, are generally obscure. Ethnic geography gives us some assistance by pointing out the great highways, and where its indications are

* We do not intend to add any thing to what we have said in the note to p. 263 but our readers may refer to Prichard's remarks on the Biblical chronologies, and to Bunsen's views. The author of the Church of the Future considers ancient Egyptian history as representing the *Middle Ages* of the ancient world.

† The development of mankind is in one respect like that of a tree. From the same stock rise numerous branches, which again give out new ones, and so on through a complex ramification. But the interlacing branches do not maintain their independence like those of the tree, nor is their connection with the stock retained. The human branches seldom meet without a process of absorption and destruction commencing, so that some branches are constantly being obliterated, or eaten through, and the continuity broken. If we suppose the tree a polyp, confined in its growth and that of its offsets to a limited space, its different branches and twigs preying on each other, and detached or excised ones retaining their vitality, the comparison will be more illustrative.

confirmed by physical, linguistic and moral evidence, little room is left for hesitation in adopting the conclusions to which they lead. We can only now advert to one of these indications in the briefest manner. Mid and south Asia are strongly contrasted in their physical characteristics. In historic times there have been successive movements of Mid-Asian races to the W. and S. upon the races that had preceded them there, and whom they have subdued. Ethnic geography tells us that it must always have been so. Middle Asia naturally nurses hardy and rude tribes. Their contests cause migrations. They are pressed to the W. and S., which are more easy of access than China. The comparative softness of the southern nations from the climate, and the temptation held out by their wealth and refinement, provoke conquests. Independent of all great aggressive movements, family migrations have always taken place from M. to S. Asia; while the difficulties of the mountain barriers and the rigour of the climate, have prevented the stream of migration ever being from the south to the north. The two regions always presented and always will present this contrast, although the progress of civilisation tends more and more to modify, and may ultimately neutralise, its effects. If we now view the languages of the old world in connection with this law of ethnic geography, for such it seems to have hitherto been, we might conclude, with a degree of probability, that, in eastern S. Asia, the evident connection between the Chinese and the Tartarian races, arises from the former having descended from Mid-Asia, and not from the latter having ascended from the Chinese basins. Proceeding westward we may, in the same way, conclude that, in the Indo-Malayan basin, the Burmese and the allied languages preserve some evidence of one of the southern movements of the Mid-Asian tribes; the Tibeto-Indian languages, of another; and the Old Indian languages, of a third; from the N. W. (not N. E. as Dr Prichard supposed) which connects itself more decidedly with the existing Mid-Asian races, although the S. Indian are so distinct from the Tartarian languages, that the period of the migration must have been very ancient.* Africa again points to movements long preceding the origin of the Semitic, Iranian, Old Indian and even the present Tartarian races. Its languages throughout are strongly allied to the Tartarian and earliest Indo-European, but they have also far more Semitic tendencies than either the Tartarian or its Indian allies. They therefore recede to a time when the organism of the Mid-Asian languages was not fully developed, but exhibited all the chief elementary tendencies and characteristics of the Turanian, Iranian, and Semitic. This evidence of the

* When I speak of ethnic movements I do not mean single migrations, but migrations continued during long periods, sometimes for thousands of years, until the migrations take a new direction, or till the causes that induce them, cease to operate or are opposed by new forces arising in the region to which the movements were directed, or in intermediate ones.

antiquity of the African languages is amply confirmed by their structural and glossarial differences, which are so great as to shew that each took its form at a period when the harmonic organism was comparatively crude, and probably not greatly advanced beyond the Egyptian. Lastly, the Iranian languages themselves are only Mid-Asian ones rendered inflectional.* The tribe who spoke them appears to have descended from a family with a finer organism, that was planted in Bactria or Irania, and, increasing there in population and strength, became a new fount of nations which spread to the S. E. and N. W. The Semitic tribes also probably belong to a similar era. The latter located in front of Africa and the former in front of India, long prevented all movements of the more easterly Mid-Asian races upon the lands to the S. and S. W.†

It is evident that Africa has not been directly colonised from India, because her languages have neither the highly developed and well marked Tartarianism of the S. Indian, nor mainly the Tartar-Chinese forms of the Indo-Tibetan. Moreover they have far more phonetic and euphonic fluency, and other indications of the earlier harmonic era, than any existing Indian languages, although some of the latter are remarkably fluent. From the Sechuana to the Berber, the African languages exhibit diversities and combinations which can only be referred to a crude Tartar-Semitic origin, and there is no evidence that any other part of

* As to the comparatively small importance of this change in itself, see Vol. III p. 619. It can hardly be called an organic one, or at least is so in a restricted sense only, because it seems quite possible that the same tribe might gradually convert a postflexual language like the Tamil, the Turkish or the Australian, into a postflexual one like the Latin. A Turanian language like the Median, having an Iranian collocation, might, in the hands of a tribe of great intellectual power and activity, become inflectional in the course of an era of no great length. In that case the organic development which ultimately produced the inflectional language would have originated in a family possessed of a non-inflectional language. Fully to understand how closely the general character of the Iranian approximates to the that of the Tartarian, it is necessary to compare both with the other great groups of the Lau-Chinese, the Asianesian and the African. In the latter the ideologies of even adjacent languages exhibit more striking differences than the Tartar-Iranian languages. I particularly refer to the position of the relational particles. In the Ugro-Tartarian, Tibetan, Burmese, Old Indian, and most of the Iranian, they are almost uniformly postplaced. In the Lau-Chinese, African and Asianesian their position varies from one language to another, and even in the same language it is not uniform. The prevailing tendency of the African and Asianesian however is the reverse of the Tartar-Iranian, prefixes and initial inflections being much more,--- common than postfixes and final inflections. The great prevalence of a uniform system of postfixes in Asia and Europe is another evidence that the languages thus characterised belong to late eras. The freer ideology of the African and Asianesian concur with other considerations, in evincing that they belong to an earlier era of the harmonic tongues than the Tartarian. The collocation of the Tartarian and Iranian were probably originally much less divergent than they now are. The change in that of the latter seems to have been, in some degree, connected with the sinking of postfixed particles into inflectional endings.

† I have not referred to the Euskarian, Ugrian, Samoidean, Yenisean, N. E. Asian, American and other older races, because they are not immediately connected with the basin of the Indian Ocean. We shall find it necessary to advert to them when we endeavour to ascertain the true position of the Asianesian languages, and the particular eras of linguistic development with which they associate themselves. In this enquiry every family of languages in the world is illustrative.

Asia could have applied their prototypes, but that where it is naturally to be sought, the adjacent S. W. region, where Semitic, Tartarian and Iranian (i. e. advanced Tartarian) existed in close proximity, the Iranian preserving more of the Tartarian character than the other members of the same family, and the Tartarian having an Iranian structure and many Semitic roots.* The difficulty hitherto presented by the contrast between the more Tartarian of the African languages and the fully developed Semitic of Syria and Arabia, has been lately much removed by the researches into the ancient languages of the Euphrates basin. If I may judge from an imperfect newspaper notice of Major Rawlinson's latest communication to the Royal Asiatic Society (in February last) the Babylonian language of his inscriptions has an African or Semitico-Tartar structure. Various linguistic types beneath and between Egyptian and Babylonian, and between them and Tartarian, probably prevailed in numerous tribes inhabiting S. W. Asia and Africa, during the archaic eras which preceded the existence of the families from which the Aramæan, Canaanitish, Himyaritic, Babylonian, Median, and Persian tribes descended. Even after the connection between the two continents by the isthmus of Suez, was cut off by the predominance of the Egyptian race in the lower basin of the Nile, the tribes of Arabia and the Euphrates may have continued to communicate with Africa by the Red and Indo-African seas. In India again the Tamulian era is evidently long posterior to that of the development of the African languages, but there is evidence of the existence of older tribes and languages more nearly related to the African. The Iranian tribes, from the high development and great structural and glossarial affinities of their languages, evidently belong to a very recent era compared with the African or even the present Tartarian and Old Indian. Yet the period when the distinctive Iranian bent was taken by a single family, must be exceedingly remote, for even the highly developed Sanskrit cannot have a less antiquity than 5,000 or 6,000 years, and between it and the origin of older Iranian forms, and

* The basin of the Euphrates throughout probably presented transition languages, and the adjacent region between the Caspian and the Black Sea, from its mountainous character, has preserved tribes that appear to be connected in their languages with the Ugro-Tartarian as well as the Euphratan and Iranian. The Armenian roots are frequently Medo-Persian. The Georgian has some resemblance to Iranian but more to Turanian. The Circassian again have connections with the more ancient Turanian.—Finnish, Samoides &c. (See Klaproth's *Asia Polyglotta* and Dr Prichard's *Researches* Vol IV. I have not at present the means of obtaining a knowledge of the Caucasian languages myself.) The Caucasian tribes partly belong to the Caspian basin, which includes that of the Wolga, of which the upper portion is within the existing Finnish boundary. Before the eastern Tartarian tribes moved into the lower basin of the Wolga, and thus interposed themselves between the northern and S. W. parts of the Caspian, it cannot be supposed that it was not inhabited throughout. W. Asia from the North sea to the Euphrates must then, or in some earlier eras (if Iranian movements preceded Tartarian into Europe by this route) have been continuously occupied by Ugrian or Ugro-Caucasian tribes, and there is much evidence in languages and ethnic geography, that the greater part of central Asia was also possessed by similar tribes.

between the latter and the original Tartarian, long eras must have elapsed.*

The preceding observations will, we hope, satisfy the reader that it is as unsafe to enter upon the ethnology of the Indian Archipelago with negative, as it is to do so with positive, preconceptions, respecting the nature and antiquity of the continental relations of its races.† We must admit the possibility and even probability

* I think Dr Prichard has drawn too sharp a line between the Turanian and Iranian languages. In his desire to confine the former to the eastern half of Mid-Asia, he leaves the greater portion of the western half without inhabitants, until the comparatively recent movements of the Turkish and Mongol tribes to the westward; although it is evident from the data which he has collected respecting the languages to the N. of the Euphrates basin, that older Ugro-Tartarian elements reached from northern Asia and Europe, across the continent, to the head of that river, long before the movements in question broke the continuity. Hence he received the discovery of the Tartarian character of the Median language with distrust; and hence also he looked to the valley of Assam as the path by which the so-called Tamulian family entered India, while all the probabilities are in favour of their northern prototypes having belonged to an organically and linguistically advanced Mid-Asian race, of which offshoots entered India from the N. W. They probably occupied the same territory which afterwards became the seat of the Irano-Indian tribes before they moved into India. The southern and western tribes constituting the great mass of the non-Iranian population of India, still preserve a physical and mental organism intermediate between the Iranian and the east African. The physiognomy presented by some of the tribes, more particularly the eastern ones, clearly shews that the latter physically belong to the N. E. India preserves, in her older races, physical types close to the E. African, the E. Asian, and the Iranian. The quasi Iranian element is far too prominent in the S. of India to have been derived from an infusion of Irano-Indian blood. It points to migrations from the N. W. preceding those of the latter race, and tends to confirm the belief, founded on every ethnic probability, that the transition from the Tartarian to the Iranian and Semitic organic types in the W. and S. W. of Asia, was a gradual one, which was in progress long before the Iranian and Semitic tribes came into existence. The Egyptian and most of the African and Old Indian races were probably derived primarily from S. W. Asia, during successive eras, when this type was already established there. There was also in remote times a direct communication between India and East Africa, producing an ethnic interchange.

† As the subject is probably new to many of our readers, we here recapitulate the more important of the general characteristics of ethnic history and its difficulties.

1. The distinctive physical, intellectual and linguistic character of every tribe is given by the family in which it originates.

2. Prejudices against foreign races, fear of them, the difficulty of communicating with them &c. preserve the tribe with all its peculiarities.

3. When external circumstances enable a tribe to become populous and powerful, it extends itself over the earth's surface at the expense of other tribes.

4. These tribes sometimes amalgamate with the dominant one and form a mixed race and language, but more frequently disappear altogether. They are destroyed; or they gradually waste away, from the dominant tribes taking their females; or they are reduced to a helot state and lose their own language; or they are incorporated with the dominant race. (When there is a complete local mixture, the more numerous tribe assimilates the other although it be dominant.)

5. Every powerful tribe that has grown up in its native seat, and then spread itself by national movements, or by giving off families who found new tribes, alters the ethnic aspect of the world, or of great regions, by displacing and blotting out numerous races and languages.

6. This cause must have constantly operated since the world, or large portions of it, were occupied by several tribes; there has therefore been a succession of such ethnic revolutions, all exceedingly gradual in their progress, although at particular times they have been much accelerated by national conquests and forced movements.

7. The number of existing tribes must bear a very small proportion to those that have existed since the beginning of human history; and the course of human developments, organic, linguistic &c. can never be perfectly traced.

of such connections in ancient times, and it therefore becomes of importance to bear in mind that there is evidence of a well marked development having prevailed over the whole or the greater part of the continental regions, anterior to most of the powerful civilised nations, with distinct languages, which arose in the southern basins of the Asiatic Continent and on the Nile. The periods when these civilisations originated cannot be determined, but they must have long preceded the earliest dates that can be established by historic or graphic evidence. It is only necessary to recollect that many of these dates are several centuries older than 2,000 B. C. and that some are nearly 4,000 B. C. to render us cautious in limiting the possible ethnic history of any region in the world to a few thousand years. If a connection can be established between the insular and continental races, the evidence on which it is based should also afford a solution of the important question, whether it arose during the historical eras of the latter, or in the more remote archaic times, which must have long preceded the epoch of 6,000 years, or 200 generations, ago.*

8. A considerable proportion of the obliterated tribes have left some remnants of their existence in other tribes that have assimilated them. But it is exceedingly difficult to distinguish in any existing tribe what it may have gained from tribes that disappeared before the dawn of history. It is not impossible in many cases, because tribes allied to the lost ones sometimes preserve an independent record of the general character of their development, in language &c.

9. No dominant tribe or family of tribes completely sweeps the more ancient races from the face of a great region in its first progress. Many ethnic seats are so difficult of access that they continue to protect remnants of the old races throughout long periods, and even throughout a succession of ethnic revolutions in the more open seats.

10. It thus becomes possible, particularly by the evidence of language, to restore the outline of many of the human developments that have successively prevailed in a region and in the world.

11. But even the most sheltered tribes are eventually amalgamated by peaceful or aggressive means. Of this even the historical eras of Europe and Asia supply abundant proof.

12. We can never therefore hope to reconstruct the entire history of the human race,* Much in all eras preceding the historical, and in every region, must remain obscure or entirely concealed; and the primordial era of mankind must for ever remain unapproachable by us. The general character of human development in it will be more distinctly understood by deeper psychological, physiological and linguistic researches. But it will always lie without the pale of ethnography.

13. All new developments, organic, mental and linguistic, have been by a series of advances, each slight in itself and extending over long periods. To account for the existing and historical ethnology of the world, a great lapse of time is therefore required.

* I copy note 146 to the second volume of Humboldt's *Cosmos*, as it will often be necessary to advert to the ancient dates, which it gives.

Chronological data for Egypt:—"Menes, 3900. B. C. at least, and probably tolerably exact;—commencement of the 4th dynasty (comprising the Pyramid builders, Chephren-Schafra, Cheops-Chufu, and Mykerinos or Memkera), 3430;—invasion of the Hyksos under the 12th dynasty, to which belongs Amenemha III. the builder of the original Labyrinth, 2200. A thousand years at least before Menes, and probably still more, must be allowed for the gradual growth of a civilisation which had reached its completion, and had in part become fixed, at least 3430 years before our era." (Lepsius, in several letters to myself, in March 1846, after his return from his memorable expedition.) Compare also Bunsen's considerations on the commencement of Universal History, (which, strictly speaking, does not include the earliest history of mankind), in his ingenious and learned work,

It is not my intention to present my readers with a general review of eastern ethnology in the form of a connected and continuous work, which would not be adapted to the plan of this Journal. I shall from time to time, and in every number in which room can be found, insert an essay embracing one section of the subject. The greater part is already written, but there are a few blanks in my outline linguistic map, and I wish, if it can be done, to fill up these before completing the preliminary comparisons. As the chapters on this, the most important branch of the enquiry, may thus be postponed for some months, I shall conclude this introduction with a short notice of one or two of the more interesting results, positive, probable or suggestive, to which, at this early stage of the comparison, I have been conducted.

If almost any Oceanic language be examined, it will be found to have strong resemblances, and even coincidences, in words and structural traits, to one or another branch of all or several of the great linguistic families bordering on the Ocean or intimately connected with the border nations,—Lau-Chinese, Japanese, Tartarian, Tibeto-Indian, Burman, Old-Indian, Syro-Arabian, ancient Egyptian, African and even Iranian and American. The investigation

Ægyptens Stelle in der Weltgeschichte, 1845, 1st book, S. 11—13. The history and regular chronology of the Chinese go back to 2400, and even to 2700, before our era, much beyond Ju to Hoang-ty. There are many literary monuments of the 15th century B. C.; and in the 12th, Tscheu-li records the measurement of the length of the solstitial shadow by Tscheu-kung, in the town of Lo-yang, south of the Yellow River, which is so exact that Laplace found it quite accordant with the theory of the alteration of the obliquity of the ecliptic, which was only propounded at the close of the last century; so that there can be no suspicion of a fictitious measurement obtained by calculating back. See Edouard Biot sur la Constitution politique de la Chine au 12ème siècle avant notre ère (1845), pp. 3 and 9. The building of Tyre and of the original temple of Melkarth, the Tyrian Hercules, would reach back to 2760 years before our era, according to the account which Herodotus received from the priests (II. 44). Compare also Heeren, *Ideen über Politik und Verkehr der Völker*, Th. I. 2, 1824, S. 12. Simplicius, from a notice transmitted by Porphyry, estimates the antiquity of Babylonian astronomical observations which were known to Aristotle at 1903 years before Alexander the Great; and the profound and cautious chronologist Ideler considers this datum by no means improbable. Compare his *Handbuch der Chronologie*, Bd. I. S. 207; the *Abhandlungen der Berliner Akad. auf das J. 1814*, S. 217; and Böckh, *metrol. Untersuchungen über die Masse des Alterthums*, 1838, S. 36. It is a question still wrapped in obscurity, whether there is historic ground in India earlier than 1200 B. C., according to the *Chronicles of Kashmeer* (Radjatarangini, trad. par Troyer), while Megasthenes (*Indica*, ed. Schwanbeck, 1846, p. 50) reckons from 60 to 64 centuries from Manu to Chandragupta, for 153 kings of the dynasty of Magadha; and the astronomer Aryabhata places the beginning of his Chronology 8102 B. C. (Lassen, *ind. Alterthumsk.* Bd. I. S. 473, 505, 507, and 510.) For the purpose of rendering the numbers contained in this note more significant in respect to the history of civilization, it may not be superfluous to recal, that the destruction of Troy is placed 1184. Homer 1000 or 950, and Cadmus the Milesian, the first historical writer among the Greeks, 524 years before our era. This comparison of epochs shews how unequally the desire for an exact record of events and enterprises made itself felt among the nations most highly susceptible of culture: it reminds us involuntarily of the sentence which Plato, in the *Timæus*, places in the mouth of the priests of Sais: "O Solon, Solon! you Greeks still remain ever children; nowhere in Hellas is there an aged man. Your souls are ever youthful; you have in them no knowledge of antiquity, no ancient faith, no wisdom grown hoar by age."

of the ethnic evidence afforded by the Oceanic languages is therefore exceedingly complicated, because we must separate the historical and the archaic affinities which have a positive value in tracing the history of the insular races, from the primeval ones which, for anything we know, may belong to a period when these races, and those with which we compare them, had no separate existence.

One general conclusion I have been led to adopt from an accumulation of evidence of all kinds. This is that the human history of the Archipelago is of very great antiquity; that no means have yet been discovered of penetrating to its earliest inhabitants; that, as might have been anticipated from its geographical position, it has been more or less influenced not only by the history of the tribes who have successively occupied the adjacent Ultratrainian lands, but by that of all the countries of Africa and Asia bordering on the great Ocean, or connected with the Ocean lying lands. It is probable that this connection with the seaboard of the continent, and with the great movements and developments reflected by it from the interior, began before the epoch at which positive records, whether historical or archaic, commence; and it is certain that, since that epoch, it has received influences, successive or contemporaneous, continuous, temporary or intermittent, from Africa, Western Asia, India, the Tibeto-Indian region, Burmah, Siam, Anam, China and Japan. It is therefore probable that the Archipelago faintly reflects the ethnic history of these lands. There is also an evident connection with America, but I am by no means satisfied at present that it has ever been direct, and all that I know inclines me strongly to believe that it is entirely to be traced to the common source in Asia, to which a large part of the ethnic characteristics of both are clearly referable.

It must, I think, be regarded as certain that the Archipelago has a history contemporaneous with that of every civilised nation on the great Ocean, and that, at the remotest period to which the history of any of these nations has yet reached, insular tribes existed, having relations to continental tribes. I have not yet found a single tribe to which an aboriginal or exclusively Asianesian character can be ascribed, and I am well assured that none will ever be discovered. I have not yet found a tribe on the Continents which can be regarded as the parent of any Asianesian tribe, or which we can positively pronounce to be older than any Asianesian tribe. It is as difficult to say what the Asianesian races are not, as to define what they are. Are they allied to the Chinese and the adjacent nations to the westward? There are strongly marked traits of all kinds which leave no doubt of the existence of such an alliance. Is this alliance confined to any part of the insular region, or to any of the Burmah-Chinese nations? It extends from Sumatra to Easter Island; it embraces Rakhoing, Burmese, Lau, Siamese, Anam and Chinese ingredients, as well as others not so well recognized in these nations as in the many ruder

tribes which belong to the same continental alliance. Do the continental connections reach beyond the Transindian region? The mountainous borders of the valley of Assam and the Himalaya are occupied by allied tribes, some of which are Asianesian in almost every leading trait. When we scale the Himalaya and place ourselves on the great table land of Asia, it might be supposed we would shake off all the insular characteristics. Far from it; they follow us into Tibet, and when we pass the great southern mountain chains of Middle Asia, and come to the lands of the Turks and Mongols, and, advancing to the north, arrive amongst the Siberian nations, we still recognize Asianesian traits. If we return to the southern regions and visit the most ancient Indian races, they again increase in number. When we cross the Indian Ocean and make ourselves acquainted with the tribes on its western shores, we are astonished to find that the allied East Asian characteristics, numerous and varied as they are, yield in importance to the African. If we place the greatest distance that the habitable world allows between Asianesia and the tribes with whom we compare them, we still find alliances. In Europe they meet us amongst the Finns and Laplanders, the Hungarians, the ancient Britons, the Greeks and many other nations. In America the Esquimaux of the north and the Abipones of the south, and a host of other races, have striking Asianesian characteristics. In a word, the eastern islanders partake of every great ethnic development of the human race, which has yet been recognized, and if we ask of that grand recipient and preservative of ethnic influences, language, whether it cannot arrest this universal diffusion of the archaic history of Asianesia and restrict it to a particular region, it answers that the insular tongues are related to all the principal linguistic families. The alliances are by no means slight or accidental. They are substantial and essential, and can be established by a great mass of facts of all kinds. To trace every well marked alliance to its source will be a labour of immense difficulty, and one which in many directions may never be completely successful. But the very fact of so wide a range of positive relations leads to one important conclusion at the outset, viz: that the ethnology of Asianesia must illustrate that of every other region of the world, and that its antiquity is probably as great as that of the oldest existing tribes on any of the continents. The insular tribes can be as little derived from any of these as they can be from each other. The ethnic lines of both visibly approach as they are prolonged into the past, but, like the hyperbola and its asymptotes, they never meet.

Amongst all these foreign influences of which the presence can be clearly traced, two are of the widest extent and greatest importance. The first is entirely African and Indo-African in its character. It embraced the whole Indian Archipelago, Australia and Papuanesia. Whether it extended to Polynesia and Micronesia I regard as still doubtful. It certainly included a portion of Micronesia. Along

the shores and islands of the Indian Ocean the races to which it must be referred appear to have prevailed. Their limits were those of the monsoons; or from Africa to Polynesia. When they thus spread themselves over Africa, India, and the Indian Archipelago, the great outlying regions of the old world, there could have been no civilised Semetic, Iranian, Burmese or Siamese races on that sea to hinder them.

The languages of their population belonged to a stage intermediate between the monotonic and the inflectional, and had strong and direct affinities to the other families of language of this stage,—the Ugro-Tartarian, Japanese, Old Indian and African, and to a certain extent to the American, which last may be considered as constituting a peculiar family. Amongst the best preserved examples of these languages are the Formosa-Philippine and the Australian. It is probable that some of the eastern Melanesian will be found to be equally characteristic.

The second of the great insular families is Tibeto-Indian and Mayama-Anam. It connects itself with all the races and languages from Tibet to Anam, but it chiefly flowed in through the ethnic basin of the Malacca sea. By a long continued influx this family spread itself over the Peninsula, Sumatra, Java, Borneo, and Celebes, but its further progress over the many islands to the north and east appears to have been long checked by the older races. It was probably only by slow steps, and by settling at many points, that it gained a firm footing even in the western islands, and a long period must have elapsed before its tribes became so populous, and spread so far into the interior, as to enable them to absorb and destroy the earlier occupants. The settled inland communities of Sumatra evidently owed much to direct influence from similar communities on the continent.* When communities of this family had grown in numbers and power till they dominated, and could be freely developed under the genial insular influences, a new civilisation gradually arose, indigenous in many respects, but constantly stimulated and directed by traders and settlers from the father-lands, and owing more to what they originally brought, and continued to receive, from thence, than to their own genius and inventiveness. In the interior they expanded into considerable agricultural communities in favourable localities, although in most places they retained the nomadic forest or *ladang* culture and

* The earliest emigrants were probably in a similar state of civilisation to the present less developed tribes of the Tibeto-Anamese region, and had gradually spread themselves along the coasts and down the river basins till they passed into the Peninsula, and thence, probably after some centuries, into Sumatra. Although a much superior race to the Africo-Indian natives, they were not strongly separated from them by habit, and religion. The latter had not then been harassed, exacerbated and degraded by the wrongs which they were, in after ages, to endure at the hands of the former. They were in the undisputed possession and free enjoyment of the lands which had been immemorially theirs. There is no reason therefore to believe that at first any great barrier existed, save that of the difference in race, to prevent a peaceful and friendly intercourse. The Tibeto-Anam people are only rapacious and

the habits and character of the less civilised tribes of the Tibeto-Anam region. On the coasts and rivers, maritime art and enterprise were highly developed, apparently from fresh influences receive from the basins of the Irawadi and Ganges after a higher civilisation, accompanied by a greater demand for the peculiar products of the eastern islands, had arisen there. This led to the growth of maritime communities of which the chief seats were in Celebes, the Molukas and the Philippines, but it is probable that the first were in Java, and that Javanese colonies or annual trading stations were the nuclei of the eastern states. The common demands of the traders gave a unity of purpose and direction to the navigation of the islanders throughout the whole of this region, and the monsoons, which regulated their voyages, still further tended to impress on it a uniform character.* During the earlier ages of the extension of this family, and when it was everywhere numerically small compared with the aborigines, the more advanced and more harmonic languages of the latter came in contact with the less advanced monotonic languages of the new settlers, who found it as easy as it was necessary to acquire the language of the land, while the natives had no motive to acquire that of the new comers.†

unscrupulous when they are powerful. When weak, they are peculiarly humble and conciliatory in their demeanour towards foreigners, professing for them great respect, humouring all their prejudices, and concealing their own. Their position and policy towards the Africo-Indian tribes, after they had become numerically strong, must have been similar to that of the more civilised maritime tribes to those of the interior, of their own race, at the present day. The Malay are more separated by their habits and religion from the heathen Binua, Daya, &c., than the predecessors of the latter were from the Africo-Indian tribes. As the Malays now rob and oppress the Binua, we may believe the ancient progenitors of both, robbed and oppressed the Aborigines wherever they could, till the latter, exasperated and embittered, withdrew sullenly from the unequal contest, and, shrinking more and more from the rapacity of the former, lingered on in a half animal state of existence, or, revenging themselves ferociously when they had opportunities, provoked an exterminating retaliation.

* The connected basins of the Java and Molucca seas were the great nurseries and seats of this navigation. The foreign traders and those from the north of Sumatra, probably reached Java, but the true insular navigation must always have been in the hands of the people of these two basins. Their mutual deprivations and hostilities, and the contests with the earlier Africo-Indian races, developed in them a boldness of character to which their continental progenitors were probably strangers, and must have led to the habit of sailing in fleets, which they retain, to a considerable extent, to the present day. The spices, tortoiseshell, feathers, &c. must have been collected as now by the natives at ports in Celebes and by the Moluka-Timorean islanders, and the Javanese in contact with the foreign traders may have been the chief or only carriers for a time. But the great maritime communities of the east must soon have learned to carry westward the produce of their own islands and what they received from the Papuas. The limits of the conquests of the Tibeto-Anamese race prove that its more eastern movements were guided by foreign commerce. It pressed on to the spice islands and occupied them. Their produce was far more than enough to meet the foreign demand, and they contended themselves with trade and deprivations to the further east. In the Philippines their partial colonisation, chiefly a coast and a river one, appears to have been mainly stimulated by the Chinese and Japanese trade, to which that of Siam, Anam and Tonquin were also added. When I come to the history of the Bugis, I shall bring forward many illustrations of the condition of the Archipelago during the Tibeto-Anam era.

† In the same manner the modern settlers from China learn the insular language current at the place where they come, and where they permanently settle and gradually

If there was a direct and regular communication between the Africo-Indian family, and people of the same race in the west, prior to the advent of the Tibeto-Anam family, it was cut off by the latter, who, continuing to move into the western islands, constantly added fresh infusions of their languages to the now hybrid but mainly insular languages of their forerunners, while these were diffused more sparingly, and mostly at second hand, through the more easterly settlements. Lastly, a later Indian influence, belonging to a far more advanced civilisation, flowed in a great stream into the western Archipelago and cut off that of the Irawadi, before its linguistic operation had made much progress.* As this happened at a recent period, perhaps not much more than 2,000 years ago, the Indonesian languages appear, with the exception of Indian additions and some less important ones, to have been preserved in nearly the same state in which they were when the Mayama-Lau influence was arrested. In the two extremities of the eastern chain, the Formosa-Philippines and Australia, the tribes and languages of the older family remain, and the Tibeto-Anamese tribes of the first group retain these languages comparatively little modified by their paternal ones.† In Melanesia the languages are probably still mainly Africo-Indian also. The structure of the only one that has been grammatically examined, that of Tanna, is complex and inflectional. Strong features of the Africo-Indian structure are retained by some of the Transjavan tribes. The western languages, and particularly those nearest Burmah-Siamese influence, such as the Malay, have lost much of the complex Africo-Indian organism, and exhibit a partial return to the simplicity of the former. It may be that the Myama and Thai emigrants into the Peninsula and Sumatra were, from the first, so numerous as to prevent their completely losing their fatherland languages, and that the colonies there always retained much more of the words and forms of the latter than the more eastern colonies. The more central of the latter, Celebes, the Molukas and the allied S. E. ones, appear to be intermediate between the western and the more permanent Africo-Indian. The

form a community, as at Malacca: The mother tongue of the very first Asianian generation is Malayan with an admixture of Chinese, while the structure of the paternal tongue is retained with difficulty. They begin by marrying native women, whose language becomes that of their children. But persons of the mixed race thus produced are preferred by new settlers from China as well as by each other; the stronger traits of the maternal race are gradually softened, and a physical type arises which appears only as a variety of the paternal.

* It is probable that the vessels of the Godavery long confined their foreign voyages to a coasting one round the Bay of Bengal to the ports on its eastern side, and that the trade to the Archipelago was then in the hands of the Peguans. The first direct Indian voyagers to Acheen &c are more likely to have been Singalese than Kalinga.

† As we must go to Australia and Papuanesia to understand the character of the Indo-African era of the Archipelago, so we must go to the Philippines, and similar eastern lands to understand the character of the transition period. In the Philippines we have the strongest evidence that the Tibeto-Anam race began with commercial settlements on some of the rivers, whence they have partially occupied the interior.

Polynesian again appear to have been severed from them at a comparatively early period of the Tibeto-Anamese migrations, but after they had predominated in this part of the Archipelago. They present a peculiar combination of many well preserved Tibeto-Anam words, with much both of an Africo-Indian, a Tibeto-Indian and a Transindian ideology. The deductions from a comparison of physical and intellectual character, manners, customs and arts, confirm those derived from the evidence of language.

It will be remarked that I do not recognize any period, as that of the universal prevalence of a single language. I can find no evidence that the whole Archipelago, or any considerable portion of it, was ever colonised, or invaded and conquered, by a great body of foreigners at any one time. It has always received involuntary emigrants, and trading visitors and settlers, from every maritime people of the Indo-Pacific basin that has had sufficient knowledge, skill and boldness to reach it; but the influx of permanent colonists of any particular race, appears to have been always slow, and the numerical predominance of every new race must have been the work of many centuries at least. The foreigners who came at any one time, and even the whole number of pure blood in the Archipelago, must always have been almost infinitesimally small compared with the native population. This must be born in mind in comparing the growth of foreign races in the eastern seas with the movements of continental races into new districts,—as the Tartarian race to the west of Asia, the Tamulian into India, the Iranian into India and Europe,* or of proper colonies in which communities of foreigners are at once transplanted, as the English in Australia. Trade, not colonisation, has been the great foreign agent of ethnic change in the Archipelago.† Hence after the first population, no pure foreign nations arose, but only metamorphoses

* In all these cases the migrating tribes and communities carry their own language with them, and it is only somewhat modified by the languages of the conquered or absorbed races. They also gradually induce an adoption of their language by the aborigines in the open districts. Hence we sometimes find the aboriginal race preserving its physical identity while it has adopted in great measure the language of the dominant race, or a modification of it. Some of the aboriginal Tibeto-Anam tribes of eastern and middle India have their primitive physical character more or less strongly marked, while their languages have a Tamulian and quasi Tamulian character. Others again, such as the Asamese, have, at a later period, linguistically assimilated to the tribes of the succeeding great movement from the N. W. The Tamulian tribes of western India have undergone the same linguistic change. The language of the pre-Tamulian tribes of southern, and eastern India, who also probably preceded the Tibeto-Anam tribes over all India and carry us back to an extremely remote period, have of course long been lost in the successive influxes of new tribes and languages. But physical and linguistic vestiges still remain, sufficiently strong, when connected with the general ethnological history of the Indo-African basin, to prove their existence and their probable character. Of such linguistic revolutions caused by great influxes of foreign tribes, the Archipelago cannot be expected to afford examples.

† Internally there has been much and constant colonisation and conquest. The thin population, and the multitude of creeks and rivers, have constantly invited the formation of new communities. A man who dislikes his present position, or is forced to quit it, never hesitates from the fear that he will not speedily find a new home to please him. It should also be observed that there appears to have been

of native tribes, and successive regenerations of the transformed communities, by a continued influx of foreign men.*

The germs only of communities have been implanted from abroad; the growth of every community has been indigenous. Again, foreign blood and ideas have been diffused far less by the scattering of such foreign germs over the Archipelago, than through the medium of the earlier colonies, probably confined to the west. These, as they advanced in numbers and power, would gradually give voluntary and compulsory settlers to more distant rivers and islands, many of which would found new communities, which would continue both to send out in their turn, new settlers, and to receive accessions from the western tribes. A multitude of dialects and languages must thus have arisen. The languages imported by the Tibeto-Anamese settlers differed, as did those of the natives, and the combinations formed, in different places, from the contact of the two families, † varied in the proportions of each which entered into them. But the structures of the native tongues had strong affinities amongst themselves, and predominated in all these new combinations. If it be asked when the Africo-Indian migrations commenced and ceased, and when the Tibeto-Anam began, I can give no answer. I can trace positively that both existed, and in comparatively recent times, because the Continental relations belonging to both classes are too strong and fresh to be referable to an indefinite primordial antiquity. I can also see that the Indo-African preceded the later E. Asian which developed the Malayu-Polynesian tribes. But of the older history of the Archipelago I know nothing. If it be asked why the immediate continental progenitors of the existing Malayu-Polynesians, so much nearer in position, and so much more ancient by linguistic organism, than the Indo-African tribes, did not occupy Indonesia first, I answer that the reason must undoubtedly be that they had not extended to the sea board when the Indo-African migrations commenced, although more ancient people, now obliterated, may have existed

at one period a great influx of Hindus into Java, connected with religious or political revolutions on the continent.

* There are some inconsiderable exceptions.

† I have for want of a better word, spoken of the Tibeto-Anam *family*, but it must be remembered that, although the Anamese are closely allied physically to the Himalayan and Asamese mountaineers, their language is very different in structure from the languages of the latter, which also differ amongst themselves to a considerable extent. The Mon, Myama, Karen, Lau and other intermediate languages also differ much. The whole however constitute, with the Tibetan, an alliance, the nature of which will be defined hereafter. It must also be recollected that the present division and distribution of the Tibeto-Anam tribes, is probably very different from that which prevailed when their influence first reached Asia. Many of the present tribes may not then have existed, although their prototypes did. Moreover subsequent successive changes in the continental tribes may each have affected the kind and amount of the influence exerted on Asia. The distance in time, and in many ethnic traits of all kinds, between the first Tibeto-Indian immigrants, who are well represented by the Polynesians, and the later Mayama immigrants, who are best represented by the Rawa, Malays &c of Sumatra, is very great.

there. If it be asked by those who believe it to be proved that one at least of the great successive ethnic foci, if not the first of all, was in the region where the Transindian and Chinese rivers rise, why the Tibeto-Anam nations were distanced in the ethnic march by tribes of a far later linguistic development, and who came from a land remote from the focus, the answer is that it is very doubtful whether, in the earlier stages of human intellect and art, the direct route from this focus to Asianesia was not much longer in time, than the circuitous one by the great middle highway of Asia and the passes leading into S. W. Asia and Africa.* There would, at all events, be nothing improbable in the conclusion that the N. W. shores of the Indian Ocean were reached sooner than those of the vast congeries of mountains of which the greater part of S. E. Asia consists. The inner band, some hundreds of miles in breadth, is formed by closely packed chains, the principal of which are, in great part, always covered with snow. The Himalaya are comparatively easy of passage, but they have proved so formidable to man, that the great mass of the population of India appears to have been always derived, not from the adjacent Tibet, but from the westward. I throw the oceanic distances out of the reckoning. As soon as there were boats to be driven across the ocean, they disappeared. Sumatra is ethnically adjacent to Africa, Arabia and India, but its distance from Tibet by the eastern routes, and even by the Himalayan, is enormous for rude tribes. A few weeks would transport men from Africa to Asianesia, but thousands of years may have elapsed before the aborigines of Mid Asia reached the borders of the ocean by the S. E. land routes. If it be further asked why the Africo-Indian tribes did not people the more accessible parts of the Transindian region, as well as Asianesia, if the eastern race had not descended to the sea board from Tibet on the one side or Yunan on the other, I answer that I have no doubt they did, and that we have the strongest evidence of the fact in the negro and quasi-negro tribes that are still preserved in some of the mountains of the Malay Peninsula, Siam and Anam. Lastly, if it be asked why this ancient population has been so much more obliterated in Ultraindia than in Asianesia, and why the dominant races, instead of adopting the language of the aborigines, have preserved their own, and probably imposed it on the latter, I answer to the first part of the question that Sumatra, Borneo and Java have been more completely swept of the ancient races than Transindia, and as an answer to the last I refer to the remarks I have already made on the character of the migrations into Asianesia, and the very different one of most continental ethnic movements. I refer both the Indo-African and the Tibeto-Anam movements

* The mountains, forests and marshes must have repelled the Mid-Asian tribes from making migrations through them, while the steppes, varying in their character with the seasons, and differing in different places, invited and enforced a nomadic life and occasional migrations.

into Asianesia, to archaic eras which must be considered recent ;— but whether both were in operation before the Iranian family came into existence ; whether the old influences continued to operate long after new ones, destined to supplant them, had begun to be felt ; whether, as is probable, more ancient, ruder and feebler tribes preceded the Indo-Africans in any part of Asianesia, or continued to pass into it after Indo-Africans had begun to occupy it ; what was the degree of linguistic development and of civilisation, to which the earliest African and Asiatic immigrants had attained, or what was the general ethnic condition of the human race when men first appeared in the islands ; what tribes, in the successive emergence of new and submergence of older ones during the continuous ethnic flow of the Continents, contemporaneously affected the history of the Archipelago, by the same or different channels, and what tribes remained ignorant of its existence ; whether, for instance, African, S. W. Asian, Indian and Utrafrican influences were ever felt together, during the same archaic eras, or whether, while all or some of these lasted, the Iranian race continued, for a long period, to have no knowledge of it ; what periods intervened between the time when each continental race first unconsciously gave settlers to Asianesia, and the time when it became aware of the existence of the islands, and began to have occasional intercourse with them :—these are questions to which I cannot at present offer any positive answer, but some of which will, I think, find solutions as we proceed in our investigation, although others will never be answered.

Such is the impression made by a first connected view of the subject. I shall present the more matured conclusions which I may form, from a closer comparison of the languages, in an early number. Meantime a brief glance at the physical and moral evidence taken by itself, will shew the reader that it does not weaken the first impression made by a rapid and general survey of the languages.

CONNECTION WITH AFRICAN RACES : A number of facts physical, moral and linguistic, in the ethnology of the Asiatic tribes, have a marked and unmistakeable resemblance to others found in African ethnology. We shall mention a few of these as indicating a decided ethnic alliance to a certain extent, whatever opinions may be formed respecting its source. Some imaginative readers may, with Ptolemy, throw a connecting continent across the Indian Ocean, or, with a host of modern writers, view its islands as the fragments of a great southern land that once prolonged the Transindian peninsula into the Pacific. Others, who have been accustomed to think that the fracturing and submerging of continents, is a work of more than a few thousands or tens of thousands of years, may be content to suppose that all its shores were once occupied by the same race, or rest with the belief that the Peninsula of India was peopled by men of the African family before

the influx of a conquering Turanian or pre-Iranian race from the north developed the higher Dravirian civilisation, with its extraordinary maritime advancement. Others may see no difficulty in the hypothesis that the same family, feeble though inventive and artistic, which produced an Egyptian race, produced also maritime races, on the east coast of Africa, and that this maritime power ultimately sunk, like the Egyptian, before the superior valour and vigour of foreign races, and the former the earlier, because it was more exposed to Arabian aggression than the latter was to Arabian or Grecian. Others who cannot recognize any evidence of considerable maritime races in the Indian Ocean earlier than the Himyaritic and Phœnician, may consider the fact of the existence of tribes possessed of boats, along all the eastern coast of Africa, and the priority of these races in time to the Himyaritic and Phœnician, as evinced by their languages, to be a sufficient explanation of the gradual transportation of African families to the eastward, in the course of the pre-Semitic and pre-Iranian eras. But whether in the archaic times, we confine African influence to its modern location, or bring it geographically nearer to the Indian Archipelago, the preservation, to the present day, of African elements in the latter, is a fact that must enter largely into all our attempts to restore its ancient history. The elements peculiarly African are combined with others which are common to Africa and more eastern lands, as well as intermediate ones, but it will also be borne in mind that elements common to India and some or all of the Transindian countries, or a portion of their races, with some or all of the Oceanic, may nevertheless be African. If any positive African elements are found in Asia, a probability immediately arises that they will also be found, or once existed, though now obliterated by later ethnic revolutions, in other lands washed by the Indian Ocean, and at least as open to African influences as the Archipelago. It must be remembered that our knowledge of the principal tribes of S. Eastern Africa is, as yet, chiefly from native information, and that we are ignorant of the more minute traits of the habits, opinions, and superstitions of the best known tribes. I have no doubt however that we already know much of these by anticipation, in our closer, though still very imperfect, knowledge of the Oceanic tribes.* That I may avoid all risk of misconstruction in what follows, I must add, in anticipation of my conclusions, that African elements are strong and abundant in India and the countries between it and China. They have been much affected by Brahmanic and Budhistic influence, the latter itself perhaps Africo-Indian of a later time; but in many of the less altered and ruder Indian tribes everywhere, and amongst the civilised tribes of S. India and S. Asia, there is a great

* This wide extension of almost every ethnic trait gives a high value to the most minute accounts of tribes in any part of the Indian Oceanic region, whose confidence an observer has acquired. Every fact that he can establish becomes useful in directing observation and enquiry amongst other tribes in all parts of the region.

substratum of an earlier development, which is entirely African in its spirit, and in many of its characteristics. But much of the ruder and purer African, preserved in the more isolated parts of the Eastern Archipelagoes, is clearly distinguishable from the Indo-African entering into the later civilisation of India and the Indo-Anamese countries, and thence transmitted to the islands, if not in part also derived from Western visitors. We can establish, 1st, an early archaic African character which was common to Asia, Africa and, in a considerable degree, to America, and which was evidently transmitted from the first to the two last; 2nd, a later archaic African character, with strong Syro-Egyptian traits, directly received from the shores of Eastern Africa and Arabia, and diffused over India, Transindia and Asianesia, but not reaching to China, Tibet or eastern Mid-Asia.* This last contained Egyptian elements, because the tribes of the eastern shores of Africa were subject to the ethnic influence of the Nile basin behind them, and the more northern were in constant contact with it by the ancient commercial routes. Although this Semitico-African influence is entirely archaic as respects India, Transindia and Asianesia, it may, and probably does, extend itself into the earlier ages of the historical era of Egypt. The ruder Indian and Papuanesian tribes represent the ruder African, or a low state of African development characteristic of small and scattered tribes unacquainted with agriculture and not collected in towns, large villages or camps, and which we may believe to have prevailed over the greater part not only of Africa, but of all the south-west and southern Asiatic basins at an early era. It was probably first diffused to the eastward by the ichthyophagi of the coasts of East Africa and Arabia, while civilisation was gradually growing in the basin of the Nile. The pre-Iranian Indian culture and that of Ultraindia and Asianesia represent the more advanced African, or that of large communities in which many of the ruder traits remain, but blended with others springing from a higher intelligence and art. The great antiquity of Egyptian culture forbids any decided chronological separation of the two developments, because the ruder dwellers on the coast would soon, in a slight degree, reflect such of the customs and religious notions of the interior as were adapted to their intellects and mode of life. In India these African traits became early mixed with the dawning Iranianism of the more civilised Dravirian nations, as well as with Tibetan elements in the N. E. As I refer the ruder African or Africo-Indian chiefly to the earliest stage of the navigation of the Indian Ocean, that of fishing canoes, I refer the more cultured to successive eras of commercial navigation when African, early Arabian and, subsequently improved,, Himyaritic, Phœnician, Indian and Mayama boats gradually connected all the shores of the Indian Ocean by a coasting trade, of

* But Japan, Mexico, Peru &c., appear to have felt it.

influences continued to flow in contemporaneously, as happens now with every foreign race that frequents the Archipelago. Seamen of the lower classes would sometimes remain, and smaller and ruder societies would be separated, in many parts of the Archipelago, from the more powerful and numerous ones, which better preserved and retained somewhat of the higher social organism and customs of the Western parent states, and continued to receive accessions of numbers and influence from them, either directly or through India and Ultra-India. Every trading company or vessel must have included members of a lower or servile class.

Physical Facts. While most of the Oceanic spiral haired tribes are distinguished, by their general physical character, from the adjacent races of E. Asia, they have most decided resemblances to the E. African races. In every considerable group of African tribes several varieties may be observed. This remark, which is true of the Continent, applies also to Madagascar. In the Asianesian groups a large range of variations is also seen. This is exhibited in the Philippines, as well as in the more eastern groups. In Africa there are exceptions of a peculiar kind to the distinguishing character of the hair. In some of the Fulah tribes it passes from slightly curled to straight, and becomes soft and silky. If the Australians be admitted to have an affinity to the Asianesian family of negroes, the same exception appears in it also.* Most of the other African varieties have also their representatives in Asianesia. Thus Prichard gives a portrait of a Mozambique negro which is a very correct representation of one variety of the eastern negro found in the island of Ende or Floris. The remarkably indented appearance or sinking in at the junction of which different parts were ultimately appropriated or shared by different races. It is also probable that both the ruder and higher

* The physical affinities and those in language and customs between the Australian and other Indo-African tribes of Asianesia are strong and decided. They have also been considerably influenced by the Tibeto-Anam races, although this is exhibited by some tribes more than by others. But placing their physical characteristics, and the peculiarly Tartarian character of their language together, I would have little difficulty in concluding that they more nearly associate themselves with a very ancient and rude Indian development than directly with an African one. But the former must have been closely related to African, linguistically and in other respects, and probably belonged primarily to the era when Africa, S. W. Asia and India formed one ethnic region, and when the position of the particles was only beginning to lose its indeterminate character. At this era the whole linguistic development may be well characterised as a crude Indo-African. The Australian shews more decided evidences of having passed through, not a Tamulian medium, but an earlier, and perhaps more western, one, to which the Tamil was also akin, than the other Asianesian languages. The local position of the Australian race affords a presumption that they preceded the Papua tribes. They were probably derived immediately from India or through Transindia, while it seems more probable that, although many of the Papuan tribes had a similar origin, the most important and influential came directly from Africa. The Australian agglomeration of successive words of relation after the action word &c is entirely analogous to the African, Madagascar, Formosan and Philippine pre-agglomeration. The relations of the Australian to the Tamulian exclusively are few, and the latter is far more advanced than the former.

the nose and forehead observable in many of the Papuas,* is also a characteristic of some of the S. Indian and E. African people. Some of the African tribes have a Semitic cast of countenance, and there are varieties of the southern Indian and Papuan families which present the same aspect. But the grand resemblance is that which appears in the more generally prevailing characteristics of both families,—such as the spiral hair; the oval and sometimes elongated form of the face; the moderate thickness of the lips which in some varieties even become thin; the general absence of the prognathous form, which is so marked a peculiarity of some of the African and Asiatic negroes, and of the obliquity of the ocular opening and smallness of the eye which distinguish many of the E. Asian races; the nose, full and somewhat flat but sometimes slightly aquiline, and, in general standing out from the face much more than in the S. E. Asian races; the anterior

A type intermediate between the African and the Tibeto-Anam is common where the Papuas are mixed with the Indonesians of the Tibeto-Anam type. Amongst the Papua heads in Muller's *Bijdragen tot de Kennis van Nieuw-Guinea* all those in Pl. 6; Nos. 5 and 6 of Pl. 8, and, in a less degree, those in Pl. 7, have a most decided S. Indian character. Nos. 2 and 5 of Pl. 6 have such a striking resemblance to two Tamil men whom I have frequently seen in Singapore, that they might be taken as tolerably good portraits of them. As the Tamil physiognomy varies greatly, from a kind of Semitic-African and Iranian compound to decided Indo-European, and does not appear to be understood by ethnologists in Europe, I shall hereafter describe its prevailing varieties. Meantime the following notes made from an attentive observation of an assemblage of 40 or 50 individuals of the lower classes may be interesting. *Nose* generally pyramidal, i. e. narrow and low at root, running in a straight line into, or below, the forehead so as to form an angle with it, instead of having an arch and an elevated spine rising to meet it in a curve; the base broad, from the alae being more thrown out or making a more obtuse angle with the septum than in the Iranian, but high—the tip consequently angular. When viewed from the side the resemblance to the Papuan nose is very remarkable; the frontal and nasal profile lines, particularly the latter, are in general straight, and the latter makes a decided angle with the former and sometimes runs in below it so as to form the Papuan indentation, although it is rarely so deep. A peculiar small curved nose, resembling the ancient Egyptian, is sometimes seen. The horizontal curve formed by the lower orbital ridge and the spine of the nose is decidedly different, as the latter runs into the former instead of appearing to rise from it. The alae are more expanded and thrown up (as in Jukes Torres Strait portraits II p. 236) than in the Indo-European, and the nares rounder and more open and visible. This prominence of the nostrils much affects the character of the face as compared with the Indo-European. [The open nostrils which so frequently give a peculiar and, in European eyes, singularly distasteful character to the E. Asian face, are much rounder than the Tamil or Melanesian, and often accompanied by a want of any point, the extremity appearing as if it had been shorn off in a slanting direction and then pressed down, so as to give the nares a round instead of an elongated shape, and to throw out the alae till they appear more as lateral appendages than as a part of the nose. The openness of the Tamil-Melanesian is lateral not anterior, being chiefly caused by the point descending below the level of the curved alae and exposing the lateral or inner margins of the septum.] The *lips* are generally thicker and with a more animal character than the European; some are a little and others a good deal African but the upper jaw is not anteriorly projecting. The general character seems to be E. African. The beard is strong and ample; a feature which greatly distinguishes the Tamil from the Mongol and allied S. E. Asian and Asiatic tribes. *Eyebrows* generally straight and hairy. *Eyes* large and horizontal. *Forehead* well developed and between roundish and flatish but more inclined to the latter. The nearest faces to the finer of the ancient Egyptian that I have ever seen, have been amongst the more delicately formed Tamils.

projection of the cheek bones; and, on the whole, a general cast of countenance decidedly retiring from that of the Guinea negro on the one side, and the Mongol on the other, and which would perhaps be best described physiologically as Indo-African.* It is intermediate between the S. Indian and the negro type, and if the spiral hair were generally absent, as it is in some tribes, it would approach the former much more nearly than the latter. The Indian character of many of the E. African races and some of the middle and westerly ones, such as the Fulahs, Ashantees, Mandingos, and Yarribas, has been frequently remarked, and the same character is seen in many of the varieties of the Papuas of New Guinea and Torres Strait. Even the ample Indo-Semitic beard, never found in the S. E. Asiatics, appears amongst the Australians, the negroes of Tanna, Mallicolla, Rotuma, and, less noticeably, amongst some of the western Papuas. Several of the Madagascar tribes have the spiral hair and other characteristics of this physical type, and the decided resemblance between them and varieties of Papuas found from New Guinea to New Ireland, has been strongly insisted on by Lesson, who examined both. There are probably few varieties of the East African types, from those of the Danakil on the Red Sea to those of the Kafir and Kongo tribes in the south, to which near approximations might not be found in the Eastern islands. On the other hand, it must be remembered that amongst the Papua tribes there are varieties leaning to the S. E. Asian type, while preserving some decided African characteristics. Although belonging more to the mental part of the subject, I must add here that the great difference between the generally direct, and often rapid and demonstrative, Indo-African temperament of the Papuas, and the slow, reticent, phlegmatic Tibeto-Siamese temperament of the later Indonesian, is strongly marked in the expression of the face in most of the Papuanesians, and indeed is often even more striking than the difference in features. Even the more lively eastern continental tribes, such as the Anamese, want the Gallic demonstrativeness and the abrupt and independent air of the Papuas, and in this respect rather resemble the Tibeto-Indians, Polynesians and Micronesians.†

Customs &c. A common barbarity in habits, and even a similarity in some specific ones, does not prove a connection or identity

* Of these traits, the peculiar pyramidal nose connects the Australians, Papuans and Tamulians in a very striking manner. For the Papuans see Muller's plates. A New Guinea Papua may be occasionally seen in the streets of Singapore at present, who is a good illustration of this peculiarity.

† This subject will engage our attention soon. The African tribes, upon the whole appear to me to be essentially much more Iranian in their temperament and character than the Chinese, Americans and other tribes of the eastern Asian family are. The Tamils again, who are connected by their language with the most linguistically advanced Tartarian tribes and verge close y on the Iranian, have the same temperament, with far more of the European intellectual development. They so closely ally themselves in this respect with the earliest Indo-European races, that the ruder Celtic can hardly have differed from the ruder Tamil. The modern Celts, and those nations in which the Celtic blood prevails, retain the same essential ideosyncrasy, under all the improvements and refinements of western civilisation.

between two rude nations; but when a striking agreement is found in many customs, some of which are of a remarkable character, it is difficult to believe that they can have originated spontaneously in both. Resemblance in one trait is not evidence by itself, but a strong combination of identical traits not found in other races is conclusive. Having established a connection by these, other traits which we had at first put aside, as common to the families under investigation with some others, must be thrown in to complete the mass of proof, for it is the effect of cumulative comparisons to give a value to facts which separately have none. Some peculiar customs which are found in many countries on all sides of the Great Ocean,—African, Asiatic and American,—as well as in its central islands, will again enter into our ultimate view of the Oceanic ethnology as a whole, when we may be able to ascertain, from whence, in each particular instance of their occurrence in Asianesia, they were immediately imported, and whether they first originated in Asia or Africa. The African affinities are clearly separable into two classes, one of a ruder kind confined to the Melanesians, and one partly including these tribes but in general distinctive of the Indo-Tibetan, some of the Indian,* the Tibeto-Anam, and the lank haired Asianesians.

The scanty clothing of *chanats*, leaf aprons &c, common to the ruder African and Oceanic tribes with many other races, must be disregarded, and our comparison, instead of embracing the external covering, be mainly restricted to customs that affect the person itself.† We may notice however the agreement between many African and Asianesian races in the general style of the war dresses, the wearing of tufts and bunches of hair at the knees, the adorning shields with tufts of the hair of slain enemies, the thick polished armlets of shell or ivory, the necklaces of teeth and bones as charms &c.

The different Papua modes of dressing the spiral hair are all practised in Africa, where some tribes make it stand out like a distaff, supporting it with wooden pins, while others plait it into slender ringlets. The dressing and arranging of these plaited locks is a laborious and important operation amongst the Malgasis and many African nations, as amongst the Fijians and other Asianesian tribes who have the same custom. With some the hair is shaven, save a knot at the top, and some make it into wigs. The Soumali and other tribes stain the hair or decolorize it with lime. Many tribes smear the body with grease, and daub or streak it with red ochre and pigments of other colours. All these are Melanesian customs. The teeth are filed into a conical form, while others notch them, and it deserves remark that of the two modes of filing the teeth prevailing in Asianesia, the horizontal and the serrated, the latter

* In pre-Iranian times including all the Indian, and still strongly blended with Hinduism which the Africanism of India has corrupted and barbarised.

† But compare the lappets of the Dihong Abors and Dayaks with those worn by some Kafir tribes.

or African is the one practised by the Papuas. The former or Burmah-Tonkin custom, which is generally adopted by the Tibeto-Anam tribes of Asianesia, appears however to have prevailed in ancient Egypt and the Canary islands, as it does still in some American and Esquimaux tribes. An equally curious fashion, that of boring the septum of the nose and wearing a piece of wood, bone, &c., in it, is African, Papuan and Australian. Circumcision prevails amongst most of the African tribes. Some African, like some Australian tribes knock out two of the front teeth. The African practice of making long gashes in the skin, and raising the flesh in cicatrices, is Australian and Papuan also. Tattooing, and the custom of each tribe having a different pattern, or a distinguishing mark, prevail in both regions. Large perforations of the ear are African as well as Old Indian, Transindian and Asianesian. Among other customs found in Africa and in some of the eastern islands, are many of those connected with the most ancient shaman and fetish religions, and with a rude form of Sabaism, a belief in sorcery, metempsychosis, putting sorcerers to death when they will not give rain, the pretended extraction of diseases from the body of the patient, in the shape of animals, bits of bone, wood, &c., animal worship, the selection of tutelary or sacred animals by different tribes, the peculiar sanctity of the crocodile, the annual sacrifice of a youth or virgin to it, purging villages of evil spirits, the custom of human sacrifices generally, different forms of cannibalism, eating portions of slain enemies and of deceased relatives, preserving the heads of enemies, drinking warm blood and eating raw flesh, tearing the heart or kidneys out of animals and devouring them, omniverous and uncleanly habits;* infanticide, the destroying of old and diseased persons; † many incidents of the system of interdictions or *tabu*, *tabu* of the domestic fowl, food forbidden to particular classes, uncleanness, purifications, removal of prohibitions, the character of the dances in Australia, Van Diemen's Land, &c., and amongst many of the African tribes, lunar dances; abandonment of the house and sometimes the village in which a death has taken place, doubling up the body with the head resting on the knees and burying them in circular graves or in jars, † smoking corpses to preserve them, keeping them in

* This distinguishes all the races of the Oceanic basin which have not been purified by Brahmanic and Semitic religions.

† Compare the voluntary Fiji practice with that of the Tschuktschi in N. E. Asia.

† Some tribes place it in stone and earthenware jars (Celebes, New Guinea, Japan) and others, who have no jars, in circular graves, (Australia.) Strong traces of this and numerous other Africo-Asianesian customs are found in S. India. The exceedingly valuable translations of the Mackenzie M. S. S. by the Rev. W. Taylor, which have appeared in the Madras Journal of Literature and Science, contain many notices illustrative of the ethnology of this region, and amongst them are the following: "Anciently men wearing *tufted* hair, Curumbars and various others, of the Jaina credence, dwelt in this town. They were the aboriginal residents."

"Anciently in this town, they did not keep the very old people (in the houses) until death; but seeing the time approach, they put them in very strong-made

caves, keeping the bones of the dead in the house and carrying them about for a time, the preservation of the skulls of ancestors, slaughtering horned animals and placing the horns on poles or trees around the grave; ordeals, oaths and engagements by drinking blood; conical and hemispherical huts; boomerangs, poisoned arrows, the shape of shields, spears, &c., earthen-ware manufacture, the peculiar style and ornament of carved wooden articles, clubs, spoons, images, or fetishes of animals, gods, &c., the style of plaiting caps, baskets, &c., procuring fire by working a piece of stick in a cavity made in another piece, tubular bellows worked by a piston, the resemblance between the peculiar cylindrical beads worn by the ancient Guanches of the Canaries and those worn by the Timoreans;* many social usages, such as those connected with the sexes, ceremonies attending circumcision or the initiation of youths to test their courage &c., and promote great endurance of bodily pain, peculiar secret societies &c. &c.

The consideration of the place which Madagascar occupies amongst the Africo-Indian connections of Asianesia is so important in itself and so much dependent on linguistic evidence, that I would have reserved it altogether, if the prevalent opinions respecting its nature had not been so decidedly opposed to my conclusions. I will limit myself to a few remarks, as I shall return to the subject as soon as enquiries which I am prosecuting into the Malgasi languages, with the aid of some natives of the island, are completed. I may state, in the first place, that the connection in language and customs between Africa and Asianesia can be established independently of Madagascar. If this connection originated in the passage of Africans to Asianesia, a probability immediately arises that the connection with Madagascar was caused by the transfer of Malgasis to Asianesia, either directly or by the intermediate shores and islands of the Indian Ocean. The belief that the language of Madagascar has been derived from Asianesia, originated in the supposition that the winds of the Indian Ocean would prevent the transport of boats from the former to the latter, and this remaining as an axiom in Malgasi ethnography, the subsequent discovery of the intimate ideologic alliance of its languages, with those of Asianesia, led to the rejection of the idea that occasional tempest driven boats from the Archipelago had given rise to the verbal connection, and the adoption of the hypothesis that a colony or tribe of Indonesians, called Hovas, settled in Madagascar, acquired earthen jars, together with food suitable for them. Such was the practice in this Paduúr. They would die off, some little time after being placed there. Such kind of earthen jars are termed Matamaccachal.† Though these were placed in early days, yet even now many such chals (pans or buckets) are to be seen. Human bones, and drinking vessels which had been placed therein, have been taken out, and buried."

† "Which, I apprehend, must be rendered--'heretic dog kennel.' [Is Matama not a name for Mautama or Martaban Jars? see note, post L.]

* Is this kind of necklace an imitation, on the art of making earthen-ware being discovered, of the earlier one framed of pieces of reed strung together, which is preserved by the ruder Australians?

dominion over the native tribes, and imposed their language upon them.* There are so many obvious and conclusive objections to this theory that it is difficult to find a single argument in its support. I will note a few of the positions which I will establish in a future paper. The northern portion of Madagascar is within the limit of the monsoons, and the southern is close on, and connected by a N. E. wind with, that of the westerly winds that prevail to the south of the Trade Wind. The zone of the latter is not invariably and exclusively possessed by it as was formerly believed. The notion of the impossibility of Madagascar prows being blown eastward has a similar foundation to that, now exploded, of the impossibility of Indonesian prows reaching Polynesia. Every point on Madagascar and the east coast of Africa generally, is subtended by an eastern line of land, partly insular and partly continental, stretching 70° from the Indus to Van Dieman's Land and New Zealand. Any African or Madagascar boats that were carried across the Indian Ocean would be certain to touch land at some point along or within this line. Negroes are still found along 60° of it, or from the Andamans to Van Dieman's Land and even to New Zealand,—that is, the negro range is greater on the Asian side than it is on the African side of the Indian Ocean. The sea board natives of Madagascar, like those of East Africa generally, are bold sailors and manage their boats as expertly as the Polynesians. The Sakalavas were in the habit of making piratical voyages in fleets to the Comoros and the coast of Africa. Before the Arabs became a maritime power, the native coasting navigation and trade of Eastern Africa and Madagascar must have been great in proportion to its freedom, and the insular Malgasis probably took a prominent part in it. It is probable or certain that Indonesian as well as Indian boats have from time to time been driven on the coast of East Madagascar (as on that of Africa), but their crews could not have introduced their languages, unless the island had been without native tribes. But it is notorious that the Hovas are only one of a number of tribes occupying different parts of a mountainous region considerably larger than Sumatra. The obvious African character of the other tribes has obliged the supporters of the hypothesis in question to admit that they are either aborigines, or were in possession of the island before the Indonesian colony came. The Hovas were a small tribe of little comparative importance until they were forced by the superior power and numbers of their enemies to take refuge in the sterile, elevated, and difficultly accessible table land of the interior. Although necessity and probably the colder climate here excited their energy, they were always a secondary power to the Sakalavas, until the time of Radama, and since the death of that extraordinary man the Sakalavas have gradually been recovering their independence and ancient predominance. It is

* Humboldt's *Kawi Sprache* and Prichard's *Researches*.

quite possible that a successive influx of Indonesians may have had some effect in modifying the physical character of the Hovas, but if there has been such an influence, it has not been confined to the Hovas, for other tribes also exhibit gradations from a negro to a non-negro character. A few Asianesian words may also have been introduced in the same way, as Mr Crawford believes. But the languages are undoubtedly native, and genuine members of the African family, like the tribes who speak them, and I have not yet met with any facts requiring us to recognise an Indonesian influence. The hypothesis that a colony from the eastward, by some magical process, induced several distinct tribes of natives, occupying different parts of the land, to agree to lay down their own languages and adopt a new one, and conferred on them the miraculous power of doing so, is attended with still another linguistic difficulty. If the Hovas were Javanese, as Mr Ellis and Dr Prichard believed, they would have introduced a Javanese language, but we learn from Mr Crawford that in 8,000 Malgasi words he could only find 15 exclusively Javanese and 73 common to Malay and Javanese. The ideologic and glossarial analogies however are not confined to Java and Sumatra. The former are much more strong to the Formosan, Philippine and Celebesian languages, and, to present all the Asianesian traits of both kinds, we have to go to Polynesia. The colony therefore must have traversed a large part of Asia to construct a language for Madagascar, and must, after all, have laid aside the great mass of its own vocables and invented new ones. The better specimens of the Hovas lean much more to the finer Africo-Iranian physical character of some of the African races, than to the Tibeto-Anam character of the lank haired Indonesians. The portrait of a Hova in Dr Prichard's *Natural History of Man*, which, I am assured by gentlemen who have often visited Madagascar, is characteristic, has very little of the Indonesian character, as Dr Prichard himself remarks. There does not indeed appear to be any greater variety in features and colour amongst the inhabitants of Madagascar than is observable in most regions of Africa containing several tribes, of whom some are in low and others in elevated districts. If there be an occasional Mongol type which has led to the idea of a Malayan origin, we need only recollect the Hottentots to be satisfied that the great South African family, with which the Madagascar tribes are undoubtedly allied, presents extremes both on the Mongol and the Semitic and Indo-European sides, more than sufficient to embrace all the varieties of the Malgasi. The Hovas, Ovas or Ankovas are entirely African in their manners, customs, religion, government, arts, &c., and their very name is African. It is a generic word signifying people or men, a mode of designating races found in all parts of the Oceanic region. In S. W. Africa there are *Ova Tjaona*, *Ovaherero*, *Orampo*, &c. The Hovas are indistinguishable, in the whole character of their civilisa-

tion, from the civilised races of southern Africa. There is another Madagascar tribe which we can refer in the same way to the opposite portion of the continent. The extinct race of Vazimbasy who appear to have occupied Ankova before the Hovas, and whose tombs (called Vazimbasy) are held sacred by them, are identified by their name with the tribes of the Zambesi basin, one of which is still called Zimba or Mazimba.* It seems probable that there has been a successive influx of settlers from the opposite continental basins, some belonging to different tribes, but all speaking dialects of the same language or closely allied languages. These migrations must have taken place before the Arabs were a maritime people, or at least before they settled on the east coast of Africa. The Malgasi languages of themselves prove that their separation from the continental stock took place in archaic times, and indeed the island must have been inhabited within a few hundred years after there were canoes on the Zambesi and the other rivers on the opposite coast. As the Nile basin was inhabited long anterior to 6,000 years ago, it is probable that the human history of Madagascar numbers many thousands of years.

I believe that the Malgasi tribes are essentially African in all respects; that their languages are African in phonology and structure; that they have considerable glossarial affinities to many of the continental tongues; that their vocabularies do not differ more from African languages than these do from each other; that they have been amongst the chief African sources of the Africo-Indian

* The word *zimba* or *zamba* (*sam, zang, tham, jam*) combined with the prefixes *ma* (*v. mo, mu*) and *ka, kwe, kwi*, and with some postfixes, gives a name to Mozambique, the rivers Zambesi, Mozimba, and several other places, rivers and tribes of the African land opposite Madagascar, such as Zimbaze, Masanzani, Mozamba, Muzimbaze, Kazembe, Mazaramba, Kwerimba, Kwizimajugo, Zanggibar or Zanzibar, Mombaz, Majombo (in Kongo) Moviza, Mizimbazy &c. It is also found as the name of one of the great Kafir tribes to the southward, the Tambukasy, properly Mathimba, which is identical with the *Va* or *Mazimba* of Madagascar. This local name with several other widely spread African ones, such as *Dongo, Dongolo, Merawe, Galla, Tambuki* &c are found in the Indian Archipelago, where the African and Malgasi local, ethnic, substantival and adjectival prefixes are also common, *ma, n, mano, mono, an* &c. Compare the African and Madagascar *Androi, Antewa, Anasy, Ankova, Ankuala* &c with the Asianesian *Ankola, Antrona, Angasa, Anan*; the African and Malgasi *Mahalasely, Mahafaly, Mahavelona, Makua, Makaronga, Maravi, Ambongo, Ampitaha, Amazula, Amahosah, Amathumba* or *Mathimba, Masina, Monomatapa, Malakorum, Monomwezi, Malgasi, Mananghare, Mananzari* &c with the Asianesian *Ambei, Ambenu, Amunubang, Amabi, Amarasi, Ambatiki, Ambau, Matuku, Mokunya, Mathuata, Madonovi, Madomalina, Manado, Manawa, Mavai, Manatur, Manjere, Mintira, koka, Manubrit, Monesani, Manuwif, Mangarai, Mangareva, Mangkasar, Min Manangkabau, Malaka, Maluka, Malaki, Mal'olo, Amahag, Amahusu, Amalessi, Amblau, Ambin (Amboina) Ama'olo, Amakua*, (S. E. Indonesia) *Makua* (Polynesia) *Makapua, Makahola, Makanobal, Makariki*, &c. &c. The name of the Negro tribes of Luzon *Aita, Ita* (black) appears to enter into the Greek *Aitiopia* which was a descriptive and not a merely ethnic word.

A gentleman who has just arrived from Comoro has lent me a work by M. La Combe on Madagascar, in an introduction to which by M. Froberville the Vazimbasy are identified with the continental race. I have also received much information respecting Madagascar, which will enable me to enter fully into the subject of its relations to Africa, India, Arabia and Asia.

languages of Asianesia, but certainly not the sole ones, because the latter have African words which are either not found in Madagascar, or are found on the continent in forms closer to the Asianesian. The whole western margin of the Indian Oceanic basin, from the Red Sea to Kafirland, gave words and customs to the eastern islands, but the gifts from Madagascar have been amongst the greatest, as might have been anticipated from its position.*

Evidences of an Africo-Semitic† influence belonging to a more developed or artificial culture than the ruder African of the Papuan islands, are preserved in India, the Tibeto-Lau region and the eastern islands. Such are inheritance by sister's sons,‡ the marriage of sisters by kings or chiefs,§ a purer or more intellectual Sabaism, —a great advance on fetichism, and which in the pre-Iranian epoch of Indian civilisation connects itself with Egypt and East African ports, Aden and the Himyaritic race, and not with Iran, although the latter in its turn was connected with the former. The sun and moon were the chief gods in the S. E. part of the Archipelago.

Many African customs are American also, such as tatooning, the tribe marks, mode of burying the dead, the tabu on women for long periods after child-birth, disregard of female chastity before marriage, interdictions to which women are subject

* The first broad inference of a direct connection admits of no doubt. But the facts belonging to remoter and indirect connections, which must be separated, are numerous and give much complexity to the enquiry. Before the whole truth of the relation of the African to the Oceanic languages can be ascertained, we must know the relation of the African to the Semitic, Turanian and Iranian languages. Africa at an early time, has evidently received much from the East. She has given back words to India before the rise of Iranianism there, but she has also received returns from India subsequently. I apprehend also that the connection between the African and Malgasi coast began at so remote a period that the languages spoken in Madagascar have undergone great changes since, both internal and from later Egyptian and other African, Phœnician, Himyaritic, Arab, Euphratan and Indian influences. But all the radical affinities, phonetic, glossarial and ideologic, to the present W. Asiatic languages, belong to the older archaic and to the primordial eras, before these languages arose from successive developments having pervaded S. W. Asia and thence spread S. E. to India and S.W. to Africa. Amidst these complex currents and counter currents of language, our chief glossarial guide is the different phonetic forms which a word assumes in its passage, in time and place, from one linguistic family to another, from a development like that of the Chinese to one like that of Sanskrit.

† The earlier Arabian customs were very African in their character, and it is probable, from many considerations, that the primitive population between the Nile and the Euphrates was closely allied to the Nilitic. The Syrian race connects itself more closely with the Himyaritic or Saban than with the Arabs of the Hejaz, and the Berber on the north and the languages of the higher basin of the Nile on the south, extend the connection to Africa. The Arabian histories and genealogies derive all the present Arab people from northern families, and preserve traditions of ancient tribes who occupied Arabia before the former displaced them. In some parts of Arabia the hair approaches to a woolly character.

‡ African (Morocco, Fez, Madagascar &c.); Himyaritic (Saba); Indian (Kasia, Malabar); Asianesian (Menangkabau, Amboina, &c.). In Banabe (Micronesia) noble women marry common men and their children rise to the chieftom, which the sons of chiefs never do. Compare this with the Nair custom.

§ Egypt, Madagascar, Siam, Molukas, Polynesia, Peru.

in food &c., avoidance by men of mother-in-law or of other female relatives, initiatory ceremonies, boomerang, tabus on articles of food on death of chief, interdictions of words entering into name of chief and consequent use of new words, fetiches, shamans, human sacrifices, cannibalism, tutelary animals and plants of tribes &c. But the Asianesian traits of all kinds bring its tribes much nearer to Africa than to America or N. E. Asia, apart from the decisive evidence of language.

I have only noticed some of the more striking of the traits common to the eastern islands and Africa. To enter into the subject fully would require a volume. We cannot take up a work on Africa without finding an abundance of Asianesian characteristics. Every notice which we have recently received of the interior of the great terra incognita of South Africa reveals new ones, and furnishes additional proof that Madagascar is ethnically an integral portion of Africa in every respect, and that both have the most extensive connection with the Asiatic islands.* To obtain a comprehensive notion of the nature of the eastern connection of Africa, let the reader turn to a map and view the Indian Ocean as a single ethnic basin, having its eastern side extending from the Indus to Van Dieman's Land, and its western formed by the whole east coast of Africa. In the middle are Arabia and Persia entering into the great Asiatic ethnic region, and the latter constituting, from the remotest times, an integral portion of the middle table land, and lifted by its position and physical geography, out of the Oceanic basin. The whole western side of the basin is occupied by tribes having a well-marked character in every respect, and who have generally attained a considerable material civilisation, although their intellectual culture has always remained comparatively low. If we now turn to the eastern side and view it as a whole, we find that there is hardly a single trait in its archaic language, physical and mental character, religion, arts, institutions and customs, that is not reflected by it from the western side. We do not find that considerable approximation to uniformity of culture which prevails in Africa, and we find abundant new elements pointing to a different connection, but we find sufficient explanation of this in the respective position and characters of the two regions. Africa has, in a great measure, though by no means wholly, been left to an indigenous development,† her physical geography having repelled instead of inviting foreign conquest, which has generally exhausted itself on her northern or Mediterranean basins. The eastern region, on the contrary,

† See for instance Mr Holbe's sketch of the Damara country.

* This has resulted from her quasi-insular position, but isolation is impossible. When we consider that Semitic-Egyptian ideas pervaded all Africa, that Phœnicia largely affected the northern tribes, that Himyaritic and Arabic influences have largely pervaded even the central and western tribes, we cannot doubt that every race that, in more archaic times, occupied Arabia and the adjacent lands, influenced African ethnology.

stretching along the S. E. boundary of the Asiatic table land, has slowly been reached by its eastern and western races, successive masses of whom have been pressed and attracted into it, and thus introduced Iranian and S. E. Asian population and culture to supplant or blend with the ancient Africo-Indian. That Africa and the Africo-Asian ethnic region which preceded the Iranian and Semitic developments, and not Asianesia, have been the chief founts of the Indo-African physical and linguistic type, in other words that this ethnic movement was from west to east, or the reverse of the great continental one which peopled Africa itself, is capable of abundant proof.*

CONNECTION BETWEEN ASIANESIA AND THE INDO-TIBETAN AND TIBETO-ANAM LANDS.

Physical. The two principal forms of the S. E. Asian head, the angular (square, lozenge, or oblong) and the ovoid, both well distinguished from the Africo-Indian shape of the pure Papuan, the different shades of brown, yellowish, and brownish yellow, which prevail to the westward of China, and the coarse lanky hair which characterises the E. Asian races, are all repeated in the purer Malayu-Polynesian tribes. The remarkable ovoid forms characteristic of the Anamese and many of the insular tribes, and the more delicate varieties approaching to oval, are identical with those so often found amongst the Indo-Tibetan tribes. The quasi Iranian character of some of the Asianesian races appears to connect itself with a western influence exerted on the ethnology of the

* When the interior of S. W. Africa is explored, and its languages examined, we may expect that great light will be thrown on the ethnology of Madagascar and the Eastern Archipelagoes. One of the populous and more civilised nations existing there, and known to the tribes with which we are in contact, climb into their houses, so that their construction is probably similar to those of the Hovas. It is becoming very probable that the basin of the Nile is really the connecting chain of the civilisation of the whole of E. Africa. Even if its head is not so far to the southward as the great lake of Nyassi, which Dr Beke has shewn strong grounds for believing, it must approach so near to it as to connect its nations with those around and near the lake. These again are closely connected with all the southern tribes. The result is that the great and elevated basin of the Nile, and the lake basins to the southward, have been the seat of a continuous chain of nations which have attained to a considerable degree of civilisation. The history of the Egyptians carries back the local existence of these tribes to a remote age, for their languages alone prove that they were not colonies from Egypt in its highly developed historical period. The passes and rivers leading from the watershed to the Eastern sea board must have given these nations the possession of this coast before Aden arose. The greater rivers must have contained considerable tribes, using boats like all other river tribes. From many of those in the great extent of coast facing Madagascar, families from time to time must have crossed to that island, and ultimately an intercourse was probably kept up. When Europeans first discovered the E. African coast, they found the Arabs in possession of all the principal rivers and places and monopolizing the trade and navigation, but they also found the natives largely employed by them as seamen. What the influence of dominant and monopolizing foreigners is upon races like the African, may be seen from the examples of those rivers which had not been previously occupied by the Arabs when the Portuguese arrived. The greater part of the population have since been compelled to abandon their old pursuits and locations and retire into the interior, while those who remained have greatly degenerated.

Gangetic basin before the era of the Iranian movement to the eastward. The harshly angular or predominating form of the Mongolian head is not the most prevalent Indonesian. It is chiefly found amongst the western Malays. To the S.E. the finer ovoid, verging often on the oval, predominates.

Customs &c. The native tribes spread over the tract between the Tsangpo and the China sea, including the Ganges-Brahmaputra basin and portions of the basins of the Dekhan, preserve several stages of civilisation, and each of these is strongly connected, and in most respects identical, with different stages existing in Asianesia. Before the higher Gangetic and Transindian civilisations arose, tribes having similar habits and customs, and close affinities, physical and linguistic, appear to have occupied the whole or the greater part of the Ganges-Brahmaputra basin and Ultraindia. Although they retain every where distinctive traits, they have in many places, and particularly in the eastern part of the Indian Archipelago, been long in contact with the African tribes, or been subjected to African influences. The African elements have gradually been softened, and many of them expelled, in the principal races of the western part of the Archipelago, by the continued influx of Tibeto-Anam influences in later epochs, when the latter were themselves considerably changed by a higher civilisation. In Polynesia the Indo-African element remains strong, not only because the company or companies, that gave it a Tibeto-Anam population, were carried eastward and isolated before later civilisations reached Indonesia, but because the Tibeto-Anam races themselves, throughout their Indian and Transindian locations, were, at that early era, still deeply imbued with the old barbaric development. The culture of the land lying between India and China, before the later civilisations of either of these regions penetrated into it, was partly indigenous and partly Indo-African. The large presence of the African element in the pre-Iranian and proto-Iranian Indian, renders it difficult to refer many insular traits to their true source. But several are well marked and peculiar, and the character of the whole is unmistakable. As I cannot convey an accurate idea of the Tibeto-Anam developments in Asianesia without first giving a review of the ethnology of Transindia, and indicating the different stages of culture in it and in India with which the successive post-Indo-African cultures are associated, I will only mention generally the kind and variety of the facts by which the Tibeto-Anam origin of these cultures will be established. Mere catalogues of ethnic facts are not sufficient, because almost any two nations in the world might furnish a more or less ample one of resemblances and identities. Races must be compared through the entirety of their ethnic characteristics, and through the impressions left upon the mind by the largest and most intimate knowledge that we can obtain of them. I will therefore add that whoever first makes

himself tolerably well acquainted with the various classes of lank haired inland Asianesian tribes, that have been least affected by Hindus and Mahomedans, with their characters, physiognomies, habits, modes of life, arts, religions, &c., and will then proceed to the ethnology of the simpler Transindian and Tibeto-Indian tribes, rejecting all Budhistic elements, will hardly perceive a transition. Not less strong is the connection between the later Indonesian civilisations, maritime and agricultural, and the later civilisations of Transindia.

Of characteristic traits each embracing a greater or less number of tribes in both the continental and insular regions, we have only room to allude to a few, in a very brief and general manner. Such are many specific superstitions relating to natural objects and powers, polytheistic religions, the attributes, doings and histories of the gods, worship of ancestors, diseases, ghosts, shamanism, sorcery, ordeals, omens, spells, charms, evil eye, evil wishes, oblations, appropriation of different animals and animals of different colours to different gods, death ceremonies and feasts, giving to the deceased wives, slaves*, animals, food, arms &c. modes of burial, exposure of the body on a stage†, burial facing the east, the fear of the spirit, the means taken to soothe and conciliate it in order to prevent its haunting or doing harm to the living, laying the ghosts of men and even animals that have been slain, future world &c. An instance or two may be given. The Mayama heaven (itself imported from Saba) with its trees loaded with ripe fruit, roasted pigs and other delicacies, which are spontaneously renewed as fast as they are removed, is also the heaven of some of the Polynesian tribes. The peculiar fables connected with the deification and personification of the sun, moon and stars, are the same amongst the Binua of Johore, the Mangkassars and some other eastern tribes, as amongst the Kols of India.‡ The ceremonies attending the consecration of a spot in the house to the spirit of a deceased relative, inviting him to come and occupy it, searching for the fancied traces of his passage on the ashes that are sprinkled on purpose, are the same in India amongst the Kols and in Indonesia amongst some of the Philippine and Timorean tribes. The same custom slightly modified prevails in Amboina, Bali, Mangkasar &c. The marriage ceremonies have a frequent identity, as with the Himalayan Limbu and the Borneon Kahayans &c. The curious division of the price paid for a wife, and the various ceremonies attending its payment, have a remarkable resemblance

* There is the same hunting for a great number of heads amongst the wilder tribes of Celebes as there is with the Kuki on deaths, particularly of chiefs.

† This has also extended to N. W. and S. Australia.

‡ The Sabaism of Indonesia and Australia is a curious reflection of that which prevailed in S. W. Asia. The MOON is the wife of the Sun, and the Stars are the children. With some tribes the Sun had children of its own which it devoured. With others the Stars are the abodes of the children, servants and subjects of the royal Sun and Moon.

amongst the Kols and probably many other tribes in India, and the Battas, Luzonians and other lank haired races of Indonesia. No sooner has the impatient bridegroom paid one of the customary exactions, than he is met by another. Thus he must pay the price of the mother's milk, a compensation to the parents for feeding, clothing and training the bride, another to the mother for the loss of her society, another to dry her tears, another to the sisters for opening the gate of the kampong, a bribe to the burgher who watches the township or village boundary to allow her to be carried across it into the bridegroom's, another for the removal of a cloth spread as a barrier between his party and the bride, a gift when the bride enters the bridegroom's house, another for the bandage of her hair because it will be unloosed and dishevelled &c. Amongst the arts that have existed from an early period in the region between Tibet and Asianesia, and have been carried to the latter, are different kinds of plaited receptacles, hats, shields, foot balls &c. of cane and other materials; the numerous cane rings worn round the legs, waist, &c. cane boddices, fashions of tatooin*, blackening the teeth, the eradication of the beard, singular customs allied to circumcision, the fashions of shields, weapons and other warlike accoutrements, spring bows for killing wild animals, the mode of warfare and many usages connected with it, the peculiar mode of taking and preserving the heads of enemies, ceremonies connected with their reception and use†, loom weaving, dying, some kinds of striped patterns or tartans, articles of dress, iron mining and forging, the great clan or village houses, the separate village halls, domesticated animals,—horses, buffaloes, cows, hogs, dogs, cats.

The agreement in social and political institutions is great. Amongst the former are the custom of bachelors, and the less widely spread one of girls, occupying a separate common house; the prohibition of marriage between persons of the same clan,—a very archaic institution, for it prevails in America, N.E. Asia, China, in India amongst the Khonds &c. (and originally amongst the Aryas), in Australia, and amongst the greater number of the Tibeto-Anam tribes of Asianesia; the holding of all land and other inherited property by the female children, and the reception of the husband into the wife's clan (Kocch, some of the Garo tribes?, Malays of Menangkabau &c.;) many customs connected with marriage, the position of the wife, divorces, their consequences, the congregation of a whole village in one long house, singular minuteness of the

* *Titi P. Nias, tata Roti.*

† The Timoreans, like the Nagas, heap irony and insult on the head, place food before it, ask it if it is pleased with its place of rest, "If so, call your relations and let them eat, or will you eat alone? eat, then &c." See Customs common to the Indonesian and Assam mountaineers, ante Vol. II p. 236. The Timorian group preserves the most interesting combination of African and Indian characteristics which Indonesia affords. It would alone prove the two connections in the most decisive manner. The languages have many Tibeto-Indian as well as African features.

laws or customs relating to the institution of slavery and particularly to the status of the slave. With some tribes a man may be almost any fraction of a slave, and several families may have shares in the fraction.

The division of classes, royal (sometimes divine) noble, free and helot, and its influence on the whole fabric of society, which preserves a singular uniformity from Sumatra to Polynesia, the same class names being widely spread,* must have originated in one race, and is evidently Indian and not Transindian, although it may have been so at one period and been subsequently obliterated by the Mayama-Anam tribes. The whole constitution of society is decidedly Aryan, and carries us back to the first ages of normal Aryan influence in the basin of the Ganges. The Tibeto-Indians brought the same institutions to Asianesia which they had acquired from the earliest Aryan culture in the adjacent western region, and gradually adopted the original islanders into them as the Aryans did the aborigines in the valley of the Ganges. The Aryan social organization presented the same two-fold aspect under the action of circumstances which it did in India and Europe. In communities which were warlike and predacious from necessity or choice, it assumed a feudal or quasi military form. Each chief was absolute in his own domain. He was in fact a king, and the supreme ruler an emperor, whose position depended much upon his personal character, and who had little practical power save when supported by the stronger chiefs. In the inland agricultural communities it assumed a form identical, in almost every respect, with the Saxon and Hindu village systems. The Polynesian partook more of the feudal, because they originated in predacious maritime communities, and the smallness of the islands prevented the formation of purely agricultural communities. The western Indonesian had much more of the Saxon character, because the large islands with their inland river and lake basins

* Compare Arii, Airya, Arioi (Aria, Ariana, Ariani) S. W. Asia; Arya, India; Aru, Arang, Bugis; Arang, Panggeran aria, Java; arotch, Banabe; turanga, Viti; ariki, atiki, [elak, Ceram, Amboina] arii, eree, tirara, orih, aru, rangatira, ranakira, Polynesia; Allah, Arabic. (*the Lord?*); Ra, Phra, Egypt, Madagascar [Radama, Ranavola, Ra feral] Burmah, Riam; Raja, Rana, India; Ratu, Latu, Datu, Radin, Rajin & Malay, all probably primarily from the name for the Sun, identical in the Egyptian, Irish, Polynesian &c. La, Ra, and preserved in Ravi, India, Rarak (Solor) the Malay ari, hari (day) Greek heli; Latin sol, Saxon sun, Naga san, Mayama tshang, chung (the god of the Ahoms,) appearing with the nasal termination in Rang, Lang, Lunga, Ulungu, Langi, Langit, Langits &c. as names for the sun, the sky or a god, in several African, Indian, Transindian and Asianesian languages. The ideal basis is the worship of the sun, the deification of chiefs, and the application of the name as a title, equivalent to god, ruler or lord, king &c. The Polynesian Ariki, Arii, appears to be literally child or children of the sun, as the progenitors of the Peruvian royal line were believed to be. So the divine race of Egyptian kings were called auritee. The sun god of the Timorians is called Usinenu, Lord of the Sun (Usi is lord in Japanese).

I shall give a comparative list of the names of classes, clans, offices &c. Many of the coincidences are striking, such as tofa, Halmahera, fenna Buru, ifan Ceram, fanga N. Zealand; dati Molukas, ngati N. Zealand (clan, village.)

were favourable to agricultural development. Amongst many of these the social polity has strongly democratic elements.

The primitive Aryan culture is chiefly to be sought in S. E. Indonesia and Polynesia. A large portion of Indonesia, and in particular Sumatra and Java, have subsequently received from the later culture of the Transindian nations, more especially from the Man and Mayama, a much higher state of art, and a somewhat different social and political constitution, than that which the first Tibeto-Anam settlers brought with them. * To this later influence belong loom-weaving, the patterns of cloths, many musical instruments, dramatic entertainments, wayangs, most of the domesticated animals, including even the Burmese cat. To the most recent but already almost archaic period of the later civilisation of the Irawadi, Indonesian tribes owe the large jars or vases which have excited so much curiosity and speculation. They are not found in Java and amongst the Daya of Borneo alone, but appear to have been prized all over the Archipelago. †

POLYNESIA AND THE MALAY ARCHIPELAGO.

Those Tibeto-Indian tribes of the Indian Archipelago which have been most secluded from the continued influx of Ultratindian and Indian influence, and in which the African elements are strongest, have the nearest affinity to the Polynesian. From the Philippines to the Timorean chain, Polynesian traits are

* In the later modifications of the Indonesian political systems by Mayanma and Siamese influence, political offices have assumed a greater importance. But, upon the whole, the social and political ideas which really mould the Indonesian communities have been little affected. The insular potentates have readily adopted the forms imported by every successive race of foreign visitors that has predominated, but the ancient institutions and offices remain under the new names, or, as more frequently happens, with a mixture of Indonesian, Hindu, Mayama, Arab and even Portuguese and Dutch titles. The same curious displacement and mixture of names is presented by many of the insular religions, the ancient gods having preserved a real identity in numerous instances, after having repeatedly renewed their names.

† The fact of the Spaniards, on their first settling in the Philippines, finding that the Japanese were in the habit of buying such as remained at high prices from the Luxonians, proves that were not of native Japanese or Chinese manufactures, as has often been supposed. The finest were gilded externally and sold for 16,000 francs. The Bornean ones, which are inferior in size and want the gilding, sell for 100 to 5,000 florins; the Ceramese for 20 to 100 dollars.—When I became aware of the intimate connection that must at one time have existed between the maritime Mayama tribes and western Indonesia, the fame which Pegu, and especially Martaban, at one time enjoyed for their beautifully glazed and gilded vases, sometimes of enormous size, directed me to this country as the source of the great demand for dragon vases which must at one time have prevailed amongst the Hindus of Java (where they are frequently dug up) and other parts of the Archipelago. I lately noticed a passage in M. Dulaurier's translation of Ibn-Batfourha's description of the Archipelago of Asia (*Journal Asiatique* t. IX p. 239, which curiously confirms this opinion. The Arab traveller relates that the Queen of Kayiakary presented him with four *Martabane*, which appear from the context to have been a kind of large vases. This was in the 14th century.

more abundant than they are to the westward,* although some tribes are found in the western islands equally Polynesian with most of the eastern islands. But the great repository of the Polynesian habits is the Moluko-Timorian, or S. E., extremity of the Archipelago, from which the principal Polynesian population has undoubtedly been derived.† These traits are so numerous that it is necessary to view the eastern part of the Archipelago and Polynesia as two great groups of ethnically allied maritime tribes, such as those of the Grecian Archipelago once were. One I may mention here, as connected with that maritime art and enterprise which spread the race far and wide. Each village was a maritime community and had a large village boat which all aided in building. When the monsoon came round the Indonesians departed for trade or piracy or rather both, for, like the Phœnicians and Greeks of the same era, they plundered the weak and bought from the strong. When they returned, the boat was taken in pieces, and in some places each family had the custody of the piece which it had fabricated. In the Archipelago this custom has survived the succession of foreign influences to which it has been subjected since the Polynesians were severed from it. In Luzon, where the practice is still maintained in some parts, the same name, *barangai*, is given to the large boats and to a village or district. Each village had its social and political organism which extended to the boat, and to every new settlement that was voluntarily formed, or resulted from being wind driven into a new region. It had its royal, noble, free-labourers and helot class, the latter composed of captives and slaves and in many places doubtless of the Indo-African aborigines. The helots and freemen laboured in the plantations and at the oar. The nobles led the same life of comparative luxury which they still do in Piratania and Polynesia. The Lanuns are genuine representatives of the ancient Polynesian maritime communities, although considerably modified by later influences. So were the Jailolans and their great colonies in Ternati, Tidori, Sawai, Amboina and the Timorean chain in the East, and the Celebesian states in the West. In the further west the Javanese were doubtless anciently in every respect the same, and they probably formed the earliest of the great maritime colonies of the Tibeto-Anamese race, after those on the north coast of Sumatra. China and Japan have communicated in later times many traits of their civilisation to the Philippines, Mindanao, Sulu and northern

† There is a strong N. E. Asian physical element in some Polynesian tribes to which I shall advert hereafter.

* If we regarded customs alone we should have difficulty in referring the Polynesians to any particular part of eastern Indonesia, and some considerations might even dispose us to prefer the Philippines to the more southern groups. But imperfect as our knowledge of the southern languages are, I have no hesitation in saying that they are far more Polynesian than Philippine. Any person who compares a map of the Timorian or Cera-nese groups with the remotest Polynesian one, the Hawaiian or Sandwich I., would immediately conclude from the names, and especially from those of so many rivers and places having the prefix *Wai* (river or water), in all the groups, that a radical connection existed between their inhabitants.

Borneo, just as they did in earlier times and in a smaller degree to the Micronesian islands. The Molukas have, in all later Indian times, been the seat of an indigenous civilisation and power, and although the Indians and Indianised Javanese have visited them from the period of the earliest commercial intercourse between the Archipelago and India, they have never established any dominant colony or kingdom, and to this day the indigenous nations and governments remain, under the protection and control of the Dutch.

The great island of Halmahera was, in the oldest historical and traditional times, the seat of the predominant tribe, which included Ceram in its dominions, and had its chief colony there in the fine bay of *Sawai*. From Sawai it is probable the principal of these emigrations went forth, which, spreading along the northern islets of the Melanesian chain, at last reached and colonised the Samoan isles, and thence diffused the S. W. Indonesian race throughout Polynesia. The name of Sawaii or Sawalki is literally Sawa the little, * and Sawa is identical with Java, so that the name was probably first given by a Polynesian colony from Java, just as the modern name of a country on the south coast (Seran, Selan, Seram, Ceram) which Europeans have extended to the whole island, † was bestowed by Javanese colonists, at a period when Singhalese seem to have been the leading Indian settlers or traders and civilisers in the Archipelago, if we may judge by many names of places, sovereigns and chiefs, and by the histories of some of the Malayan nations. ‡

The name Java, Jaba, Saba, § Zaba, Jawa, Sawa, Hawa, || is the

* *Sawa, Jawa, Saba, Jaba &c.* has evidently in all times been the capital local name in Indonesia. The whole Archipelago was compressed into an island of that name by the Hindus and Romans. Even in the time of Marco Polo we have only a *Java Major* and a *Java Minor*. The Bugis apply the name of Jawa *Jawaka* (comp. the Polynesian *Sawaiki*, Ceramese *Sawai*) to the Molukas. One of the principal divisions of Batta-land in Sumatra is called *Tani Jawa*. Thawi, Dawai (Tavoy) and Hawa, Ava point the same way. [Sagu, thagu, dagu is the Burmese name of a tree.] So Tawai, N. Zealand.

† A more archaic name still appears to be *Nusa-Heli* (a curious Indonesian combination of Greek and Saxon, meaning literally *Hill Island*) still applied to the elevated mountain which is first seen by voyagers in approaching the island. Heli is preserved in the Pulo Nias language and in Kamachatka, as well as in Great Britain and other Saxon lands.

‡ Lankawi, Singapura, Lankapuri, Selan, &c. Singapore appears to have received its Singhalese name long before the Malays occupied it in the 13th century. In Ptolemy's map there appears at the bottom of the deep bay of *Sabaracus* which he has formed by joining Sumatra (Aurea Chersonesus = *Pulo Mas*, an old Malay name) to the Peninsula, a town called *Besinga* which, from its position, can hardly be any other than Singapore, perhaps at that time a Singhalese or Indo-Javanese place of trade. Mr Riug some years ago drew attention to the connection between the Archipelago and Ceylon. I shall afterwards notice his paper.

§ Ptolemy has both Jaba and Saba. He has also a town called *Sabana* at the extremity of the Aurea Chersonesus which there can be little hesitation in considering to be the principal of the most eastern Indonesian ports frequented by the vessels of Aden and India, and in identifying with *Jarona* in Java. The famous Kakula (probably the Takola of Ptolemy), Kala or Kalabar must have been the western or Sunda port, of which the Chinese appear to have preserved the name in Ka-la-pai. e. Batavia.

|| Hawa is used in some parts of S. E. Indonesia. The interchange of *h, s* and *j* is very common, as I noticed in a previous paper. The island of Sulu is called by the natives Solo and Jolo.

same word which is used for the rice fields which are cultured by irrigation. The word is primarily connected with the flowing of water, as is evident not only from its application to irrigated lands, but from its being substituted for the common word for rain in the ceremonial language of Java (*sawa*), and used in the same sense in Bali (*saba*)*; and I shall in a future paper shew ground for believing that the Arabian Saba, (Sheba of the Hebrews,) which owed its existence as a fertile and populous place to its irrigation, and was destroyed by the bursting of its great dam, derived its name, as its king did his, from the same root, and that the eastern Saba was derived from it.† That the ancient Sabeans or Himyaritic kingdom, through its great sea port Aden, monopolised the larger part of the Indian maritime trade is well known. That its influence extended to the eastern archipelago is rendered probable, amongst other things, by the evident connection of the ancient Indonesian alphabets with the Semitic. Some of their most remarkable letters which are not found in the old Indian alphabets (although themselves Phœnician) are Semitic †

* It appears to be connected with the Arabic *saba*, "to flow as water." *Wa*, *wa*, *ba*, *ab*, appears to be one of the most widely prevalent roots for water, -- *basu*, *wet*, *Malay* (apparently from *saba*, by the common process of transposition;) *hosi* rain, Celebes; *uari* Samsk, Austral. Polyn.; by rejecting *r* *wai* water, a stream, S. E. Indresian and Polynesian.

† The Indians derived the name from that of a species of millet extensively cultivated in Africa and India (*joara*, *jowara* *Ind. dura Afr.* apparently identical by the common permutation of *j* and *d*) and as this, and not rice, was probably the corn of the Saba valley, the word Saba was there connected with or applied to it, just as *Sawa* &c. is now connected with rice culture by irrigation, as it probably was at an earlier period with the millet culture by irrigation, in the Archipelago. A species of millet is called *jau* and *jawa* in Malay. It is probable therefore that the same root enters into the name of the millet. We may go further, for the name of rice itself *niwara*, *wara* &c. evidently contains one of the roots that enter into *jowara*, so that the name of both the principal Asiatic cereals points to culture by irrigation.

‡ The oldest Indonesian alphabets belong to a western connection anterior to that great one which Hinduised Java and other regions, produced the Kawi language and introduced the later Indian alphabets. The old Indonesian alphabets are even more ancient than the southern Indian and Transindian, which have also their Indonesian representatives. They evidently belong to the era when alphabets were first introduced into S. India from the west, in all probability by the Himyaritic navigators from Aden, or the Phœnicians from the Persian Gulf. The rectilinear and angular character and great simplicity of some of them, give them a place intermediate between the cuneiform and the simplest Phœnician. I allude thus briefly to this important subject, as I will treat it separately in the next number of this Journal, and state the evidence tending to shew that these alphabets were mainly adaptations of early Semitic ones, introduced by Himyaritic traders, although some are nearer the oldest Indian.

Amongst the most important historical facts connected with our enquiries are those that throw light on ancient navigation and commerce. The Phœnicians were a civilised maritime people 2,000 to 3,000 B. C., and probably long before; the Sabeans Arabs must have been so a few centuries later, and long before the time of Solomon, c. 1050 B. C.; and the Indians long before Menu c. 900 B. C. The Phœnicians and Arabs were exceedingly bold, hardy and enterprising sailors, as indeed the comparative rudeness of their vessels, their want of the compass and the imperfection of geographical science, compelled them to be, if they sought distant countries at all. We shall in a future paper consider the amount of positive evidence of the ancient Arabs or Phœnicians having themselves reached the Indian Archipelago. There is nothing improbable in the hypothesis. Their navi-

The Indian navigators found a civilised nation in Java surrounded by the sawas or jawas of millet, and giving the same name to their land. Where this Jawa is situated has not yet been ascertained. It must have been on the northern coast of the more eastern part of Java.* Its people, the *Orang Jawa* or *Jawa*, were the nucleus of the civilisation of the land. They spread themselves and their language over all the eastern part of Java, retaining their original name; and the Indians, following the usual practice of foreigners, bestowed it on the whole Island. Rice culture must have been imported by the Indians and gradually superseded that of millet, but this did not affect the name of the irrigated lands. Rice has one name nearly throughout the world, and is evidently of Indian origin.

On its ethnic history of the twin basins of the Ganges and the Brahmaputra and that of the Transindian lands have been well investigated, the course of the Tibeto-Indian and Transindian

gation, chiefly, but certainly not wholly, a coasting one, was slow, and the inhabitants of the more distant lands to which it extended, were, in general, so barbarous and little commercial themselves, that they appear to have made a practice of establishing factories and colonies. Even where they did not, they must, on each voyage, have remained a considerable period in the countries they frequented, disposing of their cargoes, collecting produce, and, in the Indian Ocean, waiting for the change in the monsoons. The more distant voyages lasted, from this cause, three years. We know that the Phœnicians had colonies along the whole limit of their Mediterranean and Atlantic commerce and in the Persian Gulf, and that the Arabs established themselves at the most favorable trading places on the African and the Indian shores of the Ocean, as far at least as Ceylon on the latter. If the more timid Indians reached the Indian Archipelago at an early period, it is probable that the Arabs soon followed, if they did not precede them, even if we do not adopt the views of those writers who believe that all the foreign navigation of India was in the hands of Arabs. There are several passages in ancient writings which tend to shew that there was a direct intercourse between the Archipelago and Africa across the Indian Ocean. The Ethiopians are said to have bought cinnamon from their eastern neighbours and to have "transported it through the vast seas to Arabia by the favour of the east wind, returning only once in five years." The notion of the proximity or continuity of the African and Indonesian or rather S. E. Asian coasts, which appears to have been firmly rooted in Indian and Arabian geography, could hardly have arisen save from the sea having been crossed, because the tendency of mere coasting voyages from Arabia to Africa on the one side and Indonesia on the other, would have been to exaggerate the distance, and throw the S. W. and S. E. extremities of the Indian Ocean far apart. The distance between Aden and Ceylon must have been greatly exaggerated before the monsoons were used, because all the sinuosities of a long coasting voyage without compass became part of the direct distance. Hence the error of Ptolemy's northern coast of the Indian Ocean. A tendency to this kind of error is inconsistent with the error in the southern boundary, and the latter had therefore, in all probability, an independent foundation.

* *Jawana* probably (see note p. 338). The connection of this word with *Yavana* applied by the Hindus to the western nations, and with the *Javan* of the Bible (in E. Arabia) is worth tracing. *Saba*, as the name of the Himyaritic race, who probably carried on the chief trade between India and the West, may have originated the Sanskrit name. The name of another Himyaritic king, *Samar*, has also been widely spread as a local name, *Samarkand*, &c. In Indonesia we have *Samar* one of the Philippines, *Samara* an ancient name of Sumatra (also preserved in Ptolemy's name for the Straits of Malacca, *Sabara-cus Sinus*.) *Samarang* &c. Compare also another Semitic name of Sumatra, *Andalas*, and that of Malaka with the ancient Phœnician names of *Malaka* (now *Malaga*) and *Andalusia*, which last may be more ancient than the *Vandal* era.

revolutions of Asianesia must remain obscure. I make any remarks on northern Indian ethnology with much diffidence, because it is at present in the hands of Mr Hodgson, who has admirable qualifications and opportunities for prosecuting it with success. It appears to me however, looking back on India with the light thrown on it by Asianesian ethnology, that there must have been an era in the history of the Gangetic basin, intermediate between the first influx of the Tibetan race and that of the Aryans, in which the former spread into the basin, and received influences of an Iranian or quasi Iranian kind as well as Africo-Indian ones; and that, for a long period after Aryan tribes appeared at the north western extremity of the basin, the Tibeto-Indian races must have predominated in it, until the slowly extending Aryan tribes introduced a new element. This, which we may term the proto-Aryanism of India, must have been of a far simpler or less developed character, in every respect, than the later culture which enabled the tribe of Aryavarta to take a gigantic stride in advance of all other Indian civilisations, and by its intellect, its institutions, its valour and its arts, to expand itself beyond the bounds of a petty district lying without the Gangetic basin, until it grew into many nations which occupied the whole Gangetic valley, held the older inhabitants in servile subjection, and so increased in numbers as to cause an assimilation of all their languages to its own.*

During the first transition era, before the advance of the Brahmans, the old tribes on both sides of the Ganges must have continued for a long period to be influenced by the proto-Aryan civilisations and languages. The higher Aryanism must also have greatly influenced them before they were finally conquered, helotised, assimilated or exterminated by the western nations. It is to the earlier of these transition periods that I think many of the Iranian and quasi Iranian traits in physical character, religion, institutions and customs which are recognized in the Tibeto-Anam era of Asianesian development, are to be attributed; and Asianesian ethnology may thus become available in restoring the ethnic history of the Ganges. The evidences of the Gangetic basin having undergone such a succession of ethnic changes before the complete establishment of Iranianism are numerous. I may instance the Turanian physical characteristics which prevail amongst the Rajmahali, Khonds, Kols and Gonds on the southern side of the basin, as far as the meeting of the Gonds and the Bhils, when an Africo-Indian character takes its place. On the northern and western side it prevails throughout a great portion of the

* There is a striking resemblance between the leading ethnic features of the spread of the Brahmanical race down the basin of the Ganges and that of the northern Chinese down the basin of the Hoangho. However much the former may have brought with it into the Gangetic basin, its chief intellectual and artistic culture was probably received there.

Himalayan basins of the Ganges and Brahmaputra, in Asam, and in the western projection of the Transindian highlands which enters into the southern and eastern part of the Brahmaputra basin. The Tibetan races are spread along the whole of the great trans-Himalayan depression or from the Hindu Kbu to the borders of China. They meet and partially blend, physiologically, linguistically or morally, with Indian races along the entire length of the Himalaya. In the western extremity the latter prevail and the physiological boundary gradually but irregularly descends from the highest ranges, till it embraces the upper habitable portions of the Sutlej, Jumna and Ganges alpine basins in Bisahar and Gharwal, after which it ascends again where the Tibetan depression is most elevated and contracted and thinly peopled, there being apparently no Tibetan mixture in Kumaon.

The large Turanianism observable in Assam and the northern and eastern sides of the plain of Bengal, the considerable contrast which even the proper Bengali peasantry afford both physically and morally to the Hindustanis, the fact of Turanian tribes being preserved on the opposite sides of the common valley of the Ganges and Brahmaputra in the Rajmahal and Garo mountains, as well as all along its northern and eastern margin, and as far as the upper basin of the Tapti to the S. W., warrant the conclusion that similar tribes once occupied all the lower part of the Gangetic basin.

The northern Indo-African tribes appear to have occupied the western part of the Gangetic basin,—the opposite sides of which still preserve remnants of them in the Chamang, Doms and Rawats on the N. and the Bhils and other allied tribes on the S.,—a large portion of those of the Nerbudda and Tapti, and probably the upper branches of the Godavery and Krishna, as well as all the western seaboard from the Gungawally northward. Their N. W. boundary must have been gradually driven in by the advance of the Aryan tribes. Before the rise of the Iranian tribes, tribes intermediate between Iranian and Turanian, probably occupied the basin of the Indus and even extended N. and W. so as to connect themselves on the one side with the ancient Africo-Semitic and on the other with the Mid-Asian.

The southern Indo-African tribes were a continuation of those of the N. W. and the Tamil and other populous ones appear to have owed to their large river basins and to the influences received from Egypt and S. W. Asia, the civilisation which enabled them so greatly to surpass their northern neighbours.† As far as can be gathered from the present distribution of the tribes, the whole of India would thus appear to have been physiologically divided by an irregular line running from the alpine basin of the Kali to the upper basin of the Tapti and thence S. E. along the Warda and Gadavery

† The Maratas however seem to have partaken largely of the Egyptian civilisation.

nearly to the mouth of the river. To the E. of that line Turanian and Irano-Turanian features prevailed and to the W. Africo-Indian, the latter being much more Iranian than the former and probably presenting a negro character in its ruder and servile people, and Iranian and quasi-Iranian in the higher classes of its more civilised tribes. The boundary has doubtless been much affected by internal movements and contests in all the middle Indian highlands, induced by the external pressure of the Aryan nations, and even in the pre-Aryan era it must have undergone a succession of changes. During that period strong Africo-Indian influences appear to have extended over the S. portion of the eastern or Turanian region, and produced languages intermediate between the Tamulian and Tibeto-Indian which was the more easily effected from the two having numerous characteristics in common. The Tibeto-Tamulian era must therefore have been of great length.

By Tibeto-Indian languages I do not mean languages composed of a mixture of existing Tibetan and Indian. There are Tibetan tribes on the southern side of the snowy range, but they are probably of recent immigration. The connection of the other tribes is with a proto-Tibetan era, when the present widely spread Tibetan race may have been only one of several rude trans-Himalayan tribes speaking archaic dialects of an incipient Tibetan character or even of one nearer Chinese. The languages of the southern tribes with whom the first emigrants from Tibet mingled, in the lower Himalayan basins and in the plains, appear to have belonged to the archaic linguistic era that preceded the development of the Tartarian, Iranian and Semitic. They associate themselves with the archaic African and Asianesian. Some of the present languages of the Himalayan and Asamesc ranges, have been able to preserve much of this archaic character, from the alpine locations of the tribes which speak them, having preserved them from being linguistically assimilated by the great Ugro-Tamulian development, or the later and still greater Indo-European one, but not from being physically and morally influenced by Turanian and Iranian races on both sides. The languages in question, with some of the S. E. Indonesian and the Polynesian, preserve much of an ideologic character simpler than both of these developments, but having many affinities which the simpler Turanian. The ethnic connection of these languages with the earlier development represented by the Chinese is buried in obscurity, but it may be conjectured that languages with an allied general ideologic character, and intermediate between Chinese, Lau and Anam on the one side and Coptic on the other, had, from some ethnic causes, obtained a wide range, before those of the Turanian development began to be spread abroad and prevail over the greater part of the Euro-Asiatic continent.*

* Both this development and the Ugro-Tamulian (of which the Burmese is the most archaic form) connect themselves in the strongest manner with the Chinese

It is chiefly amongst the Himalayan and Tibeto-Tamulian tribes that the prototypes of the earlier Malayu-Polynesian development are found. It was here that by the contact of Mongolian and quasi-Caucasian forms,* the peculiar Tibeto-Indian physical type was produced which has not been more completely preserved in the Gangetic basin itself, than amongst the earlier Malayu-Polynesian tribes, or those which have remained unaffected by later Transindian and Indian influences in Borneo, the Transjavan chain, S. E. Indonesia and Polynesia. The ethnic connection in other respects is so great and striking that we cannot separate the Gangetic from the Polynesian races by a very wide interval of time, that is not more probably than 5,000 years.†

The Polynesian has stronger affinities than any other Asianesian language to a Gangetic linguistic development of which that of the Khasia,‡ now located in the Asam mountains, is the most eastern

Compare the Polynesian, the least Turanian of the Tibeto-Indian languages and the least Semitic or simplest of the African on the one side, and the urnese and Tibetan, on the other, with the Lau-Chinese family. The proto-Gangetic languages appear to have been more archaic than the Tibetan and Tamulian, and have probably wider ideologic connections than either.

The Burmese is intermediate between the Chinese and the Tibetan. It is essentially monosyllabic, and tonic, but its structure, collocation and mode of using particles are decidedly Tibetan and distinguish it from the Lau and Anam. The proto-Burmese probably occupied some portion of the country on the boundaries of China and Tibet. Many other intermediate languages may have existed, and some are probably still preserved.

* Although I think both physical and linguistic evidence require us to admit an early Gangetic race which cannot be accurately described as either African, Tamulian or Tibetan, the causes which modified its physical character are still obscure. On comparing the proto-Gangetic languages (Khasia, Bodo, Dhimal &c.) with the Tamulian or S. Indian, the latter appear to be at a considerable remove from them in the chain of pre-Iranian linguistic development, that I prefer to consider them as forming a separate group. They have also distinctive features when compared with the Tibetan. I think therefore that until Mr Hodgson settles the point, it is safest to recognize three pre-Aryan Indian groups. The quasi-Iranian physical character which modified the African in the W. and S. and the Tibetan in the N and E must I think be referred to the proximity of S. W. Asian tribes partaking of the Iranian physical type. One long continued influx, or series of movements, from the region to the W. of the Indus, may have physically modified both the Indo-Africans and the Indo-Tibetans: There is no evidence that the Gangetic basin as a whole ever received a sensible influx of Africo-Indians. In a region which has received so varied a succession of races, the physical the linguistic and the other ethnic traits of a particular tribe, may point different ways, as often happens in Asiatic Asia.

‡ The Indian rise of the Brahmanic civilisation and power is probably not older than 4000 years, if so old. We must allow 1000 years at least for their occupation and ethnic metamorphosis of the valley of the Ganges, for they seem to have been long established at the era of the contest which forms the subject of the Mahabharat. The quasi-Iranian tinge of the Tibeto-Indian tribes in the Himalaya, the Vindhya and the Gangetic valley belongs to a pre-Brahmanic Iranianism, and migrations to the eastward must have taken place long before the Brahmans dominated in that basin.

§ The name directs us to the Himalayan basins to the west of the Kali called *Khash* in the Puranas, and even beyond the Gangetic basin to *Kashmir*. In this

continental representative. This development preserves feature not found in the Sanskrit or any of its modern derivatives, or in any other Indian or Transindian family, but which is common to the Semitic, Greek, and several western Indo-European languages. I mean the use of the definite article, which gives to a Polynesian speech a character so widely different from all the other insular ones, that it appears a strange anomaly in a language otherwise so completely Asianesian. The Khasia preserves another archaic feature common to the Malayu-Polynesian and the majority of the African languages, the prefixing of its particles. The surrounding languages have all assimilated to the postpositional system of the Tibeto-Burmese, and Tamulian groups.

I must reserve my notices of the other regions, and can only add generally, with reference to Transindia, that those portions of it which have most influenced the Archipelago appear to present, 1st an Africo-Indian era; 2nd an era in which Tibeto-Anam* tribes allied to those of India predominated, and in which the basin of the Ganges was united by boat navigation with the east coast of the Bay of Bengal; 3rd, an era when the Mon race predominated in maritime civilisation; 4th, an era in which the Mayana race, originally located between Chinese and Tibetan tribes, having gradually spread, obtained a preponderance in numbers and power; 5th, an era in which the Lau tribes issued from the highlands of Yunan and spread themselves over the upper parts of the Irawadi and Mekong basins, until, in recent times, they extended to Asam on the one side and the Malay Peninsula and the lower basin of the Menam on the other. Each of these will be considered with reference to Asianesian ethnology.†

The great objection that I entertain to the exhibition of isolated glossarial resemblances had determined me to omit any, but this paper might appear incomplete without adding a few, not as an evidence, or even as an illustration of what I have advanced, but as an example of the kind of information furnished by the comparative vocabulary which is printing.

western range of basins the proto-Aryan tribes probably first came in contact with Tibetan Himalayans.

* I was first led, some years ago, to recognize the peculiar connection of the Anam with the Indo-Asianesian races on finding, when amongst the basins of Bukit Pauchür in Malacca, that several of their non-Malayu words were Anamese. The great Transindian antiquity of the Anamese is vouched by a connection with ancient Indian and Indo-Tibetan languages, as well as with the Asianesian.

† As our knowledge progresses it will be interesting to enquire what immediate effects the different movements into India and Ultraindia had upon Asia-nesia. Did the advance of the Tamil tribes in India and the Myama-anam in Transindia cause any increased migration of the Indo-African races to the islands? Did the pressure of the later Iranian on the earlier, and of the latter on the Tibeto-Indian population of the Gangetic basin, cause the Tibeto-Indians to overflow into the adjacent region of Arracæn and the Irawaddi? Did the later advance of the Burmese and Lau races press the Indo-Tibetan population of western Trans-india into Indonesia?

[* * ERRATA. P. 312, at end of 4th line from the bottom add "and harmonic." P. 320. Transpose the 2 last lines from the bottom to the top of the page.]

HOG. The two most wide spread words for hog in the Indo-Pacific islands are, 1st, *puaka, buaka, phuc'a* and 2nd *wi, wawi, wawe, bawi, abei, habi, baboi, babo, babu, bui, bawi, bast, fasi, bavu*. The first is only found in Polynesia, and is of Tibeto-Indian origin *phak* Tibet, *phag* Bhutan, Limbu, Kiran'i, Mikir &c; *wok*, Kyen, Champhung &c.; *wak*, Magar, *wak* Naga, Garo, *piak* Chepang.* The 2nd is the most prevalent in Indonesia, and is distinguished, in all its variations, from the 1st, by the absence of the *k* or its substitute *t*, and is found on the Continent in Saubili (Africa) and Bonju (Transindia) *wai*. Another African form,—*babalade*, Fulah, *bule*, Serakoli, apparently joins this to another root, and has also its direct Indonesian derivative in *bulali*, Buol. The same word, with the vibratory form of the second consonant, is found in Suahili, *burui*, to which corresponds the *burum* of Erob (Torres Strait,) which is also the nearest of all the known Indonesian and African to the inverse form of the Malgasi,—*lambu*. A fourth African form *gru* Suahili, *gulu* Kwilimani, *horio* Kwamamyi, *galgal* Galla, appears also to have its Indonesian derivative in *gir* Besisi (Malay Peninsula.) *Kis* Rajmahali, is *kuis* in Batan. The Indian suar, surka &c. Kambojan chur, cheruk, charuk, is found in Viti, sara,* and apparently in the Java, Bawian and Bali cheleng. It results from the above that the hog is chiefly known in Indonesia by African names, that the prevalence of these names, and the existence of the animal in the wild state, prevented the permanent engraftment of the Tibetan on the Indonesian vocabularies, but that the Tibeto-Anamese who proceeded to the eastward at an early period carried the Tibetan name with them. I doubt not however but that the Tibetan form will be found in the Archipelago also.

BUFFALO. The most prevalent Indonesian name *kabu, karbau* &c. has been immediately derived from the basin of the Menam,—*kubao, kar'u, kapao* &c Champa, Khomen, Ka, Chong &c. But the word is also, more remotely, Indian,—*kerā, kara*, Bhumij, Ho,—*karan*, Tamil. The Javanese *meiso* is the wide spread Tibeto-Indian and Indian *Mahe, mhe, meshi, maji, moisho, mahish, moish, bhains, vessah*, [comp. *jamus* Arabic.

COW. The most common Indonesian words are 1st *limbu, lambu, lembok* &c. 2nd *sapi, s'mpi*. The first has been directly derived from the African (*lombe*, Saubili, *lam* Amharic, *lawum* Galla, *angumbe* Malgasi, *gnombai* Saubili,—*gombe* Kwilimani† but the roots are also found in Tibeto-Anam region,—*lang* bull and *ba* Tibetan (bou, Anam) &c cow. The same combination is used in some parts of Tibet and in the Tibirkad, placing the cow first. *api* appears to be referable to two Himalayan names,—*sa* Newar, *bi* Sunwar [the *ba* of Tibet &c, *pia* Dhimal] *pei* Malayalem,

GOAT. The Malay *kambing* appears to contain two roots,—first the same as the *kami* of the Koreng and Maram (Manipuri) and the second African *beng, banko*, &c.

DOG. The *asu* of the Javanese, Timoreans, Bugis &c., has been derived from the basin of the Irawadi (Naga *az, hu, &c.*, *Ulu, ule, al* African; *alai, ala* Rajmahali; *&c. ali, alai* N. W. Australian. *Kutti* African; *kutta, kukku* Indian; *kwito* Kagayan, *kotta*, Australian.

* If this stood alone it would be considered accidental, but the Viti contains many other evidences of having received a later Indonesian influence than the Polynesian.

† In these forms one of the widest spread names makes its appearance,—Chinese, Indian, European.

Ambua, *ambua* Malgasi, African; *oma' umai*, &c., Indonesian.

HORSE. The *jaran*, *jarang*, *nyarang*, of the Javanese &c., has come from the Himalayas (*serang* Chepang, *rang* Milchanang, *sala* Mewar) and the *kuda* &c. of the Malays from Southern India, *kudre*, Malayalem, Tamil &c.

BIRD. The Malgasi *vorona*, *vorune*, has been preserved in the *buron*, *buru* *n*, *wrong* of the Malay, Sandal (orneo) and Sumba. But this and any other African words that previously existed, have, in most of the languages, been displaced by the *nok* of Lao with the common prefix *ma* (*manok*.) The few other Indonesian forms are also Tibeto-Indian or Ultra-Indian. Thus the *janga* of the Bima is the *jhango* of the Himalaya Kiranti and Mewar. The *chim* of the Besisi is the widely prevalent word found from the land of the Gonds in India,—*sim*, to Anam, *chim*.

DUCK. A common word *ite*, *iti* *titi*, is Tamil and Burmese; and the same word is probably preserved in the Gond, *ite*, bird. An allied word, *batiki* Pampanga (Philippines) is more nearly connected with the Saubili *bitak*, Kwilimani *ma'ata*, Arabic *batto*, Gond, *tudduk*, Telinga *batto*, Malayalam and Karnataka *battu*, Tamil *vatu* and Anamese *vit*.

FISH. The most prevalent Indonesian word *iha*, *iwak*, *ia*, appears to be radically a compound of two words still preserved in the monosyllabic languages,—*ka* (Siam, Lau, and *hi* Ieochew.) The simple *ka* is also found in Indonesia. An allied form is found in India,—*naku* Mandala, Ho.

HAIR, FEATHER. *vulu* African, Indon.; *pu* Tibet; (bal Ind.)

NOSE. Malg. *uru*, *orone*; *parah*, *Sauh*; *idon*, Mal. *irong* Jav. *murun*, Tim; Mahra (Arabia) *anaf*, Timor *hanaf*.

TEETH. Malg. *nif*, *nifi*; *nifo* Poly. *nipun* Indon. *nin*, *ngin* Radak; *gui'ney* Fulah, *nigne* Sereres, *nini* Aru *nin*, *ngin* Radak, *gi'ne* Achin *gi'gi* Mal.

MOUTH. Mlumu Kafir, *mulu* Malg., *mur*, *mamun*, Manip., *mulut* Mal.; *vava* Malg. *baba* Achin, Borneo, *h* hil., *fafa* Viti; *mathu* Manip., *musu* Viti, s. E. Indon.

BODY. *bandu* Fulah, *vatang*, Malg. *badan* Mal.

HEAD. *Alo*, *loha*, *lua*, *kulu*, African; *lu*, *alu* Manip-ulu Indon.

EYE. *Masse* Malg., *macho* Sauh., *meto*, Kwilimani, *met* Gond, Ho; *Bhmij*, *Mentira*, *Besisi*; *mat* Anam, *Ka*, *Chong*; *med* Samang *mik*, *mit* Manip, &c. &c. *mata* Indon.

EAR. *Tulun* Mandingo, *talinhe* Malg., *tei* Anam, *liang* Nicobar, *te-linga* Mal.; *sufina*, *suping* Malg. *Bual* (Celebes), *koping* Mal.; *guru* Galla, *guri*, Australia; *enti* Danakil, *nget* Tumali, *nihat* Binua, *inte* (look) Mal.

HORN. *Tanro*, *tando*, African, Indonesian; *tang* Tibeto-Indian; *ra*, *rou* Tib.

LIP. *Mulut* African, Malay (mouth); *labi* Kafir, *labi* Pampangas; *gaden* Sereres, *gadu* Australian.

NUMERALS. Most of the Papuan and Tamulian are African. The New Guinea are African both in system and name.

A TRIP TO THE MOAR.

IN consequence of information received from several natives that abundance of large game was to be found along the banks of the Moar river, a party of three agreed to explore its resources, in the month of March last. A Malacca boat, with a small cabin capable of sheltering us from rain and sun, was accordingly hired, the necessary provender for a three weeks cruise put on board, and we started from Singapore with favouring breezes on the 12th. The latter soon forsook us, and instead of a passage of 24 hours as we expected, we did not arrive at the mouth of the river before 3 days, where we were very nearly terminating our journey in a rather unpropitious manner. A strong N. W. wind blowing against an ebb tide caused the sea to get up most unpleasantly, and upon attempting to get over the bar we found so little water that our boat all but struck several times, so that we were compelled to up sail and go out to sea for the night. Had we touched, the boat would have gone to pieces in five minutes, for they are miserably constructed craft, put together with the very fewest possible quantity of nails, and look as if a good shake would cause them to fall asunder. The two large mat sails have to be lowered and shifted from side to side of the masts on every occasion of tacking, and are so cumbersome and clumsy that one would suppose them to have been invented about the time of the Argonauts. We got however safely over the bar and into the river the following morning, being the 15th March, and with about half flood in our favor, proceeded to pull leisurely up the river. The Moar is a fine river, and could vessels get over the bar, a ship of the largest size might go up for fully 100 miles. There is ample depth of water, but the river is extremely tortuous in its course, winding so as to bring the sun shining in your face this hour, right behind you the next, or in less than that time, right round the compass. The general direction of the river is westward, and it rises, by the account given us by the Malays, in the mountains of Pahang leaving Mount Ophir considerably to the west, and the fall must be very gradual, for the ebb and flow are pretty equal. The river is about 500 yards broad after you enter, but it soon diminishes to about 300 yards, and this breadth I should think it retains for 70 or 80 miles. At Bukit Kupong where we stopt for some days, about 100 miles up the river, the Malay man who lives there, told us he measured the stream opposite his house, and that it was exactly 65 fathoms broad. Between Sungei Mati and Grisi the river becomes entirely fresh; the water is excellent to drink and soft and most refreshing to bathe in. It is however full of alligators of large size, and it is therefore unsafe to swim about, although we did so on one occasion, but the sight of large alligators next day was sufficient hint to us to confine our ablutions to lifting water from the river in a timbah, eastern fashion. For the first 10 or 20 miles the banks of the river are clothed with the usual mangrove, but not so

entirely as I expected. Every now and then there are pleasant vistas shewing diversified foliage. The nipah palm fringes the river and is evidently cut down all along the banks; no doubt large quantities are taken to Malacca to make attaps. The nebong palm is very abundant, there appear to be regular forests of it, and often did we desire a cabbage from the top of one, but we had no hatchet to cut them down, and the thorns with which the tree is covered effectually prevents the possibility of climbing it. For a long way up the river there is no appearance of human habitations. The first arrived at are those at Sungei Mati, but we did not visit this place to our great regret, as there are abundance of deer to be found on an island formed by the splitting of this tributary of the Moar before it joins the parent stream, and it seems to be the very region of elephants, of which we had a convincing proof the first night of our arrival. As it is impossible to proceed against the tide, we were compelled to anchor every ebb, and pull with the flood. Anxious to avail ourselves to the utmost of the flood tide, we had agreed to take our turns of watch to keep the men at their oars, and much they needed such vigilance, for a more lazy, good for nothing set of fellows we could scarcely have found had we been looking for them. About half past eleven our companion on watch heard a roar, which he at first thought issued from a legion of tigers, and presently a plunge into the water as if a shoal of whales were playing their gambols in the vicinity. But he was not left long in suspense, for, although the night was dark, he soon observed some 15 or 20 large objects approaching the boat, which, after contemplating for some time, he concluded must be elephants, whereupon he ran down and awoke Mr S. and myself. All our guns were unfortunately in their cases, as we did not dream of having shooting so soon, or that animals would be so accommodating as to swim off to us, but Mr S. had a single barrel rifle loaded the previous evening to shoot alligators. This was discharged at three or four of the animals at about twenty paces distant. Immediately after firing he looked down and found the proboscis of a fellow within a few feet of him, so close that he was compelled to start back to prevent the animal laying hold of him. The beast had got right under the bow of the boat, and one of boatmen, to keep him off, took a long pole used for keeping the sail on stretch and commenced poking the elephant in the head, which he resented by jerking the pole out of the man's hand with such violence that he narrowly escaped joining them in their nocturnal swim. The boat then passed right over the back of the beast who come up on the opposite side and made for shore, and when he was about five paces distant, a Bengali Shikari, who accompanied us, put a couple of bullets into his neck from a large musket he had contrived to load with a charge, judging from the report, enough for a small cannon. Upon this the beast uttered a yell as if grievously hurt, and had we stopt, the chances are we might have followed him up and got him next

day. But we were anxious to get up the river to the plains, where we had reason to suppose the wild cattle abounded, and therefore proceeded on our way so soon as the excitement of this unexpected visit subsided. The troop of elephants must have been very large, for besides those that swam the river, we heard trumpeting in all directions along the side they came from, answering those that crossed over, who no doubt intimated to their companions that all was not quite right in the river. The following day we stopped at a place called Grisi, where there is a single Malay hut inhabited by an old man and his family, who has a few cocoanut trees around the house, but, save those, no other species of cultivation, although the spot appears to be one capable of producing all tropical fruits, rice &c. It is a marvel how those people exist. The river supplies them with fish, and a large fine kind of prawn called "Udong Gala," but how they procure rice and salt I know not, seeing that they are too lazy to put their hands to any kind of work. We spent a pleasant tide at Grisi, saw the tracks of a variety of wild animals, deer and tigers especially, also elephants and rhinoceros, heard and saw several jungle fowl, and got some shots at the latter. On the tide making, after a most refreshing bathe we started for Pankalang Kotah, where we hoped to obtain guides to shew us the haunts of the Saladong or wild cow, deer and other game. We arrived at Pankalang Kotah at about 2 P. M., on the 17th. This village is pleasantly situated on rising ground and was the residence of the late Tumungong of Moar, whose house still remains surrounded with a pager of nibong. It has a "bali-bali" or place for the natives to assemble and talk over events within the enclosure, and the tenement itself is about as good as a native of Singapore with 10 or 12 dollars per mensem would think of living in. The rest of the houses or huts are miserable habitations, but quite good enough for their owners, for of all the lazy, good for nothing fellows I ever met with, those at Pankalang Kotah have the pre-eminence; even our lazy boatmen were astonished at their indolence and remarked that elsewhere the men worked but here the women. We saw these poor drudges pounding rice and going to the river for water, which they carried in a number of cocoanut shells collected together with rattans, whilst their lords and masters walked about, the very emblems of indolence. The Malays look lazy and harmless, but there are some of the most cut-throat looking scoundrels I ever saw, Bugis, who evidently rule the kampong, although nominally under the chief of the village and acting by his direction. Indeed there does not appear to be at present any properly acknowledged head. The late Tumungong died about a year and a half ago, and since then all has been anarchy and confusion. Every fellow who can collect a few followers dubs himself Rajah and exercises authority to the extent of his power. We had several instances of this. The Rajah at Pankalang Kotah seized the salt passing up the river to the Rajah at Segamet, and whilst we were at anchor off Bukit Kupong, a

Pahang trader in the habit of visiting Singapore, came on board the boat and said the Rajah had seized 4 coyan of salt he was taking up the river. We enquired what Rajah and he replied the Rajah at Pagoo. This is a place so small that it altogether escaped our observation. There may be 3 or 4 huts in the Raj. Thus in 40 or 50 miles we had 3 Rajahs at least and perhaps an aggregate of about 30 huts. It is therefore not to be wondered at that the people are in a miserable condition, and that the land is given up to wild beasts. The suspicion evinced by all whom we hailed in their little canoes rowing up or down the river, spoke plainly of their fears and gave us the impression of people labouring under habitual oppression, whose energies were paralysed by the conviction that they could not enjoy the fruits of their labour. The consequence of this stoppage of salt is that the price in the interior has risen to dollars 80 per coyan, the Singapore price being dollars 10. We found the people at Pankalang Kotah most blustering talkers, but most slow to realize their promises. At first they could shew us any amount of game. There were herds of wild cows in the vicinity, of tens, thirties and forties,—were we not afraid, they would take us in amongst them, but having done so must run off, as they persisted in saying these animals invariably charged and were the most savage in the jungle. They then tried to deter us from going by telling us 30 men had been eaten by tigers. These again were said to be unusually numerous and ferocious. But all could not do. We told them so much the better; all we desired was to see the animals, which they promised faithfully to shew us, if we could get up at 4 in the morning. We made no difficulty of this, so at 4 A. M., we were up and ready, but no guides. At last, after waiting until past six, we went on shore and roundly taxing them with having told us deliberate lies, we got one fellow to come with us, and a precious entangled jungle he took us through, shewing us certainly where game had been some months previous, but we could come upon no recent tracks. After losing a day to no purpose, we determined to proceed further up the river and started accordingly in the evening, but before leaving Pankalang Kotah I must make one remark for the benefit of nutmeg planters. On the hill close to the Rajah's house there is growing a solitary but fine healthy female tree. It was in full blossom but not a single fruit. I enquired if it had ever borne any and they replied never, only flowers, so I think people may now consider the question of whether the female tree will bear without the male definitely settled, for here was a female nutmeg tree perfectly isolated, healthy and vigorous, but without fruit. The next most interesting fact to establish is what proportion of males to females is best for a plantation,—query, has not nature pretty well given us the answer by causing the sexes to come up in equal proportions when a number of nuts are planted?

The morning after we left Pankalang Kotah we found our boat at anchor off a rather better looking sort of Malay hut, pictures-

quely situated at the bottom of a nice looking hill and surrounded by fruit trees. A little old Malay came off to us in his boat with whom we immediately entered into conversation, and soon discovered that he was a regular Nimrod, who had waged war against all the denizens of the forest and who volunteered to shew us wild cows within 48 hours; he told us however, what we knew pretty well before, that if we wanted sport it was necessary to burn thealang grass some two or three weeks before hand, when we would be sure of finding herds of the wild cattle feeding upon the young grass morning and evening. In consequence of this not having been done, we had many a weary walk in vain, and it was not a little tantalizing to see on every plain we went to, the whole place intersected with their paths, but nought else but tracks were to be seen. Judging from the foot marks however, the numbers of wild animals in these jungles must be immense. No spot where we landed was free from either the foot prints of the saladang, elephant, tiger, deer, bear, or rhinoceros, and often the tracks of all these were to be seen in $\frac{1}{4}$ of an hour's walk. We found our little Malay friend, whose name 'Inchi Basow' I have much pleasure in recording for the benefit of future sportsmen, most active, intelligent and obliging. He beguiled us in the evenings with stories of the forest, and many and hair-breadth scapes he appears to have had. The little fellow had immense pluck and appeared afraid of nothing in the shape of a wild beast. His father had been a sportsman before him and ended his days in a sporting manner, having been kneaded into a pancake by a huge elephant he had the temerity to go after. Inchi Basow himself has several times nearly shared his father's fate. On one occasion whilst in a boat with three others he fired at an elephant in the river, who swam up to the boat and with one thrust of his tusks sent it to the bottom, Inchi and the others narrowly escaping by their duck-like powers of swimming and diving.

We spent several days at Bukit Kupong, making excursions up and down the river to the various plains where the deer and wild cattle come out to feed. We saw a good many of the former, but they were very shy and difficult of approach, not coming out to feed until nearly dusk in the evening and returning to the jungle at day-light. Jungle fowl are tolerably abundant, and of these we shot several and could have killed many more but were prevented firing for fear of disturbing the large game. Pigeons small and large are very plentiful and we saw a variety of birds of the most brilliant plumage, particularly kingfishers of which there were very many species of great beauty. Their colors sparkled in the sun like brilliant gems and were only surpassed in their hues by the butterflies, which were also most numerous and diversified, and would have yielded a rich harvest to an entomological collector. The river is full of fish. A man with rod and line might catch any quantity. With a crooked pin and piece of thread at the end of a bamboo, our people caught dozens, indeed the bait was no

sooner in the river than it was seized, but the extemporaneous hook would not hold so that the bait was taken off some dozen times ere a fish could be jerked out of the water with this primitive tackle. The fish thus caught very much resembled salmon fry, but there were plenty of large fellows leaping in the deep water at no distance from us. Any lover of the gentle art would find full occupation for his rod and line in this fine river, but who could look after such insignificant sport when the jungles around are full of the noblest quarry that sportsmen ever went after? Our stay in this secluded spot (Bukit Kupong), surrounded by primeval forests, with every thing to reward the labors of the naturalist and sportsman was an agreeable change from the monotony of a Singapore life. Every day we saw some new bird or flower. There was one plant particularly attracted our attention, a *Loranthus* with scarlet flowers about 3 to 4 inches in length tipped with a beautiful gamboge yellow. This parasite overhanging the river in large bunches was most gorgeous to behold. We found the cassia and kayu garu in the jungle. The former had a strong pungent flavor, and the latter was as aromatic as any I have ever seen here for sale. I should think there was abundance of it to be had in these forests. Rattans are also very plentiful and of a good kind, the rotan tagur. The most striking trees were the enormous fici, generally full of either pigeons or monkeys. Amongst the latter we saw the Unka Ape. The *Lagerstomia Floribunda* was in full flower, but as I did not take any papers with me and I had no time for botanizing, I observed but little in this line. The paucity of *Orchidiae* struck me, of which I do not recollect having seen one in flower. That queen of the *Aristolochiae*, *Thottea Grandiflora* of Griffith was abundant in many places, particularly on a small hill behind Pankalung Kotah and on either banks of the river. We saw quantities of a curious fruit belonging to the natural family *Asclepiadea*, the *Sarcolbus Carinatus* of Wallich. This fruit, as the Malays quaintly express it, is poison to every thing that has a tail, yet the natives eat the covering of the seed, which is thick and fleshy, and pronounced it wholesome and good both as a vegetable and a sweatment. They could not however prevail upon me to taste it, the family to which it belongs being rather more than suspicious. The seed are very numerous, impacted closely together, flat and winged, and they use them as a certain and unfailling poison against the tiger, elephant and all wild animals. From the account given, its action must be like that of *Strychnia*, and the seed most probably contains that alkaloid.

The Malays distinctly described to us two species of wild cattle to be found here, one called *Saladang*, the other *Sapi*. On the 20th my companions fell in with a herd of nine of the latter. They got up to within 150 yards of the herd. Each selected his *Sapi*, fired and all made off, one was seen with his leg broken, but in a moment they disappeared into the jungle, instead of charging as was expected. Upon following them up however, one, a fine

young cow, was found quite dead, about 40 yards from where the herd was feeding, struck through the heart with a rifle bullet. Upon this discovery, the gentlemen with their attendants must have been a treasure for Punch, could he have seen them. They capered about (I only give their own account of the matter immediately after) shook hands, I am not sure if they did not kiss each other, but at all events their joy was tolerably exuberant. The Shikaris they had with them proposed all manner of observances for 'future luck'; first it was gravely propounded that all the guns should be left on the spot for the night, but upon further deliberation it was deemed sufficient to put their muzzles to the wounds, pass them under the animal and anoint each of the gentlemen on the forehead with a little of the blood. Some other poojahs were gone through to prevent the tigers demolishing the carcass, which was left in the jungle, it being night, minus the head and tail brought home in triumph and displayed before the writer, who could make but a poor set off against such spolia in a very good specimen of a jungle cock. Next day was devoted to the cutting up of this splendid beast. The following is a description of it made on the spot. The Sapi has much the general appearance of the Bali cattle, but has not the white patch on the buttocks; the horns are small, curved inwards, white, tipped with black; the forehead is flat with a tuft of long hair on it, particularly on the bulls; the back is curved, the highest point being about the centre; the spines of the vertebra are unusually long; the total height of the animal killed, from hoof to spines of dorsal vertebra, was six feet two inches; the hair was smooth and silky, of a brown color, except on the feet which were a dirty white, a mane about two inches long ran the whole length of the spine. There was no dewlap and the whole appearance of the animal was decidedly game. The fibre of the flesh was fine, well mixed with fat and proved decidedly the most delicious meat for flavor, tenderness and juiciness that ever any of us tasted. The only regret was the dreadful waste of it, for it having been killed dead by the ball it could not undergo the Mahomedan rite of "simbeleh" and therefore was "harum" to the Islamites. Some steaks from the Psoe muscles will nevertheless be ever remembered by us infidels with the most grateful and pleasing recollections, whether it be our lot to be feasted by Aldermen in London or to enjoy a *recherché* dinner upon Soyer's best principles, I am confident that the flavor of that steak will rise triumphant against all the science of the "Artiste," and be for ever the standard of all excellence in our imaginations. The following dinner in the jungle the day after the Sapi's death, is too important an item to be omitted in the list of our doings. We observe that the bills of fare are laid before the public when a great commander is *fêted* and feasted, and why not those of the great hunter? not that we can claim title to Nimrods of the 1st degree, but our game was truly noble of its kind and needs nerve and skill to follow and secure it; truly it is mighty hunting.

After a day of more than usual exposure we sat down to a soup, the quintessence of the wild cow, followed by steaks which I have already feebly attempted to give some notion of. Then came a tongue of the Sapi stewed with peas, not plucked from the jungle exactly, but out of an hermetically sealed tin. Then there was a roast heart and curry and rice from the most tender portions. After that, roasted to a turn, and looking most inviting, a particularly fine jungle fowl; but alas for the limited powers of man, we could not get beyond the steaks. An impotent attempt was made at the tongue, a delicacy Apicius might have praised, but it proved quite a failure. We could only mourn our incapacity to do justice to it, uttering feebly, as we sipped our Madeira, "Suda Chukop." Whilst in this pitiable state of inertia, a dish was laid before us, that might truly have raised an appetite under the ribs of death. Smoking hot marrow bones from the Sapi! Never have I laid eyes on such marrow and fatness. We had plenty of potatoes and biscuit to eat with it, so one of our trio essayed a trial; the deliciousness of the marrow beguiled him into the belief of his having a corner left, but he found himself afterwards much in the condition of the Boa Constrictor after he has swallowed an ox, and I have my doubts if the repletion would have been recovered from under a week's abstinence, had it not been for some digesters fortunately brought with us, and said to contain a pretty good proportion of Croton oil. So let this be a caution to all future sportsmen to take care how they venture on too much Sapi in a single day.

The other species of wild cattle (the Saladang) we did not see, although we met their tracks every day. The Malay guide Inchi Basow told us the meat was coarser than the buffalo and not good eating, but that the animal was much larger than the Sapi, some of the bulls growing to seven "astas." This is the moderate height of 10½ feet. My readers may believe it or not as they please. I am rather sceptical myself and only relate what was told me by a man whose statements we found correct so far as we had the opportunity of testing them. Besides the various animals I have already mentioned as denizens of the jungle here, there are a variety of fine birds. I saw one morning a brace of those magnificent pheasants called the Macartney or Euplocomus. There were also the Argus, the Cryptonix and a variety of others, but our time began to shorten and the plains not having been burned there was little use our remaining longer, with Inchi Basow who poor fellow was completely foot sore and knocked up at Bukit Kupong. So we determined to go down the river, stay a day at Grisi and another at Sungie Mati for deer and then return to Singapore. At Grisi two of us agreed to take our guns on shore with only shot to pick up a jungle fowl for dinner. We had not walked on more than 10 minutes from the Malay hut at Grisi when one of us saw and shot a jungle cock. Having loaded and stepped on a little further most cautiously to get another shot at a

cock we heard crow a little in advance, we were saluted out of a fern brake with an ominous growl which brought us both to a halt. The growl was repeated 3 or 4 times, when, looking at each other, we determined on the better part of valor and took to our heels, laughing and looking back. We had nothing but small shot in our guns so we went to the boat, got a supply of ball and returned to the spot, where we had the satisfaction of finding a tiger had just been, but who had taken himself off, leaving a very unpleasing odour behind him and his prints most unpleasantly fresh, considering that had we gone on we should have been face to face in another minute, a predicament any thing but pleasant with nothing in your gun larger than small shot. We have therefore to make honorable mention of this praiseworthy act on the part of the royal beast in giving us such timely warning.

As I have before mentioned, it was our intention to proceed to Sungei Mati and beat the island for deer, where they are said to abound, but we were prevented by the following incident which did not make a bad wind up to our trip. As we were proceeding towards Sungei Mati, not far from the spot the troop of elephants crossed when we were going up the river, the Malay boatman called to us, giving us the information that some elephants were bathing in the river. Although asleep, it being about 4 A. M., we were soon astir. The morning had not begun to break and it was still very dark, so we could see nothing, and so little did I expect to see any thing, I at first made no attempt to obtain my gun, for, when we got on deck, the noise and gabble of the Malay boatman was sufficient in my idea to frighten any animals and I fully believed that they had made off with themselves. Upon pulling in shore however we soon perceived a large elephant enjoying his morning bath and so little did he seem to care for us, he deliberately swam towards the boat. It was an exciting moment, for the great fear was of his escape. As I have said there was but little light, but we could see his large body and the great nob on top of his head pretty distinctly. The word was given, he steady now, and at about ten paces distance a couple of balls were put into his head. With this, he turned round and again he was saluted with a couple more bullets. Not liking such reception he made for land and got upon the river bank, when a well directed rifle shot hit him hard and made him scream with pain. But instead of making off, as he might have done, the noble beast instantly came back into the river to take vengeance upon his adversaries; but he was received so warmly he could never make up his mind to a regular onslaught on the boat, and when he turned and made off we followed, pouring in volley after volley upon his devoted head. Finding the side of the river we first saw him on rather too hot to be pleasant, he made up his mind to a change, and across the river he went. Then indeed he was at our mercy and we followed, giving him the contents of three double barrels one after the other in rapid succession, for by the time the third had fired, No. 1 was

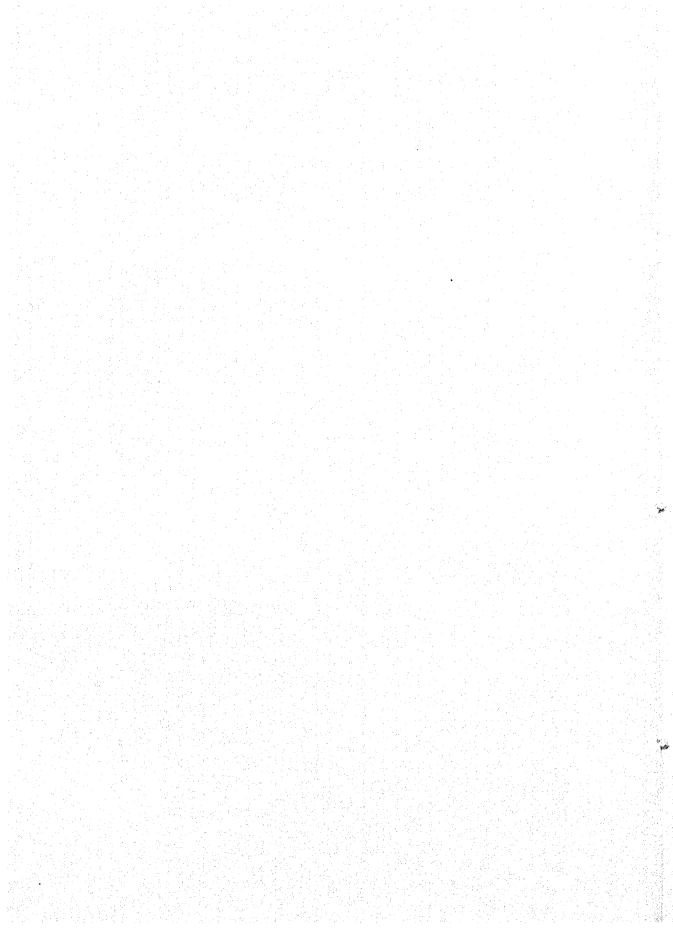
again loaded. All this time we were having target practice at the large bump on the top of the head, for we could see nothing else at about 10 yards distance. Every shot told and the poor beast spouted water from his proboscis, uttering low yells of dissatisfaction. But his merciless pursuers had not pity, although when he did reach the bank and we heard him at the edge of the river uttering plaintive cries, they did elicit a few words of sympathy, such as, "poor beast he is severely hurt, do you think he can get away?" When the boat was close to the shore, he made one more attempt and came back into the river, getting so close to the boat as to put us in no small jeopardy from his tusks, but we gave way and repulsed him with a regular broadside; he then took the shore again. By this time morning began to break and there was light sufficient to see him standing at the river's verge, tossing his trunk from side to side with his head towards us. Two of us caught sight of him at this moment and saw the large hollow in the forehead where the animal is most vulnerable. We pulled our triggers simultaneously and when the smoke cleared away, his large carcase lay stretched on the ground with the head reclining in the river. We soon boarded him, that is so soon as we could convince the boatmen he was really dead and found him a large male with fine tusks; his fore foot being exactly 54 inches round the bottom, which would make his height nine feet. He had evidently been a belligerent gentleman, for his body was covered with scars of old wounds received in combat, and under one of his eyes there was an extensive recent wound given by the tusk of some larger and more powerful adversary. The Malays say that all the males have tusks and that even the females are not altogether without them, so that elephant shooting here would be a more profitable amusement than in Ceylon where the tuskers are few and seldom to be seen. Having secured our tusks, which is a more difficult matter than I imagined and took us several hours, we determined to make the best of our way to Singapore, our time being up. In taking out the tusks we got seven of our balls, but the brain was not examined, neither the nob on the top of the head which was regularly riddled with balls. These however were of little effect, the last shots fired were the settlers, and I have no doubt that one shot in the right place is quite sufficient to bring down the largest elephant ever wore tusks.

I shall now conclude these few rambling remarks with a word or two to such sportsmen as may be induced to try their luck on any future occasion. Should a party determine on going to the Moar river, it would be advisable, indeed indispensable, to their finding game, that they should send a letter or messenger to Inchi Basow, he being the only man to be relied upon, a month previous to their setting out, with a request to burn the lalang grass up and down the river, as far and to the full extent he could; also if possible to get the same thing done at Sungei Mati. They would then be certain of finding deer and wild cattle. If the dry season,

which is February and March, be selected, and I would not recommend any other as I have my doubts about the place being safe for Europeans during the wet months, those who desire elephant shooting cannot fail of procuring plenty of sport about Sungei Mati at this period. We made this discovery too late to profit by it, although the first night in the river ought to have made us aware of it. An odd rhinoceros or two may be stumbled upon, but they are not sufficiently abundant to form an item in one's calculations. There can be no doubt the place abounds with all sorts of wild animals, but they are only accessible when they choose to come out on the plains; to go after them in the jungle is labor in vain. But the sport up the Moar is not to be had without labor and trouble. No person who is not prepared for a good roughing need attempt it. Steady nerves and a good eye are requisites, without which a man may easily lose the number of his mess, but with these requisites, a good steady companion and a trusty double barrel, a man may with safety face any and all the beasts of the forests, be they savage as they may; let them charge; the nearer they approach, the surer the blow, down they must come, and bite the dust before you.

I have now said my say with respect to our trip. May those who try hereafter have as good tempered and jolly companions and as full enjoyment as their humble servant

T. O.



THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

AN ACCOUNT OF THE ORIGIN AND PROGRESS OF THE BRITISH
COLONIES IN THE EAST.*

By Lieut.-Col. JAMES LOW, C. M. R. A. S. & M. A. S. C.

1827-28. Tuanku Din or Kudin, a near relative of the ex-Rajah of Keddah, had taken forcible possession of a village in the S. E. extremity of Province Wellesley, and had treacherously murdered its possessor Tuanku Nuh, allied to the same stock, and had appropriated to himself the wife and property of the latter. The Superintendent of the Province (then Captain Low) drove him out with a party of the local corps, and such was the state of the law at this period that no means were taken to apprehend him. He had however taken care to leave no eye-witnesses of his foul murder. He fled to the mouth of the Muda which divides Province Wellesley from Keddah, until some one, or the Siamese as was rumoured, whom he had before exasperated by his intrigues, sent secretly to betray him. Powder was fired at night under his house; he was much scorched by the explosion, and his wife, who had abetted the murder of her husband Tuanku Nuh, and his child were killed. He then settled himself within Province Wellesley until he had sufficiently recovered to renew his schemes on Keddah. His first desultory attack in February 1829 had been repulsed.

March 1829. Lord W. Bentinck having arrived in the Straits, he remodelled the government and reduced the over-

* Continued from p. 119.

grown civil and military establishments. It was supposed that he would have dispensed with a governor, had it not been found necessary afterwards that the chief should bear that title in order to render operative the Charter of the Court of Judicature.

The Council of two was abolished, and one Civilian was placed in charge of each station—with two Assistants at Pinang and one at each of the other two stations. Mr Fullerton, whose abilities should have placed him in a much wider field of action than the Straits settlements afforded, returned to Europe and was succeeded by Mr Ibbetson, who proved an energetic governor.

The populations of Pinang, Singapore and Malacca, and the merchants whose ships resort to these ports, would consider it a serious misfortune should the English law not continue to be administered to them by one of H. M. professional Judges, and indeed it could not be expected that any Lay judge, who had not been trained for, and had not practiced at the Bar, could be able, however respectable his abilities might be, to fulfil the highly important duties of a Judge in all the various departments of the Law, and viewing the increasing population of the Settlements there ought to be a separate Recorder or Judge for each of the stations of Pinang and Singapore; the Judge for the latter adjudicating also for Malacca.

28 Jany. 1830. The Chinese sugar planters of Battu Kawan Island, which is attached to Province Wellesley, became refractory and attacked a party of police and sepoy stationed there who were proceeding on duty and had seized some gambling dice &c. &c.

The Chinese mustered about 100 men armed with spears, long nibong palm wood lances, iron tridents, a favorite weapon with them, and long knives. The other party consisted of thirteen persons. The sepoy had no orders to fire, so the whole retreated but not till two of the former had been dangerously wounded; they fired a few scattered shots and made good their escape.

October 1830. At the request of the Admiral Sir E. Owen, the Superintendent of the Province was deputed by government and sent in H. M. S. Southampton, to obtain the co-operation of the Siamese fleet at Keddah against the pirates who were then infesting the coast. The fleet, consisting of forty boats, was after some delay got under sail, but not before the piratical one had escaped. It was found that boats of men-of-war had no chance of coming up with pirate boats, which are very swift before, or with the wind fair, and can pull to windward with great rapidity owing to their length and number of rowers.

August 17. The Siamese governor of Keddah was informed that means would be taken to prevent the ex-Rajah and his followers from disturbing the Siamese territory, and that any persons so acting would be seized and delivered up to him, while at the same time the Superintendent in the Province was restrained from acting

as he might otherwise have done by the intimation that any exercise of actual force against the ex-Rajah or his adherent, might in case of bloodshed be productive of very serious consequences to those employed. In truth, as the Straits government had been stripped of all direct political power, it could not always safely act in cases of political emergency, and thus it became impossible to act *consistently*. The Siamese were for once thrown off their guard, although forewarned of the impending attack.

In the mean time Tuanku Soliman, a brother of the ex-Rajah, who resided just beyond the British frontier of Province Wellesley, intrigued with the adherents of the latter within it. A large portion of the central district, *Pry*, was excited to rebellion, and a party of police proceeding on general duty under a small escort, were treacherously waylaid, and a constable, three sepoy and some peons were murdered. This man, Tuanku Soliman, had, some while before, borrowed two thousand dollars from the Pinang government under the pretext of trying to persuade the Siamese to restore his brother. The Siamese authority accepted the gift, and paid Soliman by giving him the charge of *Kota* beyond the eastern frontier of the Province just noticed. He afterwards tried to join the insurgents against the Siamese, but his courage failed and he fled back, and finally the Siamese secured his person and treated him, it is believed, as a rebel. Tuanku Long Putih was the 2nd chief of note, a son of Tuanku Raden of Palembang, and who had married a sister of the ex-Rajah. He was noted for piratical acts. The third chief who figured in this outbreak was Pakirsa, a noted pirate, who had been outlawed from Pinang for piracies and murders. He had taken refuge in Keddah and now renegade-like turned against his protectors the Siamese—afterwards when the war had been ended, and perceiving that they could make good use of such versatile qualifications, they took him again into their service. He was the son of a Coromandal man and a Malayan woman. * The two sons of the ex-Rajah had collected a party of armed men in the Province, and were about to cross over to Keddah, when the Superintendent arrested them by aid of a body of sepoy. Then came Tuanku Jaffer, a nephew of the ex-Rajah, who was very conspicuous. Next in order was Hassan, the son of a rich native merchant in Pinang, who donned the uniform of a British infantry officer. Last but not least in this array of nobles, pirates, outlaws, and vagabonds was to be seen Frederic Reiter of Germanic extraction, who had before been expelled from Bencoolen on a strong suspicion of having robbed government stores, and who had been subsequently convicted at Batavia of having forged bills, and whose sentence of death had been commuted to banishment from the

* The class to which he belonged is styled *Jawi Pakan*, the father being Indian the mother Malayan. The men who belong to this Indo-Malayan tribe are sagacious, energetic and intelligent, but these qualities occasionally render them unprincipled.

Dutch Islands. He too had the audacity to wear a British officer's uniform. It was to have been expected that the voice of these doughty warriors should have found a response amongst the Mussulman population of Pinang, and the opposite coast. It was a crusade against the infidel in which the ex-Rajah's supposed claims were almost forgotten. Hajis preached it, the rich natives encouraged it, the mass of the people rung a peal for excitement and plunder, and christians even forgot in the tumult the peaceful tenets of their faith to league with the crescent in a cause with which they had no concern.*

1831. The population of Province Wellesley was 26,000.

April 16th The boats of the armament collected in a dark night beyond the frontier, having hitherto lain concealed or unsuspected, or at least unnoticed in the creeks on the shores of the island and opposite coast. A column of about 3,000 men passed by land into Keddah from Province Wellesley. Kudin had perhaps as many with him, and amongst these were eighty men who had been British sepoye. Only a very few of these last ever returned.

The hostile fleet soon reached the mouth of Keddah river. The Siamese governor of the Fort became panic struck, when he saw this unexpected armament, for he had scarcely 100 Siamese troops, and he could not trust the Malayan ones. Besides this, he saw numbers of men in red coats and supposed that they were British troops.† This governor gave the enemy one general salvo from all his guns, and then precipitately retreated, but not before he had received a wound in no Spartan fashion, and not before thirty of his men had been made prisoners. These unfortunate men were kept by Kudin for some time, and then atrociously tortured and murdered in cold blood—thereby setting a precedent before the Siamese, which, however prone they may be in their wars to cruelty, they to their credit did not imitate to the degree that might have been expected. During this war a Chinese who had been suspected of having been concerned in the firing of gunpowder below Kudin's house as before noticed, having been seized at the Fort, was sewed up alive in the still reeking hide of a buffalo killed for the purpose; and this was exposed to the fierce rays of the sun, which of course caused it to shrink until the unfortunate wretch was either suffocated or squeezed to death.

The Resident of the Straits, Mr Ibbetson, proclaimed the armament to be piratical; and called on its Commanders to leave Keddah, but the latter paid no attention to his remonstrances.

Tuanku Din assumed the title of vicegerent. The armed vessels

* The writer of this narrative, and also of the account of the second war, resided close to the scene of contest, and added to what came within his own experience, the information daily brought to him; which was afterwards tested by comparing it with that he obtained when the war had ended.

† Sepoye serving in the Straits generally sell their old clothing.

Emerald, and *Zephyr*, H. M. ships *Wolf* under Capt. Stanley and the *Crocodile*, were afterwards despatched to lie off the embouchure of the Keddah river to prevent other forces and piratical fleets entering it, in fact to blockade it. The *Alligator*, Captain Montague, afterwards joined in the blockade. The Malays pursued the Siamese to the frontier, and there took post. Tuanku Din soon quarrelled with his second in command, Tuanku Long Putih, who consequently took the earliest opportunity of departing with his followers. Those men who had joined the force for the sake of plunder and who formed a majority of it—soon followed his example—and stole off by degrees. Kudin, finding that his cause was fast declining, grew desperate, inveighed against the British for having, as he declared, broken faith with the ex-Raja, informed the Siamese General that the English had abetted his attack on Keddah; and that the Malays had left the British territories in order to free themselves from an oppressive land tax. He hoped this last falsity would arouse the ryots in his favour. He likewise spread a report that he would make a descent on Province Wellesley and “retaliate for the obstacles which the Superintendent there had thrown in the way of the Malays, joining the standard of the Prophet’s servants.”

13th June 1831. The Raja or Chau Phriya of Ligor assembled a force of seven thousand five hundred men* supported by a corps of Elephants carrying swivels, and a baggage or rather provision train of the same animals, being 300 elephants for the whole. The advanced division entered by the Ligor Pass of T’hong Po and rapidly forced back the Malayan troops towards the Fort of Keddah. The latter halted occasionally in their retreat, and fought behind breastworks, but at length, after considerable loss on both sides, they were obliged to take refuge within the walls of the fort. The Malays quickly melted away on this reverse, and left Kudin with a few hundreds of men only to defend the place. There were some large guns on the almost tottering walls, while the Ligorian had no battering train. So that after some delay he came to a halt within a convenient distance. Such a miserable fortress could not have resisted for two days an attack from a disciplined British force, even without artillery, for the walls could easily have been escaladed.

The Siamese troops had muskets in the proportion of about one

* Ligor province	2,000
Daloong do	1,000
Songkra or Sangora do	1,900
Choomplyon do	500
Chaha	500
Langsoan	500
Phoonga	500
Malays of Patani and other places	600

7,500

in ten, the rest had swords. All, with the exception of the Raja's guards, consisting of about a hundred men, who were dressed in red jackets, were naked from the waist upwards. Their heads were uncovered, but were fortified by a crop of thick bristling black hair cut after regimental pattern, and brushed up in front like the top knot of a Cockatoo. The cartridges were sections of a small kind of bamboo filled with powder, and the balls were carried in a long narrow bag wound around the waist. These balls were composed chiefly, sometimes entirely of tin. The Raja's request to have some better ammunition from Pinang was granted with the view of bringing such a barbarous contest more quickly to a close, and as it was notorious that the attacking force had without opposition been amply equipped at Pinang!—which naturally enough was construed by the Court of Bankok as an abetting of the rebels.

As the fort was hardly large enough for Kudin's men to act freely, he ejected all the old men, women, and children, who were in it, and compelled them to remain under and outside of the walls exposed to the fire of the Siamese, when they could easily have escaped to Pinang! The Siamese chief with a tact which in a civilized commander might have been called humanity only, but here may have been induced partly by that aversion to take life which Buddhism inculcates and partly by politic considerations, sent to Kudin exhorting him to let these poor people remove from so exposed a position. A similar remonstrance arrived almost at the same instant from the government of Pinang. But this remorseless fanatic continued inflexible, and daily witnessed numbers of these helpless wretches being killed by the enemy's fire. When however the garrison had become pressed for food, he stripped these unfortunates of their property and ordered them to depart. They did so; but owing to the delay numbers perished by various accidents before they could reach the British territory.

The Siamese at last had so closely invested the fort that famine prevailed in it, while most of Kudin's ammunition was expended. Still many contrived to escape by swimming the river either to the opposite bank or to the Frigates outside, although the broad stream swarmed with huge alligators, which had been attracted by the scent of death. At length a small but reckless band only remained. Kudin might, it is said, have escaped in a small skiff,—but he was a fatalist, a predestined martyr to the faith and sure of being sent to heaven with all his sins off his head, if by the ball of the infidel. His revenge had been sweet while it lasted. The Malays thought he was then insane. This probably was a mistake. His strange behaviour arose from a naturally ferocious temper excited and goaded by mortified pride, religious bigotry and a dogged passive courage. Finally, Kudin put on the cowl—which amongst Malayan Mahometans, is the sign of self-devotedness to a cause.

4th October 1831. The Siamese having no battering train, had erected *Trojanic* towers constructed of huge beams placed erect, with platforms behind, whose top was reached by ladders. As these antiques were only about 30 to 40 yards from the walls and overtopped them, the assailants kept up a galling fire on the Malays inside. The Ligorian lost a son and several officers, besides men during this siege. At last the remnant of 50 to 60 Malays having been reduced to a state little short of starvation, the Siamese stormed the fort at its E. gateway, the Chief Kudin was killed with most of his men, and only a few were made prisoners. One of his chief men escaped by swimming to the *Wolf*. After the Ottoman fashion, Kudin's head was despatched in a bag to Bangkok. The influential Malays have several times since got up a cry of Kudin redivivus, but without producing the sensation intended.

While the war had been hastening to a close, the Patani people broke into rebellion. This ill-timed outbreak was quickly put down by the Ligorian, who had sent against them a force under one of his sons of 500 Siamese, and 3,000 of the very Malays of Keddah, when had but just before swelled the ranks of Kudin. This clearly proves the superior tact which the Siamese possess in war over the Malays. The courage of the Malay is flickering and unsustained, and the creation of a sudden feeling or constitutional impulse. He is averse to discipline and controul, and is apathetical even while under perilous circumstances. The Siamese are not more courageous, but they have unity of purpose, obey their leaders implicitly, have much perseverance, endure severe privations, and are altogether superior to the Malays in military tactics. The latter behold the Siamese with fear and hatred—the former look upon the Malays with distrust and pretended contempt. Had there been even no blockade of the river, a measure which had been taken merely to prevent piratical and other Malayan fleets entering to assist Kudin, it would have only delayed not averted the final event. The Ligorian too had a reserve of 3,000 men sent from the capital which he never employed. The contest lasted five months, during which the Siamese lost in battle 700 men, and the Malays 1,487. On this occasion an emigration of 16,000 persons took place to Province Wellesley—leaving hardly 20,000 souls in the Keddah country.*

* The writer accompanied officially the Pinang Resident, Mr Ibbetson, when he visited the Ligorian's Camp in Keddah just after the fort had fallen, and witnessed the excellent discipline which was kept up amongst his troops. The guards were regularly relieved at night at the sound of a gong, a part of a tune not unlike a Scotch Reel was played at the same time by the Raah's band, and the time was kept by a water horologe. His Highness used to sit up till past midnight writing despatches and dictating, Cæsar like, to several Secretaries at once. He sat down to the Resident's table, which was well provided by himself for the latter, from Pinang, but he did not partake of the dishes. He told his son to taste them. This he did by smelling them. At his request however he had an English breakfast of toast and eggs sent to his house. His goldsmith examined and measured the service of plate in order to have one made for himself. He

NANNING.

1831. In the year 1831 an insurrection broke out in the district of Province of Nanning, which is a dependency of Malacca. The British when they received over Malacca from the Dutch found that the Panghulu or chief of Nanning had been deprived of all political authority, on the ground, that whatever claims he might have chosen to advance had already merged into the paramount power. This condition of things was consequently upheld. With the sanction of the British Government, to which he was subordinate, he had received his title from the Ruler of Menangkabau in Sumatra, who possesses the authority, now merely nominal, but in ancient times real, and which had descended to him from the once potent and widely dominant Rajahs of that Empire. This tract of country (Nanning) embraces an area of about 400 miles square, according to Captain Newbold, and before the rebellion, it contained 6,000 inhabitants scattered about in patches of cleared land surrounded by jungle. The chief's name was Si Abu alias Dul Syed or Abdul Syed. The Panghulu had formerly paid to the Dutch before they ceded Malacca an annual quit-rent of one-tenth of the grain produce, or 400 gantang of paddy at that time, (value on an average 15 Spanish dollars) six dozen of fowls, and a duty of forty-five and one-half cents of a dollar upon each boat which his people brought down the river to Malacca. To all these were formerly added a certain number of buffalos; a tenth of the produce of land had also been levied by the Dutch.

In 1802 his predecessor had engaged with Colonel Taylor, the Malacca Resident, to use the British instead of the Dutch seal, and the import of buffalos was removed.

neither drank wine nor spirits; but was incessantly using the betel mixture. He was saluted in his sala or hall of audience by the Resident and his party with a bow in the English manner, which he returned by a slight inclination of his head. He was seated cross-legged on a slightly elevated platform, and his guests sat on chairs in front of him. His sons and officers were squatted in a half-reclining posture on a lower platform on his right; and on the left, with legs tucked under their bodies and with elbows resting on the floor, were the Secretaries and Interpreters. The body guard of 100 men squatted around the hall. One-half of these were blue, the other half red jackets. They had good muskets, the butts resting on the ground, and in the *present arms* attitude, so far as the sitting posture allowed of. His Highness was very animated in his conversation and left a very favorable impression of his abilities on the minds of his guests. The object of Mr Ibbetson's visit was to have the Province Wellesley boundary clearly defined if practicable, by natural objects where such existed, and this was soon satisfactorily arranged. His Highness described an attempt he had made to construct a boat to go by steam. It did go round about he said, but it then went down, at which he laughed outright, and his account was so ludicrous that his example was quickly followed by us also. The only strange thing is that he got the boat to move at all.

The party was supplied by the Rajah with elephants to ride on. Each animal had one mabout or driver, also four foot attendants, armed each with a sabre, the handle of which being used to parry blows is nearly as long as the blade. Female elephants only were used to ride on, and they were observed to be well trained. Colonel Gibson and the late lamented Dr Ward made on the day after our arrival on one of these elephants, an excursion to the elephant, a high rock of primary limestone, leaving Mr Ibbetson and me to palaver with His Highness in his durbar or sala.

I may here remark that I have generally found the Siamese officers quite ready

In 1807 the tax on boats was abolished at the suggestion of the resident, Major Farquhar.

In 1828 the Panghulu Dool Seyed refused to obey a requisition for him to proceed to Malacca to confer with the chief British authority. It was believed that he wished to evade the payment of the tenth above alluded to. This tenth of the produce had been recognized in the Dutch treaty of 1643-44. It was the four hundred guntangs of paddy already specified. But when the Nanning cultivation had greatly increased, owing to the prosperity of Malacca, a corresponding increase of this branch of revenue was authorized to the same original extent of one-tenth.

Mr Church was accordingly deputed to proceed to Nanning to levy this tenth, to deprive the Panghulu of the power to punish offenders, and also of imposing fines—which powers he had unauthorizably assumed. His four Sookoos or assistant chiefs were offered pensions. The attempt failed and force was the only thing left to government. As a detailed account of the war has been already given by Lieutenant Begbie,* it will not be requisite to describe it in this place, excepting in a very cursory manner.

to assist me in any of the antiquarian pursuits which carried me into their territory, and we know that Dr Richardson had every facility placed at his disposal for his journey through the heart of Siam to Laos. It looks therefore very ridiculous to find Malays more disposed than the Siamese are to throw obstacles in the way of research than to assist in it. This indisposition, where the locality is a Siamese one, may be produced by fear of the emperor, otherwise it is the result of ignorance, apathy and superstition. They do not absolutely prevent one travelling about, but they will not give any information, nor allow men to be hired as labourers.

The Siamese ought now to be and perhaps are fully aware that the British government has every disposition to have their empire preserved intact, and that it is only desirous of seeing trade there placed on a footing commensurate with the magnitude of the resources and to the prospective internal improvement of that country; and such as should be adapted to the increased and increasing aptitude of all nations for a liberal interchange of their respective products.

No one, no natives at least in Siam, it is presumed, can be more alive than its present meritorious heir apparent, that it has much to gain, and nothing to lose by admitting British scientific inquirers to travel over it. The strides which His Highness has already made, far in advance of his countrymen, on the high road to the Moral, Political and Physical Sciences, augurs favorably for the future, and comports well with his high destiny.

The Ligorian's force had suffered from small pox, and he eagerly seized the offer of receiving virus, and sent afterwards two of his medical men to Pinang to get some and to be instructed how to use it.

His Highness amongst a multiplicity of questions, asked to be enlightened on the nature of the British government. This was a poser, for free institutions are incomprehensible by eastern despots, and any account of these is not readily credited, if it be not always disbelieved.

The soldiers were put through the manual and platoon exercises to the delight of the Rajah. But he did not express all he thought. His appreciation of our superiority was afterwards evinced by his sending to Pinang to obtain old discharged sepoy to instruct his troops. His efforts however were not attended with the results he had anticipated; as innovations are distasteful to men, who never had the advantage of being taught that delectable recreation the goose step, or indeed any regular discipline. Every man becomes a soldier when the king requires him.

Siamese generals rarely expose themselves in action. One of them during a war with Ava had proved so backward that the King sent him a ladies dress as a present, at sight of which he committed suicide:

* Begbie's account of the Nanning war.

June 1831. The decision of the Home Authorities having been received, a detachment of troops was sent into Nanning, but being too small it was forced back; the Rumbow chief having joined Dool Seyed.

18th January 1832. The Rumbow chief was persuaded by the Governor, Mr Ibbetson, to break off from the Nanningite, and reinforcements of troops having reached Malacca from Madras, a second force was detached in advance on the 7th February 1832, and a price set on the apprehension alive, if possible, but if this were impracticable dead, of Dool Seyed. After a good many affairs had taken place betwixt the British troops and the Malays, with considerable loss on both sides, the stronghold of Taboo was stormed and taken on the 15th June 1832, which put an end to the war. This rebellion of a population consisting only of 5,000 persons, thus required a comparatively large and disciplined force to suppress it, affording the wholesome lesson, that no enemy however apparently contemptible should be despised. It would not be difficult to point out a long series of instances in which this undervaluation of an enemy's means to do mischief has cost the British much unnecessary blood and treasure. Nature siding with the weaker party, interferes her hills and her forests, tangled brakes and impassable morasses, to level distinctions.

6th April 1832. The eastern boundary of Province Wellesley was marked out at this period by brick pillars. This was done by the Superintendent of the Province and Siamese officers deputed for the purpose from Ligor.

Mr Murchison succeeded Mr Ibbetson in December 1833, the latter having retired after a long and honorable service. He was one of the first who set the example in 1821* of cultivating on a large scale, one which to the great advantage of the island has continued to be followed ever since. The late Mr D. Brown of Glugor was however the originator of pepper and spice cultivation, and he had the merit of succeeding at a period when others were afraid to venture, and when the experience so indispensable to success, was almost wholly wanting.

1832. The population of Province Wellesley had increased to 50,000.

1835-36. Piracies had increased to such an alarming extent to the Eastward, that the Governor-General of India made the Hon. Mr Bonham and Captain Chads, C.B., R.N., Commissioners for its suppression. Mr Bonham assisted personally and energetically

* At this period the Indian Government encouraged their servants in the Straits to invest their savings in cultivation, but latterly, following the rules it had laid down for the Indian Presidencies, the encouragement was succeeded by a positive prohibition, so that much loss was sustained by the holders of land. A measure of this kind, however expedient it might be, should have in all fairness been prescriptive, and since the Government itself was the instigator to such cultivation it should at the least have reimbursed those who had been led by it to little short of ruin.

in this desirable service. The result was eminently successful. Her Majesty's vessels, to which the H. E. I. C. Armed Steamer *Diana*, under its able commander, Captain Congalton, was added, attacked the pirates at their principal station, and after a series of operations, in which that vessel took a very prominent part, and acted also most decisively when apart from the other vessels, destroyed them and their boats, but few escaping.* This was the commencement of active expeditions against the ruthless marauders of the Archipelago, who had become formidable even to large trading European vessels, and several dashing affairs have since occurred. The last attack on their fastnesses was made by the Spanish from Manila, and was conducted with such determination and address, that a large horde of pirates were utterly rooted out and destroyed.

August 1835. Pirates became troublesome in the Kreaan river, on the south boundary of Province Wellesley, so that the Superintendent, as before, of this Province, was obliged to proceed with an armed party and a gun-boat and clear it out. In a boat which had been swamped by a shot, evidence was found of the Siamese officer (a Malay) who was stationed close to the British eastern boundary, being concerned in the recent piracies. He was ordered to remove or stand the consequences. He accordingly removed to Patani.†

* The piratical station of Gallang was destroyed on the 28th June 1836 with all the boats found there; many piratical boats were destroyed at sea and numbers of pirates killed.

No. of the above
3 villages.
14 large boats.
30 to 40 small ditto.
Ammunition &c.

† The native chiefs were bound down to suppress piracy and many prisoners as slaves were released, and the Dutch were stimulated to perform their part of the Treaty of 1824 in which they promise to aid in destroying pirates.

Although it may beforestalling time, I cannot permit myself to leave this subject without adverting to a case which was tried lately (August 1848) at Penang before the H. the Recorder Sir C. Rawlinson, the result of which, it is to be hoped, may attract the attention of Government, so that a remedy for the mischief brought to light may be provided. A Native, a Nakhoda, who is a British subject of Penang, took his schooner from that island to the East Coast of Sumatra; and having ascended a river he bought there several Malays of that country as slaves. He then set sail for Perak where he intended to sell them. On the passage he was overhauled by the officer in charge of one of the Penang gun-boats, and as these slaves were found on board the schooner she was brought to Penang. The Nakhoda was put on his trial for piracy and slave-dealing and acquitted. It appears from what fell from the Bench that as there are no existing treaties betwixt the surrounding native states and the British for the suppression of slave-dealing within their territories respectively, the Court could have no jurisdiction in cases of this description. Piracy accompanied as it generally is to the eastward by slave-dealing, can it appears be only committed on the high seas.

There is perhaps scarcely a native Prahu which trades from one native state to another, which has not one or more slaves on board, and when the fleets or single boats of two native states which are at war with each other meet at sea and engage, then a British armed vessel is very likely to mistake one of the parties for pirates, which mistake the other party will of course readily encourage, as a cheap and easy way of obtaining victory.

The trade of Penang stood thus during these years, that is, from 1st May 1835 to 1st May 1836, and from 1st May 1836 to 1st May 1837:

	1835-6	1836-7
Imports in Specie	5,421,007	6,687,465
Exports do.	5,367,523	6,578,013

Increase 3,476,948

The above has been extracted from Captain Newbold's "British Settlements in Malacca," a valuable publication, in which the reader will find many localities described and subjects noticed, which do not come within the scope of this account.

The trade of Singapore by the same authority, who took his information from Singapore Government records, stood thus*:

Imports value—	1834-35	Sp. Drs	6,420,336
Do.	1835-36	"	6,618,671
Exports.....	1834-35	"	6,735,851
Do.	1835-36	"	6,217,513

Total for the three Settlements of Imports and Exports.

Imports	Sp. Drs	8,243,629
Exports	"	7,806,965

THE SECOND KEDDAH WAR.

1836. The last attack which the Malays made to expel the Siamese from Keddah bears a very close resemblance in its principal incidents to the first one under Kudin.

The ex-Raja of Keddah had quitted Malacca on the pretext that he intended going to reside at Delhi in Sumatra, but he changed his course at sea and went to Bruas in the Perak country; from which place he had been excluded by the treaty of Bangkok. Although the Raja of Perak had, but lately, as has been already described, at his own special request been relieved from his thralldrom to Siam, he had the folly to send down the Heir Apparent or Raja Muda with a fleet of boats to visit his rather untoward guest and former enemy. Mr Murchison, the Governor, perceiving that this movement would again hazard the independence of Perak, as it would be construed by the Siamese into a demonstration of a desire on the part of the Perak Raja to aid the ex-Raja's cause in Keddah, despatched the Superintendent of Province Wellesley† to persuade the Perak Raja, which he did without delay.

The ex-Raja was joined at Bruas by several hundreds of his old adherents, and then he began to instigate another crusade against the Siamese in Keddah.

January 1837. Mr Murchison, who had been the able Go-

* P. 369 to 380.

† The writer of this account.

vernor of the Straits for several years, was succeeded by Mr Bonham.

7th February. Alat Ali, a chief, whose father had charge in former times of the islands of Lancavi, made a sudden descent upon them, and drove out the Siamese officers. These islands lie off the Keddah coast and belong to Keddah. Here he began collecting men and pressing into the service of the Raja all the Malayan boats he could find, some being trading boats from Pinang. This man refused to quit his position when required to do so by the Governor of Pinang.

April. At the requisition of government, Captain McCreagh, of H. M. S. of War *Zebra*, proceeded to Bruas, and after a smart affair in which one seaman was killed, one mortally wounded, two severely so and one slightly, the ex-Raja was secured and soon after sent back to Malacca.

But preparations for the second campaign still went on and it is deeply to be regretted that notwithstanding it had been proved by the result of the first outbreak, that the Malays could not possibly contend single-handed with the Siamese, the war-whoop at Pinang was still heard urging on two exasperated half-civilised races to deeds of carnage. Yet only a few years previously, the report of the Siamese being at Keddah was sufficient to create a panic in Pinang amongst the non-militant inhabitants.* About seven thousand arms of different kinds were at this time seized in the Province by its Superintendent, and cast into the sea, but as its salient population of Malays was about fifteen thousand, and such arms were easily manufactured, this measure had scarcely any perceptible effect in checking the preparations for war.

Six years of peace in Keddah and of apparent return to their allegiance in the Malays of that country who had *sworn fidelity to the Siamese on the Koran*, had seduced the Siamese Governor into a fatal confidence. He had thought that his three hundred Siamese soldiers and these Malays could easily have repelled any attack.

April 3rd 1838. In 1838 a man called Tuanku Mahomed Saad, acting in concert with the ex-Raja's advisers, exhorted the Malay-British population to arm for an attack on Keddah. He was half brother to the ex-Raja's father, and had only been known as of unsettled if not predatory habits. That this was a second religious war, will perhaps be clear from the private circular sent by the ex-Raja amongst the population of the settlement. "At this time there is Tuanku Mahomed Saad who has become enlightened by the grace of God, and has been *directed by God* to return to Keddah. Let all the chiefs relatives who wish to partake of the

* The Malay is unfortunately from quick feelings and a singleness of character but too apt at any time to become the tool of any reckless plotter or frenzied fanatic.

“mercy of God, and his prophet, assemble at Marbow river
“&c. &c. Date 27th Dalhaja.

[Rajah's seal.]

June. Tuanku Mahomed Taif, a Keddah chief, in the meanwhile collected a force of 800 men and occupied some posts along the line of the British frontier to the north, and was prepared to penetrate to Keddah to co-operate with a sea force to be sent there by Wan Mat Alli.

13th June. The latter chief arrived at the Marbow river, to the southward of Keddah river, about four miles to the north of the British boundary. He was here attacked by a Siamese fleet of boats which he drove back.

The Malays took advantage of the Raja of Ligor's absence at Bangkok to commence their operations.†

3rd August. Tuanku Mahomed Saad attacked the Keddah fort on the 3rd of August, but was repelled. The Siamese forces were scattered over the country—so that the garrison consisted of 70 Siamese and 300 Malays only. The latter did not shew any signs of defection on this first attack; and if their families had not been absent, they would probable have stood firm. But Mahomed Taif arrived at this time at Kubang Rotan, but a short distance up the river, where he found assembled the families of these men. Like a true barbarian he placed them in the front of his force, and advanced on Keddah fort. Its shot began to tell upon them, and two women had been killed and two wounded, before the Malays in the fort had gained intelligence of this inhuman proceeding. It had however the intended effect, for the Malays abandoned the fort to the Siamese part of the garrison which, thus weakened, retreated towards the north. These Malays then joined the invaders, who took quiet possession. Ten days after the fall of the fort the Malays got hold of Purlis and Trang, provinces further to the north. The Malayan force when first concentrated consisted of 7,000 men, 2,000 at least having been drawn from Province Wellesley. Of these, 800 were employed carrying stores. This body was then split up into detachments and dispersed to guard all outlets to the country. Some Patani soldiers and others joined this force for a short while swelling it to 10,000 men. The Malayan chiefs believed that their army must have intimidated the Siamese, and that the emperor would be induced by a new promise of tribute by them to restore the

† Meanwhile the ex-Raja's son Tuanku Abdullah seized on the Keddah frontier post of Kota on the N. bank of the Muda river within pistol shot of the British post opposite to it. The Superintendent of Province Wellesley was directed by the Governor, Mr Bonham, to seize him and eject his followers from that place, preventing bloodshed if possible. An officer's party, or half a company of sepoy, was sent to assist in performing this service. Abdullah refused to return across the river, so the Superintendent and the detachment crossed; the Malays retreated without resisting, and the post and the river under cover of a 3 pounder held in readiness, was delivered over by the above authority to the Siamese officers according to the orders he had received.

ex-Raja, and yet at the same time they adopted the very course which was much likely to thwart any negotiation with that view, the exciting of Patani to rebellion. They now tried to negotiate through the Raja of Sangora, who pretended a wish to serve the Malays, in order that he might gain time to prepare against a meditated attack by them on himself, should he not further their policy. The negotiation of course failed and the outer districts of Sangora were attacked sometime subsequently by the Malayan troops, and after a very short and partial occupation were evacuated, but not before they had sustained much mischief. They also attacked the Siamese district on the same east coast of the Peninsula called Channa; sacking and plundering villages, and Buddhist temples. The images which they found in these were chiefly made of tin—the priests having secured the more valuable ones before they fled. A party of the insurgents then arrived at Kotab Bahru, and finally at the embouchure of the Patani river, where they had hoped to procure boats to carry them to the assault of the town of Sangora, the population of which consisted principally of Chinese. In this hope they were disappointed. The second Malayan column under Mahomed Taip reached the above town and invested it a good way off on the land side, but had not the means of doing so on the sea face. They had here passed nearly three months in a state of inaction, when the Sangoreans marched against them with a force of five hundred Chinese and two thousand Siamese and Malays. The invaders were worsted with considerable loss, and compelled under Tuanku Mahomed Saad, T. Abdullah, T. Mahomed Sunnawi and T. Mahomed Taip Putih, to retreat to Keddah. The Chinese on this occasion stormed the Malayan entrenchment without guns or with the aid of but a very few muskets. They advanced with their long Tat or Pikes and covered by a moveable wooden skreen, and they actually spiked some of the Malayan wall pieces before they were driven back. The Malays although the besiegers acted the whole time of their stay, on the defence made no assault on the town. They had no guns with which to batter the walls.

During all these operations the Malays seemed to have forgotten their energetic enemy the Raja of Ligor. They had advanced into the Siamese territory without closing the gates behind them, and that wily chief seized the moment, and before these marauding invaders could reach the Keddah frontier, his troops had passed over it and were on their route to the fort. His advance first encountered a detachment of 300 men under Seyed Hussain near Alor Ganoo, defeated them, and killed thirty of them including a chief. Alor Ganoo was next attacked and forced—and the Siamese pushed on. The Malayan detachments shut themselves up in the fort and in a day or two the Siamese shut after forcing several breastworks approached nearer the fort.

The investment was latterly so close that the people in the garrison were deprived of their usual supply of fresh water, that within the walls being brakish. The Malayan chiefs, recollecting Kudin, had this time allowed all the women and children to fly to Pinang, many died by the way, chiefly owing to the privations they had indured at the fort. They were not permitted to take advantage of the refuge offered to them by a Siamese proclamation, as the insurgents wished to leave Keddah a desert, being convinced that this would be the last attempt which would be made to expel the Siamese. Tuanku Abdullah, the ex-Raja's eldest son, and some other chiefs now allowed their men to disperse, and then fled themselves to Purlis, and the Siamese took quiet possession of the fort. The Sangora column of 5,000 men was relied on by T. Mahomed Saad for renewing the contest, its absence having been severely felt, but before it had well re-entered Keddah, it had dwindled down to several hundreds only. This remnant joined Tuanku Mahomed Saad at Jiram, where that chief had collected the out detachments. The whole of his force, which amounted only to one thousand men, were marched rapidly to attack the Siamese in their lines at Alor Ganoo. Here they formed two bodies, one of which secured the right and the other the left bank of the Keddah river below the Siamese position. But the latter instead of waiting an attack fell on the Malays, defeated them successively, and forced one body to seek refuge within the British territory. The other under Mahomed Saad fled towards Purlis, devastating the country as it passed, forcing the inhabitants out of their houses and then burning the latter and the property of the owners. The chief finished this deed of a liberator, by coolly telling these miserable people to migrate to Pinang. The same atrocities were perpetrated at the town of Purlis, which was reduced to ashes—thus did this chief out rival the very acts with which the Malays had overcharged the Siamese. Tuanku Abdullah, the ex-Raja's eldest son, reached Pinang and delivered himself up to Mr Bonham the governor. After Tuanku Mahomed Saad had returned from Purlis, he proceeded south again and posted himself on the north bank of the Muda river, where he intercepted the refugees from Keddah to Province Wellesley and obliged them to give up 20 per cent of their buffaloes; although he had before levied a duty on them at Keddah, and he sold them on the spots speculators from Penang and Province Wellesley. He deprived them also of their arms. On the approach of the Siamese he fled towards Perak, passing close along the eastern frontier of Province Wellesley. It is believed that he carried away property plundered from his countrymen in and out of Keddah to the amount of ten thousand dollars, a species of atreicity which was not imputed to the other belligerent chiefs. His conduct also, and that of many of his chiefs was marked by the most cold-

blooded cruelties and barbarities. Several hundreds of prisoners were massacred by him in cold blood and numbers were previously tortured. His own people did not escape his fury, for he decapitated many of them on very slight grounds. The thirty Siamese who were taken prisoners when the fort first fell, together with ninety others were inhumanly massacred in cold blood before the fort was evacuated. With these were sacrificed with similar barbarities, Blat Chi, a Siamese chief of Sangora, also Yokkabat, a Siamese officer, who had been long stationed at the Muda post, and *his two young children*. This man was forced before this tragedy to become a Mussulman, and he was then sent to overlook a gang of Siamese prisoners who were working in irons. The cries of all these miserable wretches were distinctly heard on board of H. M. S. *Hyacinth*, then blockading the river. Would the commander not have been justified, had he been aware of what was going to take place, in forcibly preventing the perpetration of such horrid enormities by persons ostensibly priding themselves on living under the protection of the British flag? Could any policy have dictated an indifference to them? But no special directions could have been given to meet such events, and certainly more than might have been expected had already been done to aid the Siamese, and the Court of Bangkok had been supine in not sending an overwhelming force to crush the rebellion in the bud. Humanity would have fully justified, although it is doubtful if political considerations would, any interference by him in quarrels betwixt other nations.

A Bengal man who had once been a sepoy in the British service, and had got the charge of the guns on the river face of the fort, was suspected by Mahomed Saad of treasonable negligence. He called for this man and told him that as his heart was false it should be exposed. He was instantly ripped, from the neck to the abdomen, and thrown out behind the fort and died a lingering death eight hours afterwards.

The Malays lost in this war 958 men by their own lists—and the Siamese, chiefly by the attacks on their scattered posts, about 1,000 men according to the Malays. The actual number lost to the former has been averaged with greater probability of truth at 2,000 men, while that on the Siamese side has been exaggerated. About one-half of the latter were *Malays, Bengalees and Chinese*.

The Siamese column which drove the Malayan forces before them, and regained Keddah, did not exceed 1,500 men, although the Ligorian had reserves in readiness beyond the frontier, one of 3,500 from the lower provinces, and an equal number at least of Bangkok troops at Sangora, all of which he should have had in the advance, and so settled the affair quickly.

The Malayan *British* subjects who had thus fought for thankless chiefs, were so disgusted that they declared it was the last time

they would appear on such a field, and it will in all probability prove so; as most of these men were born in Penang and Province Wellesley—and since stringent preventive regulations have been made by the Legislative Council of India, to guard in future against such demoralizing warfare.

The Siamese government now divided Keddah into four provinces, over each of which it placed a governor.

The Ligor Rajah was, not long after the conclusion of this war, summoned to Bangkok, and it is alleged, that he was suspected by the court of being rather *over-attached* to the British. This falsity may have been a mere pretext for keeping near to the capital one of the ablest men Siam ever possessed, and who on that account may have been considered dangerous at a distance. He died there several years afterwards and was succeeded by one of his sons. It cannot however be supposed that this officer, whose intellect far exceeded perhaps that of any of his countrymen, should not have duly appreciated the British character and the power and resources, arts and sciences of Britain.

The future career of Tuanku Mahomed Saad is one of newspaper celebrity. He was incarcerated at Penang for alleged piracies committed both during and after the Keddah conflict on native traders of Penang. The case was thrown out by the Court of Judicature on the plea of no jurisdiction, he was then sent up to Calcutta, and kept there for a good while, when the Supreme government released him. He returned to his old haunts, where he lived neglected and powerless for a year or two, and at last came in disguise to Penang where he died.

The Superintendent of Province Wellesley* having learned after the war that a number of women and children, the families of Siamese prisoners, taken during the contest, were shut up by the Malays at the stockaded post of Kota on the north bank of the Muda river, and were on the eve of being sent to Sumatra to be sold as slaves, proceeded there with some armed boats and compelled the Malays to give them up. As the law stood, and even as it now unfortunately stands, this was indeed an act of supererogation, but it was in accordance with the wishes of the Siamese and with the spirit of the treaty of Bangkok.

1840-42. The arrival at various times of troops proceeding to the seat of war in China created a great deal of bustle in the Straits, particularly at Singapore, and the advantages derived from having settlements there as half-way ports were doubtless duly felt and appreciated.

In 1843 Lieutenant-Colonel Butterworth C. B. became Governor.

Several piratical acts having been committed by Malayan chiefs residing on the east coast of Sumatra, the Governor made a requi-

sition to the Naval Commander for assistance in punishing them.

It has been alleged that this attack has prevented some Native traders visiting Penang from the coast in question. It is not likely that even if true, those holding back could have long resisted the impulses of self-interest. But if they should have done or should do so, we can only regret that any portion of the native trade to Penang should depend on the caprices of pirates.

Agriculture.

The limits of this sketch will not permit of any minuteness of detail on this head, an abstract therefore is all that shall be attempted.*

Penang.

The island consists of about 48,000 orlongs or 64,000 acres of which a considerable portion is under cultivation. Its chief exportable agricultural products are nutmegs and cloves. Cocoanuts are in some degree exportable but not to the other hemisphere and oil has not been made for exportation beyond a few piculs. Pepper which was formerly extensively cultivated here is now brought principally from Sumatra. Some rice is also grown.

Province Wellesley.

The actual area is estimated at almost 150 square miles, and the cultivated extent about 30,000 acres at the utmost, perhaps 25,000 would be nearer the mark. The chief exportable products are rice, sugar, nutmegs and cocoanuts. Some pepper is grown.

The cultivation of Sugar began at first in Batu Kawan, an island attached to Province Wellesley, in about 1790.

In 1840 Mr Bacon began to cultivate on an extensive scale in the northern part of the Province, and his example was very soon followed by others. Several French gentlemen having seen the account of the Province above adverted to, arrived from the Mauritius. Government had at length adopted the true policy of selling land and without vexatious reservations, so that applicants had little trouble in settling down to their work. But the government stopped short in this wise improvement on antiquated systems. Instead of placing the whole cultivating population on a fair and equal footing by permitting the holders of grants and leases to commute their rents, and quit-rents at fair rates, not exceeding that at which it now disposes of land by *sale*, the commutations were fixed at unequal and in most cases at excessive rates. The evils attendant upon a close and retentive system of land and its management; as if it were worth the while for any government to hold

* "A Dissertation on the soil and agriculture &c. of Pinang and Province Wellesley" was published by the writer of this in 1836. Although much perhaps might now be added to it and some portions of it would admit of modification, still it will be found to be generally applicable to the present time.

fast, low tracts of jungle and swamp instead of dispensing it freely and thus spreading abroad the blessings of civilization and industry; has already been exemplified in the decreasing population of the Province in localities where sugar is not the main article of production. Every possible encouragement also to this valuable branch of agriculture was in the beginning afforded by the Governor Mr Bonham, and the Honourable Colonel Butterworth C.B. afterwards much forwarded it by every means at his disposal, and by heartily following up such reasonable suggestions as were proposed to him, and there is no doubt that had he possessed enough discretionary power sugar cultivation would have been in a much more advanced condition than it now is.

The cruel inflictions which the British colonists in the west have suffered from free trade principles, have almost crushed the Indian and Mauritius sugar growers; and have been injuriously felt in the Straits by them and others. A company which was forming with a large capital for sugar growing in the Malacca territory has, it would appear, abandoned its operations. It is to be hoped the Province Wellesley and Penang sugar planters will not be discouraged. They have facilities for obtaining free labourers from China at a much cheaper rate than it may be safely said any planter in any other part of the sugar growing world enjoys—the soil is good and localities are favorable. It seems indeed strange that the cultivation has not greatly exceeded what it is—and this can only perhaps be, I think, accounted for from the ignorance which prevailed at the commencement of the best mode of cultivating the cane and preparing the sugar, which deficiencies led to an over-expenditure, creating discouragement. The labor of an able-bodied Chinese is only 10 cents per diem, and there is no charge for food and clothing or medical attendance.

Malacca.

There are no agricultural exports—coconuts are plentiful.

Nutmegs.

The produce has been rapidly on the increase. It is a speculation which has not yet been tested sufficiently to admit of a general inference, for whatever money may have been made by spice growers arose from limited competition, but now the competition is such as to reduce profits greatly.

Province Wellesley, 1st July, 1848.

J. Low.

* * * To prevent distant readers being misled by Colonel Low's present strong opinions on the subject of the Siamese and Malay claims to Kedah, we beg to refer to our note at the bottom of p. 25. and to repeat that "the opinion of the great majority of the Europeans of Pinang not connected with government" has always been as strongly in favor of the Malays as that of Colonel Low has latterly been hostile to them and favorable to the Siamese. We may add that we have taken some pains to make ourselves acquainted with the facts, and that we regret our esteemed contributor should have abandoned the more unprejudiced views which he formerly entertained.—Ed.

THE
TRADING PORTS
OF THE
INDIAN ARCHIPELAGO.*

ALBAY, (*Philippines*.) The capital of a district of the same name, situated at the S. E. extremity of Luzon. The town, which contains many substantial buildings and about 13,000 inhabitants, lies two miles inland from the head of the Gulf of Albay, which is said to afford excellent anchorage, but is not well known, as the trade is carried on exclusively by pontoons and other coasting vessels, which carry the produce to Manila. Its position, near the St. Bernardino channel, which is much frequented by vessels from the Pacific bound to Manila, is important, but Sorsogon, an excellent harbour in the same district, presents so many superior advantages as a port of refuge for vessels that have met with accidents in the Pacific, and also as a trading port, that it will be preferred when the outports of the Philippines become the resort of European traders, an event which seems likely soon to take place. Albay is chiefly remarkable for producing *Abaca* or Manila hemp of better quality and in greater abundance than any other district in the Philippines. This production is obtained from the filaments of the *Musa textilis*, a sort of banana, which is easily propagated by transplanting the suckers that spring up about the roots of the old plants. The *Abaca* is generally planted in the cacao gardens, to shelter the shrubs from the heat of the sun, and it seems to be only in Albay, Leyte, and on the north coast of Mindanao that it is cultivated expressly as an article of commerce; the production of sugar absorbing the attention of planters in districts more adjacent to the capital. The filaments are detached from the stem by a very simple process, which closely resembles the mode of preparing hemp in Europe. The consumption of Manila hemp is daily increasing, more especially in the United States of America. As it evidently requires a rich volcanic soil, it would probably succeed in the Moluccas and in the islands east of Java.

AMBOYNA, *Ambon* of the Malays and Dutch, the capital of the Netherlands possessions in the Moluccas, Lat. 3° 41' 41" S. Long. 128° 9' 51" E. *Dumont d'Urville*. The town and fort are situated on the S. E. side of a narrow inlet, 14 miles in depth, which penetrates the island in a N. E. direction and nearly divides it, the low isthmus which joins the two peninsulas being only a mile and a half across. The Bay of Amboyna, as this inlet is called, consists of an outer bay, on the shores of which the town is erected, and an inner bay or harbour, with low swampy shores,

* Continued from p. 251.

which admits and affords shelter to vessels of the largest size, but is very rarely resorted to, even by ships in want of repairs, owing to its extreme unhealthiness. The outer bay is unfathomable except in a few spots close to the shore. The anchorage is on a bank of coral and sand, which extends rather more than a quarter of a mile from the beach in front of the town, and is so steep that at a cable's length from the shore the depth is 25 fathoms. The best anchorage for a vessel having much cargo to discharge is about half a cable's length from the end of the government jetty, to which she can haul for the purpose of discharging, but this cannot be done without permission of the authorities, which is rarely withheld, however, unless there happen to be several ships of war in port, and it becomes necessary to keep the jetty clear for general purposes. The best anchorage for vessels coming for refreshments only, or whose stay is not likely to be long, lies to the N. E. of the jetty, and it will be necessary, especially during the S. E. monsoon, to carry a warp on shore to one of the anchors that are set up near the beach, to prevent the ship from being driven off the bank by the puffs of wind from the land. The bay is clear of hidden dangers, but when the weather is calm, the strength and eccentricity of the tides and eddies often cause alarm to strangers. The danger however is more apparent than real, as the currents never set home on the land. A ship entering the bay during the S. E. monsoon should pass pretty close round Nusa-Niva Point, and keep the starboard shore on board all the way up to the town; and if coming from the westward she should never attempt to enter the bay until she can lay up for this point and so be able to proceed along the weather shore. There is a bank with 15 to 25 fathoms upon it a few cables' length to the S. of Nusa-Niva point, which might prove useful to a ship driven out of the bay by the onset, an event which often takes place during the calms which prevail in the intervals of the westerly monsoon. The bottom is coral, so that only a kedge or stream anchor should be used, as there might be difficulty in getting it again.

Topography. Ley-timor, the smaller peninsula on which the town is situated, is 15 miles long by 4 wide and is traversed throughout its entire length by a range of hills, which rises abruptly from the sea on the S. E. side, but leaves several small plains on the shores of the bay, the largest of which is the site of the town of Amboyna. Hitu, the northwestern peninsula, is entirely composed of hills, some of which attain considerable elevation, but scarcely sufficient to entitle them to the name of mountains. The nucleus of the town consists in Fort Victoria, which owes its origin to the Portuguese, but it has been much enlarged and improved by the Dutch. It contains the chief government offices, the barracks for the troops, and the military store houses. The esplanade of the fort is surrounded by a number of large brick houses without an

upper story, which, with those that line two streets running towards the Governor's house at Batu Gadja, are occupied by the principal residents. The Campong China, which abuts on the S. side of the esplanade, is the commercial portion of the town, and is almost exclusively occupied by Chinese and other native merchants. It also contains the principal church, and a spacious market house, which is the greatest curiosity in Amboyna, not on account of its architecture, for that is of the most primitive oriental character, but from its being chiefly occupied during market hours, by the Orang Nigri, or people of the villages of the interior, who resort to it for the purpose of disposing of their surplus produce. To the north-east of the esplanade lies the "Burgher" quarter, which is occupied almost exclusively by the descendants of the old Portuguese and Dutch inhabitants, retired soldiers and their families, in fact by all those who in the persons of themselves or of their ancestors have been connected with Europeans. This quarter also contains a spacious church, in which the service of the Dutch Reformed religion is performed in the Malayan language.

Population. The island of Amboyna contains about 30,000 inhabitants, a fourth of whom occupy the capital and suburbs. The country people, who are called *Orang Nigri*, or villagers are the ancient inhabitants of the country. They are generally below the middle size, have neat and active figures, and that bright and intelligent look which is also characteristic of the Dyaks and of the people of the interior of Celebes, but is rarely met with among the Malays or Javanese. The extreme neatness of their dress, which consists generally of a sarong and kabaya of black calico, their great personal cleanliness, and their utter rejection of the use of siri or betlenut, which so disfigures the mouths and teeth of the Javanese and Malays, combines in producing a *toute ensemble* which excites no small degree of surprise in European strangers from the western parts of the Archipelago, who probably learn for the first time how prepossessing a people the natives may become through education and cleanliness. Their ancient form of religion has almost entirely disappeared, its place being supplied by that of the Dutch Reformed Church. The villages are still, as formerly, under the local controul of the *Orang Kaya* or hereditary chiefs, who are assisted by several *Orang Tua*, or elders, and two or three *Marinio*, or police officers. The *Orang Kaya* have also the local management of the clove plantations, and are responsible for the trees attached to their respective villages being kept in order, and for the entire annual supply of spice being sent in to government. Every village is provided with a native school-master or *Guru*, who has been educated at the institution of the Nederlandsch Zendeling Genootschap or Dutch Missionary Society, which has long been established at Amboyna. These school-masters teach reading and writing in the Malayan language, (the

Roman character being employed) with the rudiments of arithmetic and geography, and as the entire juvenile male population with the greater portion of the female, attend the school, education is more generally diffused than in any country of Europe, with the exception, perhaps, of Holland and Scotland. The immense numbers of Malayan bibles and other religious books that have been circulated, not only in Amboyna, but throughout the Moluccas, have produced an uniformity of idiom which greatly facilitates communication not only between Europeans and natives, but between the natives of the different islands themselves. Indeed the Malayan language here assumes a degree of importance which is unknown to the other European establishments in the Archipelago. It becomes in a great degree the language of general society, as Dutch is rarely spoken except by individuals born in Europe who are few in number. A constant correspondence is also kept up in Malayan between the Government and Orang Kaya of the interior. Under these favourable circumstances the Malayan dialect of the Moluccas affords a facility in expressing ideas which is unknown to the westward, where the language is only spoken generally by uneducated people, a circumstance which may eventually lead to the Amboyna dialect becoming the general medium of communication throughout the Archipelago. The *Guru* undertake the duties of curates or lecturers, in addition to their own, performing divine service in the village churches, which, if far from the capital, are only occasionally visited by the European clergy, indeed the latter, owing to the smallness of their number, are called upon to perform the duties of bishops rather than of pastors. The villagers lead a very quiet life, subsisting chiefly on the produce of their lands,—sago, maize, yams, and the sugar of the *tuak* palm,—which is eked out with fish obtained chiefly by means of stone weirs erected on the coral reefs that line the coasts. Crime is almost unknown, indeed is rare even in the capital, where, from the motley nature of the population, which includes many slaves from Macassar, Java, and Bali, it might be expected to prevail to some extent.

The natives of Amboyna have been characterised by strangers as excessively indolent and apathetic, which indeed might be looked for under the circumstances in which they are placed,—but the accusation is most unjust. It is true that the Burghers who usually crowd the jetty, spending their time in angling for small fish, will refuse to carry even a light burthen; but it must be remembered that this branch of manual labour is the peculiar province of slaves, and it is not to be expected that the *Vrij Borghers*, poor enough as they usually are, but priding themselves in possessing the same religion with the Europeans, would lower themselves by performing a description of labour which even Chinese and free Mahomedans would disdain. As to the natives of the interior, what

with the labour of tending the clove trees, which *must* be performed, coupled with that of cultivating the soil, on which their very subsistence depends, they have very little idle time on their hands.

Commercial History. Amboyna had been resorted to by native traders from the west during many years previous to the first arrival of Europeans in the Archipelago, for the purpose of obtaining spices and other valuable articles produced on the island or collected from the neighbouring countries. In the year 1512, the Portuguese viceroy Albuquerque, after the conquest of Malacca, despatched two commanders, Abreu and Serrano, to explore the Moluccas. They loaded cargoes of cloves at Guli-guli, a port on the south coast of Ceram, but on the return voyage, the ship of Serrano, which had separated from her consort, was wrecked on Nusa Pinho, or Turtle Islands, to the south of Amboyna. Serrano and his crew, after undergoing many hardships, succeeded in making their escape from the island in a cora-cora, or native prahu, which they got possession of by stratagem, the crew having landed for the purpose of plundering the shipwrecked people. In a few days Serrano reached Amboyna, where he was well received by the inhabitants, and it was probably owing to this accidental circumstance that Amboyna was selected as a trading station by the Portuguese, in preference to the neighbouring districts of Ceram, which produced spices in much greater abundance. In 1605, the Dutch under Van der Hagen attacked Amboyna, when the Portuguese garrison surrendered and was allowed to depart in two prizes, one of which sailed to Manila and the other to Solor. In 1611 the English, who had traded occasionally with the Moluccas, established themselves at Luwu, a port on the peninsula of Huamowel, which forms the eastern extremity of Ceram, but they were soon expelled by the Dutch. In 1620, owing to remonstrances made in Europe, the English were allowed to establish a factory at Amboyna, but it existed only two years, when it was effectually annihilated by the celebrated massacre of 1622, to which individuals of both nations, even now, feel it painful to refer. Amboyna did not attain a very high degree of importance until the year 1652, when a treaty was entered into with the king of Ternate, in which he consented to the extermination of the spice trees throughout his dominions. The Dutch were now enabled to confine the culture of cloves to the island of Amboyna, and one or two others in the neighbourhood, and that of nutmegs to the Banda group, a system which is maintained until the present day. *Hongi-togten*, or expeditions for eradicating the spice trees of the neighbouring countries, were undertaken periodically by the Dutch governors assisted by the native princes in their interest, but this part of the system has now been discontinued. The English, on gaining possession of the Moluccas during the late

war, maintained the system of monopoly, and the Dutch government, since the restoration of the Moluccas, have very closely followed the footsteps of their old East India Company, but not with the same profitable results.

Productions. Amboyna is remarkable for the variety and importance of its vegetable productions. The island possesses a rich volcanic soil, and from the peculiarity of its position, it is accessible to the rains both of the Indian and Pacific Oceans, and as these prevail at different seasons of the year, the atmosphere is in an almost constant state of humidity, which proves highly favourable to vegetation. Its geographical position is also favourable with regard to *variety* of productions, for being situated in the close vicinity of New Guinea and Australia, it possesses the vegetation belonging to the Australian as well as to the Continental Indian system. The fruits, which all belong to the latter, are excellent in quality. They comprise the orange, lemon, shaddock, mangostan, durian, mango, jambo, lansat, amona, guava, papaya, and tamarind. The bread fruit, (both the Manila and South Sea-island varieties,) is also found here. To these may be added the Kanari, a nut which furnishes a large quantity of oil, and which takes a conspicuous place in the domestic economy of the inhabitants. In its wild state, the nut, although eaten abundantly by the inhabitants, is not very palatable to Europeans from the quantity of oil it contains, but the cultivated variety of the Kanari produces a fruit which is equal in flavour and delicacy to the almond, and is justly prized by all who have had opportunities of testing it. This tree belongs decidedly to the Australian system, as it is not met with to the westward of Amboyna, or, perhaps, Buru, although it is common on the north coast of Australia, and, I believe, extends as far to the south as Moreton Bay, on the east coast. The Kanari-nut constitutes the principal food of the birds of paradise of Arru and New Guinea during certain seasons of the year, and their intentness on seeking their food among the thick foliage of the trees affords opportunity to the hunters, who have previously concealed themselves among the branches, to shoot them with blunt arrows, when they fall to the ground and are secured by parties lying in wait below, and their bodies and feathers dried for exportation.

Of the numerous varieties of palm, the most useful are the sago, which usually grows in the swamps, and furnishes no small portion of the food of the inhabitants; the coco-nut, which is planted around every house; the sagoweer, nipa, and lontar, which furnish the *tuak* or toddy, a favourite drink of the natives, and the surplus of which is distilled by a simple process into an ardent spirit, or is boiled down into sugar. Lastly the pinang and nibong, the first of which furnishes the betel-nut of commerce, and the other supplies the inhabitants with a hard wood which is used for spears,

bows, and digging-sticks or wooden spades for cultivating the earth. The stems of the sago palms when stripped of the leaves, are used for fencing in the plantations, and are then called *Gabbagabba*; while the leaves of the others are employed in making hats, mats, boxes, and baskets of many varieties.

The aromatics, comprising the clove, nutmeg, kulit lawang, and kayu puteh or cajeput trees, all belong to the Australian system of vegetation, but it seems to have required the rich soil and moist climate of the Moluccas to bring the three first to perfection as articles of commerce. The kayu puteh, however, which delights in the sandy soil of the sea shores, is found in greater perfection in Australia than in the Moluccas.

As the nutmeg and clove are both cultivated at Singapore, the former with great success, it will be unnecessary here to enter into minute particulars regarding the mode of cultivation, which, indeed, would be foreign to the expressed object of this memoir. The nutmeg of Amboyna is inferior to that of Singapore. It is only at the Banda Islands, which are especially devoted to the cultivation, that the nutmeg attains perfection, but there the clove tree yields a very indifferent product, while at Amboyna it attains its highest state of development. As the climate of the two groups is precisely similar, this difference must be the result of a variety in the nature of the soil, in fact it soon becomes evident to those who have had opportunities of visiting both groups, that Banda and Amboyna are by no means alike in this particular. It struck me that the soil of Banda was chiefly enriched by the ashes cast out from the Gunung Api, or volcano, which stands nearly in the centre of the group, while that of Amboyna seemed to owe its fertility to the presence of decomposed limestone. The climate of Singapore exactly corresponds with that of Amboyna and Banda; the soil, only, is different, but this the skill and perseverance of our nutmeg planters have counteracted by producing a soil, through the aid of manure, which closely corresponds with that of Banda. The want of success that has hitherto attended the planting of cloves may probably be owing to a similar system of manuring being adopted to that used in the nutmeg plantations, whereas a totally distinct system is evidently required to produce the clove-soil of Amboyna. Perhaps it would be well to obtain a sample of this soil from Amboyna itself, when analysis would shew what ingredients were required to render the soil of Singapore similar to that of the former place. When this is effected, the cultivation of the clove in the Straits will, in all probability, be perfectly successful.

The animal kingdom presents the same mixture of Asiatic and Australian varieties which has been noticed as characterising the vegetable kingdom;—the Australian opossum co-existing with the porcupine and civet cat of the continent of Asia. A small variety

of the kangaroo, which still exists on the Arru Islands, is said to have been found here also formerly, but it has now disappeared. The opossum is the only marsupial which seems to hold its ground in the presence of animals of the old world. It is found throughout Australia, New Guinea, and the Moluccas, and has become more numerous in the settled districts of New South Wales than when the continent was first settled. This is probably owing to their taking up their abode in the forest trees, whence they also derive their food, so that they are not liable to the attacks of beasts of prey. The monkey, the only animal of the old world likely to molest them, does not exist in a wild state at Amboyna, although it extends along the Sumatran and Trans-Javan chain as far as the east end of Timor. Deer abound in the forests, but these are known to have been imported originally from Java and Macassar. The domestic quadrupeds, consisting of a few ponies, cattle, buffaloes, goats and hogs, have all been derived from the same sources, indeed the process of importation, as far as regards the two former, is still going on, the island not affording sufficient open pasturage for breeding purposes. Fish are abundant throughout the Moluccas and the varieties are very numerous. Valentyn, who evidently turned great attention to this branch of natural history, delineates upwards of 500 varieties in the plates attached to his famous work on the Moluccas.

Agriculture has not made the slightest progress since the first arrival of Europeans. The plough is still unknown, or at all events, not used, the mode of turning up the ground by means of two sharp sticks, one held in each hand, being still generally practiced. The agricultural productions consist of maize, small-grained millet and pulse, with yams, sweet potatoes, melons and pumpkins. The sago palm can scarcely be said to be cultivated, as the young trees spring up spontaneously from the roots of those that have been cut down, so that the proprietor of a piece of sago ground has nothing to do but to thin the young trees, so as to afford room for those intended as standards to spread their branches. Rice, in sufficient quantities for the supply of the government establishment and of those of the inhabitants who can afford to purchase it, is imported from Java. The cultivation is said to have been introduced, but in that case it must be confined within very narrow limits. The Count C. S. W. De Hogendorp, in his valuable "*Coup d'Œil sur L'Isle de Java*," (p. 321) states that the circumstance of the cultivation of rice never having become extended is attributed by some to the policy of the old Dutch E. I. Company, which threw every obstacle in the way of its cultivation, with the view of keeping the natives in greater subjection from their being only able to obtain supplies through the medium of the Company; while others attribute it to the indolence and inactivity of the natives. A third cause exists in the country people being

obliged to reside on the uplands, for the purpose of attending to the clove plantations: they therefore live remote from the low country which alone is adapted for rice planting. Indeed they could not have formed rice-sawas, without first destroying the sago palms with which the low lands are covered, an act which would have been exceedingly unwise under the circumstances of the case, as the sago could be collected at any season of the year, in fact, whenever the clove plantations did not require their attendance; while the rice cultivation would entail continued labour during long periods, and they had no guarantee that the produce would not be appropriated by their rulers, as the spices were already. The natives of Amboyna, if left to themselves, would probably never have become a rice growing people, but their rich products would have enabled them to purchase abundance from the inhabitants of the western islands. This would have given rise to a commerce which has never existed under the grasping monopoly of Europeans, although it was maintained to a great extent previous to their arrival in the East. Probably the greatest evil that the natives of the Moluccas have derived from contact with civilized nations, consists in their having been deprived, for more than three centuries, of the nutritious food that is necessary to the full development of human powers.

The cacao, or chocolate-bean has lately been introduced, and grows luxuriantly on several spots in the neighbourhood of the capital. The like success has attended coffee and indigo, indeed Amboyna seems to be well suited to any tropical production that requires a rich soil and a moist climate.

Commerce. The *Nederlandsch Handel Maatschappy*, or Netherlands Trading Company, has an establishment here, which, with the government, engrosses almost the entire foreign commerce. Amboyna, although the capital of the Moluccas, does not possess a single merchant ship; but some of the Chinese and other natives have a few trading prahus which are chiefly employed in bringing provisions from the neighbouring coasts of Ceram and Buru. The annual supplies of rice and other stores for the Government, and of goods for the Maatschappy establishment, are brought from Java during the westerly monsoon in ships belonging to Arab or other native merchants settled in Java, and these return in May, June, and July, with the yearly produce of cloves, and such articles as the Maatschappy agent may have collected. The latter, however, receives payment for his piece-goods and other European manufactures chiefly in silver guilders or rupees, which are circulated to a considerable extent here owing to the government officers, the troops, and the crews of ships of war on the station, being paid their salaries or wages upon the spot. The annual supply of cloves, averages about 300,000 pounds. The receipts on account of this spice amounted in the year 1822, to

upwards of 500,000 guilders, while the expenses of the cultivation, or, rather, of the small rewards given to the Orang Kaya, Orang Tua, and Marinios, who superintended the plantations, amounted to 90,000 guilders. During this year the supply was rather less than usual, but it is never, even with the duties and taxes levied at the port, sufficient to pay the expenses of the establishment, which amount to the sum of nearly 1,000,000 guilders annually.

Vessels belonging to other European nations than their own are not allowed to trade at Amboyna, and even private vessels of the Dutch very rarely visit the port unless taken up for government service. These restrictions are sometimes evaded by small Spanish vessels from the Phillipines which bring cargoes of Manila segars and China goods, and take cacao and cash in return.* These vessels, however, take the precaution of touching at the island of Sulu, and obtaining a native flag and papers. The local authorities

* This subject was discussed at some length in the Singapore newspapers about 12 months ago, as it was thought that from the provisions of our treaty with the Netherlands of 1824 it would afford an opening for British vessels also. The 7th Article of this treaty runs thus: "The Molucca Islands and especially Amboyna, Banda, Ternate and their immediate dependancies are excepted from the operation of the 1st, 2nd, 3rd and 4th Articles until the Netherlands government shall think fit to abandon the monopoly of spices: but if the said government shall at any time previous to such abandonment of the monopoly allow the subjects of any power other than a native Asiatic power to carry on any commercial intercourse with the said islands the subjects of his British majesty shall be admitted to such intercourse upon a footing precisely similar."

More importance was given to this concession (if it may be so called) on the part of the Dutch, in thus admitting Spanish vessels to participate in the commerce of the Moluccas, than it really deserved, for if the British government had deemed the opening of the ports of the Moluccas as conducive to our commercial interests it might have been effected years ago, and without any reference to the provisions of the treaty. I find that I have stated the fact of Spanish vessels being admitted to trade at the port of Amboyna in a report which was sent home to government soon after my visit to Amboyna in 1841, and which was published in the Parliamentary papers relating to Port Essington in 1843. As I understand the fact has been denied by parties in Holland, I insert an extract from a recent work on the Phillipines by M. Mallat, which was published in Paris in 1846, and as he cannot be supposed to have been aware of the full bearing of his paragraph, he may be considered, at least, as a disinterested authority.

"The departure of the vessels for the Moluccas takes place during the months of December and January. The merchandise they carry is of a similar description to that exported to Sulu, to which may be added fancy articles, and gown pieces for the ladies of the residents and the superior authorities. Their return cargoes consist of cacao, birds of paradise, cloves, nutmegs &c. These islands are Dutch possessions; commerce can therefore be carried on there in the greatest security. But the import duties being very considerable, a great deal of contraband trade is carried on. The freight is 5 per cent on the value of the merchandize, and $\frac{1}{2}$ per cent additional per month."

(Le depart des navires pour les Moluques a lieu dans les mois de Decembre et de Janvier. Les marchandises qu' on y porte sont les memes qu' a Sulu, plus quelques objets de fantaisie et des robes pour les femmes des residents et des autorites superieures. On en rapporte du cacao, des oiseaux de paradis, des clous de girofle, de la noix de muscade, etc. Ces isles sont une possession Hollandaise: aussi pent-on y faire le commerce dans la plus grande securite. Mais les droits d' entree y etant tres considerables, il s'y fait beaucoup de contrebande. Le fret est de 5 pour 100 sur la valeur des marchandises, plus $\frac{1}{2}$ pour 100 par mois.) *Les Phillipines: Histoire, Geographie, Mœurs, Agriculture, Industrie et Commerce des Colonies Espagnoles dans L'Océanie. par J. Mallat. Paris 1846. Vol. II. p. 326.*

seem to be pretty well aware of the evasion, but they are heartily ashamed of the illiberality of their government, and are evidently not inclined to make very minute inquiries when the parties do not attempt to break the regulations of the port. English and American vessels in distress occasionally put in at Amboyna, where they are treated with hospitality, and allowed to purchase such stores and refreshments as the place affords, but a guard of soldiers is put on board the ship the moment she arrives, and remains there until the period of her departure, which proves so annoying that the port is never resorted to except in cases of the utmost necessity.

The following articles are to be obtained at Amboyna in addition to those already mentioned:—Ambergris, kayu puteh oil, bees-wax, ebony, lingoa-wood, kayu-buka, and many other ornamental woods, some of which are prepared in slabs from 6 to 9 feet in diameter. When the resources of the neighbouring countries come to be developed, this list will be greatly increased, especially in the particular of resins and dye woods, of which the adjacent island of Ceram furnishes many varieties.

The present miserable state of commerce at Amboyna scarcely authorises so long a notice as the above, but it is not likely to remain a sealed port for ever, and when once opened, it must become the emporium of the Moluccas and New Guinea. Much as we may admire the moral courage of the Dutch in persisting to maintain a system that has been repudiated by every other civilized nation, it may be doubted whether their line of policy, which is so well calculated to invite aggression, will tend much to the stability of their Indian empire. As long as the system of monopoly had only to encounter the apathy of European nations, which naturally do not care much about the commerce of remote places concerning which they know little, affairs have progressed smoothly enough, but a new nation is springing up in the south, and gradually spreading over the continent of Australia, which is already beginning to shew symptoms of discontent at being excluded either actually by absolute prohibition, as in the Moluccas, or virtually by exacting regulations, as in Java, from ports in their immediate neighbourhood, whence they could derive those supplies of tropical produce for which they are now obliged to resort to the more distant Spanish settlements of the Philippines. That there is a strong and intelligent party in Holland favourable to liberal measures is well known, and I cannot conclude this article more appropriately than by extracting the following remarks from the valuable work quoted above, the author of which has spent the greater portion of his life in the public service of the Dutch Indian settlements, and, I believe, now fills the important office of vice-president of the Council of Batavia.

“It is a fact unfortunately too well known, and which it will

answer no good purpose to pass over in silence, that the Company, to insure the monopoly of its wares, caused all the clove and nutmeg trees, beyond the number necessary to produce the quantity of spices that they could sell, to be rooted up and destroyed, often with arms in their hands. To effect so general a devastation it became necessary to commit many violences, to maintain costly garrisons, to build forts and strongholds, to pay pensions to the native chiefs, and in fine to deprive themselves of every other source of revenue.

“Again, if the results of this system ensured them the exclusive trade in spices, still they were never able to sell more, in ordinary years, than two millions of guilders worth of cloves, nutmegs and mace, while to obtain them they often expended more than three millions, all in ruining these beautiful countries from which they might have derived immense advantages under a good administration.

“The cruel effects of this fatal system on the countries and nations that had the misfortune to be subjected to its influence, will be long felt, but let us hasten to say that a salutary balm has been shed upon the bleeding wounds, and we may now lay the first foundations on which an edifice may be erected more consonant with present times and existing manners.*

“No point in the colonial system has probably excited more attention on the part of the superior authorities in our Indian possessions than the problem as to the advantage or disadvantage of the monopoly of spices in the Moluccas; or has called forth more opposite opinions.

“The partisans of the olden time, and such are not wanting, pretend that without the monopoly of spices the Moluccas will not be of the slightest value to the State. The partisans of liberal ideas assert, on their part, that this exclusive monopoly carries a destructive germ that will in the long run cause the total loss of these valuable possessions. Nevertheless all parties agree that to carry out with success, and without imminent danger, changes in the existing system, it will be necessary to act slowly and with prudence, following a plan that will only present at first preparatory courses, and the effects of which will only make themselves felt

* The author here alludes to the results of the Governor General's visit to the Moluccas in 1824, when the oppressive laws of the former Dutch East India Company, which were supposed to have led to the risings and massacres of Saparua and Nusa Laut in 1817-18 were greatly modified. These reforms, however, were not full enough to satisfy the natives, for in 1829 a conspiracy, in which many of the chiefs and a portion of the garrison were concerned, having for its object the massacre of the Europeans, was discovered by accident when on the eve of consummation. Six of the ringleaders were shot, among whom was Raja Wangi, a chief of great influence with the natives. Lieut. Bastiaanse, who was an eye witness to the execution, states that Raja Wangi was not struck by a single ball at the first discharge, which tended to confirm a belief on the part of the natives that he was invulnerable. *Voyages dans Les Moluques*. Paris. 1845. p. 102.

in proportion to the results obtained."* *Coup d'Œil sur l'isle de Java et les autres possessions Néerlandaises dans L'Archipel des Indes, par le Compte C. S. W. de Hogendorp. 1830. p. p. 315 et seq.*

Similar opinions to those expressed by the intelligent author quoted above have been long entertained by the great bulk of the educated classes in Holland. Respecting the annual loss sustained by the government in supporting the monopoly there can be no doubt, and its oppressive bearing on the native population is sufficiently indicated by the annual decrease in their numbers. The Baron Melville Van Carnbee, in his valuable statistics of the population of the Moluccas (*Moniteur des Indes for 1847-48*) gives the following as the amount of population for Amboyna and its environs during the years 1837 to 1841 inclusive. 1837—11,702; 1838—10,909; 1839—9,041; 1840—9,274; 1841—8,966. It may seem extraordinary that where both rulers and ruled are manifestly injured by keeping up the old system, it should still be pertinaciously maintained. But there exists a powerful body in Holland deeply interested in the continuance of the present system, which ensures to it the exclusive trade in European manufactures throughout the Moluccas, namely, the *Handel Maatschappij*, which possesses in an eminent degree that indifference to national interests and national reputation, which forms the distinguishing characteristic of all Joint Stock Trading Companies whenever their own particular interests are at stake.†

[As I shall often have occasion to allude to the Netherlands

* Neanmoins tous etaient d'accord que, pour faire avec succes et sans un danger imminent des changemens dans le systeme existant, il fallait agir avec prudence et lentement, d' apres un plan que ne presenterait d'abord que des voies preparatoires, et dont les effets ne se feraient ressentir qu'au fur et a mesure des resultats obtenus.

† Of course I allude here only to joint Stock *Trading* Companies, which are combinations of capitalists to procure by their joint influence that exclusive participation in the particular branches of commerce they engage in, which merchants and traders also seek in their individual capacities. The difference that may exist between Joint Stock Companies is pretty distinctly shown by the present and former condition of our own East India Company, which was once a trading association like the *Handel Maatschappij* of the present day. On being restricted from trading, the Court of Directors of the East India Company assumed the functions of a Ministry for the administration of our Eastern empire, on very much the same footing with the Home ministry, for if one is amenable to the Board of Controul, so is the other amenable to the Parliament, but with this difference, that while one Ministry can be turned out of office by an unfavourable vote in the House of Commons, the other can only be restricted from adopting measures that may be considered as hostile to the national interests. The effect of this new arrangement, which made the East India Company dependant for its dividends on the revenues of India instead of on the monopoly of its trade, has resulted in a series of measures for the development of the resources of India which are calculated to excite the admiration of all civilized nations. Not the least important of these is the Act recently announced (No. V. of 1850) which, as it contains only a single section of six lines, I may here insert entire. After a preamble stating that the Governor General of British India had been empowered to frame laws for opening the ports within his jurisdiction it enacts as follows: "I. Goods and passengers may be conveyed from one part of the territories under the Government of the East India Company to another part thereof, in other than British ships, without restriction,

Handel Maatschappy in the course of this work, I will give here a short outline of its history and present position. It was organised soon after the close of the late war, when the United Provinces had their Indian colonies restored to them, and in conjunction with Belgium, became the kingdom of Holland. The Handel Maatschappy was ushered into the world under very favourable auspices, the new king being not only one of its most active promoters, but also one of the principal shareholders. Its influence has been gradually extending in the Archipelago until the present time, when it possesses almost the exclusive commerce of that portion which lies to the south of the Equator. One of the most singular points in connection with this Company consists in the uniform sympathy that its interests, and the measures taken to support them, have met with even in England, which of all other countries is most injured by the maintenance of its system. No individual who has meddled with its Indian monopoly, or is likely to do so, is safe from attack, although he may have rendered eminent services, which have been enthusiastically acknowledged by the nation. Sir James Brooke had scarcely recommenced his useful career in the Archipelago, with powers which would soon have resulted in the utter extinction of all monopolies, European or native, on the coasts of Borneo and Celebes, when a portion of the public press, and a select body of the popular orators of England, broke out in vilifying attacks on his public character, for pursuing measures for the suppression of piracy identical with those that had mainly contributed to the establishment of his high reputation. At the same time, singularly enough, the wanton and unprovoked attack of the Dutch ships of war on Sulu, undertaken, if not at the instigation, certainly for the purpose of promoting the interests of the Handel Maatschappy, is passed over without the slightest comment. Another object of attack to this party, (if it may be so called) of public writers and popular orators, is the new settlement of Labuan, but as the settlement could not be accused of aggressions on the aborigines, this party was unable to enlist in its favour the well-meaning but morbid philanthropists who swelled the public meetings on the pirate question, and the discussion has therefore been left to the writers and orators alone. Labuan, although only recently founded, has undoubtedly been as suc-

other than is or shall be equally imposed on British ships, for securing payment of duties of customs or otherwise."

Compare this simple Act with the elaborate diplomacy of the draft of the New Navigation Laws which has been submitted to the States General by the king of Holland, in answer to the enquiries of the British Government as to how Holland was disposed to meet *their* New Navigation Law. In fact the two most purely commercial nations of the world are pursuing diametrically opposite courses with regard to the administration of their Indian possessions, and the result will prove both interesting and instructive. While the Court of Directors of the British East India Company has been elevated into the position of a national Ministry, the Government of Holland has descended to the level of the old Dutch East India Company, and has so mixed itself up with the transactions of the Handel Maatschappy, that it becomes difficult to say where one ends and the other begins.

cessful as any settlement that has ever been planted by Europeans in Borneo, whether as regards the suppression of piracy or the extension of commerce, and the only interest that can be injured by its maintenance is that of the Handel Maatschappij, whose monopoly on the eastern coast of Borneo and the northern coasts of Celebes must inevitably be destroyed if it is continued. But it is not in the western parts of the Archipelago alone that the interests of the Handel Maatschappij have met with this uniform good fortune. In the course of the last 25 years no less than three settlements have been founded by the British on the northern coast of Australia, which, if successful, were calculated to interfere with the monopoly of trade in the Moluccas. Of these the two first were abandoned soon after the first difficulties had been overcome, and the third, although maintained for 11 years, was never opened for settlement, the residence of parties unconnected with government being only permitted on terms which no single individual was found willing to subject himself to. Again, it is now more than four years ago that the question of the extension of Steam communication to Australia was first discussed with vigour, yet, although the public mind, both in England and Australia, is almost unanimous on the subject, its consummation seems as remote as ever, unless a route that would avoid touching on the commercial preserves of the Handel Maatschappij be adopted, which no practical navigator could recommend. In charity it must be supposed that this uniform good fortune which has befallen the Maatschappij in finding strenuous advocates in England on all occasions in which its interests have been in jeopardy, has been the result of accident, but so undeviating has been its course through a long series of years, that those who wish to see the blessings of commercial freedom extended to these parts, feel themselves bound, whenever a new question arises, to examine as to how it will affect the interests of the Handel Maatschappij, and they have little difficulty in judging correctly as to the result.

At the present moment there is an important question at issue between the governments of England and Holland, which will settle the point with regard to the maintenance of the exclusion principle in the Moluccas. The new British Navigation Laws, which admit ships of all nations to her ports on equal terms, contains a clause which enables Her Majesty to withhold their extension to those nations which do not reciprocate its liberal provisions. As Holland is the only civilized country that closes any of its ports against British shipping, it is supposed, perhaps correctly, that this clause was expressly intended to meet this degrading exclusion. The inhabitants of the Provinces of Holland, who are placed by the new British Navigation Laws in precisely the same position with the people of English counties, naturally dread that their government, in its anxiety for the interests of the Maatschappij, may adopt measures that will lead to the exclusion of Dutch agricultural produce from the best market that the world affords, and have

made a bold stand against the maintenance of the old system. A few months, or even weeks, will bring us the results, and I sincerely trust that before this pre-publication is completed, I shall have to remodel all those articles which relate to the Dutch Ports of the Archipelago.]

AMFUANG (*Timor*.) A small trading port about 40 miles to the north of Coepang, which is occasionally resorted to by prahus and small vessels for the purpose of obtaining sandal-wood and bees-wax, but for some years past the greater portion of the produce has been carried overland to Coepang, owing to the coasting trade having been much interrupted by Lanun pirates, who now visit the eastern islands of the Archipelago more frequently than formerly from their having been much disturbed lately on the coasts of Java, Borneo and Sumatra, by Dutch and English vessels of war. Amfuang was also frequently resorted to by British and American whaling vessels, chiefly to obtain spars for masts and booms, which are abundant and of good quality in the neighbourhood of the anchorage. In May, 1843, the English Whaler "Sarah Elizabeth," Captain Bellinghurst, while at Amfuang, with two officers and 14 men on shore cutting spars, was attacked by 5 large and several smaller Lanun prahus, the crews of which, after killing, taking or dispersing the party employed on shore, boarded the ship, the Captain and the remainder of the crew, who were taken by surprise, escaping to sea in the whale-boats. The pirates, after plundering the ship, burnt her to the water's edge, in which state she was found by three other whalers, that had been met with by Captain Bellinghurst in the offing, and had accompanied him for the purpose of rescuing his ship from the pirates. A full account of this transaction will be found in the "Moniteur des Indes" for 1847-48 p. p. 84-5.* For particulars respecting the productions, &c see COEPANG.

In many of the English charts, the next bay to the north of Coepang is called Amfuang Bay, but it is not known by that name to the natives, who apply it only to a spot a few miles to the N.E. of the Gunner's Coin, in lat. 9° 3'. 58" S. long. 123° 41' 24" *Freycinet*. and to an inland territory of which the latter is, or was, the sea-port.

AMHAI or Amahoy (*Ceram*.) A port on the south side of the island, nearly due north from Nusa Laut, the eastern-most of the Amboyna group. The town lies on the shores of a small bay a short distance within Point Koka, which forms the eastern extreme of a large bight called Elipa-puteh. This place was formerly much frequented by native traders from the west, as the anchorage is said to be excellent, and easy of access, while the neighbouring territory once was remarkable for the abundance and

*The article alluded to is the production of the late Jonkheer Cornets de Groot, who was during several years Resident of the neighbouring settlement of Rhio, and afterwards Secretary General to the colonial department of Holland.

quality of the clove produce. The trees, however, were destroyed when the power of the Dutch became paramount in these parts, and its trade has since consisted exclusively in a pretty constant intercourse, kept up by means of boats or cora-coras, with Amboyna, which place it supplies with large quantities of provisions and pottery. The inhabitants are nearly all Christians, and as the country around is populous and productive, it may at some future time become a trading port of consequence. The bay, although supposed to be clear of hidden danger, should be approached with caution, as the fringing reefs extend in some places more than a mile from the shore.

AMOURANG BAY (*Celebes*.) A deep, narrow inlet on the north coast of Celebes, about 30 miles to the westward of Menado, the capital of the Dutch possessions in the northeast part of the island. This bay is much more secure than that of Menado, which is exposed to the heavy squalls from the northwest. Its northeastern shore should be avoided, as it is lined by an extensive coral reef. The best anchorage is in the southwest part of the bay, where vessels lie in 40 fathoms very near the shore, but sheltered from all winds. There is a small, but well constructed fort, in which the civil commandant resides, who is under the orders of the Resident of Menado. The chief production of Amourang is black coir or gummuti rope, which is of excellent quality. A considerable quantity of coffee is grown in the neighbourhood, but this is all transported to Menado for shipment to Europe in the vessels of the Netherlands Trading Company. Amourang offers no inducement to the visits of trading vessels, but it abounds in refreshments, a circumstance of which the English and American whalers formerly availed themselves, but latterly certain restrictions have been placed on the intercourse between the inhabitants and foreign vessels, which will probably prevent its being resorted to in future. In February, last year, the American whaling ship *Octavia* anchored in Amourang Bay, but the commandant refused to allow the crew to purchase supplies until permission had been obtained from the Resident of Menado. In the course of two days the necessary permission arrived, accompanied by an order that the ship should depart from the Bay within twenty four hours. It is said that the opening of Menado to foreign vessels, which occurred a short time ago, was accompanied by an order on the part of the Batavian government excluding them from all the coffee ports on the north coast of Celebes. Such a daring assumption of power is scarcely credible, but it seems, nevertheless, to be true.

AMPANAM, (*Lombok*,) a town on the west side of the island, in lat. 8° 33' S. *Horsburgh*. It has of late years become the chief resort of foreign traders, owing to its being the nearest seaport town to Mataram, the present residence of the king of Lombok, which is distant inland about 3 miles. The anchorage is due west of the

town in 10 to 15 fathoms sand, from 1 to 2 miles off shore, the latter distance being generally chosen from November to March, when the westerly monsoon sometimes blows with great strength, throwing a short but turbulent sea into the roads. During the easterly monsoon, ships taking in cargoes of rice often lie much closer to the shore, which is nearly steep to, it being necessary to use the utmost despatch in embarking their cargoes while the sea is smooth, for, although the wind is off the land during this season, a tremendous surf is often experienced for days together, which cuts off all communication with the shore except by signal, while its strength lasts. This surf is caused by heavy rollers from the S. W. which occur at intervals, and generally during calm weather. A similar phenomenon is experienced at the island of Ascension and sometimes at St. Helena. It is probably caused by submarine volcanic action, as it is evidently unconnected with atmospheric causes. In all the old charts a sort of ridge or bar, with 7 fathoms water upon it, is laid down, and is distinctly mentioned in Horsburgh's Directory as having existed in 1811, but this has certainly disappeared. A small knoll, having less than 3 fathoms upon it, lies to the south of the anchorage, about three miles off shore, which seems to be identical with the "shoalest part of the ledge" in the directions by Mr Dawson, an officer of H. M. S. Psyche. (*Horsburgh's Directory* vol. II. p. 657, Edition of 1843.) In October 1841, we anchored about a mile and a half to the N.E. of this knoll in H.M. S. Britomart, and immediately abreast of the town.

Ampanam was not frequented by European vessels previous to the year 1834; Labu-Hadji and Pijou, in the eastern side of the island, being then the chief resort of ships requiring cargoes of rice for the China Market. About this period an English merchant, Mr King, who had previously carried on business at Batavia, established himself at Ampanam under the protection of the King of Mataram, and was afterwards followed by Messrs Bird and Lange, two Danish gentlemen connected with the China Trade. The facilities their presence afforded for carrying on a commercial intercourse with the inhabitants, soon attracted British vessels that had taken out emigrants to Australia, and were on their way to the Indian ports to obtain return cargoes for Europe. These would often obtain a freight to China, the Mauritius, Singapore, and sometimes to England, or, if the captain was possessed of Treasury or other Bills, could procure rice on the owner's account which would materially aid in paying the ships expenses if taken to China. During the year ending in October 1841 no less than 25 English ships loaded at Ampanam, either on owner's account, or on that of Mr King, who had now become the sole European merchant, Messrs Bird and Lange having removed to the neighbouring island of Bali, where the latter soon acquired great influence over the natives, and was of material assistance to the Dutch during their late invasion of Bali.

In the mean time, Mr King, who had assisted the king of Mataram in an internal war which had made him master of the entire island, was appointed Bandar or controller of the trade of Ampanam, which virtually gave him monopoly of trade as for as regarded Europeans. This prosperity, however, did not last many years, for a few months after our visit in the Britomart, a commissioner of the Dutch Government arrived from Batavia. The manuscript of his report, as well as that of Mr Moliere, an agent of the Handel Maatschappij, who visited Bali and Lombok in 1839, were used by Mr Melville in the compilation of his valuable account of these islands, having been placed at his disposal by the ministry of the Colonies. (*Moniteur des Indes*. 1846-47.) Mr King has since removed to Koti, on the coast of Borneo, and the British trade with Lombok may be said to have ceased entirely. Even the national flag of Lombok, which was often to be seen formerly in the roads of Singapore, has disappeared for some time past. It is scarcely known where the immense rice produce of the island now goes to, but it is said to be carried for the most part to Java in Dutch and native vessels, where it is much required to make up the deficiency caused by a large portion of the rice lands of Java being now devoted to the culture of produce better suited to the European market.

Ampanam also exports coffee, cotton, and tobacco. Refreshments of all kinds suited to the wants of shipping,—bullocks, pigs, poultry, yams, and sweet potatoes,—are to be obtained in great abundance; which causes the port to become a favorite resort for American Whalers during the season in which they fish in the seas contiguous to the N. W. Coast of Australia, namely May to September, when the boisterous season of the southern hemisphere obliges them to resort for a time to low latitudes. Labu Hadji, on the opposite coast of the island, has now, however, become the chief refreshment port of Lombok, the king having made a request that the whalers would confine their visits to the villages of the east coast, where refreshments were more abundant, and where the crews could enjoy themselves on shore without interfering with the trade. No less than 17 whalers have been seen in the port of Ampanam at one time, each with a crew of upwards of 30 men. Traders visiting Ampanam, or any of the ports East of Java, should take every precaution to prevent surprise, as the Lanun pirates now resort to these parts in greater numbers than formerly, their course along the northwest coast of Borneo to the coasts of Sumatra and the Malay Peninsula being now obstructed by the settlement of Labuan, which they cannot pass without some intelligence being received of their motions, and this being conveyed speedily to Singapore, would inevitably lead to their being sought out and destroyed. In the year 1837 the schooner *Maria Frederica*, Captain Gregory, was cut off in Ampanam Roads; and in 1840, the English whaler *Mary*, Captain Blossie, while at anchor at the North Islands, near the N. W. point of Lombok, was surprised

and taken by a fleet of Lanun prahus* ; but the vessel and crew were soon afterwards ransomed for a large sum in Spanish dollars by Mr King, who subsequently finding that the pirates still remained there, fitted out an English merchant brig, that was then loading rice for England, with guns and men supplied by the king of Lombok, and succeeded in driving them away for a time. There are no port dues, or charges, unless such may have been introduced recently.

For particulars concerning the population, productions, commerce, manufactures &c., see LOMBOK.†

* See "Moniteur des Indes" for 1847-48 p. 17 and 21.

† For the sake of arrangement I find it necessary sometimes thus to refer the reader to articles which have not yet appeared. Where an island or district contains several ports, as is the case with Lombok, it would create needless repetition were I to give full particulars on the points mentioned in the text under the heading of each port. I have therefore classed all those minor ports which admit such arrangement into small geographical districts, such as "Sulu Archipelago," "Sumatra (West Coast)," "Timor" &c, a plan which may appear to leave the articles unfinished, but will be found to facilitate reference when the publication is completed.

(To be Continued.)

THE PIRACY AND SLAVE TRADE OF THE INDIAN

ARCHIPELAGO.*

1836. By a letter from the Governor, dated 13th January, the merchants of Singapore were informed, that the Supreme Government had directed the Governor to submit the draft of an act and schedule for levying a duty on the sea exports and imports of the settlements in the Straits, "to meet the expense of effectually protecting the trade from piracy." This announcement excited the greatest alarm and vigorous measures were immediately adopted to prevent the passing of the act, which it was felt would prove a death-blow to the prosperity of the settlement. The opposition proved effectual, and the intention of the Government was abandoned. On the 2d February, the brig *Lady Grant*, bound from Calcutta to China, having 400 chests of opium on board, was attacked while off the Sambalang islands in the straits of Malacca, by five pirate prahus, one being of very large size carrying a black flag at the main and full of men. They followed for some time in the wake of the vessel, but the brig out sailed them and they were left far behind. At last it fell calm and at midnight the prahus were observed making for the vessel a-head; when they came within shot the brig opened fire upon them from the fore-castle but they still advanced yelling and beating their gongs. The brig then gave them three broadsides of grape and cannister which staggered them, and after lying to for a few minutes they pulled in the direction of the shore, apparently much disabled. The guns of the brig were worked by the officers and five European steersmen, the lascars going below and concealing themselves. A pukat from Perak to Singapore, laden with a large quantity of pepper and tin, and manned by 50 Bugis, was attacked by four prahus a little to the northward of Salengore about 8 o'clock on the evening of the 1st February. The fight was vigorously kept up until the next morning, when the pukat having received considerable injury was run ashore and a temporary stockade erected, within which the crew remained for four days, fighting at intervals with the pirates, who at last, wearied out by the obstinate resistance offered, desisted from the attack and left the spot. Five of the Bugis were killed and nine wounded, and the boat so much damaged that she was obliged to put into Malacca for repairs. The brig *Fathal Ganie* on her way from Malacca to Lukut was attacked next day, near the same spot, but escaped with one man killed. A trading boat which left Singapore for Borneo on the 28th February, was attacked outside the harbour of Singapore, the firing being heard on shore and by the shipping. She beat the pirates off, having two men killed and several wounded, and was so much injured that she returned to Singapore.

* Continued from p. 162.

The boats of H. M. S. Rose had an encounter with a large fleet of pirates off the Dindings, and a warm fire was kept up for some time, but night coming on the boats were recalled. It appears that the pirates had a station at the Dindings where they refitted and kept their stores of provisions and plunder. As many captives as eighty, men, women and children, were there at one time. A Chinese junk, laden with silks, rice, salt, oil, buffalo horns and other goods, and having a crew of eighty men, was attacked by ten piratical prahus near Tanjong Panyusu (Point Romania). The pirates fired into the junk for several hours, killing five of the Chinese and wounding others. They at last boarded and plundered the junk, carrying away the whole of the crew except two, who jumped overboard and reached a small island, from whence they were brought to Singapore by a Malay fisherman. On the 15th March a prahu of about eight koyans burthen, on its way to Singapore from Pahang, was attacked off Tanjong Panyusu by eight pirate prahus. A strong breeze enabled the prahu to outsail the pirates who kept up a running fire upon her, about fifty shots passing through the sails, but none striking the hull. The pursuit was abandoned near the entrance to the old straits of Singapore. Several small fishing and other prahus were about this time attacked near Singapore, several of the men in them being severely wounded, and the crews only escaping by jumping over-board and swimming ashore, their boats and the contents falling into the hands of the pirates.

On the 23rd March H. M. S. Wolf, Capt. Stanley, and the H. C. Schooner Zephyr, Capt. Congalton, then on a cruize from Singapore to the Eastward, while off Johore observed three large prahus pull out from the shore and attack the barque Mas Jadul Bahur, a native vessel under Dutch colours. The boats of the men of war were immediately sent to her assistance, on which the pirates pulled in shore and round Point Romania, finally escaping from the boats. On the 24th the boats being still absent, thirteen large prahus were seen standing over from the Bintang shore towards the Romania islands in two divisions. The Wolf's boats and the gun-boat, which had in the meantime returned, attacked the first division which briskly returned their fire, and at last succeeded in pulling out of gun-shot. The second division was then attacked, and a running fight was maintained round Point Romania, until the ammunition in the boats being exhausted they were obliged to return to the ships. They observed five other large prahus come out of a river near Point Romania and join the thirteen which had been engaged. There being no wind at the time the men of war could not give any assistance, being at too great a distance from the scene of action. Search was made on four or five succeeding days by the vessels and their boats for this piratical squadron, but they could not be met. A man who had been captured by this fleet and afterwards made his escape, stated that they were from Linga and Gallang, some of the larger prahus having crews

of nearly one hundred each, and carrying Dutch colours. The guns of some were of considerable size, and one of them had cloth sails and was rigged as a three masted schooner. In the beginning of the month of April, two Malay prahus on their way from Pulo Bungoran (one of the Natunas group) to Singapore, were attacked off Tanjong Panyusu by eleven prahus, two of which were schooner rigged with cloth sails. The pirates on nearing the two prahus fired into them, and the fire being returned they engaged for some hours. The largest of the trading boats took the other in tow, the Nakodahs of the two being father and son, but the enemies' fire cutting the lashings, the smallest boat fell into the hands of the pirates, and it is supposed that the crew were murdered. The boat and its cargo was about two thousand dollars in value. The other prahu although closely pursued by the pirates effected its escape, the pirates desisting from the pursuit on the approach of two ships. A small Malay trading prahu was about the same time, and near the same place, chased by a fleet of nine prahus who fired into the boat, and her crew having no arms, she immediately surrendered. The pirates ordered the crew to leave the boat, and they were obliged to go into the sea and hold on by the sides, while the pirates plundered it of every thing it contained, including the mat sails &c. They then fired upon the boat and wounded two of the crew. A squall coming on, the boat got away and reached Singapore. The Dutch gun-boats from Rhio in this month chased a squadron of 6 piratical prahus in the Straits of Rhio, which at first seemed disposed to resist, but after a few rounds had been fired, separated, and all made their escape amongst the numerous islands in the Straits of Bulan. Five armed boats were afterwards sent from Rhio, but the pirates again dispersed, leaving a junk laden with salt, which they had apparently captured, concealed in a creek where it was discovered and taken to Rhio. On the 14th April, four klings appeared at the Police office in Singapore, and gave a full account of the capture of a kling brig when on her voyage from Pinang to Singapore, which we have briefly mentioned under the preceding year. These men deposed that they formerly belonged to a kling brig, the Samdanee, which about seven months before, when within a day's sail of Malacca, was captured by four pirate boats which came off from the land, the crew of the brig making no resistance. The brig was laden with piece goods, rice, ebony &c. and had 38 persons on board, including 3 Chinamen and one China-woman as passengers. After landing a boat-load of the cargo, the brig was towed over to the west side of the Straits and so on to Gallang, which was reached in twenty-five days. The pirates were about 160 in number, under the command of Panglima Awang, a half-caste Chinese, who on the passage took the woman under his protection on which her husband threw himself overboard. The vessel on her arrival at Gallang was dismantled, and

the cargo sold to some Chinese residing there. Two of the four men were bought by a Malay from Linga, but the Sultan on learning their captivity ordered them to be released. The other two were taken to Indragiri for sale, the Chief of which would not allow them to be sold but sent them to Singapore. The brig was believed to have been burnt, after being stripped of all her sails, rigging &c.

The Dutch Government, in the beginning of this year, again renewed its endeavors to put a stop to the piracies committed by the subjects of the Sultan of Linga, appointing Major Kolf in conjunction with the Resident of Rhio, to take the necessary measures on the subject, the Governor General M. De Eeren himself addressing a letter to the Sultan of energetic remonstrance. Various measures were concerted between the Sultan and the Dutch commissioners, having for their object to oblige all trading and fishing boats belonging to Linga and Rhio to furnish themselves with annual passports, and providing for an effective surveillance over the boats engaged in fishing for agar agar, tripang and karet. The Sultan was also to place chiefs in whom he had confidence, in the principal islands under his jurisdiction, who were to exercise a vigilant control in repressing piracy and slavery in the parts under their charge. Through the exertions of the Resident of Rhio 52 Javanese who had been taken by pirates and sold as slaves were restored to liberty. In the course of this year twenty five pirate prahus manned by 155 men, having arrived at Kottaringan in the island of Borneo, were blockaded in that port, and with the active assistance of the Sultan of Kottaringan their prahus were for the most part destroyed, and the pirates made prisoners. The Sultan sent 54 captives to Java.

About this time the Lanun and Sulo pirates seem to have been peculiarly audacious, ravaging the coasts of the Spanish provinces in the Philipines, burning villages, capturing trading vessels, and carrying away numbers of the inhabitants into slavery. A fleet of twenty four prahus attacked a Spanish gun boat, commanded by Lieut. Elliot, an Englishman in the Spanish marine, off Corregidor. They bore down upon the gun-boat in the form of a half moon, evidently intending to surround her. The gun-boat however succeeded in sinking the boats of the two principal leaders and the rest then sheered off. Some other gun-boats soon afterwards arrived and a search was made for the pirates, but they could not be found.

A Chinese junk was on the 16th April captured near the Romania islands by three prahus, after they had fired upon her for two hours, wounding thirteen men out of 16 composing the crew. The Chinese being totally unarmed at last took refuge in another junk which was lying near, but which the pirates did not attack. Several other Chinese and Cochin-Chinese craft on their way to or from Singapore, were about this time reported to have been captured by pirates near the coast of the Malay Peninsula.

Three Cochin-Chinese were found on the island of Pulo Tingie, on the coast of Johore, hid in the jungle, by the boats of the *Wolf*, who stated that their vessel had been taken about a month previously, and that three days before being found they had made their escape from the pirates who had been refitting on the island. A few days after this, three suspicious looking prahus were overhauled by the boats of the *Wolf*, but two of them having passes from Singapore were released, whilst the third was detained. The crew being brought on board the *Wolf*, some of them were identified by the Cochin-Chinese as having formed part of the force which had captured their vessel, and one of the Cochin-Chinese who had been found without pantaloons, insisted that he recognised the missing garment on the person of a pirate, of which he immediately divested him. During this cruise the boats of the *Wolf* and *Zephyr* minutely examined the coasts of Johore and the islands in the vicinity, and found numerous wrecks of native vessels, Chinese, Cochin-Chinese, &c., strewed along the shore, together with many human skeletons, which there was but too much reason to suppose were the remains of vessels and their crews which had been cut off by pirates. Six of the Malays taken on this occasion were afterwards convicted in the Admiralty Court at Calcutta of piracy, but the counsel for the prisoners intimated their intention to move for an arrest of judgment on the ground that the Cochin Chinese government, the vessel of whose subjects had been taken by these pirates, was at war with the nation to which the prisoners must be construed to belong. This objection was afterwards abandoned, but it being deemed advisable by the Court to have some information respecting the situation, condition, &c., of the states to which the prisoners might be held to belong, judgment was postponed. The Governor General in Council directed enquiries to be made accordingly, and the result of these enquiries was laid before the Court, and the judges held that there was no reason to believe that any of the states in the Straits of Malacca sanctioned or recognised any private confederacies of their subjects to commit acts of piracy. The pirates in question were held to belong to the state of Johore, with which the British government had a treaty, and there was no ground for concluding that any war subsisted between Johore and Cochin China at the time the piracy was committed; robberies on the seas by persons of these nations must be considered on the footing on which they are placed by writers on natural and international law; and it was therefore the duty of all good members of a civilized state to apprehend pirates and sea robbers. On account of the time which had elapsed since their trial and other circumstances, it was not considered advisable to carry out the full sentence of the law against the prisoners, and judgment of death being recorded against them, they were sentenced to transportation for life.

During the course of enquiries made for the shipwrecked people

belonging to the English vessel Charles Eaton, which had been lost to the east of Torres Straits in 1834, the Diana, a frigate belonging to the Dutch royal navy, discovered that the inhabitants of the small island of Vordate had plundered the Dutch brig Alexander, Captain Harris, from Batavia. A landing was made upon the 3rd May, and a number of the culprits were taken prisoners and brought to Amboyna. The government afterwards directed that three vessels of war should proceed to the island, and demand that the Orang Kaya of the place where the Alexander had been plundered should be delivered up. The Orang Kaya could not be found, but two villages were destroyed and some of the principal culprits were seized and transported to Amboyna.

In May H. M. S. Andromache, Captain Chads, arrived in the Straits, charged with the special mission of suppressing piracy. On the 30th of May, five boats belonging to the Andromache were sent to examine the Arroa islands in the Straits of Malacca. About midnight three boats were seen in a small bay, on which the pinnace pulled towards them. The Malays manned two of the prahus and came to meet the pinnace. They were hailed in Malay and told "we are white men, do not be afraid." They immediately began to sing their war songs, beat their gongs and flourish their spears. They were again told not to be afraid on which a voice called out "sons of Malays! there is but one boat, let us fight her." Three or four times they were hailed but paid no attention, and on the nearest prahu coming within 12 or 15 yards of the pinnace, she was fired upon, when the two prahus returned the fire with their great guns, swivels and fire-arms. The other boats then came up and a warm engagement ensued. The Malays at last jumped into the water, and although told in Malay to come on board the boats, and that they would not be hurt, they refused, and fought desperately in the water, so that they were nearly all destroyed. The seamen and marines landed in the morning and scoured the island, which was about half a mile round and uninhabited, and a few prisoners were taken. There were about a hundred men in all belonging to the prahus, most of whom are supposed to have been killed, only nine prisoners being taken. These stated that they belonged to Linga, and had been sent out by the Sultan to commit piracy. The three boats were heavily armed, the largest having a long nine pounder and 5 swivels carrying a pound or $\frac{1}{2}$ pound ball. The boats were destroyed and the Andromache proceeded on her cruise. On the 13th June the Andromache being in the neighbourhood of Point Romania sent her boats to examine that piratical locality. They saw five prahus about 3 miles a-head of them to which chase was given, the prahus making for the shore. The two smallest prahus were soon abandoned, their crews going on board one of the large prahus. The boats gaining upon them, the largest prahu opened her fire upon the pinnace, within their great shot distance. When

within pistol shot distance the men-of-war boats fired upon the largest prahu with grape, and a smart contest was maintained for some time, until the pirates jumped into the water and refusing quarter were nearly all killed. The remaining two prahus had in the meantime gained the shore and the men fled into the jungle. The prahus were burnt, five Cochin-Chinese prisoners being found in one of them. The Supreme government having appointed the Hon. S. G. Bonham, Esq., Resident Councillor at Singapore, to be joint Commissioner with Captain Chads for the suppression of piracy, the Commissioners left Singapore on the 23rd June in the *Andromache* in prosecution of their duties, and on the 25th anchored in Rhio roads where the Commissioners landed and had an interview with the Dutch Resident. On the 26th the boats of the *Andromache* were sent to destroy the famous piratical settlement on the island of Gallang, one of the Rhio Archipelago. Some Cochin-Chinese prisoners who had made their escape from Gallang previously, and now accompanied the expedition, pointed out a junk of about 300 tons as having been captured by the pirates when they were made prisoners. A great quantity of articles was found evidently the produce of piratical expeditions. About thirty large boats were destroyed and between forty and fifty small prahus. Some of the large boats were fitted up with stockades, large guns, swivels &c, all being more or less armed. About six hundred men were on board these boats who escaped on shore and hid themselves in the jungle. There was no appearance of cultivation at the place, and very little trace of any settled mode of peaceful industry, yet there were found three large villages estimated to contain between three and four thousand men. There were some long twelves, a good many nine pounders and a great number of swivels carrying pound balls. An immense quantity of ammunition was found in the houses, many hundred barrels of coarse gunpowder containing about 100 lbs each, and some English powder and cannister powder. This was all destroyed and several of the houses blew up. An attempt was made to get the junk off but this failing she was scuttled. The *Andromache* afterwards proceeded up the east coast of the Malay Peninsula, the petty chiefs residing on which were found very reluctant to give information regarding pirates. While off Pahang two Chinese slaves effected their escape, and were taken on board the gun-boat, in spite of the remonstrances of their master, a Chinese, who said he had saved their lives by purchasing them from the pirates, and thought it was very unjust that they should be taken from him without any compensation being made. On her return the *Andromache* paid a second visit to Pahang, and information having been received that a Cochin-Chinese junk laden with salt had lately been captured by a notorious pirate belonging to Pahang, the boats were sent away in search. The junk was found scuttled and still full of salt. On a demand being made, the Rajah

of Pahang delivered up to the commissioners, seventeen Cochinchinese and Javanese men, and a woman and child, who had all been captured by pirates and sold at Pahang. Many more were reported to be in captivity at Pahang, and these the Rajah promised to send to Singapore. The boats of the *Andromache* were sent on the night of the 18th July to the river Endow, a notorious haunt of pirates, where they refitted and obtained provisions and also sold their captives. The natives fled on the approach of the boats, but some property having been claimed as theirs by two Cochinchinese who had formerly been sold at Endow by the pirates, and afterwards taken to Pahang, and the houses being found stored with guns, ammunition, and arms of all kinds, the village was burned down. A Javanese slave who had been sold by the pirates five years before, made his escape to the boats. The *Andromache* again left Singapore on the 30th July, and on the morning of the 1st August her boats were sent to examine Pulo Bangkalis, and the mouth of the Siak river on the north east coast of Sumatra. When off Tanjong Jatie six prahus were observed, which in the early morning mistaking the boats for Siak traders, advanced towards them. When they discovered their mistake it was too late for flight, and they then opened a fire upon the boats which was promptly returned, and so effectually that the greater part of the pirates, estimated at 180 in number, were destroyed. The six prahus were taken and burned. One of the prahus was blown up, it was thought by the chief of the party Panglima Awang, mentioned already, by which a seaman in one of our boats was killed, and several others were severely wounded. Six Europeans were wounded by the fire and spears of the pirates, four of them severely. The *Andromache* went to Pinang, and then returned to Singapore, the commissioners visiting several native states in the Straits, the Rajahs of which in general kept out of the way to avoid an interview, and who were therefore admonished by letters of the danger which would attend their lending aid or encouragement in any way to pirates. Various piratical haunts were examined by the boats of the *Andromache* and *Zephyr*, but they were all found deserted. In July the English brig *Zoroaster*, while trading at Kurong Kaya, a place between Acheen and Pedier, was cut off by the native part of the crew, who for the most part consisted of Malays from Pinang, Captain Patton, the master, his wife, child, and chief mate being killed. The brig was scuttled and sunk, the crew going on shore. The government schooner *Zephyr* was sent to demand the delivery of the murderers, but this was refused by the Achinese authorities after having been at first promised. About the same time a Dutch schooner the *Dolphin*, having a quantity of treasure on board, was cut off by her crew, who murdered the Captain, his wife, and mate, and carried the vessel and a female passenger whose life was spared into Acheen roads and delivered them to the Rajah. The Dutch autho-

rities sent a vessel to Acheen to demand that the vessel, the female and the murderers should be given up, but this was refused. The schooner was afterwards fitted out to cruize for piratical purposes along the coast, under the command of a native well known as the Black Nacodah, a renegade Englishman, named Osborn, being navigator, but after an attempt by her commanders to take the English ship *Trusty*, which failed, the schooner was burned, whether accidentally or by design is not known, the crew escaping in their boats.

In September H. M. S. *Raleigh*, Captain *Quin*, went to the island of *Linga*, to deliver a letter from the Commissioners to the Sultan of *Linga*. The *Raleigh* had gone as far as *Rhio* in the commencement of the previous month for this purpose, but some misunderstandings having arisen between the Dutch authorities at that place and Captain *Quin*, and the Sultan being then on his way to *Rhio*, while Captain *Quin* wished to deliver the letter at *Linga*, he returned to *Singapore* and afterwards proceeded in search of the *Andromache* to receive further instructions from the Commissioners. Having been directed to repair to *Linga*, the *Raleigh* accordingly once more set out and on the 19th September anchored off *Linga*, about two miles from the entrance of the river, which was as near as her draught of water would permit. It was found that the Sultan was still at *Rhio* but Captain *Quin* went up the river in his boat, and was met by two *Panglimas* who conducted him to the prime minister *Tunku Deen*, by whom he was very courteously received. A delay of two days was requested before the letter was delivered, that suitable preparations might be made to receive it with all due honor, to which Captain *Quin* assented. On the day appointed Captain *Quin* proceeded on shore with the letter, and was met outside the river by the principal officers of state, attended by numerous boats with flags and pendants flying. On landing at the residence of the prime minister the party was welcomed by a large crowd of people with music and much ceremony, according to the Malay fashion. The letter was received on a silver salver, then carefully wrapped in a scarlet cloth richly embroidered with gold, the important event being announced by a salute of 16 guns which was answered from the *Raleigh*. The British officers were afterwards conducted to the house of *Rajah Abdullah* a relative of the Sultan, who met them with much courtesy and led them to a large building, handsomely fitted up, and containing a repast set out on two tables, at one of which the *Rajah* entertained the English officers, while the other was occupied by the principal officers of state, amongst whom the *Rajah* of *Tringanu*, then at *Linga*, was classed. The populace were entertained with plays and music. Captain *Quin* and his party retired at five in the afternoon, being saluted with 16 guns, duly returned from the ship. The prime minister and other chiefs professed a great desire to cultivate the friendship of the English, and stated that the Sultau

had done and was still doing all he could to repress piracy, maintaining six armed prahus for the purpose of cruising against the pirates who had committed many depredations on the territories under his rule. Captain Quin was also shown a proclamation denouncing death against both the principals and accessaries in acts of piracy, and he was assured that as a further measure of prevention the coasters and larger vessels belonging to Linga were furnished with passes by the government, wanting which they were to be accounted as pirates.

Captain Quin made as minute a survey of the river as he was able under the circumstances, and found that it could be ascended by boat for seven or eight miles from the entrance. It is of a serpentine form, and the entrance is easily distinguished from the anchorage, but the water on the bar is very shallow, the Raleigh's boat repeatedly grounding at low water in soft mud. There was a strongly fortified covered stockade on the left hand side, protecting the mouth of the river, mounting 16 guns of from six to nine pounds in calibre, with one 18 pounder in the centre. The mouth was further fortified when requisite by a small boom. The sides of the river had numerous creeks where a great number of vessels of 50 tons and smaller sizes were lying. Dismounted ordnance lay strewed about on both sides of the river. The principal part of the town was situated on the left bank, including the residences of the Sultan and chiefs, the Mosque and a Chinese temple or joss-house. The buildings were chiefly of wood and thatched, a few being covered with tiles brought from Singapore.

While H. M. ships *Andromache* and *Raleigh* were proceeding up the straits of Malacca, on the 7th September, their boats picked up a small sampan in the straits of Dryon containing four men, two women and a child, who stated that they had effected their escape from Rettie on Sumatra, a well known piratical shelter, where they had been detained in slavery, having been captured by pirates six years previously. The Raleigh soon after returned to Singapore and was despatched to Pahang to remind the Rajah of his promise to search for and send to Singapore all slaves which had been sold at Pahang by pirates, but which he had neglected to do. The Raleigh brought back 28 men, 4 women and a boy, thirteen of whom were delivered by the Rajah, the rest having escaped to the Raleigh while lying off Pahang river. Many more, however, were stated to be at Pahang, numbers having been sent into the interior on the Raleigh's arrival. The Rajah again renewed his promise to search out and transmit to Singapore all who might still remain in slavery at Pahang.

In October the Governor of the Straits settlements issued a circular, stating that in consequence of receiving no reply from the king of Acheen, and only very unsatisfactory ones from some of the chiefs of that country, to his demand for explanation relative to recent outrages committed on that coast, he had determined to

have no further communication with them, and moreover to refuse admission to any vessel of war under Achinese colours into any British port in the straits of Malacca, pending a reference on the subject to the Governor General in Council. This was not to extend to vessels or boats *solely* engaged in trade.

A very active slave trade appears at this time to have been openly carried on by the Achinese on the west coast of Sumatra, the slaves being obtained from Pulo Nias and other islands off that coast. A correspondent of the *Singapore Free Press* speaks from personal knowledge of the extent to which the traffic was prosecuted. He says—"the island of Nias in particular, the largest and most populous of those laying in a line opposite to that coast, is the devoted land on which this curse has fallen. Board any of the numerous small prahus to be found in the direct route from that island to the N. W. Coast, and you will not fail to find undeniable proofs of it, generally young girls and boys, either kidnapped by the dealers themselves or purchased there, chiefly from the numerous petty rajahs who divide the island among them, and who obtain them by similar means; but perhaps more frequently by the operation of their own laws, which permit the pledging of the body of the debtor to his creditor.——Land on the opposite coast of Sumatra, at any of the numerous settlements, and you will find these unhappy victims exposed for sale in their shops like any other merchandize.——I happened last year to see four young women newly imported, exposed for sale in the manner above mentioned;—companions in misery they had huddled themselves into the back part of the shop, and from native modesty, or absorbed in grief, their faces were turned from the light of day. On an intending purchaser making his enquiries, they fearfully and for a moment turned their faces, which, though almost entirely screened by their long and loose dishevelled hair, I could see were pale and swollen even to disfiguration, by the unheeded tears they so copiously shed,—while their savage owner answered these enquiries with the same indifference as he answered those of another customer who was at the moment treating for a piece of Achinese cloth.'

THE SILONG TRIBE OF THE MERGUI ARCHIPELAGO.*

By J. R. LOGAN.

THIS chain of islands is inhabited or frequented by the Silong, of whose physical characteristics I have found no notice.

Their language is peculiar but undescribed. There are a mild, peaceful and honest race, and little given to crime. They believe that nats or spirits dwell in the sea, land, air, trees and stones, but they do not invoke or sacrifice to them nor are they symbolised.

Their number does not exceed 1,000. They are nomadic fishermen living in their boats or beneath trees on the beaches till the monsoon becomes severe, when they construct slight huts. They subsist entirely on turtle, fish and shell-fish. They are timid, reserved and difficult of approach. All these characteristics they possess in common with most of the Orang Laut (Sea Men) who frequent the creeks, islands, and solitary shores of both sides of the Malay Peninsula and the Johore Archipelago, and they are probably a portion of the same race.†

A VOCABULARY OF THE SILONG LANGUAGE.

By E. O'RILEY, Esq.

<i>English.</i>	<i>Silong.</i>	<i>English.</i>	<i>Silong.</i>
Long	Adat	Gold	Sin
Broad	Lagat	Silver	Gnin
High	Data	Mountain	Dlai
Short	Abit <i>or</i> balui	Hill	Dlai
Here	Idi <i>or</i> Ini	Water	Awaen
Few	Abit	Sea	Tao
Small	Nek	River	Minám
Large	Adat	West	} Mata alai
Slow	Kruakru		} namak
Rapid	} Wai-wai <i>or</i>	East	Mata alai taok
	} Sat Sat	Cloud	K'neung
Sound	N'hang	Rain	Kuian
Light	Seng	Lightning	Kelat
Darkness	K'man	Thunder	Tgun
Black	Ketam	Day	Alai
White	Patuik	Night	K'man
Red	Melat	Morning	Smira
Yellow	Ina-mang	Sun	Mata Alai
Blue	Ketam	Noon	—————tgak

* *Region, ULTRAINDIA. District, IRAWADI-SALWIN BASIN. (Western Islanders) Tribe 20. Authority, Dr HELFER, Journal of the Asiatic Society (Bengal) 1839 p. 986. The references are to the number and place of the tribe in our ethnological review.*

† Since the above was written I have received a small Silong vocabulary from Mr O'Riley which will be found below. I shall make some remarks upon it in the next number of the Journal. Mr O'Riley notices its strong Siamese affinities. But it has relations to other Ultraindian and even to Chinese languages which shew that it is not a mere offshoot of the Siamese, but probably a sister language.

<i>English.</i>	<i>Silong.</i>	<i>English.</i>	<i>Silong.</i>
Earth	Tanak	Moon	Bulan
Stone	Batoe	Star	Bituek
Heat, Hot	Kalat	Dead	Matai
Fire	Apoi	Eat	Makan
Burn	Kalat	Drink	Ma'am
Rice	Pla	Laugh	Mawak
Tree	Ki	Speak	Miyar
Leaf	Dadn	To hear	Neung
Flower	Bungnat	Sleep	Nedun
Elephant	Gaza	Spirit	Katar
Tiger	Pnuk	Man	Mesa
Horse	Ma	Woman	Benaing
Buffalo	K'bao	Husband	K'lak
Cow	L'mu	Wife	Plao
Goat	Pet	Father	Apang
Dog	Aai	Mother	Aenang
Hog	Babai	Child	Anat
Monkey	Klak	Son	Anat
Cat	Meao	Daughter	Anat binaing
Rat	Keku	Sister	} Ao-aoi (eld.)
Bird	Sisom		} Biang (young)
Duck	Adat	Old	Patao
Snake	Awlan	Boy	Anat kanaing
Fish	Akan	Girl	Biniang
Bee	Samang	Road	Jalan
Ant	Kedám	Arrow	P'lah
Egg	K'loen	Tomorrow	Sisao
Head	Atak	Boat	Kebang
Hair	Autak	No	Ka
Ear	Tengah	Beautiful	Amon
Eye	Matat	Ugly	Amonhat
Nose	Yong	Good	Amon
Check	T'kek	Bad	Adut
Mouth	Awkang	True	Pakat
Tooth	Lepadn	Come	Gnadin
Tongue	Klek	Go	Lakai
Hand	Langan	Kill	Mepang
Thumb	Metin	I, mine	Kyi
Nail	Kekoe	He, she, it	Awlang
Belly	K'lan	Ye, your	Kanye
Bone	Klan	This	Ini
Blood	Awaen-melat	Who	Asao
Foot	Kakai	What	Sipan
Hot	Kalat	Oil	Mnyat
Cold	Dayam	Milk	Awaen sa-lai
Hungry	K'lan	Salt	Selak
Sour	Masam	House	Amak
Bitter	N'hai	Wood	K'ae
Sick	Makit		

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

THE KAREAN TRIBES OR ABORIGINES OF MARTABAN AND
TAVAI, WITH NOTICES OF THE ABORIGINES IN
KEDDAH AND PERAK.

By Lieut.-Col. JAMES LOW, C. M. R. A. S. & M. A. S. C.

IN almost every region of the globe to which geographical knowledge has introduced us, have been found tribes or hordes of men whom we call aborigines, because the obscurity of their history presents formidable obstacles to investigation into the nature of the stock from which they sprung.

In the Indo or Hindu Chinese countries with a few exceptions, inspection will convince us that wherever such wild tribes exist, their external conformation and bearing, if not their language and habits, bear an analogy more or less strong to the same characteristics displayed by the more civilized nations or tribes which have supplanted them in their ancient rights.

The races throughout that wide portion of the earth lying betwixt India and China, including the eastern islands, exhibit generally in their features and physical conformation the evidences of a common origin—and which assimilate them to the hill races of the Himalaya and its spurs and vallies, Tibet and perhaps Tartary—marks which sever them apparently from most of the remaining classes of mankind.

The only perfect exception to these remarks as applicable to

Eastern Asia, with which undoubted research has yet supplied us, is the existence of the woolly haired races, which have been discovered in the Eastern Peninsula, and in the Indo-Chinese Archipelago.

These tribes existing in the lowest state incident perhaps to humanity, if we except the native Australians, without its actually blending itself with the inferior animals, have the fairest claim to the title of aborigines; and there seems to be no reason why we should not allow them to be a distinct variety of the genus man. I may here notice as a curious, perhaps a valuable coincidence if it could be traced to its source—the similarity in the name given to the jungle tribes by people so wide apart as the Burmans and Malays are.

There is no necessity however for tracing them to Africa, if the African negro is not a distinct species, as some have advanced, from the other races of mankind—since the same physical and perhaps moral causes which contributed to stamp them so indelibly, may have operated with equal force elsewhere to change form, feature, and complexion.

The Kareans or Kayens who inhabit the civilized districts of Lower Burmah, are chiefly distinguished from the Burmans and Peguers by a fairer complexion and by greater strength of muscle. While those tribes, who, going under the same denomination, although often differing from the former and each other in stature, complexion and in language, inhabit the closely wooded and wildest parts of the country, are generally also fairer than these two races.

Those tribes only will here be described who were visited during my several journeys through Martaban, Ye, and Tavoy, in Perak and in Keddah.

The observations now offered were made by me during various journeys over the Tenasserim Provinces immediately after they fell to the British arms.

The wild tribes in Siam will also be adverted to.

The Kareans of Martaban are divided into two tribes, termed respectively by them Kaphlung wa or the civilized, and Asiyang or the barbarous. The latter are likewise termed by the Burmans Kaysnuee or red Kayens. The manners and ideas of the former I have had frequent opportunities of noticing. But although I explored the country up to the wild track inhabited by the latter and lying nearly N. and S. about 140 miles from the sea, I was not so fortunate as to meet any of them. Perhaps this was fortunate in one point of view, as they are represented as very savage and expert at the cross bow, shooting from behind cover of the jungle with deadly precision.

They formerly gave constant annoyance to the Burmans in Martaban, as they made annual attacks in bodies of five, eight, or ten thousand.

The superiority which the Burmans had in fire arms,—weapons with which the Asiyang have no means of supplying themselves, alone saved them.

Besides the two tribes noticed, the Martaban Kareans describe four others whom they consider as belonging to the same general class as themselves; although situation and long estrangement from each other, have created dissimilarities in their respective customs and even in their respective features. These are :

1st. Kaplung Tongsu.

From their history and appearance it is pretty apparent that their origin was not very remote from that of the Chinese.

2nd. Bang Khlang—who inhabit the Taitkilla district.

3rd. Kathang-mong—who live at the foot or in the vicinity of the *Tanen-taungki*, a Siamese range of hills bounding Martaban.

4th. Kathang-wa, a tribe on the Siamese borders, and rather attached to that nation than to the Burmans or Peguers.

The only information which could be got from the Martaban Kareans respecting their origin, amounted to this, that of old there were two persons, one fair the other dark complexioned, which amounts to no more in my opinion than a compliment to their late conquerors. They say that the Peguers are allied to the dog, the Burmans to the pig and the Siamese to the monkey. Now we learn from "Mackenzie's Account of the Pacific Ocean" that the Chippewyans have a tradition that they were produced from a dog, and further we know that the worship of the dog pervaded the Indo Chinese countries at a period not very remote. But it is worthy of remark that this physico-geological system of progressive existence is now at least confined to the tribes who have not yet been imbued with the doctrines of Buddhism, and that the Burmese, the Peguers and the Siamese follow in their creative system the dogmas of the Indian and Ceylon Buddhas.

The Kareans have no written records, and their traditions are remembered with reference to the periods at which they migrated from one place to another.

The Kareans in the neighbourhood of *Padda* in Tavai, where I halted a day, told me that there were two tribes in that Province, the *Mitkhen* and *Mitho*.* The former have been induced to incline towards Buddhism and they occasionally come within sight merely of a temple, and return satisfied with this distant sort of worship, reminding us of the periods when the newly converted mountaineers of Scotland used to think that if they reached a spot commanding a view of the Parish Church they had sufficiently fulfilled the duties enjoined them.

On being questioned about their religious (or superstitious) ideas, they declared that of old a superior intelligence vouchsafed to

* The first wear the cloth, which is ornamented with the seed of a plant. The *Mitho* do not use the seed, but color their cloth a variety of tints.

reveal to them a religious and civil code which was engrossed on buffalo skin parchment. The individual to whom it was entrusted left it for a while by accident on a shrub, and crossed a stream. Finding out his mistake he returned to the spot and beheld a dog running off with the precious roll. The dog on being pursued let fall his prize, but before the owner could reach the place a fowl had obliterated the characters on the roll by scratching on it with its feet, (such being the fanciful case, the document must have been very concise)! Hence, continued the narrator, we venerate the feet of the common fowl because to them adhered the sacred writing, but in so doing we do not object to eat the body. The feet we place over our door posts and above our beds to charm away evil spirits. These spirits are called *Sinna* and live in the earth or in the air.

At *Mendat* where I remained a few days, some further information was obtained regarding the *Tavng Byaup Kareans*, and especially from a venerable female of the tribe who had been converted to the religion of Buddha, although she still wore the modest and primitive dress of her ancestors.

These people affirm that they are the descendents of the *Maleichin*—literally "*Lords of the soil*," who were driven from *Tathaung* somewhere in the Burman country by an invasion of the *Kenshetha*, and that this event took place about seven generations ago (this period being 1824 A. D.) which might have been, if true, about 1614.

They revere the feet of the fowl in the manner described by the *Bada* people.

We cannot expect to find any definite code of laws amongst so simple and scattered a people, who have not moreover any written language to preserve one for posterity.

Custom with them is law, and living as they chiefly do in small hordes, mutual interest, and perhaps a sort of clanship, has preserved them from many of the vices and passions of their more polished, but certainly less happy neighbours the *Peguers* and *Burmans*.

I have seen in a Karean village thirty or forty people inhabiting one long house; which sufficiently evinces their social disposition towards those of their own tribe. Here they were locomotive, and engaged in planting rice; after the harvest of which they intended moving to another spot.

There is no generally spoken Karean language. Almost every tribe has an idiom so far distinct from that of any other as to render it nearly unintelligible, often wholly so, beyond the range of hills or jungles wherein the tribe performs its migrations or has permanently settled, which last is a rather infrequent occurrence.

In all the pronunciation is guttural and broad, and in these respects accords with the *Phasea Mon* or language of *Pegu*, which is very ancient. In the comparative vocabulary which has

been made out by me of the various Indo-Chinese dialects which I have had opportunities of examining,* will be found a number of Karean vocables belonging chiefly to the tribe found to the northward of Martaban, in this dialect the gutturals *kh* and *gh* are of frequent occurrence although rarely existing in the tongues used by the larger Hindu-Chinese states.

If the Tavay Karean traditions are to be credited, the ancestors of the principal tribe there had once a written language. It was given to them by *Kachahlong* a very sacred personage, and "was written on cow skin parchment.† This being was dressed somewhat like a Burman priest. He stayed five hundred years on earth, when tired of the wickedness of man he returned to the sky—leaving with a *Thamka* or holy man the sacred writing for "their guidance"—a *Thamka* is stated to be now residing at *Kathangwa*, a village somewhere in the forest near Taungbyaup. He does not shave his head like a Burman *Phaungee* or priest.

These people say that it is more proper that they should rejoice at, than lament, the death of a relative; because he has made his escape from the miseries of life.

They bury the dead, but often when time has consumed the grosser parts of the body they disinhume the bones, especially when removing to a distant spot. They give a feast on the occasion. It consists of venison, pork, the flesh of monkeys, and baboons, vegetables and ardent spirits. The remains of the deceased are carried afterwards in procession *thrice* round the house. They are then carried away with the party, or are again deposited in the ground. Some tribes towards *Tennasserim* practise the same custom at their marriages.

The friends of a deceased person give a feast on his demise, which lasts for three days. Solemn dirges are then sung. One of these I had translated immediately after a Karean had repeated it to me. It runs thus:—

"Let the departed rest in peace,

"We know not whither he has gone—but we trust

"His *new abode* will be a happy one."

Plainly however as they in this dirge acknowledge a future state, it amounts to a transient impression, which scarcely modifies their actions, or imposes any restraint on the will.

In the upper parts of Martaban the Kayeners carry the corpse round the house in procession, they then *burn* it along with all the clothes, arms, implements of husbandry, household ware &c which appertained to the deceased, a custom manifestly of Sacyan or Scythian origin and prevalent in the shape of the burning of joss paper, amongst the Chinese.

* This vocabulary will appear in a future number.—Ed.

† This assumed use of parchment made from cow and buffalo skin militates against a Hindu or even a Buddhist origin being assignable to this, and the previously noticed Kreaan language. But these primitive people may have used such parchment for receiving certain signs and marks of a rude nature, and have naturally concluded that the more perfect character had been similarly engrossed.

It originated perhaps in some region near the confines of Europe. It obtained and still obtains amongst Tarter hordes, and amongst several North American tribes (vide Mackenzie's work) and it no doubt prevailed in India at some distant period.

Marriage. The youth of both sexes contract marriage at an early period. In the infancy of society and where a youth of activity has equal means with the older persons of the tribe of subsisting himself by the chase or by fishing, he finds nothing to prevent his marrying early. In fact it becomes a matter requiring little thought.

He soon perceives it to be his real interest to enter into that state. For the women weave the dresses of the men, cook their food, cultivate the few culinary vegetables in use amongst them; and attend to other domestic affairs. They also assist in the cultivation of Cotton and Indigo. For these purposes the grass and brushwood are burned down, the soil roughly dressed by means of their wood knives of iron, or by sharp stakes, and the seed is dropped into holes and left to its fate.

The men assist in these occupations when at leisure, but they have generally other pursuits to engage their attention, such as hunting, fishing, cutting down forest trees, building houses, fencing, war and collecting the produce of the forest.

In Tavay the Karean lover pays his addresses in form, and if the girl approves of his suit they are soon constituted a married pair by the giving of a feast to their friends.

On many occasions of this sort the manes of their ancestors are carried in procession round the house of the bridegroom.

This practice does not obtain in so far as I could learn amongst the Martaban, or Mautama Kayeners. In that province the bride and bridegroom with their relations contend for the possession of a bamboo, which is allowed, it is presumed, to fall to the share of the intended husband. But in many instances the bamboo is delivered to the bride, who defends her house against the attack of her intended, thus placing it in her power to prove to him her future entire submission, or her will and power to use it with effect if it should be requisite to do so. All the relatives tie threads round their wrists on the occasion.

The head person of the village or an elder selected for the occasion, takes some rice and places part on the head of the bridegroom and part on that of the woman.

The whole party then partake of a spirit distilled from rice. The marriage is now considered as finished. The husband generally resides in the house of his father-in-law or mother-in-law for three years, which may remind us of a similar and much more ancient and more lengthened custom as described in holy writ. Although polygamy is not actually forbidden, yet custom, and the disadvantages here attending a plurality of wives, where they have certainly not been degraded to the level of beasts of burden, make the men

rest contented with one. The latter marry at about twenty and the women at fifteen. The women when they have become matrons, wear a coloured or chequered frock or gown.

In their maiden state they wear a white dress. Virgins only have armlets or bracelets.

When newly married, the Martaban women draw a line with red paint from the forehead to the crown, along that part which shews the separation of the hair, which last is neatly separated to the right and left of the forehead.*

The employments of the Kareans I am describing consist, independently of the chase and fishing, in cultivating cotton, tobacco, indigo, pepper, tea, maize and pulses, and in collecting the various products of the forest viz., ivory, wax and cardamums. The women manufacture coarse cloth, striped and chequered. The colours are very lasting and brilliant.

The Burmans by forcing several of the Karean tribes to cut down timber without any adequate recompense for their labour, drove them further into the interior. Their habits renders it easy for them to escape from oppression, if they cannot withstand it by positive resistance. They are a peaceable people, but, according to Burman and Peguan account, are good soldiers when forced to go to war.

They rear pigs and poultry, and train dogs to assist in finding game.

These last mentioned animals are also expert in tracking out the tortoise, the flesh of which the Kareans prize much. I found their villages surrounded by the shells of these animals. Those who live on the banks of the river are well supplied with the various species of turtle found in it; and with their eggs which are dug out of the sand. They rear buffaloes when the village happens to be in a flat part of the country favorable for rice cultivation. They lay gins for small game, and for the larger species huge cross bows, stretched and ready to discharge a large arrow or rather spear at the animal which may tread on the spring. This mode is likewise practiced by the Malays in killing tigers. Instead of requiring to wait an hour before a fowl volant could be caught for my dinner, as would have been the case at any village in the more polished regions of India, these Kareans immediately placed a row of springes on the ground towards which the poultry were promiscuously driven by a circle of children and women, by which means any number wanted were caught in a few minutes.

Their houses are generally commodious and substantial.

There is abundance of the best timber for the frame work, and closely plaited palm leaves and mats form their remaining protection from the weather.

* The Journal of my account of the San Luan or great Martaban river in May and June 1825, was published in an abridged form in the Tr. of the R. A. S.

It is not always owing to a restless disposition that they change their place of abode. Fevers and other diseases often thin their numbers, and dispose them to seek for a more healthy spot.

Amongst these diseases the spasmodic *cholera* which seemed to have been very long known to them, commits at intervals great ravages. I met one party on the Martaban river who had been driven from their village by this scourge and were seeking other abodes.

I frequently offered medicines to individuals whom I found under the influence of fevers, or other complaints, and these were thankfully received. They seemed chiefly, like all barbarous people, to rely for relief on the muttering of words supposed to drive away the malignant spirits which they think are the cause of this mischief and contagion.

Their common food is rice, which they receive from the Martaban and Tavay people, in exchange for their cotton cloth and the produce of the woods, venison, turtles flesh and eggs as before noticed, they have often the flesh of monkeys, which they shoot with the cross bow, the arrows being poisoned, poultry, pork, and the flesh of many other animals.

They have lacquered plates and China ware, procured from the Burman petty traders, on which they serve up their meals, and some have learned to use China spoons, and they get from the same source, cooking utensils, salt, and balachang or caviare.

They distill an ardent spirit from rice, with which they carouse on great occasions. The women partake of it. The apparatus which I observed in a hut, forty miles north of Martaban, consisted of an earthen pot, to the top of which a large oblong earthen vessel was luted. To this, which was kept wet and served as the condenser, was attached the receiver, a common cooking pot. The rice used is the *oryza glutinosa* (Mand. and Roxb.) In some tribes virgins only are permitted to beat it out and prepare it for distillation. It is fermented with a piece of sour dough.

Dress. There is some variation apparent in the dress of the different tribes, but it chiefly lies in the colours, not in the form. The value of a full dress may be about 7 shillings.

The tribes who live in the deepest recesses of the forest are of barbarous habits compared with those who have approached nearer to the Peguan or Burman towns.

They all cultivate the ground.

The Kayennee or red Kareans form a very numerous and powerful horde which occupies a considerable extent of country northward of Martaban, skirting the great Siamese range of hills.

They, as before stated, made periodical inroads into the Martaban territory and had they been possessed of fire-arms, they would probably have driven out the Burmans from that Province. Their dress in war consists of the skins of wild animals and their

coats of tough buffalo hide are calculated to resist the arrows of their enemies.

Several of the lesser tribes are remarkable for a pleasing simplicity of manner as well as uniformity in dress.

The loom is a simple machine, but the web is narrow, seldom exceeding eighteen inches.

As the Kayeners of Martaban cultivate cotton, the members of each family make its cloth and they can afford to dispose of their surplus stock at cheaper rate to the Peguers and Burmans than these people could manufacture it for. It is a strong but coarse cloth, thick and warm, and dyed with brilliant colours. The turban or head dress is tasteful and the women embellish their gowns with rows of a white seed which resemble shells. Both men and women wear necklaces of beads. The men wear a sort of smock frock fitting pretty closely to the neck and open to a little below the collar bone. This is altogether either white or the upper half is white and the under or two-thirds of it is striped with various colours horizontally. It reaches to the calf of the leg. The women have a petticoat of a tartan looking pattern reaching nearly to the ankle, over this is the same sort of frock not open in front, as it is put on over the head. It fits pretty close to the neck and reaches to the middle of the leg. The sleeves in both cases cover but one half of the arm. The lobes of the ears are widely perforated and a plug of wood or an ornament of silver or gold is stuck into it. The hair is long and black. I did not notice any tattooing on the persons of these people. The cotton used in Tavay is almost wholly brought from Martaban where it is purchased by barter from the Kareans.

The Kareans use as dyes, indigo of two sorts, the true and the creeping indigo, kasumba and turmeric.

The Kayen women consider the dress of the Burman females as exceedingly indecorous. In this any one will readily acquiesce who has witnessed it, since it exposes the greatest portion of one leg in walking. It serves however to shew the ideas of propriety entertained by a people looked on by the Burmese and Peguers as barbarous. The fact is that they are the least barbarous in many particulars of the three, if decency in external behaviour, a softness and native simplicity in their ideas and social habits, industry, and an aversion to quarrel with their neighbours, are some of the indications of civilization. It is true they are not so far advanced in some of the arts as the two former classes, but they have a greater chance of happiness in the freedom they enjoy from oppressive civil institutions and the miseries introduced by ambition.

The women do not depress the breasts by folding the upper parts of the dress tight round the body like the Malayan and Burman, the Siamese and Peguan women, nor do they use false tails or queues, both of which are Burman customs as well as Chinese.

It must however be remarked that the whole of the Indo-Chinese nations and tribes are less cleanly in their habiliments than the Hindus, which arises from their preferring coloured silk and cotton dresses to white cotton ones. The neglect of cleanliness is not so apparent on these kinds of cloth and this causes them to wash their dresses less frequently than they ought.

The bath is however, generally speaking, daily resorted to by all.

The Karean men eradicate their beards.

When their children can walk they bestow names on them. The following are some I got from a Tavay Karean woman, and they are put down here because by names the connection of one class with another may often be traced :

Men.

Cha kang ka
 Cha thui po
 Thein pang ko
 Cham aung sa
 Chau eng pu
 Bang yu po
 Chakang phla
 Chowang po

Many of these have a great resemblance to Siamese words, some actually are, as Chau, a Lord, master, eng self &c.

Women.

Ma sui
 Ma-mo
 Ma-wa

Nang Me to-e (nang is Princess in the Thai or Siamese tongue.)

Ma thui
 Nang Longshi
 Nang Mui sho
 Nang lei
 Nang kla
 Nang ne
 Nang tho

The Kareans are fond of dancing and vocal music.

They think it a great accomplishment to be able to recite extempore verses.

The old lady before noticed on being asked by me to repeat some lines, immediately sung the following ones

Khola pyu gyaung do mi
 Pinong palang pa rawi
 Pame piyang tang piyang ch'i.
 2nd.

Pang me luzi thai gi
 Chang thung sinna mai pli
 Wi ya ri supha ya ri
 Thang pe wi palaji.

These lines I found by my Burman Interpreter include a panegyric on the British or *Kholapu* as they call us, and nearly in these terms—but whether the old lady extemporised them or not did not appear.

Let us be grateful for the events which have placed our persons and property in safety under British rule.

Henceforward we shall be permitted to enjoy unmolested the fruits of our labour.

A Song.

Kabang zea ula lau
 Cha-nang te-ang lagnau plo
 How can a vessel cross the ocean without sails
 Emooi nangsa e-obu
 Kiwi lang le-thi ke ku

(I could not get the proper translation of these two lines)

Pudi pri le lau che klain
 Thuau thang shea mong chirrikhai
 Mani phu puk de khui khai
 Hinnui kabang mung tang thein
 The mariners were youths—mere novices—
 The old man came on deck—
 An ox being fastened to a rope—
 Seven ships (2 mariners) escape by this means

The obscure lines may relate to some antient tradition of a deluge or of shipwreck. When going on a journey some of the Karean tribes take the bone of a fowl's leg and thrust into it a bit of stick. If that comes out whole they think it unlucky, if it should be broken into two pieces fortunate.

THE SEMANG AND SAKAI TRIBES OF THE MALAY PENINSULA.

While residing in Perak opportunities offered for conversing with many persons of the *Sakai* tribe, who at my request were brought from the interior districts by order of the Raja, and as we can scarcely doubt of these being the descendants of the aborigines of the country, an account of them may not prove unacceptable to the curious inquirer. It is well known that a race of men having most of the characteristics of the negro is spread over these countries. None of this tribe were brought to me in Perak, but as I had frequent meetings with individuals of it in the Keddah country, it will be described also.

There is another tribe termed *Allas*, the individuals of which are represented as resembling greatly in features and manners the *Sakai* tribe or eastern negroes.

There appeared in a Pinang paper some years ago an interesting account of the aborigines of the Malayan Peninsula, by Mr John Anderson,* in which the Semangs are particularly alluded to. The description of them was evidently intended as a general one by the author, who compiled it chiefly from information received from the Malays, and as such it appears valuable. But there is reason to believe that many shades of difference will be discovered betwixt the several hordes of the different tribes on the Peninsula. And as this writer states that the language of the Semangs of Tringanu on its east coast differs by Malayan accounts, from that of the tribes or society in Keddah, while as it appears to me we have no authority to enable us to trace the analogy betwixt the languages of these tribes and those of the Papua negroes of the eastern islands, the inference may be drawn that we have not as yet obtained such satisfactory information respecting any of them, as can enable us to refer with any degree of certainty or even probability to their origin. It must have required a very long period of ages before these races, allowing that they proceeded from the same stock, could have spread from 6 degrees north latitude, to the further extremity of Japan. If we must assign Africa to their progenitors, the assumption is not upheld by any tradition, either oral or handed down to us in written history. Our only guide through the gloom would seem to be language. But are the languages of Africa sufficiently understood to facilitate a comparison betwixt them and those of the apparently cognate tribes of the eastern seas? We must either suppose with Crawford in respect to the Papuas that they are a distinct and inferior species of the genus man, or combat with little less than impossibilities.

* Mr Anderson was Secretary to the government of Pinang and is well known by his account of his mission to the East coast of Sumatra.

The Semangs.

The following is the paper by Mr Anderson mentioned above :

"Of the origin of that most singular and curious race, called Semang,* the Malays possess no tradition. Certain it is however, that the tribes of them which inhabited various parts on both sides of the Peninsula were much more numerous, before many of the present Malayan colonies were founded by emigrants from Sumatra. The Semangs are designated by the Malays Semang Paya, Bukit, Bakow and Bila. The Semang Paya are those who reside on the plains and borders of morasses; the Semang Bukit, whose abode is on the hills, and the Semang Bakow are so called from their frequenting the sea-shore and occasionally taking up their quarters in the Mangrove Jungles. The Semang Bila are those who have been somewhat reclaimed from their savage habits and have had intercourse with the Malays. A similar race of people are said to have formerly inhabited all the islands of the Archipelago, and small parties are still to be found on many of them. To the eastward they are called Dyak, and on the east coast of the Peninsula, Pagan. They are at present most numerous in the interior of Ian, a small river to the northward of the Mirbow, near the lofty mountain Jerei, in the Keddah territory. There are small parties also in the mountains inland of Juru and Krian, opposite Pinang. Their huts or temporary dwellings, (for they have no fixed habitations and rove about like the beasts of the forest,) consist of two posts stuck into the ground, with a small cross piece, and a few leaves or branches of trees laid over to secure them from the weather. Some of them, indeed, in the thicker parts of the forest, where the elephants, tigers, and other wild animals are most abundant, make their temporary dwellings upon the cliffs and branches of large trees. Their clothing consists chiefly of the inner bark of trees, having no manufactures of their own. A few who have ventured to approach the Malayan villages, however, obtain a little cloth in exchange for elephant's teeth, garru, wax,

* In his disquisition on the languages and literature of the east Dr Leyden makes mention of the Negro Tribes as follows. "The Papuas, termed by themselves *Ingolote*, but by the Spaniards of the Philippines, *nigritos del monté* from their colour and woolly hair, are the second race of aborigines in the Eastern Isles, in several of which they are still to be found, and in all of which they seem to have originally existed. Some of these divisions have formed small savage states and made some advances towards civilization, but the greater part of them, even with the example of more civilized races before their eyes, have betrayed no symptoms, either of a taste or capacity for improvement; and continue in their primary state of nakedness, sleeping on trees, devoid of houses or clothing and subsisting on the spontaneous products of the forest, or the precarious success of their hunting and fishing. The Papuas or oriental negroes, seem to be all divided into very small states or rather societies, very little connected with each other. Hence their language is broken into a multitude of dialects, which, in process of time, by separation, accident and oral corruption have nearly lost all resemblance. The Malays of the Peninsula consider the language of the blacks of the hills as a mere jargon, which can only be compared to the chattering of large birds; and the Papuas dialects, in many of the eastern isles, are generally viewed in the same light.

woods, gum, dammar and canes, which they procure in the forest, but of the intrinsic value of which they possess little knowledge, and are generally imposed upon by the crafty Malay. From the Malays also, they procure their arms and knives and tobacco, of which last they make great use. They in turn frequently impose upon the superstitious Malays, when they have no products to barter and wish to procure a supply of tobacco, by presenting them with medicines which they pretend to derive from particular shrubs and trees in the woods, and which they represent so efficacious for the cure of head-aches and other complaints.

The *Semangs* subsist upon the birds and beasts of the forest and roots. They eat elephants, rhinoceros, monkeys and rats, and with the exception of the partial and scanty supplies which they obtain from the Malays, they have no rice or salt. They are very expert with the Sumpit and poison the darts with Ipok, procured from the juice of various trees, which is a deadly poison. They handle the bow and the spear with wonderful dexterity and destroy the largest and most powerful animals by ingenious contrivances. 'Tis seldom they suffer by beasts of prey, as they are extremely sharp-sighted, and as agile in ascending the trees as the monkeys. Their mode of destroying elephants, in order to procure the ivory, or their flesh, is most extraordinary and ingenious. They lay in wait in small parties of two or three when they have perceived any elephants ascend a hill, and as they descend again, which they usually do at a slow pace, plucking the branches as they move along, while the hind legs are lifted up, the Semang cautiously approaching behind, drives a sharp pointed bamboo or piece of neebong which has been previously well hardened in the fire, and touched with poison, into the sole of the elephant's foot,* with all his force, which effectually lames the animal and most commonly causes him to fall, when the whole party rushes upon him with spears and sharp pointed sticks and soon despatch him. The Rhinoceros they obtain with even less difficulty. This animal,

* "The Eastern Insular Negro" says Crawford, "is a distinct variety of the human species, and evidently, a very inferior one. Their puny stature and feeble frames cannot be ascribed to the poverty of their food, or the hardships of their condition, for the lank haired races living under circumstances equally precarious, have vigorous constitutions. Some islands they enjoy almost exclusively to themselves, yet they have in no instance ever risen above the most abject state of barbarism. Wherever they are encountered by the fair races they are hunted down like the wild animals of the forest and driven to the mountains and fastnesses incapable of resistance. (a) Sir Everard Home gives the following description of a Papua Negro carried to England by Sir T. S. Raffles. (b) The Papuan differs from the African Negro in the following particulars. His skin is of a lighter colour, the woolly hair grows in small tufts, and each hair has a spiral twist. The forehead is higher and the hind head is not so much cut off. The nose projects more from the face. The upper lip is longer and more prominent. The lower lip projects forward from the lower jaw to such an extent that the chin forms no part of the face, the lower part of which is formed by the mouth. The buttocks are so much lower than in the Negro as to form a striking mark of distinction, but the calf of the leg is as high as in the Negro.

(a) Crawford's Archipelago vol. 1; page 26.

(b) History of Java, vol. 2, Appendix page 235.

which is of solitary habits, is found frequently in marshy places, with its whole body immersed in the mud, and part of the head only visible. The Malays call the animal *badak tapa* or the recluse rhinoceros. Towards the close of the rainy season, they are said to bury themselves in this manner in different places, and upon the dry weather setting in, and from the powerful effects of a vertical sun, the mud becomes hard and crusted, and the rhinoceros cannot effect its escape without considerable difficulty and exertion. The Semang prepare themselves with large quantities of combustible materials with which they quietly approach the animal, who is aroused from his reverie by an immense fire over him, which being kept well supplied by the Semangs with fresh fuel, soon completes his destruction and renders him in a fit state to make a meal of. The projecting horn on the snout is carefully preserved, being supposed to be possessed of medicinal properties and highly prized by the Malays, to whom they barter it for their tobacco &c.

A more simple and natural mode of bestowing names cannot well be imagined, than that adopted by the Semangs. They are called after particular trees, that is, if a child is born under, or near a cocoanut or durian, or any particular tree, in the forest, it is named accordingly. They have chiefs amongst them, but all property is in common. They worship the sun. Some years ago the Bindahara, or general of Keddah, sent two of these people for the inspection of some of his English friends at Pinang; but shortly after leaving Keddah, one of them, whose fears could not be appeased, became very obstreperous, and endeavoured to upset the small boat in which they were embarked; the Malays, therefore, with their usual apathy and indifference about human life, put the poor creature to death, and threw him overboard; the other arrived in safety, was kindly treated, and received many presents of cloth and money. He was taken to view the shops in the town, and purchased a variety of spades, hatchets and other iron implements, which he appeared to prize above every thing else. On his return to Jan, he built himself a small hut, and began to cultivate mace, sugar cane and yams. He is still there, and is said to be a quiet inoffensive man. This man was at the time of his visit to Pinang, when I saw him, about 30 years of age, four feet, nine inches in height. His hair was woolly and tufted, his colour a glossy jet black, his lips were thick, his nose flat and belly very protuberant, resembling exactly two natives of the Andaman islands who were brought to Prince of Wales Island in the year 1819.

The Semangs are found also at Tringanu on the Eastern side of the Peninsula and a gentleman of this island has had one, who was sent to him by the king of that country, in his service many years. He was procured when a child, and has no recollection of his own language. I am informed however by the Malays, that the dialect

of that tribe is different from those of Keddah. He is not of such a jet black glossy appearance as the Semang from Keddah whom I saw, nor the two Andamans who were at this settlement some time ago. A few months since, a party of fifteen of the Semangs, who reside on the mountains of Juroo, came down to one of the villages in the Honorable Company's territory, and having experienced kind treatment, and received presents from some of the inhabitants, they have continued in that neighbourhood ever since, and frequently visit the villages."

THE SAKAI

Chiefly found in the Perak country.

They chiefly inhabit the lands skirting the mountains, and the recesses of the forests; many families have however been induced to settle near the Malays and to wear decent clothing. Those who live in the wilds have still many comforts, which raise them above the condition of a perfect savage.

They erect huts, form dresses of the bark of trees, and plant rice, sugar cane, and yams.

The Malays divide them into three classes. The *Sakai Jina*, or those who have in some degree adopted settled habits, the *Sakai Bukit*—who live amongst the hills, near Ulu Birtang, and the *Allas* who are found principally about Ulu Kantu. This last tribe differs from the other two in adopting the custom of piercing the cartilage of the nose and ears and inserting in them porcupine's quills, and of tattooing the face and breast, by means of a sharp piece of wood and filling the punctures with the juice of a tree. They do not use salt. They employ dogs in the chase, a custom which Mahometanism has no doubt brought into disuse amongst the Malays. A family consisting of three men and an equal number of women were persuaded to visit me. They were of the first mentioned class. Portraits of the men were obtained, but the women had gone away to a distance and could not be found in time to have theirs taken also. These three men were measured, their respective heights were found to be 4 feet 10½ inches, 5 feet 5½ inches, 4 feet 10¾ inches. The lobes of their ears are bored and distended greatly.

Their complexion does not differ from that of the Malays, and one of the women had very good features. They were all, excepting her, more or less afflicted with the ring worm, an observation which may be extended to all the jungle tribes of the Peninsula. In some cases it has proceeded to such a height as to change the colour of the whole body to a dirty white, mixed with red. They have small heads and bones, keen penetrating eyes, not depressed at the inner corners, long, curling but not woolly hair, and black teeth, owing to the practice of chewing betel. The nose is rather flat, but not disagreeably so.

They live by hunting chiefly, but as before mentioned they cultivate the soil in a rude and partial manner. The seed is cast into holes made by a sharp stake. The only arms they appear to have, are sharpened poles of bambu, and the blow pipe and poisoned arrow, but I suspect they left their long bows and arrows in the jungle when they came, for I got specimens afterwards, said to belong to the hill Kreans. The pipe is merely a cane tube gth

of an inch in diameter, and from 6 to 7 feet long, inclosed within a large cane. There is a knob at top, partially hollowed towards the orifice. The quiver is a joint of hollow bamboo, and contains about fifty very light arrows. The arrow is of bamboo, nine inches and a quarter long, and $\frac{3}{8}$ ths of an inch in circumference. The pointing is of the same piece of bamboo, and is $2\frac{3}{4}$ th inches long, one inch and a half of which is dipped in a preparation of the inspissated juice of the ipoh tree. The head is a cone (the base upwards) of kumbar, which is the central part of a leaf of a species of palm and has a corky texture. The arrow weighs only 20 grains. But it goes nevertheless with much rapidity and force, at least with sufficient impetus as to cause it to pierce the skins of hogs, monkeys and other animals. The poison takes effect in about 10 or 15 minutes by the accounts of these people. The Sakai who gave me his tube and quiver, shewed me how he propelled the arrow. The knob is with some difficulty taken completely into the mouth, and a full expectoration sends forth the weapon. He informed me that the poison has no power on the common fowl, when it was tried afterwards both on a dog and fowl, it produced no effect, perhaps from its having been too long kept, for they carry fresh poison with them, and dip the arrow into it the moment before it is shot.

The Sakai generally use earthen cooking vessels, but iron ones when they can get them. They eat almost any sort of animal food. The land tortoise is equally acceptable to them as to the Kareans of Martaban; and indeed the general manners of the two tribes much resemble each other.

They seem to have very slender ideas on religion, and but obscure glimpses of a future state, the existence of which they neither affirm or deny. They deprecate the Nyani or superior, and Pateh, or the inferior spirits, which are male and female.

They bury their dead with many signs of grief, and on the death of near relatives, generally change their abode.

During thunder they go out of their houses and brandish their poles and arms to frighten away the evil spirits.

They practice a sort of Sibilism;—an arbor of thorns is framed—into this a man and his wife are put. The neighbours sing outside, a strange noise is then supposed to be heard, which is believed to be a sign that the invoked spirit has possessed the inclosed pair. They then come forth, and whatever they utter is considered the will of the spirits alluded to.

Polygamy is permitted, but is not common, and they seem to care little about their wives leaving them.

They appear however to treat them well. But should a man chuse to resent the infidelity of his wife, he may kill her and her partner without any apprehension of the result, further than of their relatives avenging the deed.

A young man pays his addresses in person. If the girl approves,

he gives a present to her family of spears, knives and household utensils, and a time being fixed the relations the both sides assemble at the bride's house. The betrothed eat rice together out of a dish, and the little finger of the right hand of the man is joined to that of the left hand of the woman. These two last observances are found with some slight modifications amongst the Malays on like occasions. The eating together is also a Burman and Peguan custom.

The parents on both sides then pronounce them married persons, and give them good advice for their future conduct, as *Mano Klamín che dada*,—an admonition or wish that they may be fruitful.

No account could be got of any laws being enforced amongst them. Indeed they are of too wandering habits for the operation of such, although the social compact is no doubt strong enough to make them live in harmony.

Their Mampade or Airs are much in the Siamese style, which last undoubtedly takes the lead amongst the musical compositions of the Indo-Chinese nations, and their songs have got an intermixture of Malayan, as in the following one which was sung to me somewhat in the Siamese manner:

Pirdu salen kinnang ingat sampei
Yari mola asal nyite gyijen
Ayer ambun umbun moli
Kiri baju layang mayeng singi.

I could not get this fragment satisfactorily translated, but the greater part of the words are Malayan.

The Sakai language is a polysyllabic one, and contains many words of Siamese and Malayan origin. Those which were obtained have been inserted in the comparative vocabulary.

The pronoun precedes the verb, and the verb the adverb—*en mau chip diteh*—I wish to go there.

beh badeh—come here.

bei ha juk—let us return.

duk gu chip—dont go.

ma he nyong badeh—why have you come here.

ampu lalas—when (was she) brought to bed.

mar hubbur he—what news?

ho dik dik—give all.

it is very cold—*singet dikit*—(sangat dingin Malay.)

ta bar kidde taleh—it is improper to do so—(ta bai Mal.)

The adjective follows the substantive, *eloh duk*, a good house—*kinnah bar* or *hardur n janee bar*, a handsome woman—*chik ta bar*, the elephant (is) not (a) good (one)—*bar sakali*, best. These degrees of comparison are almost Malayan, exhibiting the infancy of the reasoning faculty amongst the Sakai.

Dentals are of constant recurrence in this language, and a frequent use is made of the Indo-Chinese *ú* as a medial and final letter, a peculiarity, not, according to my experience at least, incident to the

Malayan, but as just noticed very observable in the Lau, Siamese and Peguan tongues. But it is deserving of remark that a near approximation is made towards the use of this vowel sound by the Malays of Perak, especially in final ú. It is hardly requisite to add that the *Sakai* have not any written language or character. Their three first numerals are peculiar, su, one,—nar, two,—ni, three, the rest are Malayan. They reckon decimally. Their proper names have a near affinity in most instances and correspond exactly in others with Malay words. They are chiefly remarkable on account of most of them beginning with the letter S.*

Men.

1 Sittong (P. M.)	Bassuwait	Sikumbal (M.)	Silanchap doubtful
2 Sijamman (Bg.)	Ba-limpoon [M.]	Si-bunga (M.)	Silimoon [M.]
3 Siyadap [M.]	Panggil [M.]	Si-rangis doubtful	Yuman
4 Si-tupeí [M.]	Sitimor [M.]	Si-yassen do	Sibusut (M.)
	Simiyan	Si-yute do	

Women.

1 Si-pootih (M.)	5 Singap (doubtful)	8 Sirotus
2 Si-barte (doubtful)	6 Nooc	9 Sungoh (M.)
3 Moirse do	7 Etam kundool (M.)	10 Si-kiche
4 Tangam		11 Bage

* *Si* is a Malayu-Tagalan definite or article, used before names of persons —
ED.

THE MANNERS AND CUSTOMS OF THE MALAYS.*

By J. R. LOGAN.

MEALS.

THE Malay has only two regular meals in the day, the first or *makan pagi* (morning meal) about 10 o'clock in the forenoon, and the second or *makan malam* (night meal) generally between 7 and 8 o'clock in the evening. A slight refreshment of cakes accompanied by tea in the seaports, and a decoction of coffee leaves in other places, is sometimes taken in the morning. There is nothing to distinguish the two meals either in the customs observed at them or in the food used. The meal is generally taken by the labouring classes in the *rumah dapor* or cooking house, and by the wealthier persons in one of the middle rooms. When there are guests, it is invariably in the *serambi* or verandah. A mat having been spread on the floor, the guests, if any, and the family, or such as are not employed in preparing or bringing the food, seat themselves on its margin. The men sit *bersila* or cross-legged like the Arabs and many other eastern nations, leaving the arms quite free, and the women *bertimpo* or with the limbs bent back, the left under the right, with the feet protruding on the right side and the ankles crossing. The left hand rests flat on the mat so as to afford an useful, if not necessary, support in this position. A *giloh* or earthenware jar of water covered by a *cheper* or brass plate on which a *batel* or brass cup is placed, is then brought in on a *bokor* or round brass vessel about a foot in breadth and two inches in depth. If the party is large then is a *giloh* for every 4 or 5 persons. This is placed on one side of the mat. A *tampat luda* or spitting pot is at the same time placed on the floor beside the mat. The food is then brought by the host's boys, and by himself if he has only one or two friends eating with him, but when he has numerous guests by boys and young men of his own family and those of his neighbours. It is contained in bowls and plates placed on round *dulangs* or trays of brass or wood, and varying in size from one to three or more feet in diameter. In place of *dulangs*, a *pahar*, or tray with a pedestal, is used in Naning and other countries in the interior, and appears to be the original Malayan tray as it is very little used by any other races. The boiled rice is first brought in on a large plate called *pinang idangan*. A small plate is then placed before each person. The dishes of *gulai* (or *lou*), under which name cooked meats of all kinds are included, are next brought on a tray. When there are many guests there is a tray for every four or five. The persons who bring the food then with their hands fill each plate with rice from the *pinang idangan*,

* Continued from Vol. III p. 284.

which they remove and bring in again replenished, after which they retire to the side. The host then makes a *sambah* to the guests, lifting his hands, with the palms meeting, to his forehead which he bends over them, and saying "Dato Dato, Tuan Tuan, Inche Inche sikilian, silahkan berayer," "Datos, Tuans and Inches all, be pleased to dip your hands in water,"* or sometimes simply "*Bismillah*" in the name of God. The person who happens to be seated next the *giloh*, upon this fills the *batel* with water from it, places it on the cheper and hands it, with a courteous inclination, to his neighbour who places the *tampat luda* below his right hand and pours a little water over it with his left. He then passes it to his next neighbour, and so it goes round, being refilled from the *giloh* if necessary. The hand is not dried. The guests then draw together round the tray, or in separate knots round each when there are more than one. Each person then says "*Bismillah hirahman irrahcem*," "In the name of God, the compassionate, the merciful," and proceeds to eat. If the party is small the host remains seated and eats with them, but if there are many trays, he rises after the laving of hands, and moves about conversing with the different groups. Each guest from time to time helps himself by means of a *sudu* or small spoon with a short handle, to a little *gulai* out of any of the dishes on the tray. The hand is used to mix the *gulai* with the rice and convey it to the mouth in small quantities and slowly. During the meal, trays are brought in holding a small teapot and *chawan* or small cups, and placed on the mat, and the cups are filled ready for any one to help himself when inclined. When the lads who serve the rice see any person's plate nearly empty, they hasten to him with the *pinġan idanġan*. The guests at each tray generally finish together. Should any one from want of appetite be unable to continue eating however slowly, till the others are satisfied, he *mintā ampun* or begs pardon when he stops. When the guests are satisfied they drink a little water, and draw back from the trays. The mats are then cleared and swept, and the *tampat siri* again takes its place on them. One of the guests then invokes a blessing and prosperity to the host, using some Koran phrases, and the other guests say *amin! amin!* It is then entirely at the pleasure of the guest to leave or remain. They generally stay conversing for a quarter of an hour when the party is large. When it is limited to a few of the host's friends they usually remain an hour or two. In the harvest season *nassi pulut*† is offered to the guests after they have eat *siri* for some time. They partake a little and divide the

* Berayer is formed from *ayer*, water, and the invitation is therefore literally "be pleased to water your hands." It would be considered very coarse and vulgar to ask them to wash their hands as implying that they were dirty! Marsden does not notice this use of the word.

† These and the other words not pertaining exclusively to meals will be explained in the proper place.

remainder amongst them, each wrapping his share called *birkat* in a bit of plantain leaf. On particular occasions, such as marriage and death feasts, the meal is succeeded by observances which will be mentioned in connection with these topics when we come to treat of them. At great feasts the Arab mode of eating is adopted. A large white cloth called *supra* is spread over the mats, and for every five persons a *pingan idangan* of rice surrounded by small dishes of *gulai* is placed, and all eat out of the *pingan idangan*.

When the wives of the guests have been invited to the feast they pass into the middle room, where they are entertained by the mistress of the house. They eat either before or after the men, and there is no essential difference in their mode of dining save that they indulge in a greater variety of dishes, and generally seat themselves in groups of eight around each tray.

Friends are occasionally invited to the morning meal, but generally to the night one.

When the family is by itself, the wife and children place the food on the mat and all eat together without ceremony. The washing of the right hand and the *bismillah* are never omitted, whether a Malay eat alone or with others. Some are even so scrupulous as to repeat the *bismillah*, either in word or thought, every time they eat or drink, whether at meals or not.

In Naning, when the Panghulus are invited, a small pillow or mat is placed for them.

The above customs are more or less closely adhered to by persons of all ranks and classes who have either no avocation, or one which does not carry them far from their houses. Those who go to a distance, and cannot conveniently return for their meals, such as wood cutters, carry with them a sufficient quantity of boiled rice wrapped in an *upi pinang*, i. e. a portion of the internal membrane or lining of the spathe or sheath of the pinang leaf, together with a little *sambel blachan* and dried fish placed in a bit of plantain or other leaf.

When a party goes on a pic nic, as the Malays of Malacca in particular frequently do, the provisions, prepared and placed in *bahal ragas*, are called *bahal bahálan*. The *koe koe* are carried in *rantangs* or in Chinese *siahs*. Plates and dishes are taken except when the road is difficult from jungle or hills, when plantain leaves are substituted for them.

THE BOTANY OF SINGAPORE.

If nature has been frugal in her gifts of the higher orders of the animal kingdom in Singapore, she has lavished with unsparing prodigality, the riches of the vegetable one; notwithstanding the infertility of the soil, climate more than compensates the loss, heat and moisture cover the lean earth with unceasing verdure, and we realize what fancy paints as the most desirable of all climates, an eternal spring. But independently of its profusion, the Botany of this place possesses several other interesting considerations; being a connecting link between the Indian and Australian forms, we have types of both and many genera of either region. We observe the Indian forms in the natural families, Palmæ, Scitamineæ, Aroideæ, Artocarpeæ, Euphorbiaceæ, Apocynæ, Guttiferæ, Corvolvulaceæ, Leguminosæ, all numerous. The Nat. Fams. Casuarinæ, Myrtaceæ, particularly Melaleuca and Proteaceæ connect us with Australia. Even did I possess the requisite knowledge, a Botanical treatise would be beyond the scope of the present report. I shall therefore content myself with an endeavour to make those at a distance aware of some of the plants to be met with here, and for the sake of convenience will speak of them in the following order—plants cultivated for ornament, and to be seen about the houses of both Europeans and natives; indigenous plants around the coast and in the jungle; fruit trees and economic plants; and lastly, such as are commonly used in medicine.

Of the 1st class, which are principally exotic, but grow with indigenous vigour, many species of the following genera may be seen, *Acacia*, *Agave*, *Allamanda*, *Bambus*, *Barleria*, *Bignonia*, *Clerodendrum*, *Crinum*, *Cassia*, several species, *Casuarina*, abundant and indigenous, *Erythrina*, *Draçena*, *Ficus indica*, *religiosa*, and *elastica*, *Gardenia*, *Hibiscus*, many beautiful species, *Jasminum*, *Justicia*, several species, *Jatropha*, *Curcas* and *Multifida*, *Lantana*, *Lawsonia inermis*, *Michelia*, *Melastoma*, *Myrtus*, *Muraya*, *Nerium*, *Nyctanthes*, *Passiflora*, *Ponciana*, *Pterocarpus* (this species is the *Angsana* (Malay) a tree found all over the Archipelago, and a quick grower, propagated by merely sticking a limb into the ground, which soon throws out roots, and becomes an umbrageous and beautiful tree, the timber of which when old makes furniture very little inferior to Mahogany,) *Plumbago*, *Plumeria*, *Quisqualis*, *Rosea*, *Vitex*, and *Yucca* pretty nearly include all the genera commonly cultivated. As yet little attention has been paid to ornamental gardening, but from the foregoing list, all of which grow freely, it may be inferred that there is no want of capability in the climate, and that the deficiency of gardens arises from the indifference of the inhabitants. Around the coast we find the *Rhizophoræ* in great abundance, which afford an inexhaustible supply of fire-wood to the town and shipping,

amongst them is to be seen a rather conspicuous and striking tree, with bright red flowers, the *Pyrranthus* of Jack. The *Ipomea Maritima*, spreads over the sand with its dark green foliage and showy purple flowers; a species of *Antidesma* is also common in this situation.

The plants which usually spring up when the primeval forest has been cut down, and where that bane of all the rest of the vegetable kingdom the *Andropogon Caricosum*, or lalang grass has not taken possession, belong to the following genera, *Melastoma*, *Myrtus*, *Morinda*, *Solanum*, *Rubus* *Rottlera*, *Clerodendrum*, *Commersonia*, *Ficus*, *Passiflora*, this is *Passiflora foetida*, and found in so many places I am inclined to think it indigenous.

The jungle, with the exception of its outskirts, is unexplorable without great risk from the number of tigers, but I have collected between forty and fifty species of Orchideous plants, including Epiphytal and Terrestrial, and about the same number of ferns. *Fici* are extremely numerous. Of palms I have not seen more than 20 species, although I believe there are a much greater number. The most interesting of those in an economic point are the Coconut, the *Areca Catechu*, or Pinang, the *Areca Sigillaria* or Nibong, the *Sagus laevis* or Rumbiya, *Nipa fruticans*, or Nipa, and *Gomutus* or Iju. Of the Nat. Fams. that mostly abound, the *Asclepiadæ*, *Apocynaceæ*, *Euphorbiaciæ*, *Scitanineæ* and *Urticaceæ*, are the chief. That interesting plant, the *Nepenthes*, is common, but there is no such thing as a *Rafflesia* which a late American writer sets down as abundant in Singapore. What could have been mistaken for that Titan of flowers I am at a loss to conceive. Although the trees have not as yet arrived to the state of productiveness, except in a few old plantations, Singapore is possessed of almost all the fruit bearing ones in the Archipelago, certainly of all the most desirable. The following are to be found flourishing in full vigour in many places, promising to the rising generation, or to those who wait a few years, an abundant supply. *Anacardium* or Gajus; *Annona*, of this genus, we have the *Squamosa*, *muricata* and *articulata*, *artocarpus*, *incisa*, and *integrifolia*; *Sukun* and *Nangka* (Malay) there are 2 other varieties of the latter, *chumpada* and *nangka bubur*; *Averrhoa*; *Bilimbing* and *Carimbola*, the specific being the same as the native name; *Bromelia Ananas*, and *Carica Papaya*, also known by their specific names; many species of *Citrus*, *Cynometra*, or *Namnam*; *Durio Zibethinus*, the well known dorian; several species of *Eugenia* commonly called rose apples; *Garcinia Mangostena* or famed mangosteen, of which there are many flourishing plantations; 2 or 3 species of *Lansium*, amongst them that excellent fruit called *duku*, which is even a more agreeable subacid than the mangosteen, and preferred to that fruit by all who have ever tasted it in perfection. It has the farther recommendation of being most wholesome, invalids may partake of it "ad libitum." It is in season about the middle of September.

At present we receive our supply of the fruit from Malacca, where it is abundant, but the tree grows here quite as well and only requires time to yield its produce. Our most common fruits after the pine-apple are plantains and guavas. Of the former there are a great variety of sorts. The best are pisang mas, pisang meral, pisang susu, pisang ijoo, pisang berangan and pisang rajah. Of mangoes there are several varieties; the only one palatable to Europeans is the dodol, but even this, gentlemen from Continental India pronounce no better than a carrot. The whole tribe are difficult of culture from the depredations of an insect which attacks them, depositing its eggs in the bark, the larvæ feed upon the stem, and as they grow eat their way down along the pith, making their exit at some 3 or 4 feet from the place of deposit. This so weakens the branch that it is sure to snap across at the place of exit. Of *nephelium* there are two species, rambutan and polassan, both agreeable acid fruits. Besides these may be found 2 or 3 species of *dyosperos*, the pomegranate, alligator pear, sapota and a variety of other fruits more curious than useful. The indigenous fruit trees pretty generally follow the rule of producing about the 7th or 8th year.

Plants for economic purposes.

Rice is cultivated to but a very trifling extent. The whole yearly produce of the Island would not feed its inhabitants for a week. This is however of not much importance, situated as Singapore is in the midst of rice growing countries. Java alone would be more than sufficient to supply us, and the cultivation of the article here from the want of plains and infertility of the soil would not repay even native labor.

The climate is adapted for spices, all kinds grow readily. We have the nutmeg, clove, cinnamon, pimento, pepper, and ginger, thriving admirably, but the only sorts as yet cultivated with a view to commercial profit, are the nutmeg, clove and pepper. The Chinese grow ginger in small quantities for domestic use but not for exportation. I have no doubt that the cardamom would thrive here, there being a wild species in the jungle. The cinnamon cannot grow better in Ceylon, it is however only cultivated as an ornamental plant. Pepper, as I observed before, is dependant upon the cultivation of gambier, the residue of the boiled leaves being requisite for manuring it, without which it would not grow. The quantity produced on the island, yearly, amounts to about twenty thousand piculs, and that of gambier to about eighty thousand. The whole of this latter cultivation is carried on by Chinese, the number of gardens is estimated at about 800. There are a couple of extensive plantations of the sugar cane, and a considerable number of rising cocoanut plantations.

European vegetables may be said to be unknown as the growth of the Islands. Great care has enabled some gentlemen to obtain a partial success in cabbages, peas, turnips and asparagus, but I

fear that they never can be introduced into general cultivation. The following are the only sorts to be found in the market,—a coarse French bean, and still coarser mustard. The egg plant or Trong, the Hibiscus esculentus, or Tando Kambing (Malay) the Patola a species of Momordica, cucumbers, 2 or 3 species of cucurbeita, a good spinnage, the basella alba, and another indifferent sort, the amaranthus oleraceus, yams and sweet potatoes, or batatas, are in abundance. There are also a few cabbages and potatoes, but these latter are imported. The supply is however pretty well kept up, and this highly desirable vegetable is generally obtainable throughout the year. One or two species of arum called kaladee, a coarse radish called lobah, some inferior onions and coarse greens are all to be met with. The arrow root plant, the maranta arundinacea, has been introduced and grows freely, and without care. The produce when properly manufactured appears quite equal to the West Indian, and decidedly superior to that of Bengal, with which I have frequently compared it. Tapioca might be made here in any quantity, as the jatrophia manulot appears indigenous, it needs no further cultivation than to plant portions of the stem which in about 9 months will have grown up, bearing tubers as large as a man's leg. If there was demand for the article the produce might be made equal to any amount required, the Malays grow the plant for their own use, they eat the tubers cooked in their curries or simply boiled.

Medicinal Plants.

The only plants used by Europeans in medicine that grow in Singapore, are the Ricinus communis, the croton Tiglium, the Datura stramonium, the Menispermum Verrucosum, Punicaganatum, Menthae and Citrus. We are however surrounded by hundreds of plants that exert an influence upon the nimal aeconomy fully equal to any already known I may instance the powerful purgative and emetic effects of the seeds of Jatropha Multifida and J. Curcas. The former without being in the slightest degree acrid, when eaten to the extent of one seed, produces first violent vomiting, followed by copious watery evacuations, without griping, some 10 or 12 times, as I have experienced in my own person.

I have a long list of Plants said to possess powerful qualities, but as I have not personally verified their uses I shall postpone the mention of them to some future period.

I have for these three or four years used a decoction of the root of the Penawar Pait or Eurycoma Longifolia (Jack) in Intermittent Fever, and with the exception of Quinine, I know of not more certain remedy.

The Professors of Medicine amongst the Malays are generally old women, notwithstanding which I am not ashamed to confess having obtained from some of them most valuable information. To do so, however requires, much caution and patience; it is the grain

of wheat to be sifted out of a bushel of chaff. They place much reliance on charms, and prayers, and they have very indefinite ideas of quantity. It is moreover extremely difficult to get them to part with their information.

I have lately made and used the inelastic Caoutchouc or Gutta Percha in Bougies, and am of opinion that the substance will be very valuable for that purpose in tropical climates, as it is not affected by ordinary temperature, and has the very great advantage of retaining any shape it may be required for, which can be altered at pleasure by simply dipping it into boiling water. I have not yet been able to procure the flower or fruit of the tree, but I believe it to be one of the Sapotææ.

I shall not extend my remarks on Native Medicines at present, as I hope at some future period, if time and leisure permit, to go fully into the subject

There is however a substance I may as well allude to, which has been used by me for many years in Hospital practise; it is common here, in fact forms a principal export to China,—the “Agar Agar” or *Fucus Saccharinus*. This seaweed forms an elegant, clean and most effective poultice for all glandular swellings, or chronic abscesses, having the quality of discussing those capable of absorption, or bringing speedily to suppuration, those that will not decline. It is used in a state of jelly and prepared by boiling the fresh substance in water until dissolved.

T. OXLEY.

*** The above notice of the botany of Singapore was written several years ago, and although not incorrect as far as it goes, is very far short of what the author would deem worthy of publication as a separate paper. It merely formed part of an ordinary yearly Report for the information of government.—ED.

THE ETHNOLOGY OF EASTERN ASIA.

BY

J. R. LOGAN.

GENERAL REVIEW.

SECT. 1. *Introductory remarks on the ethnological importance of the races and languages of E. Asia, the isolation of the tonic group, and its relation to the Tartarian and other harmonic languages.*

THE ethnology of the Indian Archipelago and the more eastern parts of Asianesia has, on most sides, a double aspect, one of an African and the other of an Asiatic character. These, however, are frequently so blended that it is difficult to say which traits belong to the one and which to the other. Again, African and Asiatic ethnology have much in common, and they must have approximated more closely in archaic times, when all the races of the old world were nearer the same level of barbarity than they have been in historical times. In forming any estimate of the proportion between the ethnic traits in which the Asiatic immigrants into Indonesia agreed with the more ancient Indo-African occupants and those in which they differed, it is obvious that there are many sources of error if we confine our view to Asianesia itself. For several thousands of years negro and non-negro lines have run parallel to each other from the Andamans and Nicobars to Polynesia on the one side, and to Formosa and probably even to Japan on the other. In some regions the negro element prevails and in others the Indo-African. Here the one race are the exclusive occupants and there the other. In one island we see the two races living in proximity and independence; in another the negroes are wild wanderers in the forests; in a third they have ceased to exist as a separate people, and left no other physical trace of their presence save in the partially negro character which the Polynesian or Indonesian community has acquired. Even in Australia the Malayn-Polynesian element is strong, and there cannot be a doubt that it has penetrated into every part of Papuanesia. We must therefore go beyond Asianesia to find the African and Asiatic elements in a state of purity. We must seize the distinctive features of the two developments in their native regions, and furnished with this knowledge, we may tread with more certainty the labyrinth of Asianesian ethnology.

We shall begin with Eastern Asia, not only because the Asiatic races of the islands are the most developed, predominant and interesting, but because this course will enable us at once to investigate a most important problem in ethnology, a solution of which is not merely necessary for our Asianesian researches, but is greatly desired by ethnologists for the general progress of the science. It is well known that a large group of languages exist in S. E. Asia

which are distinguished by their tones, their monosyllabic character, and their consequent want of that power of phonetic composition and flexion which pervades European languages, and without which they would, with our ideologic notions and habits, cease to be languages, and become mere catalogues of words incapable of being formed into intelligent speech. The apparent isolation of this group excites attention not less than its singular character, and we are especially struck by finding that its peculiarities abruptly stop with the shores of the continent. The soft, highly vocalic, harmonic and consequently dissyllabic character which distinguishes the Malayu-Polynesian languages, becomes a phenomenon of extreme interest when we thus find that it presents a complete contrast to the adjacent languages of S. E. Asia, with the exception of those of the Malay Peninsula. In the great circuit from Sumatra to the Liu-kiu islands, the continental languages are throughout monosyllabic and strongly intonated. When we pass to the islands lying in front of them this character is entirely lost and another kind of uniformity takes place. But when we extend our observations beyond this circuit to the north-east and north-west, we find that the peculiar phonetic character of the insular languages spreads at both ends into the continent, meets in the interior behind the monosyllabic region, occupies the greater part of middle and northern Asia, and may be followed into Europe, Africa and America. The tonic thus form a compact group entirely surrounded by harmonic languages.

The physical facts present a somewhat different result. The tribes of the tonic languages are not physiologically separated from the surrounding tribes of the harmonic languages, but the range of the latter languages is far beyond that of the physical type of east and north Asia. Viewing the Tibeto-Chinese region as a centre we find that varieties of this type may be traced throughout its prolongation in a south eastern direction in the great Archipelago extending from the Bay of Bengal and the China Sea to the Marquesas islands and New Zealand, including the whole of the Indian Archipelago and Polynesia, while to the east a great portion of the north Pacific Ocean is occupied by tribes of the same type. It is continued on the north east by the races of the Peninsula of Koria and the chain of islands, including the Japanese group, stretching from the China Sea to Kamchatka. In America the prevailing type is the same variety of the Turanian that is found in New Zealand, China, Japan and N. E. Asia. In the latter continent the great Tangusian band runs up to the sea of Okhotsk and then sweeps westward to the Yenesei river. On the north, Mongolian races occupy a great tract behind China, and these are succeeded to the west by the Turkish races who have extended themselves to the eastern margin of the Mediterranean. The other tribes in the N. E. and N. of Asia are physically allied to the Tartarian family. On the east, the Tibetans and the abori-

ginal races of eastern India complete the circuit of the Turanian nations, who thus appear to occupy the whole of Asia with the exception of the tracts occupied by African and quasi-African tribes, and a comparatively small region in the south west including Persia and Arabia, and, in later times, India. The allied Finnish and Hungarian races give them a still greater diffusion to the west. The physical evidences of a community of origin for the monosyllabic races and the Tartarian, Tibeto-Indian and lank-haired Asianesian races, are exceedingly strong, and almost conclusive of themselves.

The enquiry thus arises whether there are any natural phonetic laws which can explain the seeming contradiction between the linguistic and the physical facts. Is the apparent complete phonetical insulation of the Burmah-Chinese languages capable of being broken down, or have some languages always been tonic and others always harmonic? Can any natural causes be discovered adequate to explain the passage of the harmonic and essentially dissyllabic into the monosyllabic languages, or the latter into the former? If so, has the transmutation of the one genus into the other, taken place all round the existing monosyllabic circle, or only at one or more particular points? Was the monosyllabic region at one time of greater extent, and did the phonetic change occur at different points in it and beyond the present tonic boundaries? These are enquiries of the greatest ethnological importance, and demanding an amount of observation far beyond what we at present possess. Without seeking here to decide which is the more ancient form, I believe that the passage of the tonic into the harmonic is a natural one, while I am not aware of any law that will admit of the conversion of a polysyllabic into a monosyllabic language. The probability seems to be that the primitive Turanian language was mainly monosyllabic, and that the tribe who spoke it occupied some part of the eastern region of the Asiatic mountain land. Since all the existing monosyllabic races are placed in countries watered by great rivers that descend from the same district in this region, we may further believe that the seat of the tribe was at one time in some of the vallies of eastern Tibet. The preservation of the ancient phonetical character by their descendants along all these rivers, and its loss on all other sides, must be connected with the physical geography of the region. Wandering to the south and east along the great vallies of these rivers, regions would soon be reached far more favoured by nature than the cold and sterile home of the primitive families. Here population would rapidly increase, large communities be formed, civilization arise, and language take a fixed form. Meanwhile upon the families diverging to the north and west the nomadic habit would be impressed by the nature of the land in those directions, —no great fixed communities would arise,—and each family and tribe, wandering and insulated, would be left to the un

checked operation of those natural laws which destroy monosyllableness. The latter character would no where be preserved save where fixed communities had grown up in an early epoch. But since that era a great succession of changes must have taken place. As civilisation advanced in Mid-Asia, and the means of rapid locomotion were acquired, isolation would cease. The expansion of strong tribes would no longer be necessarily a self division and a growth of new nations. Dominant races would arise in every region adjoining the great highways. There must then have ensued a great series of movements and displacements, tending not merely to disturb, but in many regions to obliterate, the primary distribution of nations. But as continuous floods or streams of foreign peoples have never been poured into middle Asia, its revolutions, even when incited by foreign causes, have led to no change in the fundamental ethnic character of the region. Even foreign governments and foreign religions have rather taken a native character than imposed their own.

The Turanian languages, as we shall find, although sufficiently distinguished from the monosyllabic group of S. E. and the inflectional family of S. W. Asia, present very considerable variations in their phonetic and ideologic character. It is evident that the present Tartarian races have not been the immediate progenitors of most of the more remote members of the family. The races of America and N. E. Asia, although physically most closely connected with the Chinese and some of the other nations of E. Asia, possess a linguistic development that allies them also to the races of S. W. Asia and Africa, and to the single European remnant of a similar development still found in Spain. Much of the advance of the Tartarian nations in all directions is historical. Before their expansion began, the ethnology of middle and northern Asia probably presented a linguistic development with traits more akin to those of the Africo-Semitic, Euskarian and Celtic on the one side and the American on the other. But although, in tracing the ethnic history of the Turanian development, the Tartarian nations may be found to occupy a different place in more ancient times, and the connection of some of the groups to the east and west be proved to be independent of them, their proximity to the monosyllabic family and their greater approach to it, linguistically, must always make them a most essential element in the investigation of the development of the languages of the Turanian races.

In enormous geographical extension and in amount of population, the Turanian family is the greatest on the globe. If philology can connect the various branches as closely as physiology has done, and thus demonstrate the reality of its unity, it will render one of the greatest services to ethnology. But the very hypothesis of so wide a dispersion of one tribe necessarily implies a vast lapse of time. If the Laplanders, the Tangusians, the Eastern Indians, the New Zealanders, and the American aborigines, are all the des-

cendants of one Asiatic tribe we must ascend through thousands of years to the point of time at which they were united in that tribe; and a complete separation of the diverging emigrants during periods so great and in regions so different in every physical characteristic, that animal and vegetable life have no resemblance, must prepare us for an almost total obliteration of the primitive vocabulary. If anything of the ancient language has been preserved we must rather expect to find it in the mental and phonetic tendencies and habits which produced that ancient language itself. The linguistic faculty of each tribe will retain the direction which it received in the bosom of the original community, and continue to work in a manner analogous to that in which it produced the primitive language. But there will be little identity in actual words, and even in phonology and structure there will be much diversity. The proof of common descent will depend on the accumulation of ethnic facts of all kinds, and a great departure by a particular language in any direction will not militate against the conclusiveness of the entire body of the evidence. It is to be anticipated that particular languages may be selected which will exhibit striking differences, and which, if considered by themselves, it will be difficult or impossible to refer to a common origin. But it may also be anticipated that other languages of the family will enable us to discover the natural laws by which these diversities have been occasioned, and thus lead to a reconciliation of both with the mother tongue and with each other. The general comparison which we intend to make, as necessary to the more immediate purpose of this paper, will prepare the way for the establishment of some of these laws, and, if it have no other result, will, we hope, at least help to awaken more general attention in this part of the Turanian region to the high ethnological importance of accurate observations of languages.*

In our 2nd introductory essay we expressed our conviction that phonetic comparisons were of more value than merely structural,

* The materials that have been accumulated for a full linguistic review are meagre. Many languages of the Indian Archipelago and the adjacent regions have not been described at all. The amount of information which we possess of the others varies extremely. Not one has been thoroughly analyzed. The same remarks apply to the Continental languages. In America, Eastern Asia and Africa there are hundreds of languages of which we have hardly any knowledge or are entirely ignorant. With few exceptions the grammars and structural notices of those that have been most fully investigated are empirical or merely formal. Their method is not merely extremely narrow but in most cases is positively false. Instead of viewing each language as a great and complex natural phenomenon, and seeking to penetrate into the laws of its phonetic and ideologic organism by a scientific observation of the facts of all kinds through which these laws are manifested, each writer has come to the task predetermined to discover a repetition of European grammatical forms and nothing else. All we can do therefore for the present is to select a few of the principal tongues in each region, notice their leading characteristics so far as these have been ascertained, compare them with the other known languages of the region, and inquire how far the facts thus brought together prove or suggest alliances leading to a knowledge of the ethnological place of the different East Asian and Asiatic languages.

and said that in the Indonesian languages everything beyond the mere surface resolved itself into their phonology. Such comparisons demand a far greater amount of knowledge, labour and critical skill than grammatical ones. We propose therefore to reserve them to the last and until we have made further observations on the causes and varieties of phonetic developments and changes. In the notes we shall incidentally notice the more obvious phonetic affinities which present themselves in examining the ideology, postponing a full consideration of these affinities till we take up the phonology as a whole.*

* The interest that attaches to the present enquiry, and the necessity of going fully into the linguistic evidence in particular, may be gathered from the following remarks by Prichard and Bunsen :—

“Nor do we undertake to answer the question whether that wreck of the primitive language, that great monument of inorganic structure, the *Chinese*, can be linked by any scientific method to the other families of human speech, and be thus, directly or indirectly, connected with the great tripartite civilizing family of mankind. But we add, there is no scientific proof that it cannot. Chinese philology, from a general point of view, is in its infancy.

“The study of the Tibetan or Bhotiya language, and that of the Burmese, would probably offer the nearest link between the Chinese and the more recent formations; but even the comparison with Sanscrit roots will not be without results.

“It would be presumptuous to anticipate the issue of such well-prepared and sifted comparisons; but we have no hesitation in saying, that we incline to believe it will be in favour of the existence of a primitive connexion. There is a gap between that formation and all others; and that gap corresponds probably to that caused in the general development of the human race by great destructive floods, which separate the history of our race from its primordial origins. In this sense the Chinese may be called the monument of antediluvian speech. Indeed the first emigration from the cradle of mankind is said in Genesis to have gone eastward.

“But whatever be the result, there is only one method of arriving at it, and that is a combination of accurate philological observation and analysis with philosophical principles, and with the collateral researches of history and of physiology. It is only by such a combination of researches that we can hope to fix definitively the place of the Chinese language in the general history of human speech, and to pronounce with historical certainty on the great questions connected with that problem. The difficulties are immense; but greater ones have been overcome in the last thirty years, and we believe that our method of distinguishing between primary and secondary formation, and of determining the succession of the phenomena of development, and thus of languages, will not be found entirely useless in the pursuit of those ulterior researches.”—*Bunsen (Address to the British Association.)*

“I shall endeavour briefly to describe the principal tribes of men as I find them distinguished by historical evidence, and by that of the most authentic records, namely, by their languages, which, of all peculiar endowments, seem to be the most permanently retained, and can be shewn in many cases to have survived even very considerable changes in physical and moral characters. Glottology, or the history of languages, founded on an accurate analysis of their relations, is almost a new field of inquiry. It has been explored with great success of late, and new discoveries are every day made in it. Our contemporaries are becoming more and more convinced that the history of nations, termed ethnology, must be mainly founded on the relations of their languages. The ultimate object of this investigation is not to trace the history of languages, but of the tribes of men whose affinity they tend to illustrate.”—*Prichard (Natural History of Man.)*

THE ETHNOLOGY OF EASTERN ASIA.

SECT. 2. *Ethnic Regions of Eastern Asia; the races inhabiting them; their general physiological peculiarities; and their fundamental connection in physiological and mental character, languages and customs.*

Eastern Asia for ethnic purposes may be divided into the following regions:— 1st, S. E. Asia and the Tibeto-Gangetic districts extending nearly from the Kuen-lun to the Vindya and Asam chains, and having the Himalaya curving diagonally from the W. extremity of the northern chain to the E. extremity of the southern. The whole region forms a triangle, of which the apex is Singapore, and the base the southern margin of the desert of Gobi, marked by bands of mountains (Shan-garjan, Ala shan, Khilian shan, Nan shan and Kuen-lun,) extending along the Asiatic plateau in a S. W. and W. direction from the Yellow Sea to the great mountain knot formed by the meeting of the Kuen-lun, Bolor, Hindu-kush and Himalayan ranges. With the exception of the tract between the basin of the Zangbo and the Kuen-lun range, which belongs to the middle of the eastern table land, having no drainage into the Oceanic basins, the whole region slopes from the margin of the plateau to the east and south, the eastern slope being marked by the fall of the Zangbo, Ganges, Yang-tse-kiang and Hoangho throughout a large part of their courses, while the southern is marked by the fall of the Irawadi, Saluen, Menam and Mekong and partly by that of the first mentioned rivers. 2nd, the region stretching eastward behind the first, embracing the central desert of Gobi, a narrow margin of the S. E. basins, a large portion of the N. and Eastern ones and the Ainojapanese Archipelago. 3rd N. E. Asia. To the last belong the Yakuti, Yukahiri, Chukchi-Koriak, Kamchatka, Namollo, Aleutian and other tribes most of which are strongly allied to the American; to the second region belong the Aino, Japanese, Korian, Tangusian, Mongolian and Turkish races; and to the first region the Chinese, Anam, Lau, Burmese, Tibetan, and Indo-Tibetan races, with many smaller ones allied to them.

These races are physiologically closely related to each other, as they all form varieties of one of the great physical types of man—the Turanian.* The predominant Turanian type of middle and northern Asia is distinguished by a pyramidal or rather conoidal skull; the oval of the basis cranii laterally expanded, and compress-

* The observation of the varieties of the Turanian head found in Singapore has suggested the following remarks on the mode in which they affect the contour of the face, which it may be useful to bear in mind in reading the text. The prevalent forms of the skull in the Turanian, as in other races, give either an angular or a curved contour to the face, and the angular or the curved may be oblong or oblate. In the Turanian races we shall call the oblong angular simply oblong, and the oblate angular square or lozenge shaped as it may approximate to the one or other form. In the Turanian the ovoid is far more common than the elliptic. The oblong ovoid sometimes approximates to the elliptic and the oblate ovoid sometimes becomes nearly orbicular.

ed at the ends, particularly in front; length of the lower jaw, prominence and angularity of the cheek bones, outer extension of both, producing a great breadth of face, particularly across the cheek bones, and a comparative narrowness of the forehead, so as to give the whole contour a lozenge shape; nasal bones flat and broad, so that the cheek bones and the space between the eyes are nearly in the same plane; the lower part or end of the nose rounded, fleshy and thick, not flat as in the negro; nostrils open, broad or diverging, but in this respect there is considerable difference in the various races; orbits very large and deep, but the eyes small and widely apart and the opening between the eyelids narrow and inclined upwards from the nose outwards; eyebrows thin and arched; lips large and thick but not projecting; hair black, thick and long; beard scanty; colour yellowish to copper; persons in most races of or rather below the middle height, in some races squat, but in others neat and light; trunk square, limbs short; in some the muscles thick and well developed with a tendency to fat, in others thin. Besides the pyramidal or lozenge shaped contour there are many other prevailing types, but the most important varieties are the oblong or elongated and the obtusely ovoid or approximately orbicular forms. The first depends greatly on the depth of the jaws and the distance between the angles of the lower jaw and the zygoma, and may be combined with the lozenge or ovoid as the forehead is narrow or expanded. The second depends chiefly on the expansion of the forehead and consequent obliteration of the lateral projection of the

In all these changes the expansion of the head at the cheek bones is the distinguishing feature of the Turanian contour, and that which prevents its attaining the oblong elliptic of the finer Indo-European physiognomy. The cheek bones may either stand out laterally both from the face and the forehead; or they may form a portion of the lateral facial projection and stand out with it from the forehead; or lastly they may form a continuation of a sincipital lateral expansion and thus stand out with it from the face.

The most marked form is the first, which produces the lozenge, acutely orbicular and oblate elliptic forms.

The lateral facial expansion (including the cheek bones) produces the oblong, in which the lower jaws are large and extend outwards more than upwards, sometimes so much as to make the face broader at the base than at the zygoma. This exaggerated variety may be termed the wide jawed oblong. The common varieties are the angular oblong and the curved oblong, the face in all being remarkably large. The latter is the most common American and Chinese form. The former is also found amongst the Chinese, Japanese and allied races. In the oblong forms, the narrow sinciput, retreating and high but sometimes low, is generally conoidal, or ridged, and the cheek bones have an anterior prominence. This, in the tribes tending to obesity, produces a heavy fleshy face. When the forehead is less narrow a more regular rounded oblong is produced.

In the third type, in which the cheek bones make an unbroken continuation of the laterally expanded forehead, the latter is generally orbicular and sometimes oval, and the lower part of the face generally acutely hyperbolic. This produces the ovoid form, of which there are many varieties. When the sinciput has a great development compared with the lower part of the face, it may be called obtuse, and when the whole has a sharp pear shape it may be called acute. When the whole has a remarkable lateral development it may be called oblate and when greatly elongated oblong. It will be remarked that this form is to a certain extent the second form reversed, the expansion being transferred from the jaws to the forehead.

zygoma, but this must be accompanied by a short and rapidly ascending jaw, so as to bring the chin, the angle of the jaw and the cheek bone into one curve which passes uninterruptedly into that of the temples. Where the jaw is longer and more horizontal a square head is produced. The finely rounded form of the oblong, or proper oval, is rarely found, although approximations to it are frequent in many tribes. All these forms are probably exhibited by every Turanian race, but in each, one will be found to predominate. In the N. E. and Middle Turanian the lozenge shape prevails, and most of the features are generally much harsher and more prominent than in the S. E. Turanian. The northern Tangusian physiognomy is the broadest and flattest of all, and the form becomes still more exaggerated in the extreme northern races of Asia and America the latter of which (the Esquimaux) have the greatest lateral prominence of the cheek bones of all races.

The M. Turanian is intermediate between the N. E. and the S. E. In the latter the oblong and ovoid prevail, the zygoma are less projecting, and the face much less lozenge shaped and more rounded, but the degrees of the Turanian characteristics vary greatly even in the same race and harsh features are found in many of them, just as amongst the Mongolians softened and rounded varieties are frequently seen. Amongst the Chinese and Japanese the oblong form prevails, and amongst the Tibetans, Indo-Tibetans, Anamese and many of the Indonesian races, the ovoid. The most striking peculiarity in the Chinese is the smallness of the eye and the oblique position of the eyelids, which makes the eye appear to be half veiled and much inclined. The opening between the eye lids is often very narrow, and the tumid eye, instead of opening boldly, peeps out with a half cunning, half timid, or dull and wholly inexpressive, character, from behind the heavy and down-hanging upper lid. The cheek bones are prominent, but in general much less so than in the Mongolian, and in the elongated heads the prominence is anterior rather than lateral, as is the case with the American Indians, and some of the Tangusian tribes. The nose is in general small and depressed, the alæ diverging and often so much rounded and thrown out as to make the nostrils circular and quite open or exposed. But besides this flat Mongolian nose, a small squiline or long and slightly arched nose occurs frequently, giving the face a most striking resemblance to the prevailing American Indian and New Zealander type, which also characterises some of the S. Indonesian tribes to whom the latter are allied. The Tibetan and the harsher Indo-Tibetan head bears a close resemblance to the Chinese, but is distinguished by its obtusely ovoid form, the distance between the eyes, their somewhat greater size and aperture, the slightness or absence of their obliquity, and the projection of the mouth and its osseous basis in the side view. The first characteristic appears to be also very common and accompanied by a greater lateral expansion of the forehead in the

Bhotia and the adjacent Indo-Tibetan races. The Tibetan, Bhotia and a few of the other Himalayan tribes have the Mongolian characteristics more pronounced than is commonly the case in many of the latter. In the lower Indo-Tibetan races the ovoid form becomes more delicate, and it is found in perhaps still greater perfection in the Anamese, whose head is small and tends to the obtuse ovoid and globular; the Turanian features are still more softened and rounded than in the Chinese, and the eye is more open and less inclined. It is one of the most delicate forms of the Turanian. A form intermediate between the ovoid and the finer oblong approaches most nearly of all to the oval, and indeed often passes into it. It is found most abundantly amongst the lower Himalayan and Vindyan tribes, in Ultraindia amongst the Arrakanese, the Karens and the Ka-kyens, in part of Indonesia and Polynesia*. In many races the eye is as large and open as in the Indo-European family, and often remarkable for its mingled boldness, softness and brilliancy, as in most of the S. E. Indonesian tribes. In many of these tribes the forehead has the roundness and expansion of the ovoid, but with a greater fullness and finer moulding of the lower part of the head than in the Tibeto-Anam form. The Chepang are a degenerate breed of Tibeto-Indians, the forehead being narrow and the mouth large and protruding. The Bodo, who approach more to the Newari than the other Himalayan tribes, frequently resemble the Mugs or Burmese. The Garo belong to the same type but with the features harsh. The Tanguisians near the Chinese frontier differ little from the adjacent Chinese.† The Lau towards China differ little from the Chinese of the western provinces. The Siamese however are distinguished by a remarkable flatness of the back of the head, lowness of the hair on the forehead, and largeness and height of the face. The occipital flatness appears also in Polynesia and in many of the tribes of S. E. Asia, though in them it is less marked than in the Siamese. The Burmese have somewhat more prominent features. Of the other Irawadi tribes the Naga appear to tend to the orbicular. The most primitive people of the western side of the basin of the Irawadi, the Kyens, have more of the Chinese flatness than the Burmese. The Nicobarians also, when without Malay or Burmese blood, approach to the Chinese. The obliquity and narrowness of the eye, which is the most marked characteristic of the Chinese, is very greatly diminished, and often little percep-

* The aboriginal Indian tribes, with the exception of the Turanian Rajmahali, Khond, Kol and Gond, appear to be intermediate between the Iranian and Turanian, but much nearer the former, and with a strong resemblance to many African tribes. They are smaller, more squat, thicker in the lip, broader and flatter in the face, less prominent in the nose, and darker in complexion than the Rajputs. The colour is nearly black in many. Amongst these tribes are the Dom, Rawat, Bhil, Kuli and Marathi, and probably most of the sudra class throughout India. The Dom, Rawat and Bhil have much of the negro, Indo-African or Melanesian character, which may be largely traced in S. India.

† M. Brugiere who lived for some time at Sivan amongst the Manchus, after travelling through China, declares that they differ little from the Chinese save in having the eyes more prominent. The colour is tawny red. *Ann. de la Prop.* 1837, 293.

tible, in the Ultraindian and Asianesian races, including the Khyi or Kasia in which however it still remains small. In some of the Nicobar tribes the eyes have the Chinese obliquity, and the Asamese, Kachari, Garos, Akhas, Miris, Khantis and I presume the other northern Lau also possess it, though subdued. In the Asianesian races the eye is generally much larger and finer than in the Tibetan and most of the E. Himalayan tribes. Indeed the latter in this respect approach much more to the Chinese than to the Asianesian physiognomy.

The effects of scanty and precarious food in rendering the person stunted and meagre, with the frequent but not invariable concomitant of thin legs and protuberant belly, are seen in the Chepang, Karens and some other tribes of the region, as amongst the Kurumbar of S. India, the Andaman and many other negro and Indo-African tribes of Asianesia.

In complexion, stature and other respects great differences are observable. The prevailing colour is yellow of various tinges from light to deep brownish. The Chinese are the fairest, being of a dull unwholesome looking light-yellow or reddish-yellow, passing into tawny in those who are much exposed to the weather and into a fine whitish yellow, with a faint ruddy flush, in those who are confined to the house. This fairness is probably attributable to the prevalence of mountains and humid plains, because in the more cold and arid regions to the N., the Mongoles and Tanguisians have a decided tawny colour. It may be in some degree caused by the greater exposure of the nomades. The Tibetan complexion is tawny. That of most of the Himalayan Turanian tribes is a little darker or a light brown. In and on the margin of the plain they are darker. In India the colour varies from dark-yellow, to dark-brown or copper and even black. The Garo like the Rajmahali are black. In the Burmese, Siamese and Anamese it becomes successively lighter, changing from an olive-brown, to light-brown and brownish yellow. In the Chinese it is much lighter. The Nagas are brownish but those of the interior yellowish. Good living and freedom from exposure tend to preserve the natural colour, which in most of the insular races must be considered the same as the Chinese, but with less of red and more of yellowish, and therefore acquiring on exposure a fine clear brown instead of a tawny or copper tinge. Most of the Asianesian varieties from golden-yellowish to brown are agreeable.

The height is generally a medium one, but the Tibetans, Bhotias and the Abor-Miri rise often much above it. Many are above 6 feet.* Some of the Himalayan races are small. The Rong or Lepcha are only 5 feet, the Ekthumba somewhat taller and the Murmi taller still, and coarser than the other Himalayan tribes. Amongst the allied Polynesian tribes the Tibetan height is

* The Yakutes often attain a similar height.

often attained by the upper classes. But amongst the eastern Turanian races as a whole the general character of the person is that it is short, thick, muscular and active, the legs are short in proportion to the trunk, but generally fleshy and muscular, often disproportionately so. The Anamese, Siamese and Burmese reach to about 5 f. 2 to 3 inches, and amongst the former the height is often under 5 f. and sometimes as low as 4 f. The Chinese are somewhat taller.

The expression of the face is the chief physical distinction between tribes whose features are nearly identical. The practised observer can at once discriminate every tribe by this characteristic. To attempt a notice of them all here would be impossible, but a few may be noticed. One general remark applies nearly to all. The timidity which characterises the S.E. Asian tribes is never betrayed, save in the more secluded, by the expression, because the predominant feeling is a profound admiration of themselves. Under all masques, grave, severe, stolid, respectful or good humoured, a quiet but boundless vanity sways the mind. Owing to their phlegmatic temperament they are plain and seemingly open in their physiognomy, and do not express their conceit in their manner and motions like the mercurial natives of S. India. The Tibetans have a mild, good humoured, cheerful and pleasant expression. In the Bhotia it degenerates to a heavy and cunning look, but in the other Himalayan tribes it is nearer the Tibetan. In the Rong it is peculiarly soft and lively. Among the eastern races the Chinese have the least expressive face. Its character must be described by negatives. Vigour or boldness there is none, but neither is there a slavish timidity. They look as if their minds were always bent on money making and sensual enjoyment, and went steadily and sensibly to work to attain their objects. The eye and the mouth are entirely sensual. The general expression is subdued and without force or animation, but it is cheerful, combining gravity with lightness and serenity of disposition, and thorough self-esteem. The Anamese face is distinguished by its levity, good humour and power of assuming a degree of sprightliness, all however in keeping with a kind of gentle gravity. The Siamese, Khamti (and I presume the whole Lau family) have, on the contrary, a remarkably grave or severe expression, sometimes with a melancholy but oftener with a harsh, sinister or sullen cast. The Balinese like the American Indians have a striking resemblance to them in this respect. The Burmese have a more cheerful, light and lively expression under their gravity. The Malay varies much, but is commonly intermediate between the Siamese and the Burmese. It is generally however superiour to both in boldness and determination. The general Indonesian and Polynesian expression is soft and indolent yet bold and exceedingly pleasant. In some tribes it is comparatively dull and weak, but in most it is lively, and intelligent. The eye, good humoured and determined in the Kol,

is dull and weak in the Chinese, more expressive in the Anamese, Lau and Burmese, still more so in the Malay in which however it varies much, being generally cloudy and sometimes sinister. In many of the Indonesian races it is exceedingly brilliant, and soft or bold according to the character of the people. In the lowest tribes it has a great quickness and vivacity, owing to their constant exercise of it. A soft, delicate, pleasing, almost feminine, expression is common to some of the Himalayan tribes (Lepchas) and many of the Asiatic from Borneo to Polynesia.

The American Indians have also the Turanian skull. The prominent zygomatic arch has not the angularity of the M. Asiatic type but is on the contrary well rounded. The prevailing type over considerable regions strikingly agrees with a common Chinese form, in which the face is elongated and the vertex conical. Indeed the Chinese more frequently tends to the American than to the Tibetan or Mongol forms. The Siamese tendency to lowness of the forehead and flatness of the occiput characterizes some American tribes, and makes its appearance occasionally in most.

From this strong general resemblance in physical constitution prevailing amongst so many and so widely scattered tribes, and which may be extended to the N. W. extremity of Europe and the S. extremity of Africa, it follows that physical evidence alone must be inadequate for the discovery of the alliances and migrations of particular tribes. We have gone but a small way when we have ascertained the boundaries of the Turanian structure. Within these limits there may be tribes which have been separated from an original Turanian stock for as many thousand years as the Iranian have diverged from a common Irano-Turanian stock. The Timorian islanders may be nearly as distant ethnologically from the Mongols as the British islanders are. The elements of physical evidence furnished by the varieties of the Turanian type are far too few, too weak, and probably also too inconstant, to determine the more archaic ethnic genealogy of each race. We shall find that the same remark applies to customs. Language alone presents elements sufficiently numerous, subtle and constant for this purpose. The possible variations in person and in customs, of families diverging from the same progenitors into hundreds of isolated tribes in none of which civilization becomes highly developed, bear no proportion to those which are possible in language. Within the circle of the same external life the mind continually works and sports, in all the variety of modes produced by the multiplex organisms of each generation of individuals. Every idea of the past preserved in words becomes the object of new feelings, new combinations and new associations in the course of the numberless times it occupies the minds of individuals, in the course of a few thousands of year. The transmission of sounds through some hundreds of generations of men, varying in their delicacy of ear and mode of articulation, and subject to the frequent influences of fashion, independently of

all purely mental sources of change, produces the most striking and universal mutations. In certain stages of of society one man can alter the pronunciation of a language to a greater extent than can be effected in centuries in a highly civilised race. Every founder of a family produces a dialect and a few generations produce new languages. Amidst the constant migrations which take place, rude tribes brought in contact, after having been separated from a common ancestor for some thousands of years, may present few marked physical contrasts, but it is impossible that their languages can have remained the same. Many fundamental traits may be alike, numerous common words may be traceable, particularly by the aid of a profound comparative phonology, but the variations as a whole must give a high character of individuality to each language, group and family.

Differences in physical geography, civilisation and habits of life have necessarily produced many varieties in the general ethnic character of E. Asia. But the races as a whole are well distinguished from the Indo-European, Semitic and African families and united amongst themselves, by remarkable traits in temperament, intellect, fundamental superstitions, domestic and clan institutions, and many specific habits and usages, which may be traced over the whole region, and have been largely preserved in the Chinese development.* We shall be able to establish the same radical connection by linguistic evidence, and when all the elements of the enquiry are combined, the reader, we believe, will be satisfied that, amidst great and numerous changes taking place during a vast lapse of time, the races of Eastern Asia have maintained a decided relationship in physical and mental character, languages, and customs, and that offsets of the same great type of mankind may be identified with even more certainty in Asianesia than in Europe and America.

Indonesia and Australia form, geographically and geologically, so well marked a continuation of S. E. Asia, that the whole might be considered as one region,—the China Sea running in like a great gulph and partially dividing the insular from the continental portion. This close geographical connection requires us to examine the ethnology of S. E. Asia more narrowly than will be necessary in the two northern regions. We shall find that the change from the monosyllabic to the dissyllabic form of language takes place within this region, and even that the peculiar ideologic traits of the Turanian languages which have spread over the greater part of the globe, are discoverable here in languages that are still mainly monosyllabic. The best linguistic division seems to be—1st, the Chinese, Lau, Anam, and allied languages—2nd, the Burmese group—3rd, the Tibetan—4th, the Indo-Tibe-

* These form the subjects of separate papers which we shall endeavour to publish alternately with those treating of particular races or districts. In the text we have confined ourselves to the physiological resemblances, as they are the most fundamental.

tan and Indo-Burmese—5th, the Korean, Japanese, Aino, and Tartarian group—6th, the N. E. Asian. This order supplies examples of a gradation of development. But as all these groups run into each other and intermixtures have taken place, we shall adopt a somewhat different descriptive arrangement and one more in accordance with the general ethnic relations of each group of tribes. We shall begin with the Burmah-Chinese family, because some of the leading characteristics of a large portion of all the tribes are found in it in the purest and most primitive form. It will afford the best illustrations of many of the principles contained in our preliminary essay,* and the clear conception which we derive from it of an ideologic method widely different from that with which our minds are most familiar, will render our comprehension of the peculiarities of the other families comparatively easy. If we dwell rather longer on the Chinese in particular than may seem consistent with the limits within which we are confined, it is because it enables us to anticipate some of the most important characteristics not only of the Malayu-Polynesian but of all the other harmonic groups, and discloses principles by the light of which the more obscure and complex ideologic history of the abstract and inflectional languages can be best investigated. Having endeavoured to refer the characteristics in question to their true natural principles when considering the Chinese, they will give little trouble and occupy little space in the remainder of our labour. Ethnic philology being yet in its infancy, and the facts ascertained for this region being few in proportion to those that remain unknown, any use which an essay like the present can have must be merely temporary. We have therefore written out our notes rapidly, bearing in mind that there is much work before us, and that our object now is not to take a complete view of any particular race or language, but only to seize on such characteristics as, in the present state of our knowledge, are available for comparative purposes. Any traits of this kind which we may inadvertently omit, will be noticed in our final recapitulation.

* * Preliminary remarks on the generation, growth, structure and analysis of languages,"—Ante Vol. iii. p. 637

THE ETHNOLOGY OF SOUTH EASTERN ASIA.

SECT. 1. *General physical characteristics of the region.*

In investigating the range and numbers of the different tribes who inhabit Sumatra,* we remarked that the best mode of describing the whole island, would be by considering it as a series of river districts. The ethnological influence of rivers is so great, particularly in rude ages, that they ought to arrest our attention before any thing else, when considering the probable directions of migration and the connections of races. In all parts of the Indian Archipelago, save the most highly civilized and fertile, they regulate the distribution of its human inhabitants. It is on their banks only that considerable communities exist, and their courses and ramifications are in general those of the streams of population also. The thinly peopled regions of Ultraindia present the same phenomenon, and there must have been a time when China and India had no other routes for man through their dense jungle but the rivers, and no population save a succession of petty tribes scattered along these primeval highways of races. It is only in advanced stages of civilization that rivers lose this supreme ethnological importance. The earth passes more and more fully under the dominion of man, natural obstacles to communication are overcome by the growth of arts and the spread of population, and the separate tribes of each river, once perhaps as numerous as its branches, merge, by successive agglomerations, into single nations, whose limits may include many basins and parts of basins. This has taken place to a considerable extent in south eastern Asia, but the influence of its rivers still predominates, and in order fully to understand the present distribution of its inhabitants, and to assist our enquiries into their primitive connections, it is necessary to advert to them. We must not be understood to give an exclusive, but only the highest, importance to rivers. Different portions of the same basin are sometimes separated by barriers impassable to rude tribes, and ethnic highways often connect adjacent basins. The entire physical geography of a region is the only sound basis for its ethnology. But the distribution of mountains is chiefly important as it determines the size and directions of vallies and plains. The drainage embraces the whole disposition of the land and includes the mountains, and, as a general law, liable however to many striking exceptions, the different parts of each basin are more closely connected with each other than with the adjacent basins.

The river system of the tonic region is one of the most remarkable in the world. Its unity is as distinctly marked as that of the monosyllabic languages, and its limits are almost exactly coincident with those of the latter. The Irawadi and the Hoang-ho are its great eastern and western members, and between them are the

* Journ. Ind. Arch. Vol. iii, p. 353.

Saluen, Mekong and Yang-tse-kiang, with the included or secondary basins of the Menam, Song-ka and Hong-kiang. The principal rivers either, as in the South-west or Ultraindian division, by direct courses, or, as in the East or Chinese division, by very wandering courses, carry us up to a country on the west of the monosyllabic region in which they all approach each other. If we take the head of the Yang-tse-kiang as the centre or apex of this land of origin or upper river region, we see that the region in question is nearly a quadrant of a circle with a radius of about 20° of lat. and with the coast, from Mergui (12° N.) to the head of the Yellow Sea, agreeing roughly with its arc. The northern boundary both of the Burmah-Chinese region and of the land of origin of its rivers, is well defined by the long mountain range which begins in the Nan-shan in Tangut, the southern extremity of Mongolia, and extends to the head of the Gulf of Leatong, separating it from Mongolia and Tangusia. The southern boundary of the land of origin is formed by the Himalaya, and it is to the circumstance of this vast longitudinal range being interrupted on the S. E. confines of Tibet by the transverse system that forms the Ultraindian peninsulas, that the divergence of the eastern rivers is owing. This transverse system begins further north in the great Chinese meridional system consisting of the Yun-ling and the allied northern ranges, by which the Hoang-ho is forced far north to the Shan Gajar or boundary range, and the Yang-tse-kiang south to the borders of Yun-nan. In the narrow space between the eastern extremity of the Himalaya and the southern extremity of the Yun-ling, the valleys of the Zangbo, Saluen, Me-kong and Yang-tse-kiang are compressed. From this point the Yang-tse-kiang becomes involved in the longitudinal ranges that reappear on the eastward, and is forced by them towards the Yellow Sea. The whole lower region, or that beyond the place of convergence, presents two well marked divisions. The eastern, or Chinese, consisting of the basins of the Hoang-ho and Yang-tse-kiang, to the eastward of the Yun-ling range and its northern branches; and the southern or Ultraindian, consisting of the basins of the other principal rivers, and having the Assam chain as their landward or northern boundary. The indentation of the Gulf of Tonkin coincides with the divergence of the two divisions.

It is in the region occupied by the closely approaching upper basins, lying west of the Yun-ling and north of the Assam and Himalaya system, that we must seek for the cause of the resemblance between the languages of the Irawadi and those of the Hoang-ho. This mountain land, with the eastern and southern divisions of the lower region proceeding from it, is at once united and insulated by nature. From the angle formed by the approximation of the Himalaya and Yun-ling systems, the compressed river courses again diverge, ascending to the west and north west through the elevated basins between the mountain

ranges of eastern Tibet; the Zangbo draining the great longitudinal valley between the Himalayas and the Zang to its head in Ngari to the north west of Dhawalagiri and not far to the east of the sacred lakes of Manas Sarowar and Rawan Rhada, the upper extremity of the Indus basin; the Saluen probably flowing through the middle of this elevated region and bending west round the eastern extremities of the Zang and Shaot Gangri chains; the Mekong draining the tract between the northern watershed of the Saluen and the great chain of the Kulkun;* and the Yang-tse-kiang descending the basin between that range and the Bain Khara Oola by which it is separated from the upper basin of the Hoang-ho. On the other side of the long mountain chain of the Kuenlun-Kulkun which forms the north and north western boundary, stretches the vast and desert plateau of Gobi.† Within the bounding range are the cold and elevated deserts of Katchi and Khor, traversed by the chains of Khor and Zaga Dabahu. By Gobi, sweeping for about 1,800 miles and with a mean breadth between 300 and 400 miles from Manchuria in the N. E. nearly to the western curve of the Himalaya and the Bolor, the Zangbo-Hoangho region is separated from the proper region of the Turks and Mongols,‡—the plateaus and vallies belonging to the central mountain system of Asia—or that extending from the north of the Bolor through the Kian-shan or Celestial mountains, the Altai and the Yablonoi. The Himalaya separate it from the Gangetic basin. The chief links between it and the inhabitable part of the continent are on the S. W., where it abuts on Bengal and the N. E. where it abuts on Manchuria. The natural barriers to communication are however considerable at both points.

The directions of the primitive migrations in this region must have

* It must be recollected that the geography of this region is still obscure, and that it even remains a question whether the Zang-bo falls into the Brahmaputra, the Irawadi or into both. It is possible that the Irawadi, Saluen and Mekong only drain the S. E. extremity of the Tibetan table land.

† "The remarkable feature of the table-land is the desert of the Great Gobi, which occupies an area of 300,000 square miles in its eastern extremity, interrupted only by a few spots of pasture and low bushes. Wide tracts are flat and covered with small stones or sand, and at a great distance from one another there are low hills, destitute of wood and water; its general elevation is about 4000 feet above the sea, but it is intersected from west to east by a depressed valley aptly named Shamo, or the "Sea of Sand," which is also mixed with salt. West from it lies the Han-Hai, the "Dry Sea," a barren plain of shifting sand blown into high ridges. Here, as in all deserts, the summer sun is scorching, the winter's cold intolerable. All the plains of Mongolia are intensely cold, because the hills to the north are too low to screen them from the polar blast, and, being higher than the Siberian deserts, they are bitterly cold; no month in the year is free from frost and snow, yet it is not deep enough to prevent cattle from finding pasture. Sandy deserts like that of the Great Gobi occupy much of the country south of the Chinese branches of the Altai." *Mrs Somerville (Physical Geography).*

‡ I do not here indicate any opinion as to the land of origin of these races, but merely allude to the fact of the great bulk of their tribes having occupied this region at the dawn of history, or having come from it according to their own traditions.

been from the dreary and inhospitable margin of the great central plateau, to the fertile and genial vallies and plains of the lower basins on the east and south. That the eastern tribes should have attained the earliest and greatest development was a necessary result of the greater size and fertility and the more temperate climate of the alluvial plains of the Hoang-ho and Yang-tse-kiang.*

The secondary districts of the Hong-kiang or Canton river and the Tonkin, intermediate between the Me-kong and Yang-tse-kiang, appear as an isolated tract separating the southern from the eastern divisions. They probably originally derived their population from the basins of the bounding rivers, and in early ages they must long have been occupied by tribes disconnected with those of the latter.

The other districts not included in any of the great basins are the following—1st, the insular chain of Hainam; 2nd, the eastern or oceanic face of the marginal Anam range, forming the whole of Anam and part of Tonking; 3rd, the S. W. or oceanic face of the marginal chain of Pantiamo; 4th, the Malayan Peninsular chain, to which may be added the small basin of the Tavay river immediately to the north of the last proper peninsular basin, that of the Tenasserim.

The region as a whole presents, first, the western elevated plateaus having a general slope from north to south and from west to east, separated by chains of mountains rising above the snow line, having an exceedingly cold climate during the winter months, and a hot one in summer when the southern vallies are warm and their vegetation luxuriant, but the plateaus arid and covered with clouds of dust, like the vast desert which lies behind them on the north. The vallies and fertile parts of the plateaus are covered with grass, in some places luxuriant, in most scanty. No trees are to be seen, and the higher regions of the mountains present only snow, glaciers and rocks. Beyond this the land slopes more rapidly on the east and south towards the Pacific and Indian Oceans, but this slope is at first only indicated by the rapid descent of rivers in deep vallies, for great mountain chains, rising far above the snow line and the highest ranges of the table land, are so closely packed

* The entire basins of these two rivers cover 537, 400 and 547,800 square miles giving a total of 1,085,200 square miles.

† For brevity and clearness we shall term the mountain chains which form the water shed between two principal river basins *central* chains; those which have a basin on one side and the sea on the other, *marginal* chains; and those which have the sea on both sides *peninsular* and *insular* chains. The drainage of the first is on both sides, and that of the second on one side, into the central rivers, while that of the second on one side, and that of the third on both sides, is into the sea. The one kind of drainage presents a succession of small insulated basins, each directly uniting itself to the Oceanic basin. In the other these are united into one basin and communicate with the Ocean by a common mouth. The ethnographic influence of these two systems must always differ, but this difference varies with the civilisation.

that no plains or plateaus exist. To the south of the opposing great depressions of the Bramahputra and Yang-tse-kiang,* the eastern chains diverge, spreading themselves, on the one side, over Yun-nan and by the Nang-lin nearly to Chusan and down the eastern margin of the Ultraindian Peninsula along the China sea, and throwing out, on the other side, the chains of Burmah, Laos and the Malay Peninsula. The northern alpine system advances into China, a land of great mountain ranges, basins and plains, sloping to the Pacific. This eastern slope retaining its northern latitude, has, for the most part, a temperate climate but with heat and cold in excess, owing to its lying on the margin of the great mass of Asia. The western mountain land is cold but in general covered with trees, save in the north. The vallies towards the east are fertile. The southern slope in its upper part assimilates to the aspect and climate of the northern alpine land, but to the south the climate rapidly becomes tropical, and the whole region is covered with forest. The region as a whole presents every aspect of surface and climate :— in the north west, elevated and arid deserts, the moving and scorching sands of many parts of which are only laid by the intense cold of winter; in the east and south, plains nearly at the sea level and of great fertility; in the north, snow covered mountains with glacial vallies; in the south, chains clothed to their summits with dense jungle.

* The mountainous barrier between the Bramahputra-Gangetic and the Yang-tse-kiang depressions, which would otherwise be continuous, appears to indicate an action of the subterranean elevatory forces transverse to that which raised the great chains of Asia and gave the general direction to the continent. This transverse elevation is continued in Ultraindia, the Malay Peninsula, Sumatra &c.

THE ETHNOLOGY OF SOUTH EASTERN ASIA.

SECT. 2. *Inner, Middle and Outer or Oceanic Divisions. Their influence on ethnic movements in different eras. The present distribution of the races inhabiting them. Influence of the region on physical and mental character and civilisation. Intermixture with surrounding races.*

For ethnographical arrangement the Hoangho-Gangetic region may, in accordance with the differences in climate and aspect which we have before indicated, be divided into certain districts marked out by strong physical characteristics. The first is the inner or central division, the mountainous plateau of Tibet, including a portion of the western margin of China. This division is about 4,000 feet above the level of the sea in its northern part where it joins the great Asiatic plateau. In the south where the swelling of the Himalaya begins to be felt, it is 11,000 to 12,000 feet in height. At its western extremity, where the Zangbo basin meets that of the Indus and its trans-Himalayan tributaries in the locality of the sacred lakes, it rises to 17,000 feet. The most fertile and accessible part of the region is the narrow southern depression included between the Himalaya on the S. and the Kara Koram and Zang chains on the N., descending on both sides so as to form the upper basin of the Zangbo on the east and that of the Indus on the west. The middle part of this division consists of dreary plateaus, at some places 10,000 feet above the sea, inclosed between mountain chains rising 3,000 to 4,000 feet above them. The W. and N. portion between the Karakorum-Zang chain and the Kuenlun, is very little known. The north eastern portion or the upper basin of the Hoang-ho, between the ranges of Bain Khara Oola and Kilian-shan, is also traversed by lofty mountains but they are separated by plateaus of considerable extent. With the exception of some portions of the basin of the Zangbo, the whole region is dreary and inhospitable in the extreme. The south eastern portion of the division also contains plateaus, but as we advance to the east and south east, the mountain chains converge till the whole country becomes a vast and lofty highland, consisting of great chains running to the S. E., the deep central vallies between which give an outlet to all the rivers of the region save the Hoang-ho.

Between this portion of the second or middle division and the inner one there is no well defined demarcation. The eastern part is a great arc of mountainous country, extending from the northern line of the Hoang-ho nearly to Ava, and embracing S. E. Tibet, the eastern part of the province of Kansuh, the western part of Shensi, the greater part of Szechuen, all Yunan and the northern part of Burmah. From the upper basin of the Hoang-ho to the southern extremity of Yunnan, it is above 700 miles in length and about 240 miles in breadth. Amongst the western chains is the Mangli

which has the Yang-tse-kiang (Kin-sha-kiang) on its eastern side, and the Me-kong (Lachu) on its western. This chain must be very high as a great part of it is always covered with snow. Many of the passes are 10,000 to 11,000 feet in height, and in some places the summits are supposed to rise to 26,000 feet. The great eastern chain is the Yun-ling which extends from the Pe-lin grange into Yunnan, the Yang-tse-kiang finding a passage in a great depression across it on the north of that province. Save in this depression and the lower parts of the vallies of tributaries which here join it from the north, the alpine tract appears to be, for the most part, uninhabitable from snow, barrenness and steepness. But in some districts many of the vallies are hot in summer and inhabitable all the year round.

The western portion of the middle division consists of the Himalayan range,—about 1,500 miles in length and with a probable average breadth of about 100 miles,—by which the eastern alpine land is continued without interruption to the mountains which immemorially formed the grand ethnic boundary between Turan and Iran.

The outer or oceanic division comprises the remainder of the region, the eastern or Chinese, the south or Anam Burmese districts, and the west or Cis-Himalayan portion of the Gangetic* basin. Its chief features are the great alluvial plains of the principal basins, the long mountain chains which divide the south western ones, and the numerous ranges which traverse the Chinese provinces to the west and south of the Great Plain. One of the most remarkable of all the mountain chains is the Malayan, which advances from the continent and extends for 540 miles into the southern ocean. The eastern face of the region thus acquires an extraordinary extension, for Peking near its N.E. extremity is in 40° N.L., while Singapore almost touches the equator. The whole of the oceanic division contains lands eminently adapted for the habitation of man. It is abundantly watered, its alluvial plains are capable of containing an enormous population, the great rivers which traverse them compel and favour internal communication, and the far divergent basins are again united by the highway of the ocean. It is far however from presenting a surface tending to the rapid amalgamation of its human races. It contains twelve great and innumerable small ethnic districts, for from the alpine land numerous mountain chains diverge or are continued, which extend to the ocean, and in the east carry far into the oceanic division many peaks, perpetually covered with snow. By these ranges the plains of the large rivers are secluded from each other. But we must look more closely on the features of the whole region as affecting ethnic movements.

* In this I include the Bramahputra basin

A region of which the physical features are so strongly marked must always have powerfully influenced the distribution, movements and condition of the human families located in it. As in all other parts of the world, this influence must have been gradually modified as population and development progressed. The existence of extremely rude tribes in different parts of the region, the little advancement which the Tibetan, eastern Tartarian and N. E. Asian tribes have made, independently of their acquisitions from China and India, the barbarity of the oldest Indonesian tribes, and, above all, the very archaic character of the Chinese and Ultrindian languages, compared with those of the surrounding races, lead us to the inference that the tribes of the present families which first inhabited S. E. Asia were ruder than the rudest of the peoples which now encompass it. In the first era of their history they must have slowly spread down the mountain vallies and through the dense forests of the middle region. After they first entered the river basins of the outer division, numerous scattered families and scanty tribes would long continue to occupy each lateral or secondary basin. We cannot conjecture when arts first arose, but until they did, the whole region must have contained almost innumerable separate ethnic locations. Amongst the 200,000 square miles of Alps of which the western part of China consists, rude savages might be enclosed for an indefinite number of ages before any families emerged into the lower and more open land. The great plains of the lower basins would oppose their progress to the eastern shores, because they continued until a recent period to be overspread with marshes, while the obstructions in the rivers prevented their offering a free outlet to the vast bodies of water that from time to time poured down from the upper regions and inundated the low lands. The geography of a large part of the region is too imperfectly known to enable us to examine the details of its ethnic influences. But the leading characteristics are easily seized. The inner and middle regions not only, as a whole, form an enormous barrier between middle Asia and the southern and eastern plains, but by the extraordinary reticulations of the mountain chains which rise above the table land or are pressed together so as to leave hardly room for vallies, each district within the mountains is surrounded by barriers of its own. Even now, with all the aids of civilisation, the routes by which China can be reached from the valley of the Zangbo are full of difficulties and dangers. Between the upper basin of the Hoang-ho and the Zangbo several chains of steep and icy mountains have to be crossed. The passage of one of them occupies twenty days, and the whole journey over these ranges and the bleak and snowy steppes between them, can only be accomplished by considerable companies, and with a sacrifice of life. The routes across the mountain band to the east of Tibet are still more formidable, for in addition to the great elevation of the chains, they are worn full of terrific ravines and

chasms, by the numerous rivers which issue from them. The snowy range of the Himalaya, again, forms a barrier between the valley of the Zang-bo and that of the Ganges which must have been insurmountable in the earlier ages of the Tibetan tribes. A large portion of the outer division, as we have seen, consists of prolongations of the middle mountain chains, with most extensive ramifications. The whole eastern and southern land indeed is compacted of bands and groups of mountain chains. China, notwithstanding its two long vallies and the great N. E. plain, is mountainous for two thirds of its surface, and Ultraiudia is almost wholly composed of a succession of ranges of lower elevation. The great highways must have long continued to be separated from each other. The inland valley of the Hoang-ho, where it flows southward between the provinces of Shansi and Shensi, must have been cut off from the low lands of Pichili on the east,—with which it still communicates by a single route,—and from the basin of the Yang-tse-kiang on the south, while separated by similar barriers from its upper basins between the Khilian-shan and Bayan-khara-oola. The central valley of the Yang-tse-kiang must have been insulated during the greater part of its eastern course between the Nang-lin mountains on the south and the Yun-ling, Tapa-ling and Pe-ling on the north. The southern maritime provinces must have presented several ethnic districts divided from each other by considerable obstacles, and totally secluded from the valley of the Yang-tse-kiang behind them. Even now there appear to be only three passes by which the Nang-lin chain is crossed. The valley of the Ton-kin river must also have been isolated from those of the Canton river, the Yang-tse-kiang and the Mekong. All these districts must have retained a great degree of ethnic independence long after the numerous subordinate or included ones were united. Amongst the mountainous regions between them many tribes must still longer have continued to be secluded. There are still numerous remnants in the Nang-lin and all the other ranges of S. E. Asia that lie to the south and west of the Yang-tse-kiang.

The western or inner division is chiefly occupied by the Tibetan tribes who possess the whole of the great trans-Himalayan depression which slopes westward to the margin of the Hindu-Khush, forming the transalpine basin of the Indus, and eastward to the unknown point where the basin of the Zangbo bends south and sends its waters into the basin of the Brahmaputra or of the Irawadi. They have even extended to the S. East and entered the upper part of the eastern basin of the Brahmaputra where they are in contact with the Mishmi. Tibetan tribes and others allied to them have spread over the basin of the Ganges, although they are now chiefly confined to the Himalayas, the Vindyas and the basin of the Brahmaputra. In the basin of the Brahmaputra they are blended with allied tribes of the Mayama family. Rude Tibetan tribes of nomadic predacious habits, known in Tibet chiefly under

the generic name of Kham and in China under that of Si-fan, are spread over all Tibet to the northward of the depression of the Indus and Zangbo, and eastward along the greater part of the eastern margin of the inner division to a considerable distance within the boundaries of the Chinese Provinces.* They probably come in contact with the inner tribes of the Brahmaputra and Irawadi basins, and are intermixed with the most westerly Chinese tribes and the Mongolian tribes who chiefly occupy the northern and N.E. portions of Tibet.

The ethnology of the E. middle division is very obscure, and will probably prove to be of extraordinary interest. In a region of which a great portion is inaccessible from lofty mountains and snow, many of the inhabited districts must still be secluded. Numerous petty tribes must retain their ancient independence and their aboriginal languages and manners, and it is probable that amongst the former some will be found intermediate between the Chinese, the Burmese and the Tibetan. This region promises to be the richest for ethnological discoveries of any that yet remains unexplored in Asia, or perhaps in the world. All the S. E. Asian tribes appear to meet in it. On the south the upper division of Burmah and the Chinese province of Yun-nan are known to contain many rude tribes akin to the Burmese and the Lau and all or most of the Turanian races who now occupy the lower basins of the rivers which descend through this region must have been derived from it. The great provinces of Sze-chuen and Kan-suh are also known to contain rude tribes, and the languages of even the more civilised communities of the latter are peculiar.† In the western parts of these provinces the Kham or Sifan of Mongolian habits, and the true Mongol tribes of the Mongfan and Kukur Tartars meet the Chinese tribes. In the S. the Mongfan are in contact with the most northerly tribe of the Irawadi basin, the Khanung. The civilised Chinese have pushed themselves into all the more open and fertile portions of the western Provinces. It is through the Province of Kan-suh that the great trading route lies which connects China with Western Asia, and the movements along which must in all eras have affected the distribution of the tribes of middle Asia.

The outer division is occupied by the great bulk of the Chinese peoples in its eastern section or in the basins of the Peiho, Hoang-ho, Yang-tse-kiang and Hong-kiang, the subject Mongol tribes extending along the northern boundary. The S. W. section is occupied by the Anamese in Tonkin and Anam, the Muong and Moi in the mountains separating this region from the valley of the Mekong; the Loi or Cham (Champa) Kammen, or Kommen, (Kambojana),

* They are found to the west of the Yalong and probably in some places reach to the Yun-ling mountains.

† According to Chinese writers some of the eastern Tibetan dialects approximate to the Chinese.

Chong, Ka or Panong in the lower part of the Mekong basin *; the lau under the various names of Lolos, Lawa, Lau, Thai, Siam, Shyan or Shan, Ahom [A-sam, or A-syan *h* and *s* being convertible] Khamti, &c., extending from their native seat in Yun-nan over the greater part of the basin of the Mekong, the entire basin of the Menam, the adjacent portions of the Malay Peninsula, and the upper and much of the middle portions of the basins of the Saluen and Irawadi, and a portion of the basin of the Brahmaputra; the Karen, † Red Karen, Palong or Zabaing, Ka-kyen, Khanung, Singpliu, Khaku and other tribes in the basin of the Saluen and the eastern and partially in the southern basin of the Irawadi; the Khyeng, Burmese, Rakhaing (Arrakan) Khumi, Kyau, Mag, Shindu, Bongju, Kuki, Manipuri tribes, Kachari and Naga in the basin of the Irawadi and Koladan and partly in that of the Brahmaputra; the Garo, Khye or Kasia, Kooch, Bodo, Dhimal, Kichak, Tharu, Denwar, Pollah, Boksar, Mikir, Mishmi, Abor, Miri, Bibor, Barkan, Simong, Dhupla, Akha, Lhop, Kusunda, Chepang, Rongbo or Serpa, Lepcha, Ekthumba or Limbu, Kiranti, Murmi, Newar, Jaruja, Sunwar, Gurung, Magar, and several other Himalayan tribes on the northern side of the Gangetic basin, and the Gond, Kol, Khond, and Rajmahali on the south. †

* The names given by the civilised communities to the steppe, mountain and forest tribes are generic and descriptive. e. g. the *Sakai*, *Binua*, *Daya* of the Malays (the first being of Indian origin, *Saka*, the wild Scythian or Turanian tribes, *Saka-lava* the great Saka of Madagascar); the *Paharia*, *Pabatia*, *Khas*, &c. of the Hindus; in more ancient times the *Jotuns*, *Raksasas* &c. In all these descriptive names many tribes with distinct languages, and unconnected with each other, are confounded. So with the Chinese generic names for the rude tribes, *Mao-tse*, *Man*, *Fan* &c. In the basin of the Mekong as in that of the Irawadi there must be numerous distinct tribes of which the names are not known. The term *Muong* is a Lau word meaning simply village or district, and its frequent occurrence in the S. and W. portions of the map of Yun-nan shows the prevalence of the Lau race there. It is probably connected with *Mong* (*Mongol* &c.) *Mang* or *Man* (the southern Chinese tribes), and the *Mon* or *Man* of Pegu. Is it not primitively identical with the Indo-European *man*, *manusia* &c. which is widely spread as the name of mankind, or of particular tribes, in Africa and Asia. A large number of tribe names in all parts of the world are simply the words which the tribes use for man, or which have at one time been so used. The great spread of some national names is remarkable e. g. *Kham*, *Khang*, *Cham*, or *Ham*, found in Mongolia, Tibet, the Irawadi and Brahmaputra basins, Bengal, the basin of the Mekong, the southern extremity of the Anam mountain band &c. Is it not radically the same as *Khan* or *Han* a chief of a tribe, or a tribe, which the Abors, Mishmi, and Singphu preserve in *Gaum* a clan, the Mayama in *goung* a village, and the Malays in *Kamu* a clan or family, and *tamunggung* a title (also of Mayama origin). So the *Kyen*, *Kain*, *Kaing* &c., of the Arracan range is found in Rakain or Ya-kain (the civilised race of Arracan), probably in the name of the widely spread *Karen* tribes (*r* and *y* being convertible in many of the Irawadi languages,) and in the *Kayens* and *Kahayens* of N. and S. Borneo. The *Ra* of Rakain is preserved in the name of a kindred Sumatra race, the *Rau* or *Rawa*, and the full name in that of their river, *Rakan*. On the opposite side of the Strait we find the Jakun which has a close resemblance to Yakain (*j* and *y* being convertible). There are many interesting facts connected with the names of the tribes of E. Asia and Asia. which will be considered separately.

† *Karen*, *Kayen* &c.--appear to be variations of one generic word, applied to numerous tribes speaking distinct languages.

‡ We shall give the names of all the known tribes in each district of S. E. Asia in our ethnographic sections. We have omitted several.

The more primordial relations of these tribes to each other and to the other races of mankind are indicated by their languages. Seizing on the broader features we observe that the Chinese, Anam and Lau languages form an eastern linguistic group. The Burmese and the adjacent languages akin to it have many of the characteristics of this group, but by strongly marked traits they pass decidedly into the postpositional class of languages, which retains a slightly tonic and highly monosyllabic character in the basin of the Irawadi, throws off the tones without becoming accentual or harmonic in the Tibetan, is developed in its full harmony and dissyllabic tendency in most of the old Indian, old N. European, Middle Asian and Aino-Japanese members, assumes a more complex phonetic character tending to flexions in the American, the N.E. and some of the N. and W. Asian, ancient European, and, still further developed by tribes of a higher abstract power, obtains the flexional and intellectual organism which language presents amongst the Iranian tribes which preserve post-flexion.

The later archaic and historical relations cannot be adverted to here without anticipating numerous details which will find their proper place in the ethnography of each division and district. We shall therefore postpone this until our concluding review, and at present merely offer a few general remarks on the distribution of the existing races.

The influence of the region in producing physiological and mental varieties is a subject demanding much deeper enquiry than I have been able to give to it. There seems obviously however to be a difference in this respect between the inner plateaus and the oceanic division. The harsher Turanian organism of the former is accompanied by a greater intellectual dullness. The southern and eastern basins display a considerable variety in mental culture and character as well as physiognomy. I am not prepared to say that this is so striking as to sanction the adoption of the strong opinions respecting the comparatively great influence of location, and the small ethnic effect of intermixture of blood, which although not decidedly maintained in the introductory portions of Dr Prichard's works, pervade every volume of his able and learned *Researches* and colour his views of the ethnology of most regions in the world. It rather appears that the influence of a region depends greatly on the state of development which a tribe has attained when it enters it. A tribe that leads the life of animals, wandering about naked and houseless, and subsisting chiefly on raw food, must be much affected by external agencies. It is easy to conceive that such a tribe passing from a temperate region into a hot and humid valley in the lower districts of Africa, might undergo far greater changes than a civilised Arab or European would. It is easy to conceive that such a tribe possessed of a Turanian physiognomy might be preserved unchanged for thousands of

years in the Asiatic table land, because there is everything there to prevent mental culture and produce permanence and uniformity. But we must pause before admitting that the Turanian physiognomy is proper to such regions, and the negro to the African. I should hesitate to believe that an English race would be physically transformed into negroes in the one region or into Mongols in the other, however prolonged their residence, provided the blood remained pure. It must have been a mere accident, humanly speaking, that the progenitor of the Turanian family,—by whatever influences of physical geography, the tendency to the form transmitted to him from his forefathers was originally given, and wherever these influences first operated,—happened to be located in a particular part of the globe which favoured the spread of the race over the eastern and northern regions, and not over the south-western. Hitherto it appears that the different types are very persistent in climates and regions that differ widely. The physiognomy of the Laplander and the Mongol may be found in India and in the Indian Archipelago. The snows of Lapland and of Greenland have not affected the colour of the Turanian hair, which remains as black in the latter and in some tribes of the former as amongst the Chinese, the Malays and the S. American tribes. The type common to New Zealand, America and China must have been preserved, during several thousands of years, under all the climatic changes presented by the regions over which different tribes must have been diffused, before this type spread itself to points so remote from each other as those in which it is now found.

I am inclined to give much greater importance to intermixture of blood than Dr Prichard has done. He has systematically depreciated the influence of this great transforming power. But as the subject cannot be entered on incidentally in the mode in which my high respect for him requires, I will not at present advance any positive opinion on its bearing on S. E. Asian ethnology, but merely draw attention to the fact that the Turanian physiognomy exhibits the greatest changes when its tribes approach those belonging to the other types, or are placed in regions where they are exposed to the contact of foreigners. In the middle of Asia they have always been in great measure secluded. On their south eastern frontier the Mongols and Tungusians march with people of the same type,—the Chinese,—and they pass imperceptibly into them. On the west and south-west the Turanian are in contact with Indo-European, Semitic and Indo-African races, and I think it will be found that wherever this contact has lasted long, a change has been wrought and new varieties resulted. It is impossible that different races can come together in the same district or region without a process of assimilation commencing which extends to person, language and manners, in a word to every thing human. They may be kept apart in a greater or less degree, and for a longer or shorter period, by geographical obstacles and by

prejudices.* But there are no barriers between man and his fellows which time does not remove. Between civilised tribes; and between a civilised and rude tribe, the process proceeds with most activity.†

Along the whole boundary between the Turanian and other races it appears to me that a change from mixture of blood is taking place and has always been proceeding. If a partially changed family or tribe becomes comparatively secluded the change is arrested, and the variety becomes permanent. The Osmanli, the lower Himalayan and Vindyan tribes, the more ancient Ultraiidian and the Asianesian lank-haired tribes appear to be far more illustrative of

* The influence of religious prohibitions has been greatly exaggerated. The Old Testament sufficiently proves how little the laws of a nation may be a true reflection of its practice. Indeed it is often the reverse. The more severe and reiterated the penalty, the greater prevalence has the crime.

† It is not sufficiently considered that the adventurers of civilised races, whether military, religious or commercial, do not at first, and in many cases never, carry their countrywomen with them. The effects of this are well illustrated by the physiological changes that have been affected by Mahomedan adventurers in India, by Hindu adventurers in Nepaul and in Java, and by Arabs in many parts of the Indian Archipelago. Where the ruder race considers itself as honoured by having the blood of its civilised visitors in its veins, there has never been any backwardness in the latter to gratify it. It must also be recollected that amongst most of the ruder, and many of the civilised, races of Eastern Asia, women are under no moral or legal restraint, until they are married, and that in some, the visitor participates in all the privileges of his host. A conquering or more powerful race that comes in contact with subject or weaker tribes, is seldom scrupulous. A large number of the women of the latter pass from their own communities into those of the former. Where the subdued people are helotised, or slaves are procured from the independent native tribes of the district, a large portion of the more powerful race lead a life exempt from toil and have many female slaves. Where the conquerors bring their own women, the latter delight to be surrounded by female slaves and retainers of the native tribes, and the consequences are inevitable. It sometimes also happens that the women of the region are more attractive than their own. In such a case the influence of the native tribes on the physiognomy of the exotic race must be unusually rapid. To this more than to any other cause I should be inclined to attribute the change that appears to have taken place in the western Turks since they came in contact with the Iranian races. The time they have been located in Europe and western Asia appears to be far too short to have admitted of climate and mode of living producing the change, even if they alone are capable of doing so. The Mongol and Manchu exhibit a very slight climatic change in the comparatively mild climate of China. In the perpetual summer of the eastern islands, in many parts of which little exertion is required to procure subsistence, the Mongol features are preserved. The influence of a more refined and luxurious life is great, but amongst the Turks the mass of the people do not lead such a life. This influence too may often be unduly exaggerated above the sexual one. The probability must always be that most of the foreign women imported into the royal and noble families as slaves or otherwise will be amongst the handsomest. It will be so with the women received by them from the lower classes of their own communities, whether of their own or of mixed race. In all applications of these views the relative numbers of the foreign and native races is an essential element. The Chinese must assimilate the Manchus, Mongols, and Koreans at the lines of contact, because the mass of population is far greater on their side than on the Tartarian. So the great populations of India, Persia and Europe must tend gradually to assimilate the Tartarian races. The pressure of population may incessantly cause the more adventurous Iranian spirits to pass into the Tartarian lands. The Tartarian tribes can only advance to be absorbed. Wherever civilisation advances population necessarily increases, and turns the ethnic scale more and more against the less cultured and sparser nations.

this than of climatic changes. The same phenomena are seen in southern India where the ancient Indo-African features have evidently been greatly changed by settlers or invaders from S. W. Asia or northern India.*

Although I shall not attempt to decide what amount of influence the physical geography of S. E. Asia has exerted on the forms of the tribes who inhabit it, I may draw attention to the striking contrasts which the region presents under the combined influences of physical geography and of race. The differences in habits and culture that are observable appear indeed to be mainly the result of differences in the physical geography of the region. The inner division of desolate plateaus and frigid mountains, forming a projection of the elevation of Central Asia, and separated from the southern lands and the genial southern winds by a snowy barrier having in many places an absolute height of five miles, faces a vast and dreary desert and is only connected with the inhabited lands beyond by long and perilous paths which admit of a slight intercourse. The southern ocean, with its arms the navigable rivers, embraces all the outer division, connects its great industrial communities with each other and with those of foreign countries, mitigates the cold diffused from the mountainous middle division and its offsets, and in the more southern districts produces a mild tropical climate, in which warmth and moisture are more genially blended than in any other region, where the Turanian needs not to swathe himself in sheeps skins or woolen, and seek a meagre subsistence by driving his hungry herds over freezing wastes from one scant and treeless oasis to another, but, careless of all covering save what civilisation imposes, may lounge beneath uncultured trees laden with food, and get, with little toil, an abundant variety of fruits and game in the teeming forest and an exhaustless supply of fish in the sea. In whatever direction we descend from the table land to the sea, a series of strong contrasts presents itself. In the north everything is pinched and meagre, and the mind reflects the character of man's outer life and of nature. In the middle region the mountaineers support themselves in vallies sur-

* If the influence of climate prove to be much smaller than is supposed, it will then become a question whether in the archaic Turanian times rude tribes of this family did not spread all over Africa as well as over America and Europe, in a word over the whole world. The Hottentots would then appear to be a last physical remnant of the African Turanian as the Fins and Laplanders of the European.

It appears very evident from language that there was a time when languages of a Lau-Chinese and Turanian character only existed. The Semitic and Indo-European groups are comparatively modern. The families in which they originated must have been late offshoots of a Turanian stock. May not the Iranian and Semitic physiognomy have first begun to prevail then? A slightly developed Iranianism is one of the subordinate varieties of the Turanian organism. An accident may have led to a family possessed of it becoming separated and secluded. The reason why took this first place amongst the mountains of S. W. Asia, and not in E. Asia, must have little or no direct connection with climate, because climates similar to those occupied by many Indo-European races are found in the Turanian lands.

rounded by everlasting snow by a scanty culture, transport their goods over difficult paths and snowy passes on the backs of sheep and yaks, and cross the torrents by rattans suspended over deep and rugged chasms.* In the jungles of the outer region and the lower parts of the middle, the more barbarous nomadic forest tribes live under trees or in temporary hovels made of a few branches and leaves, while the more advanced cultivate clearings which they change every few years, shifting their abode with their plantation, or living for mutual protection in villages, sometimes under a single roof. In the tropical south the remnants of the oldest races are still savages, and, in districts where food is scanty, more miserable than the partially civilised Kham. Even in the most genial and luxuriant districts they are comparatively barbarous when they have remained sparse and secluded. The interiors of the Malay Peninsula and of many other districts in Ultraiudia are only less thinly inhabited than the plateaus of Tibet, and being covered with dense forests and capable of culture, may be considered as affording still more striking contrasts to the Chinese lands of the outer division, where the vallies are all inhabited, the mountain sides in many places terraced and cultivated, and where, in the N.E., one continuous plain of about 200,000 square miles has been reclaimed from marshes by a gigantic system of drainage, and is now occupied by nearly 180 millions of men.† It was in the severe but comparatively temperate climate of the inland vallies of the Hoang-ho and its tributaries to the west of this oceanic plain, and under the necessity of resisting the river invasions on their homes and fields, that the Chinese race appears to have received the original tendency to persevering and methodical industry, which enabled them at a later period to expel the waters from their ancient domain over the lower basin of the Hoang-ho. To make this lowland inhabitable at all they had to enter on it in companies and begin with canals and embankments, and when the waters of the river rose and a great deluge overwhelmed the labours of villages and townships, the whole nation was compelled to unite in draining the land, clearing the rivers and making deep canals to prevent the recurrence of a similar calamity. Thus were the Chinese, like the Babylonians and Egyptians, forced precociously into the highest industrial development. It was not race, but compulsory contests with marshes and river deluges, that excited labour of mind and body, and raised mankind from the sloth and stupidity of barbarism to the activity and intelligence of civilisation. When we pass from the inner to the outer division on the east and south east, instead of finding man in a few tents or yurts sprinkled at great intervals over bare and bleak plateaus or in forest lairs hardly better or more abundant than those of wild beasts, we see him

* *Jamba Tibet, jambatan Malay.*

† The census of 1813 gave 177,000,000.

congregated by thousands in commodious houses, protected against the weather, and pursuing all the varied arts of civilisation. The agricultural communities instead of being cooped in small numbers in narrow vallies between lofty mountains, and unable to visit each other without great exertion and some risk of life, are now seen spreading without interruption and in millions along far extending basins and wide plains. While foreign merchants, with infinite labour and peril, carry their wares across deserts and over snowy mountains to seek the few and poor customers of the inner division, the native merchants of the outer gather vast supplies of commodities from a wide circuit, by great rivers, canals and roads, while the sea unites them to every other maritime country in the world, brings to their warehouses purchasers from abroad, and enables them to send their cargoes to distant markets.

The nomades of the table land having a wide range, meeting in the summer pasture lands, occasionally associating for aggression or defence, and affected by the ethnic movements and influences incident to great steppes, are necessarily raised above the extreme barbarity which the possibility of entire seclusion often causes in wandering forest families. But neither in the inner nor middle divisions has civilisation ever been indigenous. The Tibetan tribes beyond the basins of the Zangbo and Indus, and the hundreds of forest tribes spread along every mountain band and group from the Himalaya to Gunung Blumut in Johore and to the extremity of the Anamese chain, retain an ancient rudeness of manners and art, and the more cultured appear to have obtained their comparative advancement either from external influences or from having themselves been congregated in vallies before they were driven to the mountains by other tribes. The Tibetan culture has a Mid-Asian, chiefly a rude Turkish, basis, but the higher civilisation of the valley of the Zangbo is mainly Chinese, overlaid with Buddhism. Nothing can be clearer than that civilisation has not descended from Tibet or any other part of the eastern table land to China. All that is in advance of the ancient development and arts common to all Eastern Asia, and nearly to the whole Turanean race throughout the Old World, has been elaborated in the dense communities of China, aided, it may be, by influences from the west.

Those communities which still occupy the upper portions of the Ultraindian vallies represent the ancient civilisation of eastern Asia. They have acquired much from the influences of the outer division, but they preserve primitive arts and habits. It is in the plains and vallies of the Oceanic division that all advance on the primitive civilisation has been made.* In the great plains of China alone

* But civilising influences have also penetrated to them from the interior. Tibetans have descended from the north into the upper part of the basin of the Brahmaputra, and Chinese have ascended from the east into the ancient kingdom of the Lau in Yunnan and thence spread their influence westward into the basin of the Irawadi.

does this appear to have been mainly indigenous. In the western plains the culture has, in great measure, been of Chinese, Indian, and western origin. The number of foreign settlers must at all times have been small and incapable of affecting a change in the physical character or language of the native races, save in India, Arracan and the rest of the western seaboard. The tribes that have been successively subjected to the civilising influences of the Oceanic districts, appear to have all been offsets from the native races of the interior.* There has probably been much displacement and mixture. Amongst the existing hill tribes there are doubtless remnants of races once in possession of the vallies, as the Kyens assert themselves to have been of that of the Irawadi before the advance of the Mayama people down the basins of the Koladan and Irawadi. At present the most important of the civilised races in possession of the lower plains and vallies are the Chinese, preeminent amongst all the peoples of Eastern Asia for numbers and civilisation, and who for a long period have been slowly extending their population up the basins and into all the larger vallies of the middle division, gradually dispossessing and separating the ancient tribes. No other part of the world probably exhibits a similar advancement of a civilised race, under the pressure of population, from the plains into the heart of a vast alpine region. Their combination of enterprize with well disciplined and patient industry, gradually overcomes all physical impediments, for wherever any other race can find a footing and bare subsistence the Chinese can flourish. The advancement and civilisation of the Chinese, after their early discipline in contending with inundations, appears to have been mainly owing to the size and intimate connection of their two great basins which have caused the growth and ultimate amalgamation of populous and industrious nations. The southern division, on the other hand, is much divided by mountain chains and its basins are comparatively small, wanting in compactness, and deficient in continuous alluvial tracts of great breadth. This has

* The native condition of the Mayama race in particular is well represented by a large number of highland tribes in the basins of the Koladan and Irawadi, and the S. E. part of that of the Brahmaputra. The habits of these tribes have a wonderful resemblance to those of the inland lank-haired races of Indonesia. Such are the *Kuki*, *Bongju*, *Khumi*, *Lunkha*, *Shindu*, *Mrung*, *Toung-mru*, the numerous tribes known by the generic names of *Singphu* (including *Khalang*, *Kaphok*, *Lophai*, *Khaku*, &c.) and *Naga*, the last constituting a distinct family of the same alliance, but having much more of a Tibeto-Indian character. There is hardly a minute trait in the legends, superstitions, customs, habits and arts of these tribes and the adjacent highlanders of the remainder of the Brahmaputra basin, that is not also characteristic of some of the ruder lank-haired tribes of Sumatra, Borneo, the Philippines, Celebes, Ceram and the trans-Javan islands.

The existence of Negro tribes in the Anam chain and in Formosa and the trace they have left of their ancient presence in Japan, when taken in connection with their great extension in India, the western side of UltraIndia and Asianesia at a period undoubtedly anterior to the advancement of E. Asian peoples into the latter, render it not improbable that the first Turanian tribes who extricated themselves from the alpine land and descended into the outer basins found Negro tribes scattered over a large part of the shores of S. E. Asia.

favoured the mutual independence of tribes and clans, while the absence of fertile inland vallies or plains sufficiently sheltered, has exposed them to mutual depredations and to the pressure of the movements in China, thus retarding the development of civilised nations. Ultraiudia in this respect has probably still a great resemblance to the state of China three or four thousand years ago. Before population and cultivation had greatly extended, the nations of the different basins of China must have had relations to each other similar to those of the leading nations of Ultraiudia at present. We do not find that these nations are spreading back into the interior like the Chinese. The Anamese are confined to the eastern marginal district and the lower and eastern part of the Mekong basin, the Siamese to the lower part of the Menam basin, and the Burmese to the middle and lower part of the Irawadi basin. Numerous tribes and clans of the two latter races possess the greater part of Ultraiudia, and although acknowledging a nominal subjection to them, maintain a real independence. If European races had not entered the basin of the Indian Ocean, it is more probable that the Chinese, as they gradually increased in Yun-nan, would, by mere force of superior numbers and civilisation, have possessed themselves of Ultraiudia, than that any of the nations of the latter would have effectually subdued and assimilated the others. The whole character of their civilisation leads to the conviction that all in which they are distinguished from the inland tribes of the same races, has been derived from without in recent times, and has as yet had only a superficial influence on the great mass of the people and not a very deep one on the classes that have been most affected by it.

It must often have excited surprise that Ultraiudia, situated between regions in which two of the highest civilisations of antiquity were attained, and possessing at least three districts well adapted for the location of large communities, should still be so backward. It is partly to be accounted for by the great elongation of the basins and by a large portion of them being of a hilly and mountainous character and inhabited by numerous hardy tribes, who can, without much difficulty, descend on the more civilised nations of the southern plains. But the chief reason is to be found in facts of which we are apt to lose sight in the vague ideas of dense population, civilisation, riches and power, with which the generic names India and China have for so many ages been associated in the European mind. The N. Chinese and N. Indian civilisations began almost in historical times to spread from two inland points. A long period elapsed before they took possession of the three great basins, and the further extension of their power and influence has been greatly hindered not only by internal revolutions and foreign invasions, but by self imposed obstacles of a religious and politic nature. At a period so recent

as to be close on the historical, the only civilised people in the Chinese region appears to have been an inland tribe occupying the most northern district. Although the other nations of the Hoangho early participated in its civilisation, it was only about 2,000 years ago that its sway had extended to the sea. It was not, in all probability, till a comparatively recent period that the northern civilisation began to spread to the southward, and the amalgamation of the south with the north is an event not older than the rise of the Mahomedan religion. Thus although there have been nations in China from a remote period, there has not been a united empire until recently, and internal wars, with the constantly recurring necessity of resisting the Tartar and Tibetan tribes, have prevented the exercise of greater influence on Ultraindia. In India again the Iranian civilisation was long confined to a small district north of the Ganges, and ages must have elapsed before it extended eastward to the sea.

The relative positions of the present Ultraindian races appear to be intimately connected with their most ancient locations and subsequent movements, for all these races and their languages are native to the region. They justify us in concluding that the Anam race in its most inner ancient seat was either placed between the the Lau tribes and the Chinese tribes of the S. W. or came into its present location from the westward. There are some grounds for believing that they extended at one time much further to the west, perhaps across Ultraindia to the basin of the Brahmaputra, and it will probably prove that many of the tribes of the Irawadi, including even the Mon, are more closely connected with them than with the Burmese.* The Lau race again has evidently been in all eras to the eastward of the Mayama, and much more closely allied to the Chinese. The language alone would prove this. The Mayama and the allied tribes of the Irawadi are as unequivocally connected, both by their present position and by their language, with the Tibetan and Tibeto-Gangetic tribes. There is no evidence of the Mayama family having occupied the Mekong or other eastern basins, and their primitive locality was probably the S. E. extremity of the Tibetan table land, or some of the vallies in the great mountain mass at the head of the Irawadi and eastern Brahmaputra basins. There are still many distinct tribes towards the head of the former, and those known under the name of Khanung may prove to be closely allied to the Mayama family or intermediate between them and the Tibetan. The Abor, Mishmi, Naga &c. appertain more distinctly to the Tibeto-Gangetic alliance. The Mayama family is at present the nearest link between this alliance and the Lau-Chinese.

* The publication of a Mon vocabulary in an early number of this Journal will throw light on this. Before I come to the western races I hope, through the kindness of a zealous contributor, to be in possession of sufficient specimens of the Mon to enable me to determine its structure and ethnic alliances.

SECT. 3. *Ethnic boundaries of the S. E. Asian races.*

The S. E. Asian races have the following ethnic boundaries. On the N. E. the Chinese are bounded by the Korian and Tangusian tribes; along the northern margin of the Tibetan and Chinese wander Mongol tribes; on the north west the Tibetan are intermixed with Cashmerians and are in contact, but do not appear to intermix, with the tribes on the eastern skirts of the Hindu-kush, and with the Turkish tribes on the north. The attractive land of India necessarily gives the south west and southern boundary a different character from that of the north west and north. The Turanian tribes to the south of the Ganges have become isolated, being cut off from the Himalayan tribes by the Iranian and Indo-Iranian people who now occupy all the valley of the Ganges. The Vindyan tribes, bounded on the north and east by Iranian and Indo-Iranian races, are in contact on the west and south with Indo-African tribes more or less transformed by S. W. Asian influences, - Bhils, Karnatakas, Kalingas, &c. The Himalayan tribes are much mixed with Iranian people in the west. Towards the east they are purer and retain pre-Aryan languages and in some cases true Turanian features. But many of these tribes, as well as those of the Vindyas, have acquired softer and finer features. The Turanian peoples of the Brahmaputra valley are intermixed with the Aryan race of Bengal, but the majority retain a Turanian physiognomy, although they have adopted the language of the prevailing race. On all other sides the region is bounded by the ocean. The Mergui Archipelago is haunted by a fishing tribe, the Silong, who are closely allied to the races of the adjacent S. E. Peninsula. The Andamans are inhabited by a Negro race, the Nicobars by lank-haired Indonesians strongly tinctured with *Africanism* in their superstitions and manners. In the Malay Peninsula rude S. E. Asian tribes are in contact with Negro tribes, and all the principal plains and vallies towards the sea have been occupied by offsets of the great Malayu race of Sumatra. This is the only instance of the Ultraindian tribes moving back in numbers from Asianesia on the continent. Javanese influences are observable in Johore and along the eastern shores of the Peninsula, but they have not been powerful. The lower valley of the Mekong has attracted some settlers from Indonesia and Japan, and the latter have left traces of their having formerly frequented the northern part of Anam, in some of the geographical names still preserved (*Ouke Sima*, *Bouan Sima*, &c.) I have in a previous paper described the general character of the ancient movements of the Asiatic tribes into Asianesia and these will be more particularly investigated as a branch of the insular ethnology. The growth and civilisation of considerable communities of this race has prevented the formation of new communities by immigrants from the more civilised Asiatic races, who have occupied the lower

portions of the continental basins in later ages. There are no Burmese, Siamese, Anamese or Chinese tribes in Asiana, although there has, in all historical times, been a large influx of Chinese into Indonesia. The Philippines, Borneo, Java, and the Malay Peninsula have always received considerable numbers, but the greater number of those who do not die before they have made a little money return to China, and the remainder are absorbed, or subsist merely as small societies in the native trading towns or, for mining purposes, in the interior. Large mining bodies sometimes maintain a considerable degree of independence, but their turbulence has frequently led to their being massacred.

The S. E. Asian languages affect and have been affected by those of the foreign races above enumerated. Some of the Tibeto-Indian and Burmah-Indian have acquired the phonetic power and some of the idiomatic traits of the Telugu-Tamulian family, and have communicated to its dialects some of their own words. The Chinese, impotent to produce a marked ethnic impression when operating through individuals,—for they have no enthusiasm, religious or otherwise, and seek only gain and selfish gratification;—are all powerful when they can operate in large numbers and continuously. The Korian language, which belongs to the Tartar-Japanese family, is so much pervaded by the northern Chinese that the greater number of its words are now double, a Chinese synonyme being added to the native word. The same influence is exhibited in a different manner in the languages of the educated classes in Japan and Anam. It is now spreading towards Tibet and Burmah, and if the Manchu dominion lasts, its great literary and political influence on that race will lead to the gradual diffusion of its words in the Manchu colloquial.

SECT. 4. *General impression of the archaic ethnic movements in S. E. Asia.*

We can only approximate with any certainty to a knowledge of the archaic movements of races and tribes in S. E. Asia, and particularly in Ultraindia, by a full comparison of languages. By the time I have finished the publication of my survey of the separate tribes, I hope to be in possession of sufficient materials to complete the comparisons in which I am engaged, and arrive at more definite conclusions than I have yet been able to do. As some time may elapse before I publish these, I shall here briefly mention my first impressions.

China has been immemorially inhabited by tribes of the Chinese race, but the wars and movements that preceded the establishment of the kingdom of Mangli, must have influenced the tribes in Tonkin, Yun-nan and Szechuen and, through them, Ultraindia. Eastern Asia north of the great wall has been the scene of far greater changes. It is difficult to conjecture where the original seats of its three chief races,—the Tungusian, Turkish

and Mongol,—were. The first appears to have been more to the eastward than the others, but whether in the upper basin of the Amur or in one of the northern basins is not known. An older race of the Amur was probably the Aino, now confined to the Oceanic margin of the basin and the Archipelago in front. On the north the pressure of the Tungusians has greatly reduced the older tribes, driven the remnants into confined tracts, and probably destroyed or absorbed many.* On the south they have, from time immemorial, pressed in vain against the population of China. They have sometimes been at peace with it, but oftener at enmity, and have given at least three dynasties to it, that of the Khitans, that of the Kin, and that of the Manchu which still retains the throne, but with a rapidly weakening grasp. But all the Tungusians who have domiciled themselves in China have necessarily assimilated to the native race. The native region of the Turks or Huns is probably to be sought around Lake Baikal from the Altai to the Upper Amur, whence, at some remote archaic period, they appear to have spread northward down the basin of the Lena to the North Sea, and southward to the Inshan mountains on the north of China. Tungusian tribes appear to have advanced N. and N. W. cutting off the Turks of the Lena (Yakuts) from the southern hordes. The latter remained for about 2,000 years in possession of the eastern portion of the Great Plateau, including the present locations of the eastern Mongols and the western part of the province of Shensi, and they must have greatly affected the ethnology of the regions on both sides.† It does not appear that they ever conquered China, but their constant invasions and occasional occupation of the Chinese borders, must have retarded the extension of the dominion and civilisation of the northern Chinese to the southward. In the reign of Hyao-ho-ti, the Turks of the southern side of the desert united with the Chinese and drove the northern hordes out of the region from the Altai

* It is interesting to observe how the more archaic developments gradually retire on all sides. The Chinese, Tartarian, and Irano-Semitic cultures have spread till the older ones are confined to Africa, America, Asianesia and the extreme N. E. of Asia (Chukches &c).

† They must have affected the Tibetan tribes even if they did not penetrate into the valley of the Zangbo. They appear to have given their own ancient name *Hün*, *Hiong*, (*Hun*) to the region or a portion of it, for Ngari is still called *Hundes*, *Hiundes* (*Hun-land*) by the Indians. According to Buchanan Hamilton the Ghorakas call the Chinese empire, including Tibet, *Hung*. Turkish names extend at least as far south as the great lake within 9 days journey of Lhasa, *Tengri nor* (Heaven's or God's lake, the Chinese name *Thian chi* is a translation of the Turkish one.)

It is probable that many other vestiges of the presence of the Turks on the inner boundary of S. E. Asia will yet be traced, not only in Tibet but to the south of it. Turkish titles were probably once prevalent in Tibet. That of *Han* or *Khan* is preserved by a Himalayan tribe, the Lepchas, whose chiefs are called *Hang*. The probability is that the Huns were located in those portions of Tibet which are adapted for a nomadic pastoral life, and that they held the native tribes in subjection. The old Malayan names of tribe divisions *utu*, *tura*, are Tartarian. So is the title *tuau*, and probably the *tomon* in *tomongong*. *Boa*, king, in Burmah and Tonkin, is the name of the chief God of the Tungusians in Siberia.

to the Amur. About A. D. 216 the southern Huns were expelled from their country by an eastern tribe called Sian-pi* and they then moved north and west. The subsequent history of the Turks belongs chiefly to Western Asia and Europe, but the Mongolian armies which conquered Mongolia, Tibet and China a thousand years later, appear to have been chiefly composed of Turks. The ancient history of the Mongols is still more obscure than that of the Tungusi and Huns. Their tribes appear to have occupied some districts in the vicinity of Lake Baikal, and they must have been comparatively insignificant and probably subject to the Huns and Tungusi, for they cannot be clearly traced beyond Chingis-khan, when they became a nation of conquerors, and, in the course of a short period, established a dominion embracing the greater part of Asia, and extending from middle China to Germany. It seems probable that the movements of the Lau tribes called Ahom and Khamti into the basin of the Irawadi and Brahmaputra in the beginning of the 13th century, were consequent on the devastating invasion of Tibet and China by Chingis-khan.† The dominion of his successors in China gradually extended, and in 1280 Kublai-khan had conquered the whole empire, invaded

* Who were the Sian or Sienpi? What was their subsequent career? Did they continue to occupy the Hun lands north of China until the 13th century when the Mongol movement commenced? Prichard supplies no answer to these questions. According to him the date of the dispersion of the Huns was also that of the final occupation of the desert of Gobi and the northern provinces of the Chinese empire by the tribes who have since possessed the country and who over China itself have raised several imperial dynasties (IV. 307.) This is very indefinite. From the beginning of the 13th century this region has been occupied by Mongols. But who were the northern neighbours of the Chinese and Tibetans during the thousand years that intervened between the dispersion of the Huns and the rise of the Mongols? Abel-Remusat incidentally says the Sian-pi were Tangusians (*Recherches sur les Langues Tartares.*) In an extract which he gives from a Chinese author the *U-hoan* are said to have predominated after the Hsiung-nu became enfeebled. They destroyed the *Sian-pi* and then they with the Juan-juan and Wei were the masters of the country. The Juan-juan were destroyed, and the *Thu-kiuei* (Turks of the Altai) began to appear. They were subdued by Chinese, when the *Khitan* held the supremacy until the rise of the Mongols. It would appear from this, and from the names of the northern tribes with whom the Chinese were frequently at war during the 1,000 years in question, that Turkish hordes were sometimes the occupants of the northern frontier. The Chinese like the Europeans did not clearly distinguish between the different nomadic races to whose incursions they were from age to age exposed. Many of the names applied to the different hordes are probably as generic as *Saka*, *Sakai*, *Sai*, *Scoloti*, *Scythia*, *Tartar* &c. Are the former names not preserved and identified as a genuine Turkish designation in *Sokha*, *Sochalar*, the native name of the *Yakuti*? A tribe of the same race once existed on the upper Yenesei also called Sokha. It is by no means certain, notwithstanding the opinions of those German ethnologists who have been followed by Humboldt and Prichard, that the majority of the nomadic tribes who preceded the Huns in W. Asia were of Indo-European race, any more than the present Iranian looking Osmanli.

† The Khamti probably belonged to Muang Kamaret. The following passage in Du Halde, if it do not refer to the first movement of the Khamti in the 13th century, at least illustrates the manner in which that movement was probably produced. "When the Tartars attempted to make themselves masters of China a great number of Chinese fugitives from the Province of Yun-nan dispossessed their neighbours of their land and settled there themselves, and the inhabitants of Kamaret were forced to abandon their city."

Japan, Tonkin, Siam and, it is said, Borneo and Java.

It does not appear that the Tibetan race became formidable until after the Turks were broken and driven westward, which confirms the evidence afforded by geographical names and by prevalent Mid-Asian customs, that Tibet, or the greater portion of it, was within the circle of Turkish supremacy. The Tibetan nomades, forming part of the Turkish armies which invaded China, would not be distinguished by the Chinese. After the Turks moved westward the Tibetans came into notice, carried on successful wars with China, and often penetrated far into the empire. In the 7th century their dominion reached from the Yalong to Cashmir. They were not finally broken until they were conquered by Chingis-khan.

Chinese archaic history must be that of the gradual extension of the civilisation, dominion and language of the great northern race to the eastward and southward. As this race spread into the northern and middle districts, their preponderance in numbers and power appears to have caused an entire amalgamation of the local tribes with them, and the total disappearance of the native languages and manners even in the mountainous parts. The best evidence of the comparative influence exerted by races is the extent to which they have displaced local languages. There must be great superiority in character, religion, culture or numbers on the part of foreigners to induce or force a people to adopt their languages. It is interesting therefore to observe that the assimilation of all the tribes of the basin of the Hoang-ho has been much more complete than that of the Gangetic tribes by the Aryan race, for although the population of the valley of the Ganges and the western portion of the Himalaya has now an entirely Aryan character, there are numerous local tribes and languages on all the other mountainous sides of the valley. To the south of the valley of the Yang-tse-kiang, or in the ancient kingdom of Mangli, the northern civilisation pervades all the more open districts, but the native languages still keep their ground even there, and in the Nang-lin mountains the local race is preserved in its purity and independence. In the west the assimilation is even less advanced, the northern civilisation is found in the towns only, many districts are noted for the rudeness of their manners, and the local languages of the Tibetan, Mongol, aboriginal Chinese, and Lau tribes have not been displaced. But the Chinese ethnic limit is gradually enlarging in this direction, and if its progress is not counteracted, it must eventually absorb the native population of the inner basins of the Menam, Mekong and Irawadi, and advance down these basins. Yun-nan was formerly a Lau kingdom, and the Lolos were only effectually reduced two centuries ago. It now contains a large Chinese population and many considerable towns.*

* The Chinese emigration to the valleys of Yun nan is said to have commenced during the great Han dynasty.

The Ultraiadian ethnic history is, as yet, still more obscure than that of India. It is certain however that it must have undergone great changes subsequent to the earliest era which we can recognize in Asianesia. I shall best explain the general impression which I have received from a partial review of its ethnology, by considering all the S. E. Peninsulas and Islands as one region.

At the beginning of the first Asianesian era, India, (with the exception perhaps of the Gangetic basin, or the alpine portion of it) with the lower basins and the western shores and islands of Ultraiadia, were peopled by tribes of the negro type who spoke languages allied to the African. Before the second era commenced, the basin of the Ganges was occupied by Tibeto-Indian tribes, all of which had a modified Turanian and Irano-Turanian physical character, while the west and south of India were occupied by Africo-Tamulian tribes. This revolution must have been caused by an influx of tribes of a quasi Iranian physical type from the N. W. and others of a Tibetan type from the N. and E. The languages of this era were, in the Gangetic basin, of a very archaic character compared with the Indo-European, and associate themselves generally with the simpler Turanian and African. It appears impossible to explain the linguistic connection between the Vindyan and Himalayan tribes and those of S. E. Indonesia and Polynesia without admitting that, when the Gangetic basin was occupied by the former, allied tribes spread along the eastern shores of the Indo-Malayan sea, preceding the Mayama race in Arrakan. Some of the Kyen, Karen or other pre-Mayama tribes may prove to be their remnants. It can hardly be supposed that the Turanian Gangetic tribes, although those on the Ganges were probably navigators, had made such progress in civilisation as to carry on a direct trade with the eastern islands, and plant colonies in it. If this had been the case Asianesian ethnology would present a different aspect from what it does. It requires us to believe that the western maritime districts of Ultraiadia, such as Arakan, Pegu, Tavay* &c were occupied during a long period by maritime tribes more closely allied to the ancient Gangetic race than its present dominant tribes are. These Gangetic tribes appear to have received linguistic additions from the native Ultraiadian tribes, which they carried with them into Asianesia. I cannot yet say whether these native tribes have been entirely absorbed or extirpated or still exist, but they appear to have been more closely related linguistically to the Mon, Kambojan, and Anam than to the Mayama and Lau races, although necessarily allied to these also. The Mon has a strong linguistic connection not only with the Kambojan but with the languages of some of the ruder mountaineers of the

* Tavay or Tavai has been carried as a local name to the two extremities of Polynesia, for we find it applied to islands in the New Zealand and Hawaiian groups.

Mekong basin. The Anam again, although now confined to the most eastern maritime districts, connects itself with the west by the languages of the Malays, the aborigines of the Malay Peninsula, &c. The intruding Gangetic peoples were probably more advanced than the aborigines on the eastern side of the Bay. But the existence of numerous inland tribes, extending to the head of the Irawadi basin and into Yun-nan, must have prevented their permanent occupation of the sea board.

In the succeeding era Ultraindia appears to have undergone great revolutions, which were probably connected in the first instance, with the predominance of some of the nations of the Hoangho and Yang-tse-kiang that had gradually been absorbing smaller tribes and extending their race and language to the westward. The pressure caused by this advance of the Chinese population and power is probably connected with the movements in the Transindian basins, which led successively to the dispersion of the Gangetic communities* or their melting into more numerous native tribes, perhaps the Kyens or Karens; to the occupation of the Irawadi basin and partially of that of the Mekong by Mon tribes; to the advance of the Mayama tribes along the northern basins, their occupation of the marginal basins to the W. of the Irawadi, and eventually of all the middle part of the Irawadi-basin; and to the movement of the great Lau tribe from Yunnan, its occupation of all the Mekong basin save the southern extremity, its spread into that of the Menam, and its eventual movements into the Mayama lands and thence into India. The tribes that were successively advanced to the shores of the Bay of Bengal came within the operation of its commercial and civilising influences. Its navigable rivers have been frequented during the historical era by Himyaritic, S. Indian and Gangetic vessels, the first probably from an extremely remote period when the Sabeans were yet under strong Egyptian influences, and maybe said to have conducted the eastern maritime trade of Egypt, as the Phœnicians did the western.

The Mon appear to have been forced into their present restricted location at the southern extremity of the Irawadi and Saluen by the advance of the Mayama, and the Kambojans into a similar position on the Mekong by the pressure of the Lau. The Kyens, Karens &c. had probably yielded in a like manner to the Mon.

* * In the papers on particular tribes full references will be given for all facts mentioned in these reviews that are not well known or derived from personal observation and enquiry. This will prevent the occupation of several pages in each number by lists of authorities. See "The Silong tribe" in last number for an example of the method that will be followed.

* It is worth enquiry whether the Ka-kyens are not a remnant of the Gangetico—Polynesian race. They differ totally in their physiognomy from all the surrounding races.

THE
TRADING PORTS
OF THE
INDIAN ARCHIPELAGO.*

ANALABU or *Nalabu* (*Sumatra*) Lat. 4° 8½' N. Long. 96° 8 E. *Horsburg*. One of the northern Pepper ports of the West Coast of Sumatra. It is within the territory of Acheen, and still retains a considerable portion of its former trade, for although the country-ships from Continental India have ceased to visit the west coast of Sumatra, the port continues to be frequented by coasting vessels from Pinang and the Coromandel Coast, and by traders from the United States, which share the traffic with prahus and small vessels from the Dutch ports of the south. The American traders are received by the inhabitants with more favour than the others, as they bring Spanish Dollars and Turkey Opium to purchase their cargoes: country traders, therefore, do not transact much business while there are American ships loading in the port. The amount of pepper produced, which was formerly sufficient to load five or six large ships annually, is said to have decreased of late, as has also that of gold-dust, the latter being stated by Marsden to have once amounted to 2,000 ounces annually. This product, however, from its being easily transportable overland, may find its way south to the Dutch possessions, or north to Acheen and the Pedier Coast. The anchorage is in from 5 to 7 fathoms, tolerably sheltered from the north-westers by a reef which extends from Analabu Point, forming the western extreme of the bay. The extremity of the reef is generally brought to bear W. N. W. to W. ½ S., but the latter bearing should only be chosen by moderately sized vessels. Ample sailing directions will be found in Horsburg's "Directory," which should be a constant companion to the voyager in these seas.

The natural productions, articles in demand, and currency, closely correspond with those of Acheen, with which place an intercourse is kept up by means of prahus. Provisions and refreshments are to be obtained in great abundance, and at very moderate rates, the neighbouring country being exceedingly fertile and productive.

The port regulations should be the same as those of Acheen, but although Analabu is within the Acheenese territories, its dependence is scarcely more than nominal. As it becomes the interest of the chiefs to attract traders the regulations are not likely, however, to be less favourable to foreign traders. Parties purchasing pepper should agree for its delivery on board the ship, at a fixed price, free of all charges.

* Continued from p. 399.

ANAMBAS. A group of islands in the China Sea, distant about 130 miles in a N. E. direction from the eastern entrance of the Strait of Malacca. These islands were very imperfectly known previous to the year 1831, when they were surveyed by Captain La Place, of the French corvette "La Favorite," who spent some time among them. Pulo Jimaja, in the western part of the group, upwards of 30 miles in circumference, and Pulo Siantan, to the north-east, are the principal islands. The latter contains two harbours, which are said to be sheltered from all winds, but they have not yet become the resort of traders, the produce of the islands, consisting chiefly of coco-nuts, coco-nut oil, agar agar (a sort of seaweed in great demand for the China market), shark's fins, and a little tortoiseshell, being carried to Singapore in boats belonging to the natives themselves. The inhabitants are Malays, of the same race with the Orang Laut of the Straits, and like the latter, are rapidly becoming an orderly and industrious people. A paragraph is retained in the last edition of Horsburg's Directory to the effect that it is dangerous for strangers to land without proper precautions, as the inhabitants may probably massacre or make slaves of them, if they perceive a convenient opportunity. Precautions are always necessary to prevent the crews of European ships from giving offence to the prejudices of a semi-civilized people; but I am happy in being able to record that strangers, especially the shipwrecked crews of vessels, will now be received with such hospitality as the natives can afford, and be forwarded to Singapore by the first convenient opportunity. This favourable change is partly to be attributed to the absence of Lanun pirates, who formerly appeared among these islands in sufficient force to carry every thing their own way; and partly to the liberality of the Straits Government in amply rewarding those who have afforded assistance to the distressed crews of ships. The courtesy and consideration with which the island chiefs have invariably been treated by our respected Governor, who has never failed to distribute honorary tokens of approbation when such have been deserved, have also made a highly favourable impression; for the Malayan chiefs, although fond of money, hold in greater estimation the honour conferred by a public acknowledgment of their services on the part of the chief European authorities.

ANJER (*Java*). A fort and village at the eastern extreme of the island, in Lat $6^{\circ} 3' S.$ Long $105^{\circ} 55' E.$ *Horsburg*. Anjer owes its importance chiefly to its position near the narrowest part of the Straits of Sunda, this strait being the high-road for shipping passing between Europe and the ports of China, Batavia, and Singapore. A constant stream of vessels passes through at all seasons of the year, but it is only during the S. E. monsoon, from April to October, when the wind blows off the land, that they are

in the habit of resorting to the Roads. The westerly monsoon often brings very bad weather, which induces ships to hug the weather shore. This does not, however, always deprive them of communication with Anjer, for if the surf is sufficiently moderate to permit boats to be launched, they will soon be surrounded by the light prahus for which the place is famous, bringing stock and refreshments of all descriptions.

The fort, which is spacious and well-constructed, although it has not an imposing appearance when viewed from outside, is situated on the south bank of a small stream, which can be entered by ship's boats if there is not too much surf, and fresh water filled up from along-side the boat when the tide is ebbing. The native portion of the town lies to the north of the river. The site is low and level, but the land rises immediately behind, and forms a picturesque peak, which is a good mark for anchoring in the roads by bringing it on with the town bearing about S. S. E. Ten or twelve fathoms is the usual depth chosen, but if ships venture to lie here during the westerly monsoon, they will find it to their advantage to anchor farther out.

The country in the neighbourhood of Anjer is fertile and well cultivated, but comparatively few of the staple articles of commerce are produced, the country people being exclusively occupied in raising stock and provisions for supplying the numerous ships that pass the strait, and which, wherever bound, invariably take on board as much live stock as they can carry with convenience, for even if about to enter the Archipelago they will nowhere find it so cheap, good, and readily obtained as at Anjer. One would suppose that the immense demand would enhance the price, but here it has had quite a contrary effect. It has induced the natives to adopt a system of rearing poultry in such numbers as to enable them to obtain large profits on comparatively low prices. The roads present a very singular scene when several vessels are passing through at once, which is often the case. Each is speedily surrounded by 40 or 50 light prahus, bringing fowls and ducks, yams, sweet potatoes, turtle, fresh fish, and tropical fruits of all descriptions; with many varieties of monkeys, parroquets, musangs, and pilandoks; and as time is precious (for if the wind is light the ships do not shorten sail) while the natives are expert traders, these are bargained for and placed on board the vessel in an inconceivably short space of time. When no more can be taken, they start away for another vessel or return to the shore to procure a fresh supply of stock and curiosities. Silver and gold coins of all nations are current, but Spanish Dollars, Java Rupees, and Dutch copper coins are preferred. Each boat is invariably provided with a supply of maize and paddy to furnish food for the stock.

Anjer is an Assistant-Residency of the district of Bantam. A Port Captain or Harbour-master is also established here, whose duty it

is to obtain particulars concerning all ships that pass the strait, for which purpose a boat is sent off whenever the weather permits, carrying lists of the particulars required in several European languages, which are filled up by the commanders. The Anjer shipping lists, which are published in the Batavian journals, therefore contain information of much interest to parties connected with shipping. The outward bound Dutch Maatschappy ships invariably land their mails at Anjer, whence they are transported overland to Batavia, distant about 80 miles; and during the S. E. monsoon the passengers generally land also, and enjoy a delightful drive over good roads and through a most picturesque country to Batavia.

Anjer is well situated for general trade, especially with the coast of Sumatra, but foreign vessels rarely or never resort to it except for refreshments. The port was opened as an entrepôt in 1825, but this does not seem to have attracted any mercantile residents beyond an agent of the Handel Maatschappy, whose presence is more required to conduct the shipping business of the company than for purposes of trade. There are no dues on ships stopping only to obtain refreshments, but it is expected that before filling up water, the Captain will either call himself or send one of his officers to ask permission of the Resident, which is always readily granted. The inhabitants of Anjer are celebrated for their courtesy towards strangers who occasionally resort to it for the purpose of obtaining passages to the Australian colonies, as here they have the chance of all vessels from China, Manilla, Batavia or Singapore, and are pretty certain not to be delayed long if the proper season be chosen, from April to October. Indeed Anjer is well situated for intercourse with the southern colonies, the comparative insecurity of the port during certain seasons being more than compensated for by the rapidity with which voyages to and fro can be made, from the vessels employed not having to encounter the delays from light and unfavourable winds which render the navigation of the inner seas of the Archipelago so tedious and difficult.

AOR ISLAND. *Pulo Aur* of the Malays, Lat. 2° 30' N. Long. 104° 34½ E. *Horsburgh*. An island on the east coast of the Malay Peninsula, distant about 70 miles N. a little easterly from Pedra Branca. It is about 9 miles in circumference, and consists of one large hill, with eminences on its south-east and north-west extremities, the former of which attains the height of 1800 feet, and the latter 1500 feet; thus forming a saddle-hill when seen from the N.E. or S.W. Pulo Aur is well known to seamen as a leading mark to steer for when bound from China to the Straits of Malacca during the N.E. monsoon. Formerly ships on making the island too late in the day to enter the strait during day-light, were in the habit of anchoring for the night in

a convenient bay at the S. W. extreme of the island, to ensure their not being driven past the strait by the strong current which prevails at this season; but the practice has now fallen into disuse. The island was lately visited by a gentleman from Singapore, who has given a lively account of it in a recent number of this journal. The number of inhabitants now amounts to 1400, who are chiefly employed in fishing or in collecting the produce of the coco-nut trees, which forms the staple product of the island, the nuts, or the oil extracted from them, being carried to Singapore in their own prahus. Fruit, poultry, and a few vegetables are also to be obtained, but not in sufficient quantities to tempt a vessel to put in solely for the purpose of obtaining supplies, and as the light-house now in the course of erection on Pedra Branca will enable ships to enter the Straits of Malacca by night as well as by day, they will no longer have occasion to anchor there to await day-light. Pulo Aur was formerly a great resort of the Lanun pirates, but latterly they have ceased to infest these seas, and the crews of distressed vessels having occasion to visit the island will meet with every sympathy and assistance from the inhabitants.

APARI. (*Phillipines*). A town situated at the mouth of the great River Tajo or Apari, which, after traversing the northern Peninsula of Luzon throughout nearly its entire length, enters the sea on the north coast, in Lat. 18° 23' N. The sources of the Tajo and Papangas Rivers, which last debouches in the Bay of Manila, lie so close together, that it is commonly reported their waters unite, and thus afford uninterrupted boat communication between Manila, and Apari. There is a portage, however, although not a very long one.

The Tajo is about $\frac{1}{2}$ a mile wide at the entrance, having 2 to 3 fathoms on the bar, with sufficient depth inside for vessels of the largest size. Brigs and pontoons which carry on the coasting trade of the Philippines, ascend the river as far as Lallo, a town 12 miles above Apari, which is the capital of the province of Cagayan, although inferior in all points to Apari, the latter having a population of nearly 6,000, while Lallo can scarcely boast of more than half that number. There is good anchorage outside the bar in 10 fathoms about 2 miles off shore, with Apari Church bearing south. The Typhoons or hurricanes which render the coasts of China so dangerous, also prevail here during certain seasons, when large vessels sometimes enter the river to seek refuge. They lie here in tolerable security, but are sometimes in danger from the large trunks of trees brought down the river by the freshes, these typhoons being always attended with heavy falls of rain in the mountains.

The sands of the rivulets produce gold, and iron ore is smelted in small quantities, but the staple production of the province is tobacco, indeed it may be said that the entire agricultural popula-

tion is occasionally occupied in its cultivation. The tobacco of Cagayan is considered the best produced in the Philippines. It is a government monopoly, no other party being permitted to purchase it from the growers; that is to say for exportation. 200,000 dollars worth is purchased annually by the Alcalde Mayor of Lallo on account of government.

Apari has never yet, as far as the writer is aware, been visited by a British merchant vessel, at least for purposes of trade. Tobacco being a monopoly, no product remains of sufficient value to attract traders, while at the same time the visits of foreign vessels to the outports of Luzon are greatly discouraged, if not absolutely prohibited by the Spanish government. The circumstance of foreign traders being able to load only at the port of Manila, greatly enhances the price of the commodities they require. For example the price of that important article, Manila hemp, at the capital, is exactly double that for which it can be purchased in the provinces.

ARRU ISLANDS. A large and compact group near the S. W. Coast of New Guinea, upwards of 100 miles in extent north and south, and about 50 miles in breadth. Its eastern limits are not yet well defined. The western side of the group has the appearance, when viewed from the offing, of one long, low island, with numerous small openings, but on closer examination these are found to be straits, which, as the group is penetrated, sometimes open out into extensive sheets of water, and at others become contracted into narrow gorges, through which the tide runs with great rapidity, producing eddies and whirlpools which prove dangerous to the native prahus employed in the internal traffic of the group. The chief port is Dobbo near the northwestern extreme, in Lat. $5^{\circ} 45' 45''$ S. Long. $134^{\circ} 20'$ E. *Owen Stanley*. The islands are low throughout, indeed those of the western coast are scarcely raised above the level of the sea, except in certain spots where small limestone elevations rise to the height of 15 to 20 feet. The land rises gradually towards the eastern limits of the group, where many islets exist with level summits and steep wall-like sides, which appear to have been coral reefs raised bodily by some natural convulsion, or left dry by the receding waters. The few that are inhabited can only be ascended by means of long ladders, which are pulled up when there is any reason to dread an attack from without. These islands are all of limestone formation, and abound in caverns which are resorted to by the *hirundo esculenta*, the swallow or martin that furnishes the celebrated edible birds-nests of commerce. It is in this part of the group also that the extensive submerged banks are found which furnish the pearl-shell and trepang for which these islands are celebrated; these, with birds-nests and tortoise-shell, constituting the staple productions of the Arrus. This group lies on the very verge of the bank of soundings which unites New Guinea with Australia. A few miles to the

westward of the Arrus this bank terminates, the sea suddenly becoming unfathomable, and the volcanic region commences, which includes all the islands to the west as far as Celebes, where the bank of soundings which stretches in like manner from the Continent of Asia is met with. The western islands are thickly wooded with lofty trees throughout, which give the land an appearance of greater height than it really possesses, but the elevated flat islets mentioned above are only scantily clothed with vegetation, the few cocoanut trees that have taken root forming very conspicuous objects in the landscape.

Population. It is difficult to form even an estimate of the amount of population, but from the numbers collected in the neighbourhood of the pearl and trepang banks during the fishing season it must be equal to that of any other country of the Archipelago in proportion to its extent, with the exception perhaps of Java and Bali. It is only in the eastern part of the group that the true aboriginal people of the Arrus are to be met with, the constant intercourse that has been maintained for centuries with the people of the west having greatly modified the characteristics of the inhabitants of Wokan, Wama, and Wadia, the islands resorted to by foreign trading vessels, where the natives are either Christians or Mahomedans, chiefly the former. The real aborigines, in their personal characteristics, show a great affinity to the Papuans, or rather to the North Australians, to whom they bear a perfect resemblance, both in personal appearance and in general character and disposition, but their customs and superstitions are identical with those of the Malayu-Polynesian races of the Archipelago. They are active and industrious at times, when they have received advances from the traders, and find it necessary to exert themselves to fulfil their contracts, but when these are completed, they resign themselves to indolence and sometimes to excess, drinking immense quantities of arrack, an ardent spirit which forms an important item in the cargoes brought from Java and Macassar. As foreign traders of many nations are among them unprotected in the remote parts of the group during the fishing season,—Europeans, Chinese, Arabs, and natives Java and Celebes,—and their intercourse is rarely interrupted by serious quarrels, the Arru Islanders deserve to be held as a friendly and sociable people.

Commercial History. The Arru Islands must have been known to the early Portuguese navigators, as they are incidentally mentioned by Galvano, who wrote about the year 1550, in his "Historia des Descubrimintos" but we have no distinct record of their having been visited by Europeans until Pietersen, a Dutch navigator, touched there on his way to explore the Coast of Australia and New Guinea in 1686. A few years afterwards the natives were induced to enter into a treaty in which they engaged to trade with no other people than the Dutch of Banda. At that

time the chief commercial productions were pearls, (which were required for the trade with Japan), ambergris, and birds of paradise, the trepang and mother-of-pearl banks, now the great sources of commercial wealth, being unknown, or at all events unfished, until a comparatively recent period. Subsequently a small Dutch garrison was established on Wokan, and the trade of the Arrus was farmed out to Europeans established at Banda, which system continued until the Moluccas fell into the hands of the British during the late war. The son of the last farmer of the Arru trade, a Dutch gentleman named Steenberg, still carries on commercial intercourse with the islands, and is invariably, when present, chosen president of the rough courts of justice which the commanders of vessels, European and Native, have found it necessary to establish for the protection of property. During the British occupation of the Moluccas, the Arru trade was allowed to take its own course, and a number of Bugis and Macassar traders from Celebes, and Chinese from Java, entered into the traffic, and now almost engross it, notwithstanding repeated attempts of the Dutch of Banda to restore it to its old channels. The Celebes traders have immense advantages over those of Banda in being able to obtain their European manufactures, which form the most important item of their cargoes for Arru, direct from Singapore.

Productions. Probably no country in the world is so favoured as the Arru group with regard to natural productions calculated to become valuable articles of commerce. The islands themselves are covered with heavy timber of many varieties, which are all, more or less, adapted for ship-building:—kanari, katapan laut, iron-wood, bintangor, dammar-laut, casuarina, and many other whose names are unknown. The low marshy lands are covered with the sago palm, which is rarely molested by the inhabitants, who are abundantly supplied with rice by the Bugis and Macassar traders. Even the birds of the air furnish by no means an unimportant item of export. The prepared birds of Paradise, so highly esteemed both in Europe and Asia, are for the most part the production of Arru, and numbers of live rose-crested and yellow-crested cockatoos, loris, and parroquets are carried away by every vessel that leaves the island for the western countries of the Archipelago, where they are highly prized and meet with ready sale. But the great sources of wealth are the pearl and trepang banks, which lie on the eastern side of the group. These extend the entire length of the group, and are often several miles in width, being intersected by deep channels, some of which will admit vessels of burthen. The trepang, or sea-slug, is of several varieties. The greater portion is caught in shallow water, where it can be picked up off the bank without diving. The pearl oysters are of two varieties. 1st. the large oyster, with a strong thick shell, from 6 to 8 inches in diameter, which furnishes the mother-o-pearl shell of commerce. These are

obtained by diving, and are highly prized, being nearly always in demand at Singapore for the European and Chinese markets. This oyster produces few real pearls, but certain knarled, semi-transparent excrescencies are occasionally found on the surface of the inner shell, which are so highly esteemed by the Chinese that they often attain enormous prices. The other description is the small semi-transparent pearl oyster, having the inner surface of the shell of a blueish colour. The shell is of small value as an article of commerce, but the oyster itself often contains pearls, which, although individually of no great value, are so numerous as amply to repay the labour of collection. Pearls of sufficient size to undergo the process of boring are sometimes found, but the greater portion are what go by the name of seed-pearls, and are only marketable in China, where they are much valued as a medicine when pounded and mixed with some liquid. Ambergris is cast up by the sea, and is supposed to be the production of the sperm-whale, which frequents the unfathomable volcanic channel already noticed as separating Australia from the continent of Asia. Agricultural productions are few, and unimportant as articles of export. Maise, yams, and many varieties of tropical fruits are cultivated for the consumption of the inhabitants, who also prepare the pith of the sago-palm in times of scarcity. The latter, which is exceedingly abundant, may at some future time become an article of export, that is to say when the commercial resources of the Arru come to be more fully developed than they have been hitherto.

It will be seen that the marine productions are those which attract the foreign traders, and render these islands of commercial importance, a circumstance which assumes a considerable degree of interest when their peculiar position is taken into consideration. The Arru Islands are situated on what I have ventured to call the Great Australian Bank, which commences at Break Sea Spit, about 600 miles to the north of Sydney, and extends in a direction nearly parallel with the Australian coast to New Guinea, the Barrier Reefs forming its eastern verge. It abuts on the south and south-west coasts of New Guinea as far as the parrallel of $4^{\circ} 50'$ S. where it approaches the great mountain range which terminates at Cape Buru, distant about 80 miles N. by W. from the Arru. This is the northern limit of the bank;—it then takes a westerly and south-westerly direction, enclosing the Arru Islands, and, verging on Timor Laut and Timor, includes the Sahul Bank, and terminates about Shark's Bay, on the west coast of Australia. All the islands and coasts situated or abutting on this bank exhibit similar descriptions of marine productions to those of the Arru, indeed this group may be considered as furnishing a fair, but by no means a favourable sample, of the productions of the entire bank. Throughout this immense tract it is the only country that possesses a population sufficiently advanced to develop the natural resources. Elsewhere, that is to say in the

few spots where the marine productions are collected, it is done by strangers who only make periodical visits;—as by the Bugis and Bajou who visit the north and north-western coasts of Australia to collect trepang, tortoise-shell, and occasionally pearls; by the Sydney colonists who sometimes resort to the reefs of Torres Straits for the same purpose; and more recently by the Swan River settlers, who have commenced operations on the pearl-banks of the south-western extreme of the bank, with apparent prospect of success, although the shells seem to be much inferior to those of the Arru Islands and Torres Strait.*

Commerce. The foreign trade of the Arru is carried on chiefly by means of square-rigged vessels and padewahkans or large prahus from Celebes, which are owned by Indo-Dutch or Chinese merchants of Macassar, and sometimes by natives of Celebes. Vessels from Java and Banda also participate in the trade, but not in a degree equal to the former. These vessels sail for the Arru during the westerly monsoon, which terminates in March, when upwards of 100 vessels of all descriptions will generally be found at Dobbo and Wadia, the ports of chief resort. The larger vessels are housed over, and the smaller ones hauled up on the beach, when the traders prepare for their excursions to the eastern part of the group, where the pearl and trepang banks are situated. These voyages are performed in long narrow prahus which are hired from the Arru islanders, or in cora-coras of a superior description which the traders purchase at the Ki or Key Islands during their voyage to Arru. The neighbourhood of the fishing banks presents a very busy scene during the ensuing months. Formerly the islanders did not embark on their fishing excursions until after they had received advances from the traders, who had to await their return, but latterly they have been in the habit of fishing

* I have already described these singular banks in a paper on the physical geography of the Indian Archipelago which appeared in the volume of the Royal Geographical Society's Transactions for 1845. I find that I shall have to re-produce that portion of the paper which relates to the great Asiatic and Australian banks in the course of the present work, as they are intimately connected with the productive character of the countries of the Archipelago. Those which lie within the banks, the Malay Peninsula, Linga, and Billiton, for example, are found to be of granite and sandstone formation, with the strata undisturbed, the minerals lying in the continuous veins, and the soil comparatively of inferior fertility. The islands situated in the deep gorge which separates the two banks are all of volcanic origin, high, and steep sided, without fringing plains, the loose soil washed down from the hill sides by the tropical rains being lost in the unfathomable seas which surround them. These are the islands most remarkable for producing coffee and spice, which flourish most on the hill-sides of rich volcanic countries. Again the islands which merely abut on the banks, so as to touch it only on one side, such as Sumatra and Java, although partaking in an eminent degree of the volcanic character, do not lose the rich soil washed down from the inner face of the mountain ranges, this being stopped by the bank, and forming immense plains admirably adapted for the culture of rice, sugar-cane and other productions which succeed best in low, rich lands. The masses of earth which fall into the beds of the rivers on the occasion of the land-slips which are constantly heard of as occurring in Java, all go to increase these plains, as the collected waters overcome them, and carry them piece-meal to the coast, where the soil is deposited.

whenever the weather proved favorable, whether traders were present or not.

The cargoes brought by the traders consist of piece goods, hardware and cutlery, chiefly of British manufacture and obtained at Singapore; large quantities of rice, the produce of Macassar and Bali; Java arrack, flavoured with aniseed; quallies, or shallow iron pans, used for boiling the trepang, and which are manufactured by Chinese at Singapore or Siam; with many smaller articles which will be enumerated under DOBBO, to which heading the reader is referred for particulars connected with the trade and harbour practices.

ASERAU. (*Timor.*) A small trading station on the north side of the island, bearing nearly S. W. from the anchorage at Kissa. The town is situated a little inland, the only indication of its neighbourhood to be seen on the beach being a few boat-sheds under which the inhabitants or rather the traders who visit them, occasionally haul up their prahus. The anchorage, which lies close to the shore, is only adapted for small vessels, and is not available even to them during the westerly monsoon, when it is not safe to approach the coast too closely, unless certain of fine weather. A considerable quantity of sandal-wood and bees-wax is obtained at Aserau, chiefly by traders from the Portuguese settlement at Dilli. A small vessel intending to trade here or at any of the minor stations in the N. E. part of Timor, should previously touch at Kissa and obtain a native-christian pilot, who will usually be found exceedingly useful and intelligent. The articles required for barter will be found under KISSA.

ASSAHAN. (*Sumatra..*) A river on the N. E. coast of the island, in Lat. $3^{\circ} 2'$ N. Long. $99^{\circ} 52'$ E. about 45 miles W. by N. $\frac{1}{2}$ N. from the Round Arroa. The river is fronted by an immense mud flat, extending six or seven miles to seaward. There is sufficient depth of water on the bar for prahus and small craft, but larger vessels, if they ever visit it for purposes of trade, which is doubtful, must lie outside. The trading station is at Kampong Balei, a village situated about 20 miles up the river, at a spot where two branches unite. The river take its rise in the country of the Battas, with which it forms a more ready channel of communication than the rivers to the south, some of which, the great Rakan for example, have their navigation interrupted and rendered dangerous by a tremendous bore which rushes up the river at the setting in of the flood tide.

I borrow the following particulars from the work on Acheen by Mr Anderson, who visited Assahan on a commercial mission from the government of Pinang in 1823, when the Sumatra trade was considered of more importance than it is at present. "The commerce of Assahan has very much decreased compared with what

it formerly was, but there are still about 80 prahus, of different sizes, belonging to the country, engaged in conveying the produce of the country to the British Settlements, Malacca, and the adjoining Malay States. Many prahus from Batu-Bara frequent Assahan, to procure rice and paddy. The chief imports consist of salt, opium, and coarse blue and white cloths, for the consumption of the Battas of the interior; but many other articles, such as have been described to be imported into Delli and other places, are also carried to Assahan." These additional articles consist of iron, coarse China-ware, Pulicat cloths, gold thread, and iron-mongery of various descriptions. Assahan has assumed a certain degree of importance latterly from the circumstance of the Chinese merchants of Malacca having embarked in the trade with Assahan to some extent, sending their own topes and schutjes with cargoes of which salt forms the bulk, this being the only port on the east coast of Sumatra to the south of Delli with which the Straits Settlements carry on a trade in their own vessels. The exports are rice, paddy, bees-wax, rattans, Batta tobacco, kayu laka and horses, to which may be added a few elephants tusks and buffalo hides, these animals being numerous about the upper parts of the river. There are both export and import duties on goods, but they do not seem to be fixed, and generally a matter of arrangement between the traders and the Shahbandar.

ATAPOUPA. (*Timor*) sometimes called Filarang, but this is properly the name only of the territory of which it is the port. The town, if it can be so called, is situated on the eastern side of an inlet on the north coast of the island in lat. $8^{\circ} 59'$ S. long. $124^{\circ} 46'$ E. *Duperre*, which affords good anchorage for shipping in from 4 to 6 fathoms, sheltered from all winds but those at north. Although situated in the midst of the Portuguese establishments, Atapaupa is a dependency of the Dutch settlement of Coepang. It has a population of 40 or 50 Chinese, and a few natives of Coepang and Rotti, the people of the country all residing in the inland villages, only resorting to the station for purposes of trade. A postholder, or civil commandant, with a corporal and half a dozen soldiers from Coepang, serve to keep order in the small community, which is the only purpose for which a military force is required, the inhabitants being on very friendly terms with the native chief, to whom the Chinese traders pay a sort of tribute.

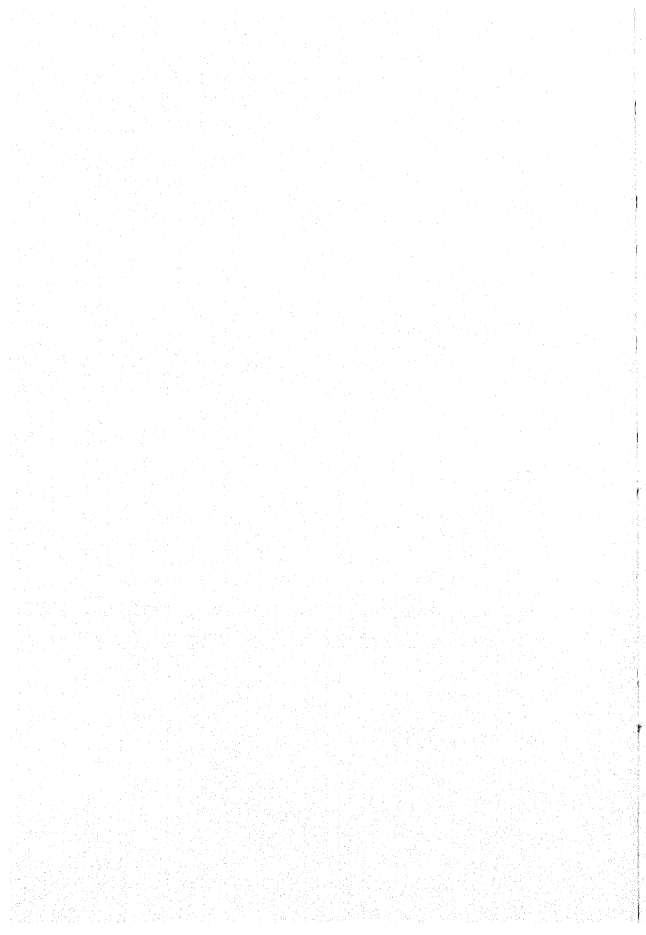
The chief exportable productions are sandal-wood and bees-wax, which are collected in larger quantities than one would be led to expect from the insignificance of the place. This is for the most part taken to Coepang, with which port a pretty constant intercourse is kept up by means of small coasting vessels. In 1836 to 1840 when the great influx of settlers to the southern colonies caused a demand for stock and grain, several vessels from Sydney obtained cargoes of maize and ponies, at this and some of the neighbouring

outports. The mountains are rich in copper-ore, but an experienced mineralogist who was sent here by the Dutch government about 20 years ago was unable to find veins that would repay the labour of working, in fact the strata have been much disturbed by volcanic action, which renders it improbable that the ore will be found in continuous veins. A mass of nearly pure native copper from the Portuguese settlements, which the writer had recently an opportunity of inspecting, appeared to have undergone fusion.

AYER BANGIS, or Ayer Bongy. (*Sumatra*). Lat. 0° 11' 42" N. Long. 99° 21' E. *Horsburg*. One of the Pepper Ports, of the west coast, formerly much resorted to by foreign traders the bay affording very secure anchorage, but since it fell under the rule of the Dutch, the produce is mostly conveyed by coasting vessels to Padang, whence it is shipped for Europe in the vessels of the Handel Maatschappij. The neighbouring territory has been made a sub-residency under Padang, the seat of the local government being Ayer Bangis, where the Assistant Resident is quartered, with a staff consisting of a vendu-meester, a receiver of customs, and a tide-waiter. Two or three "controleurs" are also stationed in the interior to superintend the cultivation, and see that the produce is all sent down to the Residency. For particulars respecting the trade, port dues and regulations &c. see PADANG.

AYER RAJA, or Ayer Haji. (*Sumatra*.) A tolerably secure roadstead, with anchorage in 6 to 8 fathoms, 2 to 2½ miles off shore, about 14 miles to the north of Indrapour Point. It was formerly resorted to by foreign traders, but now the produce is carried by coasters to Padang, whence it is shipped to Europe.

(*To be Continued.*)



THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

OBSERVATIONS ON PERAK.

By Lieut.-Colonel JAMES LOW, C. M. R. A. S. & M. A. S. C.

THE few remarks on this Malayan state which will now be offered, were chiefly made while I was employed in it, in the capacity of a political and military agent of government. These have been blended with credible native information.

Perak stretches about one hundred miles along the West Coast of the Malacca Peninsula and may be considered to have an average breadth of fifty miles. The Krian river on which there is a British post bounds it on the north, and on the south the Birnam river forms the mutual boundary betwixt it and the Selangore state. On the east it is partly divided by high hills and partly by dense jungle from Tringanu and other territories beyond these hills.

The soil is extremely fertile and the climate mild from the vicinity of the sea on one side and mountains on the other, but owing to the insidious and overbearing policy and encroachments of the Siamese, the cultivation and the population of this country have both been in a rapid decline.

The soil on the banks of the river is chiefly alluvial, with substrata of clays of a variety of shades placed over sand. The vegetable mould is, in most places which are not inundated by the river, of good depth.

The principal produce of the fields is rice, of which enough might be raised to admit of large exportations—and were the Siamese to avoid in future all interference in the government of the country, it might still prove a valuable granary for Singapore and other Settlements.

The banks of the river also exhibit the utmost profusion of the usual tropical fruits, particularly durians and mangostins, and that scarcely inferior fruit to the latter, the rambutan.

The Perak soil and climate are indeed alike favorable for the production of sugar, indigo, and other tropical plants; coffee has been partially cultivated with success and the sugar cane seems to grow to a great size without more labor than that of merely turning the soil rudely up and inserting the cuttings. But it need not be here insisted on, that the Malays are not a people capable of originating any lucrative agricultural speculation. Their numbers too are against any rapid improvement, as it is not considered that the present maximum of the Malayan population exceeds 20,000 souls. Indeed 15,000 is what I incline to rate it at. But as the government has become settled, population will increase.

The other products of this country independent of those already mentioned are:—

Gold in small quantities—although from what was learned an outlay of a little capital might render the mine much more productive.

Tin which is exchanged by the miners for goods at the rate of 80 dollars per bhar and of which two thousand bhars might be afforded yearly. The goods most in request are blue cloth of cotton, Acheen dresses, opium, tobacco, salt, salt-fish, gambier and minor articles. The richest mines lie at the sources of the small streams which feed the main river, and these rise in the high range of mountains which stretch nearly N. and S. about from forty to fifty miles inland.

They work the mines all the year, but it is not until after the harvest has been housed, that the agriculturists commence mining operations.*

The tin is gathered by both sexes and persons of all age. They work from 5 A. M. to 10, and from 3 P. M. till 6. Sometimes the concern is a general one, and is divided into shares of fifteen dollars each. But in this calculation of the produce of tin reference has only been had to the quantity yielded in quiet times. Should much encouragement be given to Chinese and other settlers no limit can be fixed to it.

* The chief mines are as follow:—At Budara, Bukkau, Sayong, Chekoos, where gold is also procured. Soongkie Beedok, where the tin is dug on the plain. Kampa, Patoong padang, where some gold dust is also obtained. The country is represented as flat. Chandariang, the ore is bartered and is afterwards smelted by the Chinese. The next place is Riah, where fine ore is dug out of the plain. Kampa, Kantar, where the ore is dug at the foot of the hills but on the plain.

The other articles of produce are rattans, wax and some excellent woods for boat building, ivory, rhinoceros horns and scented woods.

The following is the journal of the mission.*

22nd Oct. 1826. Embarked on the H. C. C. *Antelope* with the escort and followers and accompanied by the H. C. Armed Schooner *Zephyr*, the former carrying 20 guns.

26th. By the assistance of Captain Forrest's Chart alone the cruiser got into the river, for although Perak is at so short a distance from Pinang yet no vessels of the size of the *Antelope* had been accustomed for many years to pass the bar. The channel is narrow but by no means a difficult one. The river after being entered was found to be broad and deep so that the cruiser passed rapidly up by favor of wind and tide, and anchored on the 28th in 5 fathoms water below a small island. The river above this place only admits of the passage of small praus. Its banks so far are closely invested by thick jungle and, owing to the swampy nature of the ground, not now inhabited, although in more prosperous times the soil was in a great measure under rice cultivation. The Apes are now Lords of the Manor and the muskitos issue in clouds from the banks after sunset and 'all but devour forth those who are exposed to them. This pest is in a great degree got rid of by ascending the river.† There are two sorts of these troublesome insects—a small black species and a brown one. This last is bred in the Nipah palm.

* The treaty of Bankok which was entered into by the Governor-General of British India and the Emperor of Siam provides amongst other things for the independence of Perak. But the Siamese had by intrigues with disaffected chiefs in that country, got the control of it to such an extent that its Raja became powerless. The Siamese not having exhibited any intention to fulfil the treaty as regarded Perak I was deputed by government to proceed there in order to free the Raja from the thralldom under which he lay—and a Bombay armed cruiser and a party of sepoy were placed under my orders. The Siamese force was encamped on the north bank of the Perak river, and they did not await the approach of our boats and speedily evacuated their post and fled to Ligor. A month's residence with the Raja enabled me to surround him with trustworthy chiefs and to secure his independence of Siam, and this advantage is now enjoyed by his successor the present Raja (1846.)

† With respect to the localities of the river it may be stated that two streams branch off from the east bank one called Kwalah Bidor betwixt the anchorage for vessels and Bundar and the other Kantoor opposite to Rantau panjang and above Bandar. Kwalah Bidor leads by a difficult canoe navigation of five or six days up to Bidor. Here a population of from three hundred to four hundred persons used to be employed in mining for tin ore which is heavy and rich.

The Kantoor separates itself into four branches at a distance of a few miles above its conflux with the main river. These are Chandarang, Soongei Keah, Kampa and Kantar.

After four or five days paddling the canoes reach Chandarang tin mines. The country is favorable for rice.

Krort is about the same distance above Rantau panjang, with a population of four hundred souls; much tin is likewise obtained here on digging a small depth on the plain—and after the rains a large quantity of ore is found on the surface and in ravines. The miners exchange pieces of tin from the weight of a quarter of a pound up to fifty for cloth and other articles.

Kampa is two days above Rantau panjang and had a population in quiet times

30th. The Rajah having sent down covered boats the whole party consisting of forty sepoys and about as many followers and servants embarked on them and the boats we had brought with us. Captain Elwon and Dr Frith of the cruizer favored me with their company. As the native boats afforded the best shelter from the sun we preferred one of them. The largest sort is about 40 feet long by six broad, about two-thirds of the length towards the stern are covered with a pent roof of palm leaves, sufficiently high to admit a person to stand upright. The sides are formed of matted work, and the interior is divided into two apartments, the sternmost one being used as a dormitory. The deck consists of open lath work covered by mats. As such a boat or canoe is formed of a single tree, hollowed and expanded by the application of fire, the gunwale would only be about six inches from the surface of the water. They therefore add a rim about the same width composed of the koombar or central petty fibre of the leaf of a palmitte which is light and buoyant. The wood chiefly employed is the chenga. The dammar laut, which seems next in durability to the teak, is very abundant but is too heavy for ship-building.

Having passed several neat villages, we went on shore at Bandar, a large straggling village containing about 200 houses about 50 of which are inhabited by Chinese. These foreigners carry on most of the trade of the country and farm from the Rajah the opium and arrack used in the country, and most other lucrative concerns are in their hands.

The Raja had here provided a comfortable house for our reception, supposing that it was intended to await his arrival without going higher up the river. The house was built partly over the river. The stream is at this place about 200 yards wide, but it is very shallow except towards the high bank on the east side.

Poultry and other provisions were found to be much more scarce than had been apprehended—owing, as the people said, to the rapacity of the Siamese who had but a few days previous to our arrival left the country. The cattle (bovine) had been all slaughtered by them and only a few goats, buffaloes and poultry were left.

1st October. We left Bandar at 10 A. M. and advanced up the river, by help of poles, the current being too strong to admit of oars being used with effect. Four or six men walked rapidly from the prow to about the centre of the boat and by using their bambu poles all at the same time gave an impulse against the stream of

of five or six hundred souls—but the inroads of the Siamese have so distressed the people that it would be no easy matter to ascertain the population of any given place. The Raja himself has not obtained a census.

From Kampa to Kantoor is only a short journey. At the bottom of the hills near Kantoor, tin of the best quality the country produces is obtained. The inhabitants of both sexes and of all ages play at games of chance for pieces of ore or tin. The miners dig from about 5 A. M. until ten, and from three until six o'clock in the afternoon.

about 3 miles an hour to the canoe. Excepting at the sides where the banks are highest and the inner bendings of the stream, the depth rarely exceeded four or five feet. The banks are about six feet high in most places and are adorned at intervals with villages embowered in gardens of fruit-trees. The windings of this river and its numerous islands produce the most pleasing landscapes. Our pigmy fleet consisted of about fifteen boats, several of the Raja's officers having joined it.*

We then came in sight of Allaham the temporary residence of the Raja who is entitled Sri Sultan Abdullah Ma Alam Shaw. On approaching the landing place the Raja saluted us with fifteen guns—and on landing we were met by him in person with his cavalcade of sword bearers and spearmen who conducted us to his house.

The Balei or Hall of Audience was found to be in the usual rude Malayan fashion. It is about fifty feet long by thirty broad and raised in the middle for a space of fifteen yards broad along the length. On this a sofa and chairs were placed and the floor was covered with a Turkey patterned woollen carpet. The Raja's people manifested the most lively curiosity respecting us, having with the exception of those accustomed to trade to Pinang rarely seen a European.

The wife of the Raja and her female attendants were observed peeping through apertures made in the partition at the extremity of the room. The Raja treated us with the utmost civility and we then left him in order to arrange the distribution of the guard and followers and get ourselves and them housed. The town of Allaham by a series of observations made by Lieutenant Elwon at the time, lies in $4^{\circ} 11''$ N. L. and $101^{\circ} 10'$ Long. The river is here exactly two hundred and eighty yards wide. The sea is fifty miles distance by the windings of the river and about twenty in a direct line. We only went about twenty miles higher, within which space are the villages noted below :†—

* The following villages were passed—Tanjong Panaga on the east bank; Rantau panjang on the west, Kampong Ayer Matte on the same side and Kampong Kwalla Trusan on the same side.

† Paser Salla on the west bank, Kampong Gaga, opposite to it, Kampong Arun on the east bank, Salat Pulo, opposite it, Gowong Gong, on the east bank, Kalla Kombon, a small stream falling into the river from the east. Sultan Muda's village on the east bank. Tanjong Sarang Dindang, on the same side. Kwalla Pari opposite. Pulo Tiga and a village on the east, Kampong on the east. Amina's Tomb on a low sandy beach on the east. This lady was one of the Royal family. Kampong a village on the right above this place I did not ascend but the following places were described to me by natives and by Chinese :—

Bota. The Raja formerly resided here. It is a full days tracking from Allaham and in prosperous periods contained about five hundred inhabitants. Above Bota and after having passed Pulo Pisang is the village of Layang Layang containing formerly from two to three hundred people. Several tribes of Sakai or aborigines in the neighbourhood [See *the Sakai of Perak*, ante p. 429.] The traveller then reaches Budara where there are tin pits which are worked after the harvest. The ore is reckoned inferior to that of Kantu and Kampa, the village of Maroh is included in Budara and they may united contain 200 persons. Passing Sadang

The Raja is a very quiet person and very indulgent to his subjects. The routine of his life admits not of much variety. He hears complaints and settles business early in the morning, breakfasts about 10, and dines about sun-set or later.

The people who inhabit the interior have simple and rather pleasing manners. They are strict Mussulmans, saying prayers three or four times a day and on the weekly fast days the Raja assembles all his officers and attendants in his Mosque and repeats along with his Imams and them select passages from the Koran, with a fervour which is rendered ludicrous by the odd gestures by which it is accompanied. As they become warmed by their devotion they nod and shake their heads violently in concert. One who has not been accustomed to such an exercise would be rendered quite giddy by it. They did not seem the least displeased at my closely observing them. On leaving the mosque every one goes about his common occupation.

One day during my stay the Raja gave a feast to his people, it being an anniversary. A long and slightly built shed was prepared as a kitchen. Here five or six huge iron pots were placed over fires. In each of these about thirty fowls were boiled.

They live however very plainly, fish, rice and a little seasoning with fruits, being their common food. Very few of them will taste wine, and none ardent spirits.

The Raja and his people dress themselves in very ordinary garbs, except on occasions of ceremony and at these periods they are only clothed from the waist upwards, besides having on the usual nether garments. The women seem partial to sky blue cotton, and can dress themselves with considerable neatness. They

the canoes reach Blanja on the third day, supposing that there is no great haste required. The cocconut tree grows plentifully here, and the population before the Siamese and Salangorians distracted the country averaged 500 souls.

On the fourth day Bakau where there are tin mines at the foot of hills may be visited, as also Sirowan, Samut and Puel, and a halt made at Goar which contained formerly about 300 souls.

On the fifth day the river is found to grow narrow and very winding. Pass Paket, Sangan and Mundora where much rice is cultivated, also Boaya and Bundong Kring, and halt at Sayong where there are about 100 houses and where ore tin is dug.

The sixth day brings the traveller to Chigagala on the east bank.

The seventh to Jambie in a few hours. Hence by a land route of three days the river Iju may be reached and a quick passage effected through it to the Kreaan river and by it to the sea.

A few hours tracking above Jambie brings him to a spot called Kundarang where the river is divided into two branches--the north branch is not navigable by canoes. The route to the Siamese Provinces lies along its banks. The south east branch is much impeded by rapids. Proceeding up it the canoes stop at Kwalla Kangsau or at Kinderong close above it. Here there is a population in quiet times of about five hundred souls and a good deal of petty traffic is carried on. Four hours higher up is Kulin where forty or fifty people reside. The river is here rocky and narrow and previous to the Siamese invasions afforded abundance of buffaloes, poultry, goats and rice, what state it may be in now was not learned.

From Quallah Kangsau there is an elephant road to Trong. The first march is to Padang Assun. The second to Pondoh, chiefly across rice grounds. Here the population may be rated at 1,000.

however display a good deal of the upper part of the body, only throwing their upper dress which is a narrow piece of cloth carelessly across the breast. They are well featured when young, but, with the exception of these in the highest class, soon lose their attractions owing to the labor they have to perform in the sun. Many appeared to have as fair complexions as the Chinese.

It was particularly remarked by all our party that the distinguishing characteristic of the Hottentot women, although in a less degree, is very generally a *prominent* one amongst the females of Perak. They are very cleanly in their habits—bathing twice a day in the river. For this purpose they row themselves in canoes to a shallow part in the midst of the stream.

The Raja and his chief men have floating houses in which they can remove to a distance. The raft or boat of the former is known by two poles held upright by persons appointed to the duty the one in the prow the other at the stern.

The Raja accepted on two or three occasions my invitation to tea—when he partook of coffee, biscuit and confections. We amused him with music particularly that of the violin, Captain Elwon being a superior performer as an amateur. One or two of his relations shewed themselves tolerable proficient, but although by no means deficient in ear they appear to have inferior skill to the Malays of Malacca and other Eastern Settlements.

The airs they played had considerable melody but were on a low key and uniformly plaintive. They were excessively delighted however with the brisk airs of Europe. It would be superfluous here to describe Malayan instruments. The large gong at the Raja's house, which was struck at intervals during the night, harmonized by its deep and solemn tone with the sequestered situation in which it was heard.

The Raja having requested my presence at the ceremony of administering the oath of allegiance to some ministers and officers, I accordingly attended at the hall. A large concourse of people were assembled. The chiefs and their attendants were seated on carpets and mats on the floor. In front of the sofa on which the Raja sat, were arranged the following articles, a low stool on which lay the Koran, and a large jar of consecrated water, on the top of which was a model of a crown. The Raja advancing dipped the regalia, consisting of armour, in the water, and placed them against a pillow.

The new ministers and other officers then approached and had the oath tendered to them. This oath consists of two parts and is very short. The first part is the promise of fidelity, the second imprecates every calamity to afflict the juror and his family to remote generations should he betray the trust and confidence reposed in him. The characteristic levity of the Malayan disposition was not even repressed by this solemn act, for the Raja and some of the chiefs indulged their mirth occasionally, to the evident

mortification of some of his chiefs then present whose gravity was ludicrously contrasted with it. Several of those who had intrigued with the Siamese betrayed evident symptoms of alarm. Indeed under a less indulgent Prince they must have lost their heads. The ceremony was concluded by a discharge of fifteen guns—after this we partook of some preserved fruits and confections composed of rice, flour and sugar and having shaken hands with the Raja and his principal men, a custom they adopt most heartily, we returned to our temporary home. The Raja presented to me the Kris which he had hitherto worn and a handsome spear—and received in return two plated table candlesticks and shades with some silver plate and inferior articles.

Having staid nearly a month in the country, and the object of the mission having been effected, we left Allahan and returned to the vessel. The simplicity, frankness, and social disposition of the people made an impression upon my mind which cannot be speedily effaced. They have either greatly changed since the days of Dutch influence, or have been purposely misrepresented. Their chief faults are indolence and disunion, the latter having arisen from Siamese interference and oppression.

The Malays residing at several of the sea ports in Perak are somewhat obnoxious to the charge of being in league with pirates—but besides being of quite different habits from those of the interior, they had not perhaps the means of preventing pirates occupying ports in the coast. The pirates were expelled after my return to Pinang from Korau by a detachment sent under my command and the coast has been less molested since from that quarter. Those coming from other parts of the straits can only be opposed by obvious and strong measures imperative on the chiefs who harbour them.

The whole require only the example and protection of a civilized and humane European nation to ameliorate their condition and by rescuing them from the iron gripe of Siamese rule, to induce settled aims of industry and to raise them in the moral scale.

SOME ACCOUNT OF THE ORDER OF BUDDHIST MONKS
OR TALAPOINS.*

By M. BIGANDET.

3. *Ordination or Ceremonies observed at the admission into the Society.*

I will now explain rather minutely and describe as accurately as possible the various ceremonies performed on the occasion of the promotion of a Shung to the rank of Talapoin or professed member. It must be borne in mind that this ordeal through which he has to pass, or ordination, as we may aptly perhaps term it, which he has to receive, does not confer any peculiar character or give any special spiritual power to the admitted candidate, but it merely initiates him to a more perfect course of life, and makes him a member of a society composed of men aiming at a higher degree of sanctity or perfection. The entrant must be provided for the ceremony with a dress such as is used in the community; he ought to be found exempt from certain moral and physical defects that would render him unworthy of being admitted a member of the order; he ought to pledge himself to rigorous observance of certain regulations which form the constitutions of the society.

The place where the ceremony is to be performed is a hall, measuring twelve cubits in length, not including the space occupied by the Talapoins whose presence is required on the occasion. The assembly of Talapoins or Rahans must include 10 or 12 members at least, if the ceremony be performed in towns, and 4 or 6, if it is in the country. He who presides over the ceremony, is called Upitze, meaning master or guide, he has an assistant, named Cambanca Tsaio, whose office it is to read the sacred Cambanca or book of ordination, to present the candidate to the Upitze and his assembled brethren, to put to him the requisite questions as prescribed by the ritual, and to give him instruction on certain points, the ignorance of which would prove highly prejudicial to, and greatly offensive in, a professed member of the order. All the regulations prescribed, and the ceremonies observed on the occasion are contained in a book written in Pali, the sacred language. This book may be aptly termed the Ritual of the Buddhists. It is held in great respect, and some copies written on sheets of ivory, with gilt edges, are truly beautiful and bespeak the high value Buddhists set on the work. The copyists have retained the use of the old square Pali letters, instead of employing the circular Burmese character. All the ordinances and prescriptions in this book are supposed to have been promulgated and sanctioned by no less an authority than Gaudama himself, the last Budh, and the acknowledged originator and founder of the Talapoinic order. Hence the high respect and profound veneration all Buddhists bear to it

* Continued from p. 132.

contents. The candidate previously to the beginning of the ceremony must be provided as aforesaid with his Latta and Hiwaran. The Latta is an open mouthed pot of a truncated spheroidal form wherein each member of the brotherhood must receive the alms which every morning he goes to collect in the streets.

The Hiwaran or yellow garment, the only dress becoming a Rahan, is composed first of a piece of cloth, bound to the loins with a leathern girdle and falling down to the feet, second of a cloak of rectangular form covering the shoulders and breast and reaching somewhat below the knee, and third of another piece of cloth of the same shape but which is folded many times and thrown over the left shoulder, the two ends hanging down before and behind. Another article always required for completing a full dress of the Rahan, is the Arvan, a sort of fan made of palm leaves set in a light oval shaped wooden frame with a serpentine handle somewhat resembling in appearance the letter S.

The Burmese translator of the Pali text has interpolated his work with many remarks tending to elucidate the text and to shew the various motives and reasons that induced Gaudama to decree and publish as obligatory the regulations laid down in the sacred Cambanca. It must be borne in mind too that the omission of some essential parts of the ceremonies annuls *de facto* the ordination, whilst the non-compliance with others of minor importance though not invalidating the act of admission into the sacred family, entails sin upon all the members of the brotherhood, assembled *ex-officio* for the ceremony. The reader must be prepared to observe many points of close resemblance between the ceremonies observed at the reception of a Monk, or the ordination of a Priest, and those performed in those parts, on the solemn occasion of admitting a candidate to the dignity of Patzin.

The preparations for the solemnity being completed, and the assembled fathers having occupied their respective seats under the Upitze, the candidate is introduced into their presence attended by the assistant or reader of Cambanca, carrying his Latta and yellow garments. He is enjoined to repeat distinctly thrice the following sentence to the Upitze, kneeling down, the body bent forward with his joined hands raised to the forehead. "Venerable President, I acknowledge you to be my Upitze:—These words having been three times repeated, the assistant addressing himself to the candidate says, "Dost thou acknowledge this to be thy Latta, and these, thy sacred vestments?" To which he audibly answers: "yes."

Thereupon the translator remarks that on a certain day, a Rahan that had been ordained without being supplied with either *Latta or Hiwaran*, went out quite naked, and received into the palms of his joined hands the food offered to him. So extraordinary, one would have said so unedifying, a proceeding having been mentioned to Gaudama, he ordered that thenceforward no

Rahan should ever be ordained unless he had been previously interrogated regarding the Latta and the vestments. Any disobedience to this injunction would entail sin on the assembled fathers.

The assistant having desired the candidate to withdraw from the assembly to a distance of twelve cubits, and the latter having complied with his request, he turns towards the assembled fathers and addresses them as follows:—"Venerable Upitze and you brethren herein congregated, listen to my words: the candidate who now stands in a humble posture before you, solicits from the Upitze the favor of being honored with the dignity of Patzin. If it appears to you that every thing is properly arranged and disposed for this purpose, I will duly admonish him. O candidate be attentive unto my words and beware lest on this solemn occasion thou utterest an untruth or concealest aught from our knowledge. Learn that there are certain incapacities and defects which render a person unfit for admittance into our order. Moreover, when before this assembly thou shalt be interrogated respecting such defects, thou art to answer truly, and declare what incapacities thou mayst labor under. Now this is not the time to remain silent and decline thy head; every member of the assembly has a right to interrogate thee at his pleasure and it is thy bounden duty to return an answer to all his interrogations.

"Candidate, art thou affected with any of the following complaints? the leprosy or any such odious maladies? Hast thou the scrofula or other similar complaints? Dost thou suffer from asthma, or coughs? Art thou afflicted with those complaints that arise from a corrupted blood; by madness or the other ills caused by giants, witches or evil nats of the forest and mountains? To each separate interrogation he answers: "From such complaints and bodily disorders I am free." "Art thou a man?" "I am" "Art thou a true and legitimate son?" "I am." Art thou involved in debts, or the bounden man and underling of some great man?" "No, I am not." "Have thy parents given consent to thy ordination?" "They have given it." "Hast thou reached the age of twenty years?" "I have attained it." "Are thy vestments and sacred Latta prepared?" "They are." "Candidate what is thy name?" "My name is Wago," meaning metaphorically a vile and unworthy being. "What is the name of thy Master?" "His name is Upitze."

The assistant having finished the examination turns his face towards the assembled fathers and thus proceeds: "Venerable Upitze and ye assembled brethren, be pleased to listen to my word: I have duly admonished this candidate who seeks from you to be admitted into our order. Does the present appear to you a meet and proper time that he should come forward? If so, I shall order him to come nearer." Then turning to the candidate he bids him to come close to the assembly and to ask their consent to his ordination. The order is instantly complied with

by the candidate who, having left behind him the distance of 12 cubits that separated him from the fathers, squats on his heels, the body bending forward and the hands raised to his forehead, and says: "I beg O fathers from thy assembly to be admitted to the profession of Rahan. Have pity on me, take me from the state of layman, or that of sin and imperfection, and advance me to that of Rahan, a state of virtue and perfection." These words must be repeated three times.

The assistant then resumes his discourse as follows: "O ye fathers here assembled, hear my words. This candidate humbly prostrated before you begs of the Upitze to be admitted into our holy profession; it seems that he is free from all defects, corporeal infirmities as well as mental incapacities, that would otherwise debar him from entering our holy state, he is likewise provided with the Latta and sacred vestments, moreover he has asked in the name of the Upitze permission of the assembly to be admitted among the Rahans. Now let the assembly complete his ordination. To whomsoever this seems good, let him keep silence; whosoever thinks otherwise let him declare that this candidate is unworthy of being admitted." And these words he repeats three times. Afterwards he proceeds:—"since then none of the fathers object, but all are silent, it is a sign that the assembly has consented, so therefore be it done. Let therefore this candidate pass out of the state of sin and imperfection, into the perfect state of Rahan, and thus, by the consent of the Upitze and of all the fathers, let him be ordained."

And he further says, "The fathers must note down under what shade, on what day, at what hour, and in what season, the ordination has been performed."

This being done, the reader of the sacred Cambanca adds: "Let the candidate attend to the following duties which it is incumbent on him to perform, and to the faults hereafter enumerated which he must carefully avoid.

"1. It is the duty of our brotherhood each to beg for his food with labor, and with the exertion of the muscles of his feet, and through the whole course of his life he must gain his subsistence by the labor of his feet. He is allowed to make use of all the things that are offered to him in particular, or to the society in general, that are usually presented in banquets, that are sent by letter, and that are given at the new and full moon, and on festivals. O candidate all these things you may use as your food." To this he replies: "Sir I understand what you tell me." The assistant resumes his instructions:—"2nd. It is part of the duty of a member of our society to wear, through humility, yellow clothes, made of rags thrown about in the streets, or among the tombs. If however by his talents and virtue, one procures for himself many benefactors, he may receive from them for his habit the following articles, cotton and silk, or cloth of red and yellow wool." The

elect answers, "As I am instructed so I will do." The instructor goes on—"3rdly Every member of the society must dwell in houses but under the shade of lofty trees. These dwellings may be made of wood, bricks and stones, with roofs adorned with turrets or spires of pyramidal or triangular form." After the usual answer, the instructor proceeds—"4thly. It is incumbent upon an elect to use as medicine the urine of the cow, wherein the juices of lemon or other sour fruits have been poured. The following articles may also be used medicinally,—butter, cream, and honey. O Elect being now admitted into our society, it shall be no longer lawful for you to indulge in carnal pleasure whether with yourself or animals. He who is guilty of such sin can no longer be numbered among the saints. Sooner shall the severed head be joined again to the neck and life be restored to the breathless body, than a Patzin who has committed fornication recover his lost sanctity. Beware therefore lest you pollute yourself with such a crime.

"Again: it is unlawful and forbidden to an elect to take things that belong to another or even to covet them although their value should not exceed about 12 cents ($\frac{1}{4}$ of a tical). Whoever sins even to that small amount is hereby deprived of his sacred character and can no more be restored to his pristine state than the branch cut from the tree can retain its luxuriant foliage and shoot forth buds. Beware of theft during the whole of your mortal journey.

"Again, an elect can never knowingly deprive any living being of life or wish the death of any one, how troublesome soever he may prove. Sooner shall the cleft rock reunite so as to make a whole than he who kills any being, be readmitted into our society. Cautiously avoid so heinous a crime.

"Again, no member of our brotherhood can ever arrogate to himself extraordinary gifts, or supernatural perfections, or through vain glory, give himself out as a holy man, such for instance as to withdraw into solitary places and on pretence of enjoying extacies like the Ariahs, and afterwards presume to teach others the ways to uncommon spiritual attainments. Sooner will the lofty palm tree that has been cut down, become green again, than an elect guilty of such pride be restored to his holy station. Take care for your self, that you do not give way to such excess." The elect replies as before, "As I am instructed so I will perform." Here ends the ceremony. The elect joins the body of Rahans and withdraws in their company to his own Kiaong.

It has already been mentioned that the ceremony or ordination does not impart any spiritual character inherent in the person of the elect, but it is a mere formality he has to go through to enter into the family of the perfect. This admitted member is not linked indissolubly to his new state, he is at liberty to leave it when it pleases him and reenter into secular life. He may moreover, if inclined, apply for re-admission into the order, but he must go through the same ceremonies that were observed on his first ordi-

nation. It is not very common to meet among the Burmese Rahans men who from their youth have persevered to an old age in their vocation. Those form the rare exceptions, are very much respected and held in high consideration during their life time and the greatest honors are lavished upon their mortal remains after their demise. They are often designated by the honorable denomination of "Pure from their infancy."

4. *Rules of the Order.*

The obligations inherent to the dignity of Patzin, the multifarious duties prescribed to the Budhistic Monks, are contained in a Book called Patimuk, which is properly speaking the Manual of the order and the *Vade Mecum* of every Talapoin, who is obliged to study it with great care and attention. It is even ordered that on festival days a certain number of Recluses shall meet in a particular place to listen to the reading of that book, or at least a part of it, that every brother shall have always present to his mind the rules and regulations of his profession and be prompted to a strict observance of all the points they enforce. This injunction is a very proper one, since it is a fact confirmed by the experience of all ages, that relaxation and dissipation find their way into all communities at the very moment the rules are but partially lost sight of. So attentive to this duty are some Talapoins that they can repeat by heart all the contents of Patimuk. I have read the book with a good deal of attention. Many wise and well digested rules are to be met with here and there, but they are merged in a heap of minute, not to say ridiculous and childish, details not worth translating. In order, however to give a correct and distinct outline of the mode of life, manners, habits and occupations of the Talapoins, I will extract from it all that has appeared to be interesting and calculated to attain the above purpose, leaving aside the incongruous mass of useless rubbish.

Every member of the order, on his entering the profession, must renounce his own will and bend his neck under the yoke of the rule. So anxious indeed has been the framer of its statutes to leave no room or field open to the independent exertions of the mind, that every action of the day, the manner of performing it, the time it ought to last, the circumstances that must attend it, all have been minutely regulated. From the moment a Rahan rises in the morning to the moment he is to go to enjoy his natural rest in the evening, his only duty is to obey and follow the ever subsisting will and commands of the founder of the society. He advances in perfection proportionately to his fervent compliance with his injunctions and to his consciously avoiding all that has been forbidden by the sagacious legislator. Any trespass of one article of the rule constitutes a sin. The various sins a Rahan is liable to commit are comprised under seven principal heads. 1st, the Paradzekas, 2nd, the Thinga-de-cist, 3rd, the Patzei, 4th, the

Toolladzi, 5th, the Duko, 6th, the Dupaci and 7th, Pati-de-kani. These seven kinds of sins are subdivided and multiplied to the number of 229, which constitute the total amount of sins either of commission or omission that a Talapoin may commit during his remaining a member of the pious Fraternity. The Paradzikas are four in number,—fornication, theft, killing and vain-glory in attributing to one's self high attainments in perfection : a Recluse on the day of his admission is, as before related, warned never to commit those four sins under the penalty of being excluded from the society. They are irremissible in their natures ; he who is guilty of one of them can no longer be a Rahan. All other offences are subjected to the law of confession and can be expiated by virtue of the penances imposed upon the delinquent after he has made a public avowal of his sin.

The reader will be no doubt startled by the unexpected information that this practice of confession has been established among the Talapoins and is up to this day observed, though very imperfectly, by every fervent Recluse. Some zealous Patzins will resort to the practice once and sometimes twice a day. Here is what is prescribed on this subject in the Weni, or book of scriptures containing all that relates to the Talapoins, Patimuk being but a compendium of it. When a Rahan has been guilty of a violation of his rule he ought immediately to go to his superior and, kneeling before him, confess his sin to him. Sometimes he will do this in the *thein* (a place where the brothers assemble occasionally to speak on religious subjects or listen to the reading of the Patimuk) in the presence of the assembly. He must confess all his sins, such as they are, without attempting to conceal those of a more revolting nature or lessening any aggravating circumstances. A Penance is then imposed, consisting of certain pious formulas to be repeated a certain number of times during the night. A promise must be made by the penitent to refrain in future from such trespasses. This extraordinary practice is observed now, one would say, *pro forma*. The penitent approaches his superior, kneels down before him, and having his hand raised to his forehead, says :—" Venerable superior, I do accuse here all the sins that I may be guilty of, and beg pardon for the same." He enters upon no detailed enumeration of his trespasses, nor does he specify anything respecting their nature and the circumstances attending them. The superior remains satisfied with telling him :—" Well, take care lest you break the regulations of your profession, and endeavour to observe them hereafter with fidelity." He dismisses him without inflicting any penance on him, so that an institution so well calculated to put a restraint and a check upon human passion, so well fitted to prevent man from occasionally breaking commands given to him, or at least from slumbering into the dangerous habit of doing it, is now by the

want of fervor and energy in the heads of that body, reduced to be no more than an useless and ridiculous ceremony, a mere shadow of what is actually prescribed by the Weni.

The punishments inflicted for the repeated transgression of any points of the rule, are, generally speaking, of a light nature and seldom or never corporeal, as flagellations &c. &c. The superior sometimes orders a delinquent to walk through the yard during the heat of the day for a certain time, to carry to a distance a certain number of baskets full of sand, or a jug of water,—meekness being a virtue most becoming a Recluse forbids the resort to penances of a more severe nature.

Humility, poverty, self-denial and chastity are to him who has received the order of Patzin, cardinal and most essential virtues which he ought to practice on all occasions. He must, in all his exterior deportment, give unequivocal marks of his being always influenced by the spirit they inspire. The framer of the rules and regulations of the order seems to have had no other object in view, but that of leading his brethern by various ways and means, to the practice of these virtues, and inculcating on their minds the necessity of attending to the observances prescribed for this purpose. It is from this point we must view the statutes of the Fraternity, in order to understand them well and rightly, and appreciate them according to their worth and merit. We would indeed form a very erroneous opinion of institutions of past ages if we were to examine them, to praise or blame them, without a due regard being paid to the spirit that guided the legislator, and to the object he aimed at when he laid them down. Our own ideas, customs, manners and education will often dispose us to disapprove at first of institutions made in former ages amongst nations differing from us in all respects, under the pretext that they are not such as we would have them to be now, making unawares our own prejudices the standard whereby to measure the merit or demerit of all that has been established previously to our own times. The institutions of the middle ages, a celebrated modern historian has said, are intelligible to him that has entered into the spirit of those days, and who thinks, feels and believes as did the people of those by gone centuries. This observation holds good to a certain extent and *mutatis mutandis* in respect to Buddhistic institutions. The whole religious system must be understood; the object the founder of the order had in view ought to be distinctly remarked and always borne in mind, ere we presume upon the fitness or unfitness of the means he has employed for obtaining it.

For humility's sake every Talapoin is bound to shave every part of his body. In complying with this regulation he must consider that the hairs that are shaved off, are useless things, serving merely for the purposes of vanity, and he ought to be as unconcerned about them as a great mountain which has been cleared of the trees

bare-footed, except in case of his labouring under some infirmity or for some other good reason; he is then allowed to use a certain kind of plain and unornamented slippers, the shape, color and dimensions of which are carefully prescribed by the rule. When the Rahans travel from one place to another they are allowed to carry with them the ovanus or fan made of palm-leaves, and a common paper umbrella to protect their bare head from the inclemency of the weather or the heat of the sun. Their dress consisting as above mentioned of three parts is as plain as possible. According to the Patimuk each separate part must be made of rags picked up here and there, and sowed together by themselves. This regulation, though disregarded by many, is to a certain extent observed by the greater number, but in a manner rather contrary to the spirit, if not to the letter, of the rule. On their receiving from benefactors a piece of silk or cotton, they cut it in several small square parts, which they afterwards contrive to have stitched in the best way they can, so as to make their vestments according to the prescription of the statutes. The vestment must be of one color, yellow in those countries when Mahomedanism does not prevail. The yellow color is an indicia of mourning as the black is amongst most of the nations of Europe.

Seven articles are considered as essential to every member of the holy family, viz:—the kowot, thingbain, dugoon, (the three pieces constituting his vestment), a girdle, a latta, a small hatchet, a needle, and a small apparatus for straining the water he drinks. The whole number of articles he is permitted to use and possess amount to sixty: they are all plain, common, almost valueless, offering no incentive to cupidity, and leaving him who is only possessed of them in the humble state of strict poverty.

The possession of temporal goods is strictly forbidden to the Rahans, as calculated to hinder them from meditating upon the law, and attending to the various duties of the profession. Nothing indeed opposes a stronger barrier to the attainment of the perfect abnegation of self and a thorough contempt for material things, than the possession of worldly property. Hence a true Rahan has no object which he can, properly speaking, call his own. The Kiaong wherein he lives has been built by benefactors and is supplied by them with all that is necessary or useful to him. Food and raiment are procured for him without his having to feel concerned about them. The pious liberality of his supporters assiduously provides for his wants. But it is expected that he shall never concern himself with worldly business or transactions of what nature soever they may be. He can neither labor, plant, traffic nor do any thing with the intent of deriving therefrom any profit; agreeably to the maxim "sufficient is to the day the evil thereof," the Rahans cannot make any provision, preserve any food, or lay up any stores for the time to come. He must trust in the never failing generosity, and ever watchful attention of his supporters for his

daily wants and it must be said to the praise of the Budhists he is seldom disappointed in the reliance he places on them. That he may be more effectually debarred from a too easy and frequent use of the things of first necessity, a Talapoin is bound to go through a tedious ceremony called Akat on presentation before he can licitly touch any thing. When he has occasion for food, drink or any thing else he turns to his disciples and tells them to do what is lawful, whereupon they take the thing he may want and present to him with these words:—this is lawful. Then the Rahan takes it into his own hands, and eats it or lays it by as may suit his convenience. When the thing is presented the disciple must be at a distance of some cubits, otherwise the recluse is guilty of a sin and if what he receives is food, he commits as many sins as he eats mouthfuls. Gold and silver being the two greatest feeders of covetousness, the rule forbids Talapoins to touch them, and *a fortiori* to have them. But on this point however human covetousness has broken through the thorny barrier the framer of this statute has wisely devised for effectually protecting recluses from its dangerous allurements. Gold and silver are not indeed touched by the pious devotees, but the precious and dazzling metals are conventionally handed to the disciples who put them into the box of the superior, or their father, who bowing obsequiously to the letter of the rule, whilst he disregards its spirit, covers his hands with a handkerchief and without scruple receives the sum that is offered to him. It would be unfair to pass a general and sweeping sentence of condemnation for covetousness upon all the members of the fraternity. There are some whose hands have not been polluted by the handling of money and whose hearts have always been, we may say, strangers to the cravings of the *auri sacra fames*; but it cannot be denied that many among them are insatiable in their lust for riches, and not unfrequently ask for them.

No Rahan can ever ask for any thing; he is allowed to receive what is spontaneously offered to him. In this point too, the spirit of the rule is frequently done away with; the recluse will not ask an object he covets (I beg his pardon for making use of such a term) in direct words, but by some indirect means or circuitous ways, he will give significantly to understand that the possession of such an object is much needed by him, and that the offering of it would be the source of great merits to the donor. In this manner he moves the heart of his visitor, and soon kindles in his breast a desire to present the thing, almost as eager as his own is to receive it.

Celibacy is strictly enjoined on every professed member of the society. On the day of his reception, he is solemnly warned by the instructor never to do any thing contrary to that most essential virtue. The author of the order and statutes has entered on this subject into the most minute details and prescribed a multitude of regulations tending to fortify the Rahans in the accomplishment of the solemn vow they have made, and to

remove from them all occasions of sin, even the remotest. We must give him credit for an uncommon acquaintance with the weakness of human nature, as well as with the violence of the fiercest passion of the heart, since he has labored so much to strengthen and uphold the former and bridle the latter by every means his anxious mind could devise. He was deeply read in the secrets of the human heart, and knew well that the surest tactics for carrying on successfully the warfare between the spirit and the flesh, consist in rather avoiding carefully the encounter of the enemy, and skillfully manœuvring at a distance from him, than in boldly encountering him in the open field. Hence the repeated injunctions to shun all the occasions of sin. The Talapoins are forbidden to stay under the same roof or to travel in the same carriage and boat, with women: they cannot receive anything from their hands, and to such a height are precautions carried that they are not permitted to touch the clothes of a woman, or caress a female child, however young, or even handle a female animal.* When visited in their dwellings by women who resort thither for the purpose of making offerings, or listening to the recital of a few passages of the law books, they must remain at a great distance and surrounded by some of their disciples. The Talapoins are reminded to look upon the old ones as mothers and upon the young as sisters. The conversation must be as short as decency allows, and no useless or light expressions be ever uttered. On the festival days when crowds of people, men and women, go to the *Kiaongs* to hear the *Tara* or some parts of the law repeated—the *Rahans*, arrayed in front of the congregation, keep their fans before their faces all the while, lest their eyes should meet with any dangerous objects. Much greater precautions are still required in their intercourse with the *Rahanesses*, a sort of female recluses, whose institute is greatly on its decline in those parts of Burmah I have visited. For better securing the observance of continence a Talapoin never walks out of his monastery, or enters a private dwelling, without being attended by a few disciples. Popular opinion is inflexible and inexorable on the point of celibacy, which is considered as essential to every one that has a pretention to be called a *Rahan*. The people can never be brought to look upon any person as a priest or minister of religion unless he live in that state. Any infringement of this most essential regulation on the part of a Talapoin, is visited with an immediate punishment. The people of the place assemble at the *Kiaong* of the offender, sometimes driving him out with stones. He is stripped of his clothes, and often public punishment, even that of death, is inflicted upon him by order of government. The

* In treating of the precept of never touching women it is added in the *Wini* that this prohibition extends to one's own mother; and even should it happen that she fall into a ditch, her son if a Talapoin must not pull her out. But in case no other aid is near at hand, he may offer her his habit or a stick to help her out, but at the same time he is to imagine that he is only pulling out a log of wood.

poor wretch is looked upon as an outcast, and the woman whom he has seduced, shares in his shame, confusion and disgrace. Such an extraordinary opinion, so deeply rooted in the mind of a people rather noted for the licentiousness of their manners, certainly deserves the attention of every diligent observer of human nature. Whence has originated among corrupted and half civilized men, such a high respect and profound esteem for so exalted a virtue? Why is its rigorous practice deemed essential to those who professedly tend to an uncommon degree of perfection? Owing partly to the weight of public opinion, and partly to some other reasons, the law of celibacy, externally at least, is observed with a great scrupulosity, and a breach of it is a rare occurrence. As the rule in this respect binds the Talapoin only as long as he remains in the profession, he who feels his moral strength unable to cope successfully with the sting of passion, prefers leaving the fraternity and returning to a secular life when he can safely put an end by a lawful alliance to the internal strife, rather than exposing himself to a transgression which is to entail upon him consequences so disgraceful.

The sagacious legislator of the Budhistic religious order, pre-occupied with the idea of elevating the spiritual principle above the material one, and securing to reason a thorough control over bodily appetites, has prescribed temperance as a fundamental virtue, essential to every Rahan. In common with all their fellow religionists, the Talapoins are commanded to abstain from the use of spirituous liquors or any intoxicating substance. The time allotted for taking their meals extends from day-break to the moment the sun has reached the middle of its course: but as soon as the luminous globe has passed the meridian, the use of food is strictly interdicted. A stomach more or less loaded with nutritive substances taken in the evening, weighs down the body, enervates the energies of the soul, clouds the intellect and renders a man rather unfit to devote himself to the high exercises of study, meditation and contemplation which ought to be the principal occupations of a fervent Rahan. He is allowed to make two meals in the forenoon, but it is expected that he will eat no more than is required to support nature. To stifle the craving of gluttony and eradicate immoderate desire he ought to repeat frequently within himself the following sentence: "I eat this rice not to please my appetite, but to satisfy the wants of nature;" just as he says when he puts on his habit: "I dress myself not for the sake of vanity, but to cover my nakedness." Rice and vegetables are, according to the statutes, the staple food of the Talapoins, the use of fish and meat is tolerated and now a daily prevailing custom has rendered the practice a lawful one. Strictly speaking a Talapoin must remain satisfied with rice and various sorts of boiled vegetables he has received in his Latta during his morning perambulations through the streets of the place.

As it happened among the Romans that the law repressing convivial sumptuousness and luxury, proved an ineffectual barrier against gluttony and other passions, so amidst Talapoins the strict regulations prescribing a poor and unsavoury diet have been obliged to yield before the tendencies to satisfy the ever increasing demands of appetite. Most of the Talapoins give to dogs or to boys who live in the monastery the vulgar food they have begged in the streets, and feed on aliments of better quality supplied to them regularly by some in easy circumstances who call themselves supporters of the Kiaong and of its inmates. The ordinary fare consists of rice and several small dishes for seasoning the rice, in which are some little pieces of flesh dressed according to the culinary abilities of the cooks of the country, which are not certainly of the highest order. To this are added some of the best fruits of the season accompanied by sweetmeats which female devotees are wont everywhere so carefully to prepare and so fondly to offer to those who are the subjects of their pious admiration and respect. The aliments supplied to the humble recluses are of the best description for the country they live in; one would say, that they live on the fat of the land. The most delicate rice, the finest fruits, invariably find their way to the Monasteries. But withal they are not to be charged with the sin of intemperance or gluttony. The quantity of food they may take is also an object of regulation as well as the very mode of taking and even of swallowing it. Each mouthful must be of a moderate size—a second ought not to be carried to the mouth before the first has been completely disposed of by the masticatory process and found its way down through the œsophagus passages. The contrary would be considered as gluttony and an evident sign that the eater has something else in view besides appeasing the mere wants of nature. It is rather an amusing sight to gaze at the solemn indifference of a Talapoin taking his meal. One would be tempted to believe that he is reluctantly submitting to the dire necessity of ministering to the wants of a nature too low and material. The rule forbids Talapoins to eat human flesh, or that of the monkey, snake, elephant, tiger, lion or dog. As a mitigation of the severity of the disciplinary regulation prohibiting the recluses from taking any food from 12 o'clock in the day until the next morning, the use of certain beverages is permitted during the time, such as cocoanut water, the juice of sugar-cane and other refreshing draughts. The rule being silent regarding the consumption of the betel leaf, and other ingredients constituting the *delicious* mouthful for masticatory purposes, the Talapoins avail themselves largely of the liberty left to them on this subject. The quantity of betel and other accompanying substances which they consume is truly enormous. These articles hold a pre-eminent place amongst the objects that are presented to the inmates of monasteries. The red black substance adhering to the teeth and occasionally accumulating on the extremities of the mouth, the incessant motion of the

lower jaw, the stream of reddish spittle issuing frequently from the lips of the Talapoins are unquestionable proofs of both their ardent fondness and copious consumption of that harmless narcotic. Except during the short moments allotted for taking meals, a Rahan's mouth is always full of betel and the masticating or chewing process is incessantly going on.

A great modesty must distinguish a member of the family of the perfect from a layman: that virtue must shine forth in his countenance, demeanor, gait, and conversation. Any sign on his face indicating the inward action of anger or any other passion, is found unbecoming in a person whose composedness and serenity of soul ought never to be disturbed by any inordinate affection. He never speaks precipitately or loudly lest it might be inferred that passion rather than reason influences him. Worldly or amusing topics of conversation are strictly interdicted either with his brethren or laymen. The rule requires him to walk through the streets with affected simplicity, avoiding hurry as well as slowness, keeping his eyes fixed on the ground in front, looking not farther than 10 or 15 cubits.

Curiosity tends to expand the soul on surrounding objects, but a Rahan's principal aim being to attend diligently to himself, to prefer the care of self before all other cares, and to concern himself very little about all that takes place without, he assiduously labors to keep his soul free from vain inquiry, from eager desire of hearing news and from an idle or unnecessary interference in things or matters strange to him. It seems that he has the wise saying always present to his mind: "Where art thou when thou art not present to thyself? and when thou hast run over all things what profit will it be to thee if thou hast neglected thyself?" During his perambulations he never salutes or notices the persons he meets on his way: he is indifferent to the attentions and marks of the highest veneration paid to him by the people: he never returns thanks for offerings made to him nor does he repay with a single regard the kindness proffered to him. Objects most calculated to awaken curiosity by their novelty and interest ought to find him cold, indifferent and unconcerned. His self-collection accompanies him everywhere, and disposes his soul to an uninterrupted meditation on points of the law. It is a counsel of the Wini to observe particularly the four cleannesses, viz: great modesty in the streets and public places, the confession of all failings, the avoiding all occasions of sin, and the keeping free from the seven kinds of sins. Such a wise injunction can only be attended to and observed by keeping a vigilant watch over the senses which are the very gates leading into the sanctuary of the soul. I could enter into fuller and more particular details regarding the regulations of the Talaponic Order, but they would prove little interesting, and only corroborate what has been previously stated that every action of a brother even the most common, such as the man-

ner of sitting, rising up, sleeping, eating &c. has become the object of the legislative attention of the founder of the order. Nothing seems to have escaped his clear foresight, and he has admirably succeeded in leaving no room for the exercise of individual liberty. The rule is that of the great moral being whose absolute commands must be always obeyed. Every individual is bound to lay aside his own will, private views, ideas and habits, surrender his own self, and unconditionally follow the impulse of his guiding influence.

5. *Occupation of the Buddhist Recluses.*

The whole life of a Recluse being confined within a narrow compass, I will have very little to say regarding their daily occupations. As soon as a Talapoin has left at an early hour the sleeping horizontal position, he rinses his mouth, washes his face and recites a few formulas of prayers which he lengthens or shortens according to his devotion. He attires himself in his professional costume, gets hold of his Latta and sallies forth in company with some brethren or disciples in quest of his food. He perambulates the streets in various directions and without any solicitation on his part, receives the rice, curry, vegetables and fruits, which pious donors have been preparing from two to three o'clock in the morning, watching at the door of their houses the arrival of the yellow clad saints. Having received what is considered sufficient for the day, he returns to the Monastery, and sets himself to eat either what he has brought or something more delicate and better dressed which his supporter, if he has any, has sent to him.

On the principal festivals or on extraordinary occurrences, abundant alms are brought to his domicile. Sometimes he is called by a pious donor to come and receive in the Pagodas, or in Bungalows erected for the purpose, offerings reserved for the occasion. They consist chiefly of mattresses, pillows, betel boxes, mats, tea cups, and various articles he is allowed to make use of. On this occasion he repays his benefactors by repeating to them the five great precepts and some of the principal tenets of the Buddhist creed and chief points of law. He enumerates at great length the numerous merits reserved to alms-givers. On this point, it must be confessed, that he is truly eloquent and his language flowing and abundant, his expressions are ready at hand and most glowing, calculated to please the ears of his hearers and warm their souls to make fresh efforts in procuring him more copious alms. Occasionally he will recite long praises of Gaudama the last Budh, for having, during his previous existence practised eminent virtues, and thereby qualified himself for the high dignity of Phra. The sermon goes on sometimes in Pali or sacred language, which neither he nor his hearers can understand.

We must allow that the Talapoins confer a truly invaluable

benefit upon the people of these countries by keeping up schools, where the boys resort to learn to read and write and acquire the rudiments of arithmetic. In this respect they are eminently useful, and the institution, though to a certain extent burthensome to the people, deserves well of the country. The many abuses that at present attend it are almost fully atoned by this great service its members gratuitously render to their countrymen. There are no other schools but those under their management. The tyrannical governments of Siam and Burmah do not take any steps to propagate instruction among their subjects, whom they look upon as slaves fit only for bodily labour. The houses of talopins are so many little seats of elementary learning and as they are very numerous throughout the country every facility is afforded to male children to learn to read and write. The female children are excluded from partaking of this great boon by the strictness of the Monastic regulations. It is a great misfortune much to be lamented, as one half of the population are thus doomed to live in perpetual ignorance. Owing to the gratuitous education given by the Budhist monks, there are very few men, at least in those parts of Burmah I have visited, who are not able to read or write more or less correctly, whilst scarcely a woman among thousands, can be found capable of spelling one word. The Talopins being much addicted to sloth and indolence, the schools are undoubtedly miserably managed—the boys are often left to themselves without regular control or discipline. Unacquainted with the rules of Grammar, the teachers are incapable of imparting any sound knowledge of the vernacular language to their numerous pupils. Hence writing, as far as orthography goes, is extremely imperfect; the spelling of words having no fixed standard varies to an indefinite extent—as soon as the scholars have mastered the difficulties of a long and complicated alphabet, some portion of the sacred writings are put into their hands for reading. The result is that the Burmese in general acquire some more or less extensive knowledge of their religious creed. Though none among them can be found who understand comprehensively the Budhistic system, yet they are possessed of some more or less limited information concerning Budh, and his law. In this respect, they are perhaps ahead of many nominal christians in several countries of Europe, who belong to the lowest class in large manufacturing towns and remote country districts, and live without even a slight acquaintance with the essential tenets of the Christian creed.

In addition to the eminently useful task of teaching youth, the Budhistic Recluse devotes occasionally some portion of his time to copying manuscripts on palm leaves either for his personal use or to increase the small library of his monastery. The work is considered as a very useful one, deserving of great merits, and much commended by the rule of the society. It is a matter of

regret that the native laziness of the Talapoins as well as their total want of order in acquiring knowledge thwart to a great extent the wise provisions made by the framer of the rule. Were it not for such causes copies of all the best and most interesting works on the religious system of Buddhism would be greatly multiplied and could be easily procured; whilst now they are exceedingly scarce and hardly to be had at all.

The Talapoins spend the best part of the day in sitting down in a cross legged position, chewing betel and conversing with the many idlers that are always to be found in great number about their dwellings. When tired of the vertical position they adopt the horizontal one, reclining the head on pillows and gently submitting to the soporific influence of good Morpheus. They have always in their hands a sort of beads on which they are used to repeat certain devotional formulas. The most common is the following one: "Aneitta Duka, Anatto" meaning that every thing in this world is subjected to the law of change and mutation, to that of pain and suffering, and that the *moi* which is in us, is distinct from the earthy frame called body, which is to be annihilated. There is indeed an immense field opened to a reflecting mind in these three very insignificant expressions, but none of the Talapoins, at least of those I have been acquainted with, are capable of understanding comprehensively their meaning. They often repeat the forty great subjects of meditation and the rule enjoins them to be zealously addicted to contemplation, which is pronounced to be the chief exercise of a true follower of Buddh. But how can there ever be expected from weak and ignorant persons the habitual practice of so high an exercise requiring an intellectual vigor of the very first order. They must repeat on their beads at least a hundred and twenty times a day the four following considerations on the four things more immediately necessary to men; food, raiment, habitation and medicine. "I eat this rice not to please my appetite but to satisfy the wants of nature. I put on this habit not for the sake of vanity, but to cover my nakedness. I live in this Kiaong not for vain glory, but to be protected from the inclemency of the weather. I drink this medicine merely to recover my health that I may with greater diligence attend to the duties of my profession."

6. *Veneration and respect paid to Talapoins.*

In Burmah the Talapoins are highly respected by every member of the community. When they appear in public, walking in the streets, they are the object of the greatest attention. The people withdraw before them to leave a free passage. Women are seen squatting on both sides of the way through respect for the venerated personages. When visited in their dwellings even by persons of the highest rank, the etiquette is that every visitor should prostrate himself three times before the head of the monastery uttering the

following formula: "To the end of obtaining the remission of all the faults I have committed through my senses, my speech and my heart, I make a first, second and third prostration in honor of the three precious things—Phra, his law and the assembly of the perfect. Meanwhile I earnestly wish to be preserved from the three calamities, the four states of punishment and the five enemies." To which the Recluse answers: "For his merit and reward may he who makes such prostrations be freed from the four states of punishment, the three calamities, the five sorts of enemies and from all evil whatsoever. May he obtain the object of all his wishes, walk steadily on the path of perfection, enjoy the advantages resulting therefrom and finally obtain the state of Neiban." On the visitor withdrawing from his presence, the three prostrations must be repeated; he then stands up, falls back to a distance of ten feet, as it would be highly unbecoming to turn suddenly the back on the holy man, wheels round on the right heel and goes out.

The best proof of the high veneration the people entertain for the Talapoins is the truly surprizing liberality with which the people gladly minister to all their wants. They impose upon themselves great sacrifices, incur enormous expences, put themselves joyfully into narrow circumstances, to build monasteries with the best and most substantial materials, and adorn them with all the luxury the country can afford. Gold is often profusely used for gilding the posts, ceiling and other parts of the interior, as well as several trunks or chests for storing up manuscripts. Two or three roofs superposed upon each other (a privilege exclusively reserved to royal palaces, pagodas and kiaongs) indicate to the stranger that the building is a monastery. The Recluse's house is well supplied with the various articles of furniture, becoming the pious inmates. The individual who builds at his expence such a house, assumes the much envied title of *Kiaongtaga*, or supporter of a monastery. This title is forever coupled with his name: it is used as a mark of respect by all persons conversing with him, and it appears in all papers which he may have to sign. The best, finest and most substantial articles, if by the regulations fit for the uses of the Talapoins, are generally and abundantly afforded by benevolent persons.

Government does not interfere or give any assistance in building pagodas, or kiaongs, nor does it provide for the support of the pious Rahan, but the liberality of the people amply suffices for all contingencies of the kind. When a man has made some profit by trading or in any other way he will almost infallibly bestow the best portion of his lucre in building a kiaong, or feeding the inmates of a house for a few months, or giving general alms to all the Recluses of the town. I have known a man who actually spent 1,100 Company's rupees on such an occasion. It is a very large sum for the place.

When a Talapoin is addressed by a layman the latter assumes the title of disciple, and the former calls him simply *Taga*, or supporter. As there is in Burmah a court language so there is a language or rather a certain number of expressions reserved to designate things used by Talapoins, as well as most of the actions they perform in common with other men, such as eating, walking, sleeping, shaving &c. The very turn of the most common sentence is indicative of respect, when speaking to a *Rahan*. He is called *Phra*, the most honorific term the language can afford. His person is sacred, and no one would dare to offer him the least insult or violence. The influence of the Talapoin upon the people is considerable in proportion to the great respect borne to his sacred character. So extraordinary has it been on certain occasions, that they have been seen rescuing forcibly from the hands of the police, culprits on their way to the place of execution. No resistance then could be made by the policemen without exposing themselves to the danger of committing a sacrilege by lifting their hands against them. The liberated wretches were forthwith led to the next monastery, their heads were shaved, they were attired in the yellow garb and their persons became at once sacred and inviolable.

The veneration paid to Talapoins during their life time, accompanies them after their death. As their state is considered as one of peculiar sanctity, it is supposed that their very bodies partake of the holiness inherent in their sacred profession. Hence their mortal remains are honored to an extent scarcely to be imagined. As soon as a distinguished member of the Brotherhood has given up the ghost, his body is opened, the viscera extracted and buried in some decent place without any peculiar ceremony, and the corpse is embalmed in a very simple manner, by putting ashes, bran and other substances into the abdominal cavity. It is then swathed with bands of linen, wrapped round it many times; and a thick coat of varnish laid upon the whole. On this fresh varnish and gold leaves are placed, so that the whole body from head to feet is gilt. When the people are poor and cannot afford to buy gold for the above purpose, a piece of yellow cloth is considered as the most suitable substitute. The body thus attired is laid in a very massive coffin, made not with planks, but of a single piece of timber hollowed in the middle for receiving the earthly frame of the deceased. A splendid cenotaph, raised in the centre of a large bungalow erected for the purpose, is prepared to support a large chest wherein the coffin is deposited. This chest is often gilt inside and outside and decorated with flowers made of different polished substances of various colors. Pictures such as native artists contrive to make, are disposed round the cenotaph. They represent ordinarily religious subjects and occasionally some of them are shockingly indecent. In this stately situation, the body remains exposed for several days nay several months until preparations are completed for the grand day of

funeral. During this period, festivals are often celebrated about it, bands of music are playing, and people resort in crowds to the spot for the purpose of making offerings to defray the expences to be incurred for the funeral. When the appointed day for burning the body is at last arrived the whole population of the town will be seen flocking, in their finest dress, to witness the display of fire works which takes place on the occasion of burning the corpse. A funeral pile of a square form is erected on the most elevated spot. Its height is about 20 feet and ends with a small room made for receiving the coffin. The room is covered with a small roof decorated with various ornaments. The corpse having been hoisted up and laid in the place destined for its reception, fire is set to the pile in a rather uncommon way. An immense rocket placed at about 40 yards distant, is directed towards the pile by means of a fixed rope guiding it thereto. As soon as it comes in contact with the pile, the latter immediately takes fire by means of combustibles heaped for that purpose and the whole is soon consumed. A few remaining pieces of bones are religiously collected and buried in the vicinity of some Pagoda. Here ends the profound veneration, amounting almost to worship, which Budhists pay to their Recluses during their life and after their demise.

Two chief motives induce the sectaries of Budh to be so liberal towards the Talapoins, and to pay them so high a respect, viz. the great merits and abundant reward they expect to derive from the plentiful alms they bestow upon them, and the profound admiration they entertain for their sacred character, austere manners and purely religious mode of life. The first motive originates from interested views, the second has its root in that regard men naturally have for persons who distinguish themselves from others by a more absolute self-denial, a greater restraint and control of their passions, a renoucement of licit pleasures and gratifications from religious motives. According to the fundamental dogma of Budhism any offering made to, or indeed any action done for the benefit of a fellowman is deserving of reward during future existence, such as digging a well, building a bungalow, a bridge &c. but far more abundant are the merits resulting from presenting a Talapoin with one or several articles necessary to his daily use as they increase proportionally to the dignity of the person to whom the things are offered. We may judge from the following instance of the plentiful harvest of merits, a supporter of Talapoins is promised to reap hereafter. He who shall make an offering of a Latta shall receive as his reward cups and other utensils set with jewels; he shall be exempted from misfortunes and calamities, disquietude and trouble, he shall get without labor all that is necessary for his food, dress and lodging: pleasure and happiness shall be his lot, his soul shall be in a state of steadiness and tranquility and his passion for the sex shall be considerably

weakened. The offering of other objects, secures to the donor wealth, dignity, high rank, pleasures and an admittance into the fortunate countries or seats of the Nats where are to be met with and enjoyed all the things calculated to confer on man the greatest sum of happiness. The people believe unhesitatingly all that is said to them in this respect, and they gladly strip themselves of many valuable things, in order to obtain and enjoy during coming existences the riches and pleasures promised to them by their Rahans. The insecurity of property under tyrannical rulers, may contribute to a certain extent to determine people to part with their riches, and consecrate them to religious purposes rather than to see themselves violently deprived of them by the odious rapacity of the vile instruments of the avarice, tyranny and cruelty of their heartless Princes and Governors. It can scarcely be a matter of wonder that Budhists so much honor and respect a Talapoin when we consider that to their eyes, he is a true follower of Budh, who strives to imitate his great Prototype in the practice of the highest virtues, particularly in his incomparable mortification and self-denial, that he might secure the ascendancy of the spiritual principle over the material one, and weaken passions which are the real causes of the disorder that reigns in our soul and for disengaging her from their baneful influences, and that of matter in general. He is exceedingly reserved and abstemious regarding food, the use of creatures and the enjoyment of pleasures, in order to secure to reason the noblest faculty of an intelligent being,—a perfect control over the senses. He is indeed in the right way leading to Neiban, the summit of perfection. In the opinion of a Budhist nobody can be compared to a true and fervent Rahan, in sterling worth and merit. His moral dignity and elevation cast in the shade the dazzling apparel of surrounding royalty; he is a pious Recluse, a holy personage leading a most perfect life, and deserving therefore of the highest admiration and respect.

As a consequence of the profound veneration in which Talapoins are publicly held, they are exempted from contributing to public charges, tribute, *corvees* and military service. It is an immense favor, particularly among the eastern portions of Asia, where the rulers look upon subjects as mere slaves and tools under their command for executing the absolute order of their capricious fancy.

In concluding this notice I will briefly sketch the actual situation of the Talapoinic order in those parts where I have had the opportunity of observing it, and will briefly allude to the causes that have acted in bringing into it vices, abuses, and imperfections, which are lowering it greatly in the opinion of all foreigners and a few well-informed Natives.

The first and principal cause that has brought the society into disrepute and opened the door to numberless abuses is the total absence of discernment in the selection of the individuals that seek

for an admittance therein. Every applicant is indiscriminately received as a member of the brotherhood. No previous examination takes place for ascertaining the dispositions, capacity and science of the Postulant. No inquiry is ever made regarding the motives that may have induced him to forsake the world and take so important a step. His vocation is exposed to no trial: he has but to present himself and he is sure to be immediately received provided he consent to conform exteriorly to the usual practices of his brethren. No account is taken of his former conduct. The very fact of his applying to be admitted into the society of the perfect atones amply for all past irregularities. The only respectability inherent in the modern Talapoin is that derived from the sacred yellow dress he wears. The houses of the order, are in many instances filled with worthless individuals totally unfit for the profession, who have been induced by the basest motives to enter into them, chiefly by laziness, idleness and the hope of spending quietly their time beyond the reach of want and without being obliged to work for their livelihood. In confirmation of this I will mention the following instance. During my stay in Burmah, I had with me in the capacity of servant, an old stupid native. On a certain day he gravely told me that he intended to leave my service and become a Rahan. I laughed at first at what I considered to be very presumptuous and impertinent language. The old man however kept his word. Having left my house a few days after our conversation on the subject of his new vocation I heard no more of him, till it happened a few months after, that I met him in a Monastery, attired in the full dress of a Talapoin, and so proud of his new position, that he hardly condescended to put himself on a footing of equality with his former master.

Ignorance prevails to an extent, scarcely to be imagined, among the generality of the Recluses. I have met with a great number of laymen who were incomparably better informed, and far superior in knowledge to them. Their mind is of the narrowest compass. Though bound by their profession to study with particular care the various tenets of their creed and all that relates to Buddhism, they are sadly deficient in this respect. They have no ardour for study, while they read some book they do it without attention, or effort to make themselves fully acquainted with the contents. There is no vigor in their intellect, no comprehensiveness in their mind, no order or connection in their ideas. Their reading is of a desultory nature: and the notions stored up in their memory, are at once incoherent, imperfect and too often very limited. They possess no general nor correct views of Buddhism. I never met with one, who could embrace the whole of it in his mind and give a tolerably accurate account of it. They are fond of exhibiting their knowledge of the Pali language, by repeating from memory and without stammering or stumbling, long formulas and sentences but I have convinced

myself that very few among them understood even imperfectly a small part of what they recited. Those who enjoy in the opinion of the people a reputation of uncommon knowledge affect to speak very little, show a great reserve, despising as ignorant the person that approaches or holds conversation with them. But silence which in a learned man is a sign of modesty is too often with them a cloak to cover their ignorance and a cunning device for disguising pride under the garb of humility. The latter virtue, though much recommended in the Vini, is not a favourite one with the Talapoins. It is indeed impossible that they could ever understand or practice it, since they are unacquainted with the two great ways that lead to it, viz. a profound knowledge of God and a thorough knowledge of self. Talapoins who are distinguished among their brethren for their great austerities of manners, and more perfect observance of their regulations, are the most displeasing beings I have ever met with. They are cold, reserved, speaking with an affected conciseness: their language is sententious, seasoned with an uncommon dose of pretention. Sentences falling from their lips are half finished, and involved in a mysterious obscurity, calculated to fill with awe and admiration their numerous hearers; a certain haughtiness and contempt of others always shows itself through their affected simplicity and humble deportment. Vanity and selfishness latent in their hearts force themselves on the attention of an acute observer. In their manners they are so ridiculous, that one might be tempted to think that their brain is not quite sound. Talapoins in general entertain a very high idea of their own excellence, and the great respect paid to them by the people contributes not a little to feed it and make them believe than no body on earth can ever be compared to them. To such a height has their pride reached that they believe it would be derogatory to their dignity to return civility for civility, or thanks for the alms people bestow on them.

The most striking feature in the Talapoins' character is their incomparable idleness. We may say that in this respect they resemble their countrymen who are very prone to that vice. Two causes of a very different nature seem in my opinion to act together on the people of these countries, to produce such a result. The first is a physical one, the heat of the climate coupled with a perpetual uniformity in the temperature producing a general relaxation in the whole system which is never opposed or counteracted by any opposite cause. The second cause is a moral one, the tyranny of the despotic Governments ruling over the population of eastern Asia. Property is everywhere insecure; he who is suspected of being rich is exposed to numberless vexations, and the vile satellites of tyranny soon find out some apparent pretext for confiscating a part or the whole of what he possesses, or depriving him of life, should he dare to offer resistance. In such a state of things, every one is satisfied with the things of first necessity,—

emulation, ambition, the desire of growing rich, which are main-springs to move man to exertions, disappear and leave him in an abject and servile indolence which soon becomes his habitual state and the grave wherein is entombed all his moral energy. Like their countrymen, Talapoins are exposed to the influence of the above causes, but their mode of life is a third additional cause which makes them even more indolent than others. They have not to trouble or exert themselves for their subsistence and maintenance which is supplied to them by their co-religionists. They are bound it is true to read, study and meditate, but their ignorance and laziness incapacitate them for such intellectual exercises. They remain during the best part of the day sitting in a cross-legged position, or reclining or sleeping or at least attempting to do so. They occasionally resume the vertical position to get rid of their ennui—one of their deadliest enemies, and by repeated stretchings of arms and legs and successive yawnings try to free themselves from that domestic foe. The teaching of their scholars occupies a few of them for a short time in the morning and the evening. They are saved often from their mortal ennui by visitors as idle as themselves, who resort to their dwellings to kill their time in their company. To keep up their respectability before the public the Rahans assume an air of dignity and reserve. They avoid all that leads them into dissipation. Exterior continence is generally observed and though there are occasional trespasses in this respect, it would be unfair to lay on them generally the charge of incontinence. Their life so far may be considered as exemplary. Though partly divested of that candid open heartedness so peculiar to their own countrymen they are tolerably kind and affable with strangers. They cannot relinquish in their conversation with them a certain air of superiority inspired by self-admiration of themselves and of their exalted profession and sacred character. They are unwilling to see them sitting unceremoniously close by themselves and when this cannot be avoided they seek for an opportunity of removing to another place a little more elevated than that occupied by the visitor, as it would be highly unbecoming that a layman should ever presume to sit on a level with a Recluse. Such a step would imply a sort of equality between them both which is never to be dreamt of. Their smooth and quiet countenance, their meek deportment, are as it were slightly undulated with a certain roughness and rudeness peculiar to individuals leading a retired life and estranging themselves to a certain extent from the pale of society.

In the foregoing pages I have endeavoured to give a faithful account of the great religious order existing in countries where genuine Buddhism is the prevailing creed. I have been obliged for the sake of truth, to mention many abuses that have slowly crept into it, but I never entertain the slightest intention of casting a malignant contempt or a sneering ridicule upon its members. I sincerely pity these unfortunate victims of error and superstition,

who are wasting their time and energies in the fruitless pursuit of an imaginary felicity. I most ardently sigh to see approaching the time when the thick mist and dark cloud that encompass their souls shall have been dissipated and the sun of righteousness shall shed into them his vivifying beams. However deplorable their intellectual blindness may be, I always felt that they have a right to be fairly and impartially dealt with. The religious order they belong to, is after all, the greatest in its extent and diffusion, the most extraordinary and perfect in its fabric and constituent parts, and the wisest in its rules and prescriptions that has ever existed either in ancient or modern times, without the pale of Christianity.

THE
TRADING PORTS
OF THE
INDIAN ARCHIPELAGO.*

Baba---*Babuyanes*---*Badong*---*Balabac*---*Balambangan*---*Balambuang*---
Balayan---*Bali*---*Banda*.

BABA or *Babber*. (*Banda Sea*.) A high, well wooded island, upwards of 50 miles in circumference, lat. 8° 2' S. long. 129° 49' E. (South Point). *Owen Stanley*. It is surrounded by several smaller islands, two of which, *Wetang* and *Masella* lie adjacent respectively to the N. W. and S. E. extremities, the others being some distance off to the North and N. E. *Tepa*, a village on the N. W. side of *Baba*, within the strait formed by *Wetang*, is the spot resorted to by the very few trading prahus which venture to carry on intercourse with the inhabitants. There is very good anchorage for large vessels, during the S. E. monsoon, abreast of *Tepa*, in 15 fathoms, and it is said that during the westerly Monsoon vessels can also lie very safely by anchoring on the other side of the strait, under the coast of *Wetang*. The strait appears to be clear of danger, as does also that between *Baba* and *Masella*, through which we passed in H. M. S. *Britomart* in 1841. The northern side of *Baba*, and the contiguous islands are very imperfectly known, the warlike propensities of the inhabitants having hitherto deterred traders from visiting them.

The natives of *Baba*, *Sermattan*, and *Timor Laut*, who seem to be one people, differ materially from all other tribes of the Indian Archipelago, even from the western *Serwatty* Islanders, with whom, however, they are identical as far as regards general customs and structure of language. The latter distinguish them by the name of "*Rambut Merah*" or *Red-heads*, from a Papuan custom they have adopted of dyeing or discolouring the hair of the head by means of applications of pounded coral or wood ashes mixed with sea-water. The general name by which they are known throughout the Moluccas, is "*Orang Tenimber*", from the circumstance of the *Tenimber* or *Timor Laut* group being the chief seat of the race. In point of stature, they are equal to the general run of Europeans; and their features are more marked than those of the Malays or Bugis;—high foreheads with overhanging brows, and arched noses, being by no means uncommon. They are also remarkable for an energy and boldness that is not equalled elsewhere in the Archipelago; these qualities being unfortunately displayed by the almost constant state of

* Continued from page 495.

warfare in which the various minor tribes are engaged, and by the attacks they have been in the habit of making on strange vessels that they thought they could overpower. Nevertheless, the good qualities displayed by those who have had the advantage of residing at the neighbouring European settlements, to which the young men are in the habit of resorting for the purpose of being employed as seamen in prahus, or as gardeners on shore, shew that they are a highly improvable people, and, when their energies come to be turned in a right direction, they will probably play an important part in the future history of the Archipelago. The close resemblance they bear to the natives of New Zealand is sufficiently striking to arrest the attention of all who have had opportunities of comparison, and I am of opinion that it may be traced to the same cause;—a mixture of the Malayu-Polynesian with what I have elsewhere called the “Gigantic Papuan” race, although it must be confessed that the comparative fairness of complexion often met with among the Orang Tenimber is not very favourable to the theory.

Baba, although fertile, is not productive in articles of commerce. Maize, yams, and a small grain resembling millet, are cultivated in the neighbourhood of the villages, but the interior is covered with primitive forest, and overrun by wild pigs and buffaloes, which appear to have been introduced originally in a domestic state. The wild, or long nutmeg grows spontaneously in the interior, and it is said that the true nutmeg is found here also, an assertion which is borne out by the fact of a small garrison having been maintained here by the Dutch during the period in which no expense was spared in maintaining a rigorous monopoly of spices in the Moluccas. Traces of the stone fort in which the garrison resided are still to be seen in the neighbourhood of Tapa. Tortoiseshell and trepang are obtained on the coast in small quantities, but the Baba group has no submerged banks like those which constitute the great source of wealth at the Arru Islands; owing to which, and to the fate that has befallen traders, both European and native, on several occasions, the island is now rarely, if ever, visited by strangers. For reasons that will be detailed below, Baba, together with Sermattan and Timor Laut should be avoided by traders, unless their vessels are sufficiently well-manned and armed to set open force at defiance. Even then it will be necessary to take every precaution against treachery. At present the inhabitants are dependant for the European articles they require, chiefly iron, coarse calicoes, glass beads, and brass wire on the people of Kissa, which island they are in the habit of visiting with their large prahus in the month of September, returning to their own country towards the close of the year.

As my object in producing this work is not only to point out the ports with which a commercial intercourse may be carried on with some prospect of advantage, but also to note those which

should, for the present, at least, be avoided, I will here enter into a few details respecting the circumstances which induce me to recommend European traders to avoid visiting the Tenimber group until we have become better acquainted with the inhabitants. For half a century previous to the occupation of Melville Island, on the North coast of Australia, in 1824, Baba had never been visited by a single European, the Dutch military establishment having been withdrawn during the previous century. During the Dutch occupation, many of the natives, especially the chiefs, had become christians, but the sources of knowledge having been cut off when their intercourse with Europeans ceased, they reverted to their old practices, and availed themselves of the high character for honesty which the converts of the Dutch missionaries have acquired throughout the Moluccas, to inveigle strangers to their destruction. Shortly after the occupation of Melville Island in 1824, a small Government brig, the *Lady Nelson*, was dispatched to the islands for refreshments, which were urgently required by the garrison. It is not known where she went to in the first instance, no intelligence having been received of her movements until her arrival at Mowai, near the east end of Moa, where a native of Baba was met with, who induced the commander, by the promise of an abundant supply of stock and refreshments, to proceed to Aluta at the S. E. end of Baba. On arriving there the commander and a portion of the crew, which consisted of only ten men, landed for the purpose of bartering for stock, and were set upon and massacred, those who remained on board sharing the same fate, after which the brig was towed on shore, plundered, and burned. A second vessel, the trading schooner *Stedcombe*, was subsequently dispatched from Melville Island for supplies, the necessity for which had now become pressing. This vessel anchored off Luora, on the S. E. coast of Timor Laut, and was also cut off by the natives, but on this occasion two youths, who were apprentices on board the schooner, were spared at the instigation of the women. One of these youths, Joseph Forbes, survived to be liberated 14 years afterwards by Captain Watson of the trading schooner *Essington*, who had touched there for the express purpose when on his voyage from Port Essington to Sydney. Several small vessels under Dutch colours, among which was the bark *Alexander*, Captain Harris, were subsequently cut off at the Tenimber group, and in 1838, the *Essington* above mentioned, the first vessel dispatched from the new settlement at Port Essington for supplies, narrowly escaped a similar fate, having been decoyed to Nawewang, on the north side of Lakor, where a number of Baba people, who had been on a trading voyage to the Serwatty islands, had collected in expectation of her arrival. They had succeeded in drugging the crew with some narcotic mixed with arrack, and had arranged their plans for cutting off the vessel, when the opportune arrival of the agent, with a fresh boat's crew,

ed to precautions being adopted which prevented the conspiracy from taking effect. It was not until some months afterwards that all the particulars of the plot were learned from Mr Dommers, the Dutch missionary established at Moa, who had accompanied the agent on the occasion of his opportune arrival, for the purpose of inspecting the schools at Nawewang, and whose presence alone would have been sufficient to render the plot abortive. Mr Dommers remained some days at Nawewang after the departure of the *Essington*, which took place the following morning, and learned that the pilot of the schooner, *Klass* or *Nicolas Leerkassen*, a native chief of Baba, and who had been taken on board at *Kissa*, was one of the chief conspirators, and it had been arranged that he should sleep, or rather watch, in the fore-top, to secure the arms which were deposited there in a chest. They were placed in the top in case the crew should ever be driven to the rigging, and forced to defend themselves there;—a precaution which all vessels visiting these islands and the coasts of New Guinea should adopt, as on more than one occasion it has enabled the crew to retake the vessel after the deck had been carried by the natives. A few swivel guns mounted in the tops are more formidable in their eyes than whole tiers of carronades.

The late Admiral Sir Gordon Bremer, who, when Captain of *H. M. S. Alligator* was also Commandant of Port *Essington*, intended visiting all the principal ports of this group, when the tact for which he was remarkable in all transactions with uncivilized people (the most difficult of all to deal with) would soon have established friendly relations, and removed their erroneous impressions respecting the English;—but unfortunately he was called away to take command of the naval expedition to China before he could carry his intentions into effect. The mere presence of a British force in the neighbourhood has, however, been sufficient to put a stop to all further aggressions on the part of the natives, which seem to have arisen chiefly from their having been led to believe that the British possessed no naval force to protect their trade, yet it will be well for strangers to be cautious in future, as the withdrawal of the small forces from the N. coast of Australia, which will soon be known throughout these seas, may be interpreted as an act of weakness, and taken advantage of accordingly.

BABUYANES. (*Philippines.*) A group of five high islands extending from the north coast of Luzon towards Formosa, called respectively Babuyan, Calayan, Camiguin, Dalupiri and Fuga. Babuyan, the northernmost island, is separated from the Bashee group by a strait 35 miles wide, called *Balintang*, from an island of that name which lies in mid-channel. This strait is much frequented by ships passing between the southern ports of China and the Pacific during the S. W. monsoon, the passage to the

north between the Bashees and Formosa being preferred in the other season, as being more to windward. This group abounds in refreshments, but produces few commodities calculated to tempt traders. A good deal of sulphur is collected at Camiguin, and the breed of horses is very highly esteemed; they do not however thrive when removed to the mainland of Luzon. There are two tolerable harbours in the group, San Pio Quinto on the west side of Camiguin, and Musa, on the west side of Fuga, which have occasionally afforded refuge to vessels that have suffered from the typhons or hurricanes which prevail in the neighbourhood during certain seasons. These ports are fully described in Horsburgh's Directory. Except in cases of emergency, Apari will be found superior as a harbour of refuge to any other in the vicinity of the Bashee Channel, as mechanics can be obtained there to assist in any repairs that may be required.

BADONG, commonly called Bali Badong, a fertile and productive territory occupying the southern extremity of the island Bali. The south point consists of a mass of table land, from 200 to 300 feet in elevation, which is joined to the main land of Bali by a long, low isthmus, scarcely a mile in width from sea to sea. The commercial capital of Badong, which is called Kota, or the fort, is situated near the north extreme of this neck of land. A Danish Merchant, Mr Lange, has resided at Kota for several years past, and the friendly relations he has established with the native chiefs have afforded such facilities for trade, that Badong has become the principal shipping port for the produce of the southern and more fertile portion of the island.

The best anchorage during the S. E. monsoon, from April to November, is on the western side of the isthmus called "Pantei Barat" or the "west beach". A bank, or ridge, with scarcely 2 fathoms water upon it, fronts the beach to the south, about a mile off the shore, having a passage within it with depths of between 2 and 4 fathoms in which small vessels and prahus generally lie, being somewhat protected from the heavy rollers from the S. W., similar to those already described under "Ampanam", which break on the bank. Large vessels anchor to the north of this bank, in 8 or 9 fathoms. The anchorage during the westerly monsoon is on the opposite side of the isthmus, or Pantei Timor. Here there is a very snug harbour, formed by a bay whose entrance is nearly closed by an island. The passage in is so exceedingly narrow, that vessels of burthen rarely venture to enter;—although there seems to be depth of water enough; and prefer lying off the southern entrance in 9 or 10 fathoms, with two islands called the Brothers bearing south. These anchorages are safe enough after the periodical winds have fairly set in, but during the periods of change, vessels sometimes find themselves on the wrong side the isthmus. In the middle of March of the present year (1850) the British ship *Belhaven*,

while loading rice at Pantei Barat, was driven on shore and wrecked by a gale from S. W., 10 native prahus that were also lying in the roads sharing the same fate. This gale appears to have been the tail end of one of the hurricanes which are often experienced in the sea lying between Bali and Australia during the early part of the year. They rarely extend so far to the north, but ships resorting to Badong should so time their visit as to be able to complete their cargoes before the end of February, or defer their arrival until after the middle of April, by which time the S. E. trade wind will have set in steadily. The commencement of the westerly monsoon is rarely attended with any atmospheric violence. In September the trade wind begins to decrease in strength, and towards the end of the following month ships may remove to Pantei Timor without risk of being molested by strong S. E. winds, where they can lie in readiness for the coming of the westerly monsoon. Commanders of vessels coming from the south should be sure of their longitude before they venture to run for the straits during the night. The S. Point of Bali, Banditti island, and the S. E. Point of Java, are so much alike, each being an elevated limestone table land, that one may be easily mistaken for another. A few years ago a large Dutch Indiaman ran on the Pantei Timor during the night and was totally wrecked. Banditti island had been seen the previous evening;—and the S. end of Bali, which is somewhat lower, not being visible, the former was mistaken for the latter, and it was supposed that the ship was running into Bali Strait when she struck.

The staple export of Badong is rice, of which article upwards of 12,000 tons are said to have been exported in 1840. The quantity should by this time have greatly increased, as Mr Lange has several small vessels employed in collecting produce from Lombok, Sumbawa, and the small ports of Bali. Hides, horns, coffee, coconut oil, cotton, and tobacco, also form important items of export. As the productions throughout the island are of an uniform character, the reader is referred to BALI for more full particulars.

There are no Port charges on vessels anchoring merely to obtain intelligence. Dues amounting to a few dollars are levied on ships coming for water and refreshments. The import and export duties which are exceedingly moderate are levied through Mr Lange, who farms this branch of revenue from the government, and is thus enabled to afford greater facilities to European traders than if the collection was in the hands of the natives themselves. A lithographed copy of the Port Regulations is put on board every vessel on her arrival, in fact affairs are managed with the same regularity as in a well-conducted European Port.

The local currency is the *piti* or Chinese cash, which will be found described under Bali. Every description of coin current in the Archipelago, together with Treasury and even good private Bills,

can be readily exchanged for these cash through the medium of Mr Lange, and are therefore available for the purchase of produce.

BALABAC. An island of moderate elevation, about 25 miles in circumference, situated near the south extreme of Palawan, in Lat. 8° N. longitude about 117° E; chiefly remarkable for giving a name to the passage between Borneo and Palawan. There is said to be good anchorage in a bay called Dallawan, near the S. E. extremity, but the island is rarely, if ever visited by European traders, the population being very scanty. It is also a great resort of Lanun pirates.

BALAMBANGAN. (*Borneo*). A low island, 20 miles in circumference, situated to the N.E. of Tanjong Sampan Mengaio, the north extreme of Borneo, from which it is distant about 13 miles. The N.E. extreme of Borneo was ceded to the English East India Company by the Sultan of Sulu towards the close of the last century, and an establishment was formed at Balambangan in 1775, but it was soon afterwards surprised by a marauding party of Sulus, and a portion of the garrison massacred, the others escaping to the ships. A second establishment was formed there by Major Farquhar, with a part of the garrison of Amboyna, when that island was restored to the Dutch during the short peace, but it was soon afterwards removed and no attempt has subsequently been made to renew occupation. The island has no fixed population, the only inhabitants being parties of Baju Laut, or sea-gypsies, who resort occasionally to the bays on the south-east side for the purpose of collecting trepang and tortoise-shell.

BALAMBUANG or *Pampang*. A deep and well-sheltered bay at the eastern extremity of Java, once the port of a powerful kingdom of the same name which has now fallen into decay. The western side of the bay is formed by a narrow tongue of land terminating to the north in a peaked hill, called Gunung Ikan, which appears like an island to vessels entering Bali Strait from the south. This strait, by the way, was formerly called Balambuang Strait. The bay has now ceased to be the resort of shipping, the trade having been transferred to Banyu Wangi or Fort Utrecht, a settlement of the Dutch 16 miles to the north, near the narrowest part of the Strait.

Balambuang possesses a certain historical interest from its having been visited by Sir Francis Drake, (the first of our countrymen who traversed the Archipelago), in the course of his celebrated voyage round the world; and twenty years subsequently, in 1597, it was visited by the first Dutch fleet that entered these seas under Cornelis Houtman. Balambuang was then one of the four kingdoms of Java, the capital being situated a few miles inland to the N. W. of the Bay. It is said that this town has now entirely

disappeared, certainly the name is no longer retained in modern charts. The bay itself is fast filling up with soil brought from the mountain range, which has formed extensive mud flats on its western and southern shores, thus confining the anchorage to a narrow strip along the eastern side, immediately within Gunung Ikan, where there is still good shelter in 10 fathoms gradually decreasing towards the head of the Bay.

BALAYAN. (*Philippines.*) A large and deep bay on the S. W. coast of Luzon, immediately within the western entrance of Mindoro Strait. The town of Balayan, which is situated in the N. W. corner of the bay, contains 18,000 inhabitants, being the most populous in the province. (*Batangas.*) A brisk coasting trade is carried on with Manila, the neighbouring country being exceedingly productive, but as a port it yields in importance to Batangas, a bay immediately to the eastward, which being further within the strait is less exposed to the swell that rolls in during the strength of the S. W. monsoon. For particulars respecting the productions see **BATANGAS**.

BALI, an island 200 miles in circumference, immediately adjacent to the east end of Java, from which it is separated by a deep but narrow strait. The form of the island is triangular, the base lying to the north. This northern part consists in a mass of mountainous land, about 70 miles in extent east and west, having the famous volcanic Peak of Bali, 11,000 feet high, near its western end, and several fresh water lakes in different parts of the range, which last contribute greatly to the high fertility of the island by the advantages they afford for irrigation. To the south of the range the island gradually decreases in width until it terminates at Tanjong Bukit or South Point, in Lat. $8^{\circ} 54'$ S. and about 40 miles distant from the centre of the range. This southern portion of the island is uniformly low, except the mass of calcareous table land which forms the southern extremity, and is the most productive, the soil being much enriched by the alluvial deposits from the mountains. The island is divided into several small kingdoms. Of these B'liling occupies nearly the entire north coast as far inland as the centre of the mountain range; Karang Assam includes the eastern end of the range and a portion of the plain to the south; Jembrana lies to the west, immediately opposite to Java; Tabanan, Mengui, Gianjar and Klongkong occupy portions of the plain to the south of the mountains; and Badong, the most important in a commercial point of view, although one of the smallest in extent, occupies the south extreme of the island. Badong or Bali Badong is the trading port of this state, Gianjar, and Mengui;—Kidong of Tabanan;—Kasumba of Klongkong;—Padang Cove, Oudjong, and Labuan Amok, of Karang Assam;—and B'liling, Sangsit, and Tibonko, of the state of B'liling.

Population. Bali contains about 1,000,000 inhabitants, and as they are remarkable for their industrious habits and the comparative advances they have made in agricultural and manufacturing arts, must be considered as the most important of all the independent nations of the Indian Archipelago. The proportion of people to the square mile is stated by Dutch authorities to be double in amount to that of Java. Although the island is divided into several petty states under different chiefs, a certain degree of combination is created by their all acknowledging the supremacy of the Dewa Agong of Klunkong, the royal family of which state is said to be lineally descended from an ancient chief whose authority was formerly paramount throughout the island, and indeed extended to the western side of Lombok.

The Balinese are a purely agricultural people, and shew a decided aversion to a sea-faring life, never venturing abroad on trading voyages, but disposing of the produce of their industry to the numerous strangers whom it serves to attract*. In their physical characteristics they are distinct from all other tribes of the Indian Archipelago with the exception of those of the neighbouring island Lombok, that is to say those of Balinese origin, for the Sasak, or aborigines of Lombok, are evidently identical with the Bugis, Moluccan islanders, and other Malayu-Polynesian tribes of the Archipelago. The Balinese are fairer in complexion, and of more lofty stature, than either the Bugis or Javanese, and the stiff, wiry nature of their hair, more resembles that of the Mongolians of continental Asia than of any other people. These circumstances, coupled with the fact of the great bulk of the population professing the Hindu religion, has given rise to many speculations as to the origin of their civilization. The same religion is known to have formerly spread over Java, and is supposed to have been introduced from the Indian peninsula, which was probably the case; but Balinese civilization has evidently been derived from a different source, as the accounts of all travellers who have visited the island from Java, teem with details of the striking points of difference in the characteristics of the two people. From opportunities

* In the last published volume of Mr Temminck's "*Coup d'œil sur les possessions Néerlandaises*" he has pointed a strong article on piracy in the Archipelago directly against the Balinese, than whom no people in the world can be less obnoxious to such a charge. For example; "But when piracy shall have become formidable in these latitudes; when it shall insolently raise its head as at Ceram; when it shall have become troublesome to the European trade as at Bali; when the independent Rajahs shall raise the standard of revolt;" &c. Again "To put an end to these depredations, and conquer the resistance of the Balinese princes, no less than three expeditions were required, &c." These passages would lead one to suppose that the Balinese were the most ferocious of pirates, instead of people who dread the sea, and have themselves suffered more from pirates than any other nation in the world on this very account; for Bali has been for centuries preyed upon by the Lanuns and immense numbers of the people kidnapped, as they had no occasion to dread pursuit, at least at sea, after making their descent. During a long experience among these islands, I have never met a Balinese out of his own country who was not either a slave, and therefore forced to follow his purchaser, or a captive who had been ransomed or rescued from pirates.

I have had of comparison, I am inclined to believe that a very close connection formerly existed between the people of Bali and Siam. In their physical characteristics the resemblance is almost perfect, in fact the excellent sketch of a Balinese in Mr Crawford's History of the Indian Archipelago, even to the mode and arrangement of the dress, would form a perfectly correct representation of one of the lower class in Siam. The style of the houses in Bali, surrounded by walls of brick;—the form of religion;—the custom of writing on the leaves of the *lontar* palm by means of an iron style;—the mode of disposing of deceased princes by burning the bodies on lofty piles* ;—the entire system of agriculture, even to the maintaining large herds of ducks to drive over the cropped paddy fields, and whose eggs are collected and salted to form an article of export;—the custom of both sexes leaving the body from the waist upwards uncovered, (except on occasions of going abroad, when the females wear a *salendong* or scarf thrown loosely over the shoulders and across the breast), are all identical with those of the Siamese. The court ceremonies, also, very closely correspond. The crawling motion by which even a chief approaches his sovereign, first casting loose a long piece of cloth attached to his girdle as a train, is practiced by both people. The Balinese princes are unable to obtain white elephants to grace their studs like the Kings of Siam, but they adopt as substitutes the albino variety of the buffalo, a pair of which is attached to nearly every court.

Whatever may have been their origin, there can be no doubt that they are a highly intelligent and improvable people, and if they succeed in maintaining their independence, will no doubt assume a high position among the petty nations of the Archipelago. As Islamism, although it has made some progress in the sea ports, has by no means obtained an ascendancy, the Balinese are the more inclined to seek the friendship of Europeans. The slave trade formerly existed in Bali to an enormous extent, but since the Dutch have made the transport of slaves by sea illegal, it has nearly ceased. Great numbers were exported to Java, and even to the Mauritius. At the former place many of the females became the wives of Chinese, who seem to prefer connecting themselves with Balinese than with any other of the island races.

Commercial History. The details on this point need not occupy much space, since the course of events, from the earliest period of European intercourse with the Archipelago until within the last few years, has proved remarkable for its uniformity. The Balinese, although decidedly an agricultural people, and occupying a country eminently calculated to produce articles adapted for the European market, have hitherto abstained, except in a single instance men-

* At Bali this ceremony is attended with the voluntary sacrifice of some of the widows and slaves of the deceased, a custom which does not, as far as I have been able to learn, exist in Siam.

tioned below, from cultivating produce likely to attract other than native traders. In this they have probably been actuated by motives of policy, since Europeans, during the three centuries that followed the discovery of the route to India by the Cape of Good Hope, confined their trade to the acquisition of articles produced by the spontaneous efforts of the natives, without attempting to develop the natural resources of the islands. As Bali produced no article of commerce that would repay the expense of bringing a numerous and warlike people under subjection, the island remained unmolested by Europeans during this long period. Diplomatic missions to the native chiefs were occasionally dispatched by the Dutch of Java, and one was also sent by the British during our short occupation of that island, but these have invariably been called forth by peculiarities in the Bali laws, especially that called "strand-right" which makes the hulls and cargoes of wrecked vessels the droits of the native chiefs. Now, however, the case is materially altered. The success that has attended the new agricultural system introduced by the Dutch into Java since the close of the last European war, in which a portion of the fertile rice-lands is converted into sugar plantations, worked by the forced labour of the native agricultural population, has proved that all those islands which possess a rich soil and a numerous population may be made to yield every description of tropical produce at a cheaper rate than the countries of the west; and this without the odium of employing slave labour, although it is virtually effected by reducing the entire population, chiefs and labourers, to a state of absolute serfdom, the former being engaged by high salaries and titles of honor to exert their influence in coercing the latter, without which the system could not exist. Bali, therefore, no longer enjoys an exemption from attracting the attention of European powers, as the rice-fields if cultivated for sugar and indigo, and the hills if planted with coffee, would prove as productive as the eastern districts of Java, while the inhabitants, if subjected to a similar state of organisation would be equal, at least, to the Javanese as labourers. The native spirit of independence is not, however, to be overcome without the semi-extermination of the inhabitants, which would, of course, destroy one of the elements by which the soil could be rendered productive. The recent unsuccessful invasions of Bali by the Dutch forces are therefore not likely to be renewed, in fact, will tend rather to confirm the natives of Bali in their independence; as the great sacrifice of life which attended their resistance to the Dutch invasions, and the evident necessity that exists for their acquiring the art of European warfare, has rendered them anxious to seek the alliance of civilized nations, especially of those which do not seek to extend their territories beyond the limits of their own continent. A special agent of the United States government is now on his way to Bali, and certainly no mission was ever

dispatched from one country to another with better prospect of success.

Productions. The natural productions of Bali are few and inconsiderable, nearly every available spot upon the island being under cultivation. Rice is the staple product, for the growth of which, the plains that extend between the mountain range and the sea, and many of the valleys in the range itself, are admirably adapted; the numerous rivulets and the mountain lakes affording inexhaustible sources of irrigation, without which the cultivation of rice cannot be conducted on a grand scale. The agricultural skill of the Balinese, which is acknowledged to be superior to that of any other people of the Archipelago, not even excepting the Javanese, and which is especially displayed in the culture of rice, also contributes in no small degree to the high productivity of the island. The amount of produce varies very little each year, so great is the certainty attending the culture of crops by artificial irrigation. In a memoir printed in 1843, I have stated the surplus exported to amount to about 7,000 tons, but M. Melville, who had access to the reports of parties who were sent expressly by the Batavian government to enquire into the commercial resources of the islands, considers this to be much less than the real amount, and that, in fact, it equals that of Lombok, or about 20,000 tons. Cotton is produced in large quantities, generally as a second crop on the rice lands, when the season will not admit another crop of rice within the year. The greater portion of the cotton is retained for home consumption, but large quantities are exported to Java and Celebes. The staple is rather short, and the wool adheres very tenaciously to the seeds; it is, however, strong and durable. Coffee is also grown on the hill sides, and the culture is rapidly extending. It is inferior to that grown in the neighbouring districts of Java, where it is cultivated under European superintendence. Tobacco of a superior quality is also extensively cultivated, and is exported in large quantities to the countries of the Archipelago, where it is particularly esteemed by the Chinese. Almost the entire coast of the island, for 2 or 3 miles inland, is planted with coconut trees, from the nuts of which a superior description of oil is extracted. Maize, yams and sweet potatoes are cultivated both for home consumption and for exportation; in fact Bali is as remarkable among the neighbouring countries for the production of articles suited for the consumption of the Archipelago, as is Java for the production of articles suited to that of Europe.

The domestic animals are horses, buffaloes, kine, pigs, goats and a few sheep. The horses are small but hardy animals, and are found particularly useful in bringing down the rice from the country to the ports in large bags, slung across their backs, one on each side. The buffaloes are chiefly employed in ploughing the wet rice sawas, for which purpose, being semi-amphibious animals, they are better adapted than any other description of

draught animal. The breed of oxen is peculiar to Bali and Lombok, at least no other country of the Archipelago produces a similar description. Their flesh is not held in very high estimation by Europeans, as it is often very strongly flavoured with musk, but it is much relished by the Indian islanders when prepared as *dinding* or jerked beef, in which state large quantities are exported to Java, Celebes, and the countries to the eastward. These animals are often exported to Singapore, where they are usually employed for draught purposes, but they do not thrive, the nature of the grasses here being apparently different from those to which they have been accustomed. This animal seems to be the *sapi* or wild ox of the Malay Peninsula, domesticated; and has probably been introduced at Bali direct from Siam, the only spot on the continent of Asia, as far as I am aware, in which the breed exists in a domesticated state. We have also specimens of this Siam variety of horned cattle in Singapore, which have been imported from Sangora, the southernmost port of Siam. These, however, probably from the nature of the pasture being similar to that of their native country, thrive vigorously, and on more than one occasion parties interested in the subject have made enquiries of native carters as to what mode of treatment they adopted to keep their animals in good working condition while their own Bali cattle were scarcely able to move; and have learned that the thriving animals were from Siam not from Bali.

Poultry is abundant, especially ducks, which are driven in large herds over the rice fields after the earth has been turned up or the crop gathered. These birds are maintained chiefly for the sake of their eggs, which are salted and exported in large quantities, and are to be seen throughout the Archipelago on the tables of the wealthy, whether Native or European, at almost every meal.

Manufactures. The Balinese are by no means backward in the mechanical arts, although they have had less direct intercourse with Europeans than any of the semi-civilized nations of the Archipelago. They are skilful workers in iron and gold, their kris-blades and rifle-barrels often exhibiting very beautiful specimens of inlaying. The cloths manufactured for exportation are certainly of a very coarse description, but they are the better adapted to the wants of the people for whom they are intended, the natives of Ceram and New Guinea. The cloths manufactured for their chiefs and princes, especially those of silk, and silk and cotton mixed, are exceedingly beautiful, the colours from the native dyes never losing their depth until the cloth itself is destroyed.

Commerce. As the Balinese are averse to engaging personally in maritime enterprise, their foreign commerce is entirely dependant on the visits of strangers, but such is the attraction furnished by their varied products, that their commercial relations extend

throughout the southern portion of the Indian Archipelago, from New Guinea in the east to Singapore in the west. European traders generally confine their visits to Badong, where they can transact their business under the protection of Mr Lange, who has deservedly obtained great influence over the native chiefs. At the other ports commerce is conducted through the medium of the Bandars or Trade-masters, generally Chinese, but sometimes Bugis of Celebes, who either pay a fixed sum for the privilege, or become responsible to the chiefs for the amount of duties and port-dues. The greater portion of the native trade is carried on by Chinese from Java and Macassar, and by Bugis from Boni and Mandhar in Celebes. Prahus from Ceram and Goram, an island near New Guinea, also keep up a pretty constant intercourse, and an occasional prahu from Banda, Amboyna and Buru completes the list of native traders. The exports to Singapore consist of rice, coconut oil, hides, horns, small quantities of maize, and occasionally horses, pigs, and cattle. To Java and Celebes the exports are chiefly rice, coconut oil, cotton and tobacco;—to Ceram and the eastern islands, rice, tobacco and coarse cotton cloths. The imports from Singapore are European and Indian piece goods, cotton twist, opium, hardware, iron, Chinese plates and basins, kwallies or iron pans, and large quantities of Chinese mixed-metal cash. From Java and Celebes the imports are almost the same. The principal item of the cargoes brought by the prahus from Ceram and Goram is *massoy*, an odoriferous bark from New Guinea, which is much used by people about the Courts as a powder to strew over the body. To this is added wild nutmegs, birds of paradise, and aromatic oils, such as clove, kulit lawang, and nutmeg, which are in much use among the Balinese.

Currency. The current coin throughout Bali is a Chinese coin of mixed metal with a square hole in the centre called *piti*; 600 of these are the exchange for a Spanish dollar, which affords a considerable profit on the importation from China, whence they are brought in large quantities. These coins are strung on pieces of split rattan by means of the hole in the centre, generally one hundred together, two of which constitute a rupee, or *satah* a nominal coin closely corresponding in value with the Java copper rupee. Produce is generally purchased with this coin, a supply of which is constantly kept on hand by the Bandars or Trade-masters of the various ports, who furnish them to traders in exchange for Spanish dollars or Java rupees;—and at Badong, Treasury or Navy Bills are readily negotiated by Mr Lange. Even when goods are given in exchange for produce, a price in Chinese cash is fixed on each.

Port dues, where they exist, and customs duties, will be stated under the heading of each port.

[As the affairs of Bali and the islands east of Java are now attracting a certain degree of attention, it may not be out of place

to enter into some details respecting the present policy of those civilized nations which take an interest in the progress of events in these remote countries. Mr Temminck's last volume of the "Coup d'Œil," which may be considered as an authorised exposition of the views of the Netherlands Government, announces that the attempt to annex Bali will be finally abandoned, and recommends that the great object of government, the extension of the plantation system, shall be carried out by colonization instead of conquest. New Guinea is the spot recommended for this new essay, to which island an Agent was dispatched about 12 months ago, Mr Gronovius, a gentleman who has had long experience of the Indian Archipelago, and was for several years Resident of Timor. New Guinea is equal to Java in point of natural fertility of soil, and is constituted similarly with a back-bone of volcanic mountains, and one side abutting on a bank of soundings which prevents the loose soil washed down from the range being lost, and allows it to form vast plains of the richest possible description of alluvial land. There are a few draw-backs, however; the country is covered with a dense jungle of lofty trees the removal of which will require immense labour; the climate is unhealthy; and no native of the Archipelago who has ever heard of the country, (and few have not,) will go there to reside without being absolutely forced, such is their dread of the Papuans;—and not without cause, as the latter view with such inveterate hostility any strangers who may venture to settle in their country, that it resolves itself into a mere question as to which party shall exterminate the other. As the slave trade is now abolished throughout the Dutch Indian possessions, and the judgments of the courts do not supply convicts in greater numbers than are required for the cultivation of the spice plantations of Banda, it is difficult to see where and how the supply of labour will be obtained. Mr Temminck further recommends the establishment of free ports in the eastern part of the Archipelago, a measure fraught with advantage to the natives, and with honor and profit to the Dutch.

England cannot be said to have any policy with regard to this part of the world, although it is true that an establishment of Royal marines was formed on the north coast of Australia in 1838, and was maintained until the early part of the present year. Small British vessels of war were certainly employed during several years subsequent to the formation of that establishment in traversing the Archipelago and acquiring particulars concerning the various islands, but Mr Temminck is wrong in supposing that the individual engaged in prosecuting these enquiries was an English Agent, that is to say if an agent of the English government is meant. He was in the service of government, and vessels were placed at his disposal to enable him to prosecute any enquiries he might think proper, but no more, so that the government is in no way implicated in his proceedings. In fact the settlement was

formed rather with colonial than commercial objects, the chief aim of the parties instrumental in founding it being to introduce the culture of cotton in Australia, by means of labour obtained from the Indian islands. The scheme proved unsuccessful, for reasons that need not be entered into at present. Mr Temminck's plan is evidently based on the same principle, but it must be remembered that the two countries are very differently situated with regard to facilities for colonization. In lieu of the savannahs of Carpentaria, with hundreds of thousands acres of alluvial land on which the plough can be used without the slightest clearing, New Guinea presents a mass of jungle, composed of trees of enormous size, the removal of which must entail immense labour;—and instead of scattered tribes of mild savages, [the amiability of whose disposition endears them to all those who have resided among them sufficiently long to overcome the prejudices to which the appearance of a naked savage gives rise] the colonist in New Guinea, especially on the south coast, will have to encounter formidable Papuans, equal in strength and vigour to Europeans, and who, as far as experience has hitherto gone, will never be on friendly terms with the intruders as long as a man of their tribe remains alive.

The Anglo-Americans have rarely turned their attention to this part of the Archipelago until very recently, indeed I have never heard of an American vessel of war having yet visited the islands east of Java. Their line of policy is exceedingly simple. They care not for territorial aggrandizement, and merely seek commercial facilities. The present Mission is the first that has ever been dispatched to the Archipelago. An Agent was sent to Siam in 1833, who concluded a treaty with that power; and the U. S. Frigate Potamac punished the people of Kwala Batu shortly before for cutting off an American ship, but these places can scarcely be said to be within the Archipelago.

Lastly the inhabitants of the Australian Provinces. They are not an independent people, but the Act of Parliament which virtually emancipates them, places them in a better position for seeking their own fields of commerce. All that they require is that the European ports of the Archipelago be opened to their agricultural produce, so that their small vessels may make profitable voyages by passing through Torres Straits and touching at Banda, Amboyna and Macassar, on their way to Sourabaya, and Batavia, with cargoes of flour, preserved provisions, and dairy produce, which are everywhere in demand among Europeans;—and returning by the same route with cargoes of coarse sugars, which are at present not very saleable in Java, as the high rate of freight to Europe renders it a disadvantageous shipment. A slight concession on the part of the Dutch would establish a friendly intercourse with the Australian colonists, while a contrary course might give rise to a feeling which should not exist between such near neighbours.]

BANDA ISLANDS, *Bandan* of the Malays, a group of nine small islands in the remote south-eastern part of the Archipelago, celebrated as being the original source of the nutmeg, and as having furnished Europe with the chief supply of that most esteemed of spices from the earliest times until a very recent date. The central group consists of five islands;—Lonthor, or Great Banda, 7 miles in length, and averaging two in breadth, shaped like a half moon, with the convex side to the S. E.;—Gunung Api, an island consisting entirely of an active volcano, lying directly to the north of the western horn of Lonthor, distant half a mile;—and Banda Neira, to the eastward of Gunung Api, distant only two cables' length, the latter being an oblong island a mile and a half long and half a mile in width, the south end of which is occupied by the town of Banda. Immediately to the north of the north-east horn of Lonthor, distant half a mile, lies the small island Pulo Pisang. Pulo Kapal is a mere rock, and, as its name implies, bears a great resemblance to a ship under sail. The others are Pulo Ai, Pulo Run and Pulo Swangi, or the island of Spirits, to the west, and Rosengyn to the S. E. Great Banda and Pulo Ai are covered with nutmeg plantations, and there are a few spice trees on Banda Neira, but the other islands are uninhabited, with the exception of Rosengyn, on which there is a single house, and Pulo Pisang, which is a receptacle for lepers. The first circumstance that strikes a stranger on visiting the group is that so small an extent of territory, scarcely greater than the domain of a wealthy landed proprietor in England, and only half of which yields exportable produce, should have attracted so much attention in Europe. The scene that presents itself on entering the well-sheltered harbour formed by Great Banda on the south and east, and Banda Neira with Gunung Api on the north, is equally calculated to strike the observer, as there is nothing on the outer shores of the cluster, with the exception of a flag staff here and there on the hills, to indicate the proofs of civilization he will meet within. The neat white houses which extend along the entire south shore of Banda Neira, backed by the picturesque and well-constructed Fort Belgica, and the garden-like shores of Great Banda, present a scene that is certainly not equalled in the Archipelago. Any enthusiasm that may arise is, however, checked by the consideration that a similar state of civilization has existed during more than three centuries, without having extended beyond the narrow limits of the group itself, the countries immediately adjacent being equally, if not more barbarous, than when the Archipelago was first visited by Europeans. Such are the results of monopoly. The anchorage is in lat. $4^{\circ} 32'$ S. long. $129^{\circ} 58'$ E. *Owen Stanley.*

Commercial History. Banda was famed for its spices for centuries previous to the arrival of Europeans in the Eastern Seas, and the inhabitants who were estimated at upwards of 15,000, carried on a commercial intercourse in their own prahus with

Macassar, Java, Patani, and Malacca. Their supplies of provisions were derived chiefly from Ceram, Goram, Keh, and Arru, with which islands a constant intercourse was kept up, the Bandanese themselves being exclusively employed in cultivating the spices, which attracted numerous traders from the west. There were then no less than four kings in the islands, who seem to have lived on friendly terms with each other, as they invariably combined when strangers attempted to establish an undue influence in the group. The Portuguese opened an intercourse with Banda immediately after the conquest of Malacca in 1511, and during the remainder of the century made many attempts to establish themselves, but on every occasion they were driven off by the inhabitants, and the forts they had erected destroyed. In 1609 the first Dutch expedition under Admiral Verhoeve, consisting of 9 ships and 700 soldiers, arrived at Banda, and commenced building a fort on the ruins of one formerly erected by the Portuguese, but not without opposition on the part of the Bandanese, who succeeded in enticing the Admiral and a small guard into an ambush, when the whole party was massacred. The war continued with indifferent success until 1621, when strong reinforcements, consisting of a large fleet and no less than 17 companies of infantry, arrived under the Governor General Koen, a strong minded but unscrupulous man, who has been accused of instigating the massacre of the English which took place at Amboyna during the following year. The war terminated with the loss on the part of the natives, according to Dutch authorities, of 3,000 killed, and 1,000 prisoners, or nearly the entire male population. In a few years scarcely a native remained on the islands. Valentyn, the historian of the old Dutch East India Company, records the affair by a short paragraph, in which he has departed from that spirit of candour and philanthropy which usually characterises his writings. As he does not appear to have had any personal communication with the Bandanese, who had disappeared from the group before his arrival, he may probably have been biassed by a consideration of their treacherous murder of the Admiral, which certainly cannot be defended, although a smaller punishment than the utter extermination of a people would have been sufficient. Valentyn's statement is as follows: "They were of old an obstinate, wicked, faithless, traitorous, and rebellious people, in whom no reliance in the world could be placed, in consequence of which they were for the most part exterminated, or driven as fugitives to the neighbouring islands, as Ceram, Goram, Key, Arru, Cailolo (where the people are mostly Bandanese) Soeli and other places in Amboyna."* It is not a little singular that Keh, Arru, and Goram, the only islands among those mentioned by Valentyn where the influx of the refugees could have exerted much influence on the population, are the chief, indeed the

* Valentyn's *Oost Indien*, Vol III. part II. p. 34.

only great places of resort for traders from the west at the present time. Goram, indeed, is remarkable for the cordiality with which strangers are received by the inhabitants, and traders purposing to visit the west and southwest coasts of New Guinea invariably touch there to procure pilots and interpreters. The only spot, as far as I have been able to discover, in which the ancient people of Banda form a distinct community, is on the west side of the Great Keh, but as this circumstance came to my knowledge by pure accident, it is possible that other such communities may exist. While at Keh Doulan in 1841, strolling on the pathway through the forest leading from Tamandan to Serbat, I encountered a young man advancing from the opposite direction, who, instead of stepping on one side, and showing the deference which an European usually meets with in these parts, came forward with a jaunty air and patted me patronisingly, but good humoredly, on the back. My curiosity being excited, I enquired who he was, and found him to be a native of Keh Bandan, a group of villages on the west side of the Great Keh Island, the tribe occupying which had migrated from Banda shortly after the fatal war which had rendered the Dutch paramount. The stranger had just arrived at Serbat from Keh Bandan in a small prahu, with five others, whom I found on arriving at the village. He was a well-grown young man, with the comparatively fair complexion often met with in the Moluccas, and his skin displayed marks of that leprous, non-contagious malady, which is prevalent among the more uncivilized Malayu-Polynesians. Neither he nor his companions differed in the slightest degree from the brown complexioned races around, from which I am led to conclude that the ancient inhabitants of Banda were no other than Malayu-Polynesians rendered formidable by the arts and civilization introduced during a long continued intercourse with the countries of the west. I very much regretted that the distance of Keh Bandan to windward prevented us from incurring the delay that would have been entailed by proceeding there, as our time was limited, and we had still many places of interest to visit. We sailed next morning for Banda.

The history of Banda subsequent to the conquest by the Dutch is a mere record of grasping monopoly, which system was also maintained by the British during their short occupation of the Moluccas, an error of policy which the liberal-minded ruler of the then British possessions in the Archipelago would have acknowledged had he survived to the present time; for if once abolished, the system of monopoly could never have been renewed. As stated in "Milburn's Oriental Commerce:" "On the visit of the (Dutch) Governor General, in April 1824, some new regulations were promulgated by him; the object of which was announced to be that of abolishing the unnecessarily oppressive laws, relative to the monopoly of the spice trade &c., whereby it was directed that all the laws and regulations tending to protect the existing monopoly of the spices,

especially in nutmegs and mace, should be *maintained* in their rigour. All other laws, which owe their origin to this monopoly, but do not tend to maintain and protect it, were declared null and void." (p. 396). The only important event connected with the commercial history of Banda that has subsequently occurred, is the virtual transfer of the spice monopoly to the Handel Maatschappij, and the establishment there of an agent of that Company, who engrosses the trade in European manufactures, which, however, is almost exclusively confined to supplying the wants of Banda alone.

Population. This is necessarily of a very mixed character. The extermination of the aborigines in 1621 rendered it necessary that the island should be re-colonized, and this was speedily effected. The nutmeg plantations with which Lonthor and Pulo Ai were covered, were parcelled out and delivered in free gift to retired military officers and other Europeans, with the understanding that the entire produce should be sent in to the Government stores at a fixed price. The government at the same time agreed to supply the planters with any number of slaves they might require at the rate of 40 rix-dollars a head, and also to furnish the planters with a sufficiency of rice for their consumption at the cost price in Java. A supply of slaves was soon obtained from the neighbouring islands, more especially Java, Bali, and Celebes, and their numbers were subsequently kept up by constant importation. On the abolition of the slave trade, or rather of the traffic in slaves between different countries of the Dutch possessions, this source of labour was cut off, but the supply has been maintained by Banda being made a penal settlement for Netherlands India, and about half the population are now convicts. The total number of inhabitants, according to a recent estimate of the Dutch authorities, is 5,000, which corresponds exactly with the amount given by Valentyn in 1725. It may appear singular that the population should not have increased during this period, considering the vast numbers of slaves and convicts that have been imported. This however, is explained by the unhealthiness of the climate, especially during the westerly monsoon, when the direction of the wind, and the weight of the atmosphere above, cause the smoke from Gunung Api to overspread the town and neighbourhood, poisoning the air with sulphureous fumes which are found to be excessively injurious to animal life, although certainly they have no ill effect on vegetation. The convicts and agricultural slaves, whose comforts are not much attended to, and who are pre-disposed to disease by a sort of *Nostalgia* or home sickness from which the negro races only are exempt, die off with great rapidity at these times;—indeed the mortality is always great.

The community is composed of European officials, about a dozen in number;—from 3 to 400 native troops with Europeans officers;—a number of planters and burgers with their families;—

about 50 Chinese;—a fluctuating population of natives of Timor Laut, Baba, and Serua, probably 2 or 300 in number, who find employment as sailors and boatmen or as cultivators of fruits and vegetables;—and the remainder slaves and convicts.

Productions. Nutmegs and mace are the sole exportable products, nor will the limited territorial extent of the group, or the nature of the soil, which, although rich, is exceedingly rocky, admit the cultivation of articles which require large and comparatively level plantations. The average annual produce of nutmegs, according to the Count Von Hogendorp, is 500,000 lbs, and that of mace, 150,000 lbs. The trees, which attain a height of about 40 feet, grow under the shade of lofty *kanari* trees, which furnish a nut highly esteemed for the quantity of oil it contains. Fruits and vegetables are grown in the neighbourhood of the houses, but by no means in great abundance. Large quantities of sulphur are found in and about the crater of Gunung Api, and attempts have been made to collect it for exportation. It is said, however, that the labour of ascending the mountain is too great to render the speculation profitable.

Commerce. The only European merchant established at Banda is an agent of the Handel Maatschappij, who is supplied with those descriptions of cloths and hardware which are suited to the consumption of the inhabitants, and also superintends the shipping of the spice produce, which is consigned to the Company at Batavia, whence it is for the most part transhipped to Europe. The smaller traders are Chinese, or rather of Chinese extraction, for as far as I could discover, every individual of their community was a native of Banda, Amboyna, or Macassar. One of the wealthiest of these, who holds the post of Captain China, is owner of a small brig which is employed on trading voyages to Timor Laut, Ceram, and the west coast of New Guinea. This, with a few paduakans or large prahus, also owned by Chinese, and manned by natives of Tenimber (Timor Laut and Baba), constitute the entire mercantile marine of Banda, and small as it is, it exceeds that of Amboyna, the capital of the Moluccas. When the admirable position of the port for intercourse with the neighbouring countries is taken into consideration, it certainly strikes a stranger that even if nutmegs had been worth their weight in gold from the commencement of the monopoly, the Dutch would have made more profit by leaving the trade open and seeking to develop the resources of the neighbouring countries, than by turning their attention exclusively to the production of spices.

The supply of rice, for which necessary Banda is totally dependent on Java, is brought by large country-ships belonging to native merchants there, which arrive with the westerly monsoon, and return with cargoes of nutmegs during the other season. These vessels carry freight at a very low rate, but they sometimes cause great distress at Banda by failing on the voyage, owing to unskillfulness

of navigation. In the early part of 1843 two large ships bound there with cargoes of rice were lost during a gale from the north, one on the Iron Cape of Flores, and the other on the north coast of Timor. Were the port opened, Banda would be an excellent market for the beef, hams, tongues and other provisions which the Australian colonists now preserve so admirably, as well as for flour and dairy produce. The absence of direct intercourse with Europe in a great measure prevents the inhabitants from obtaining these luxuries of residents in the East from any other source.

As all foreign European vessels are interdicted by the Dutch government from trading with Banda, it will be unnecessary to enter into any details respecting duties and port charges.

(To be Continued)

THE ETHNOLOGY OF EASTERN ASIA AND THE INDO-PACIFIC
ISLANDS.*

By J. R. LOGAN.

SPIRITUALISM.†

I would proceed at once to facts illustrative of the different forms of spiritualism which prevail in Eastern Asia and Asianesia, giving such explanations as seemed fitting of their nature and origin as each branch of the subject came under review, but I fear that I should not in this way succeed in presenting these facts in the light in which they have appeared to myself, for I believe that erroneous or at least imperfect views respecting the religions and supernaturalisms of human tribes are still widely prevalent, and that I could not advance one step without exciting misconceptions on the part of many readers. There is no work to which

* Our readers may remember that our review of the ethnology of Eastern Asia and Asianesia embraces 4 principal divisions.

A. A general account of the ethnic characteristics arranged thus: I. The Individual,—§ 1. physical character; § 2. mental character; § 3. language; § 4. religion; § 5. arts; § 6. food; § 7. dress; § 8. houses. II. The Family. III. The Village, Clan, or Society, both socially and politically,—including government, social grades, distinct professions, amusements &c. IV. The Tribe or Nation with its government, institutions, laws, war &c. B. The Ethnic Geography of the region. C. The Ethnology of each people, including, in addition to the subjects contained in A and B, a section on the characteristics and influence of its location and on its numbers, and a section on its History, embracing an enquiry into the original seat of its primitive and secondary stocks, their migrations, intermixtures, engraftments of foreign people and ideas, affinities with other nations in form, customs, language and other characteristics. D. The Ethnology of the region as a whole.

We begin with the section on religion or spiritualism, because it embraces a large number of facts that are well fitted for ethnic comparisons, and because it is desirable to place the less abstract sections between it and the most abstract of the whole, those on language and mental character. Along with these series of papers belonging to div. A we shall endeavour in each number to give one or more of those belonging to div. C., that is ethnographical descriptions of particular regions and tribes. In the present number we intended to have given the ethnography of Camboja and that of the island of Engano on the West Coast of Sumatra, but want of room compels us to postpone them.

† I have adopted this term in preference to Religion, Supernaturalism or Superstition, because it is most generic and most correct. Religion and Superstition have a limited and relative sense. Supernaturalism suggests a false impression. The facts embraced by it are not above nature but in nature. Whether they have a real existence independent of the human mind or exist only in the mind, they are a part of nature. They are not supernatural but supersensual. The only sufficiently comprehensive and accurate distinction for my purpose is that of material and spiritual. Wherever the mind of a nation recognizes only matter with material properties and forces that is material or sensual to it. Wherever it superadds living consciousness and will in any degree that is spiritual to it.

In this section I merely state facts presented by an observation and comparison of many races, and endeavour to refer to their true sources and thus reconcile to our common nature, beliefs which often tend to estrange races. There is no creed which is not based on something which exists in the nature of every human being. If we cannot perceive how a creed might appear to be true to us under different ethnic circumstances, we have not understood the creed and we have not looked beneath the surface of our own nature. Praise and blame are for individuals. National faiths must be taken as facts, and scientifically investigated and explained. We might as well blame the tropical sun for its excessive heat as a nation for any

I can refer them for elementary views of the subject,* and it therefore seems indispensable to begin by enquiring what spiritualism is, whence it comes, why it assumes so many forms, and whether it is only a lingering vestige of primeval times or is still a production of the earth, a perennial faculty or tendency of human nature. It will soon appear why I cannot here enter into these questions fully, but it is necessary to state that I have not attempted to touch upon all the principal developements of spiritualism. My object has been to suggest what I conceive to be a correct method of investigating this subject, and with this end I have rather sought to illustrate a few aspects of it than to embrace a large number. Several important topics which are omitted or only glanced at under the first head will come under our notice in subsequent sections.

ethnic characteristic. It is willed that it should be so, and it is also willed that it shall not always be so. It would be impossible to write on ethnology if every investigator allowed his own religious creed to prevent him from candidly observing and recording the various conceptions of God and the lower forms of supernaturalism which his subject requires him to notice. In an age when religious and theological discussion is so rife, any expression of his own opinions, whatever they might be, would expose him to controversy. His business is not with the abstract truth or falsehood of creeds but with the fact of their existence, their connection with different ethnic developements, their influence, and their origin. The opinions of an individual who is not proselytising but observing can be of no consequence to his readers so long as he writes honestly. To guard against all misconception I beg to state specifically that my subject is not revealed religion, but natural spiritualism, although I shall not hesitate, if occasion arises, to examine how far the phenomena of the latter are reproduced in the former. A true revelation goes beyond natural spiritualism, but it also embraces all that is true in it, and assumes it as a basis. There are no greater or more instructive phenomena in nature than Human Races. Their observation demands an entire freedom from preconceptions and an openness to receive true impressions, at least as much as any other natural science. My sole aim will be to give a true account of every religion as a natural fact, and, as far as I can, to understand how each faith and practice, however repugnant to the acquired feelings and creeds of Europeans of the 19th century, are rational and agreeable to the human mind in a different stage of ethnic development. The enquiry what is true, or has most truth, is a theological one. My business is to describe what is, or has been, believed to be true by human tribes. Ethnology deals with every human science and development, but it views them only as phenomena illustrating the comparative character and operation of each tribe, and the progress of man as a race.

* In Carlyle's Lectures on Heroes and Hero Worship, many important phases of spiritualism are illustrated with equal wisdom, and beauty. No work in the English language shews a deeper insight into the human soul or is pervaded by a finer spiritual sensibility.

1. GENERAL ENQUIRIES INTO THE ORIGIN, DEVELOPMENTS AND CHANGES OF SPIRITUALISM.

SECT. I *Origin of Spiritualism.*

Spiritualism is not intuitive. It is primarily the result of experience and reason like all other beliefs which man possesses, and it is therefore dependent like them on the character and development of the race. It is this which renders it simple or complex, rude or refined, mild or ferocious, puerile or sublime.*

Everything is at bottom wonderful and mysterious to the human mind. It comes naked and sensitive into the world, and external objects are wholly strange to it, wonderful, quite alien to its nature,—supernatural. As its consciousness matures, its tender sensibility finds something transcendently glorious, loveable or dreadful in all that passes before it. But from the first it has begun to appropriate much of what it experiences. The bare

* We cannot sufficiently insist, on the threshold of ethnology, that the mind has nothing but life when it comes into being. It is as empty of all knowledge and form as the lowest animal germ. It is impressible and excitable through the senses in a higher degree than the roinds of animals, and it thus images nature, that is all things that affect its senses, in a more vivid and apprehensive manner. The images or ideas thus impressed on it are, from their greater distinctness and reality, attended with emotions of corresponding intensity and power. In this higher sensibility and activity lie higher memory, imagination and discrimination, and the action of these is reason. Between the mind of man and that of the lower animals there is probably no difference in kind but an enormous one in degree. The culture of both is physical, that is through corporeal sensation and action. But the minds of animals mirror little beyond the surface of nature, for they have little or no control over the current of their ideas and over their fresh impressions. That of man arrests, recalls, combines and compares ideas. But he can never go beyond physical nature. He has only spiritual truth in proportion as he has patiently observed nature. When the mind reflects sensible phenomena not only as they appear in space, but as they succeed in time, it has first fully imaged nature and apprehended it in its unity. Before this point in observation is reached all its conceptions of nature are necessarily partial and *pro tanto* false. As supernaturalism is always a spiritualisation of science, or a reference of all known natural powers to spiritual will, religion necessarily reflects the scientific culture of the race. The mind is formed in youth in conformity with the aspect in which nature presents itself to the race.

Until the conception of nature is freed from the many gross errors and delusions which attend it in all rude races, the national conception of the spiritual will on which nature reposes, must also be full of errors and delusions. A race in this state may be led to believe the tenets of a higher faith, whether supernaturally revealed or communicated by a more advanced nation or by native intellects of superiour power and culture. But it cannot apprehend these tenets in their whole truth. They will be little better than formula to it. They will not prevent its retaining or receiving many notions totally inconsistent with them. Man's conception of nature and of the powers that dwell in nature must always colour his religion. He may indeed believe in a God who dwells apart from nature, and may then fill nature with powers that have no relation to God. But this is pure fancy, not religion. Every honest and healthy mind recoils from the attempt to give it dreams for facts, and the mind of man in all stages of culture is in the main sound and sincere. Every kind of interpretation of the great book of nature can be believed in the appropriate stages of human culture, but at the bottom of every faith must lie a recognition of that great natural reality in

chaotic soul takes to itself the forms, the order, the whole impress of external existence, and acquires a second or superadded nature, from which it looks out on the world. Cased in this armour it ranges calm and impassive amongst objects that were once full of power to disturb and excite it. Thus constant familiarity dulls and destroys the sense of the mystery of external things. Our own nature, and those outward things and events which are its daily food, become indissolubly united in our consciousness, and wrought into the very basis of our mundane being and development. But all that has not thus become part of ourselves continues to awaken the sense of the supernatural, which every new object excited in the mind of the infant.

There is no fixed boundary between the natural and the supernatural. It varies with the culture and experience of the mind. The only constant fact is the spiritual feeling itself, which must exist in every mind and in every race, because to all men some things are familiar and understood and others strange and mysterious. What the rude man can familiarize to himself, and look upon as a possession of his mind, is natural. Such are all those ideas, born of his daily life and observation, that constantly recur in the endless and multitudinous train: masses of ideas that momentarily bloom and vanish, filling the dim chamber of his mind with a spiritual coruscation that perpetually changes its character. These familiar inmates are felt to be part of himself almost as much as his own person. They come and go without disturbing his mental equilibrium. Whatever new objects and ideas resemble them, or harmonize with them, soon take a place with them as a possession or part of himself. All others,—the old that are inaccessible and mysterious to his nature, which he cannot make a part of his own possessions, subordinate to himself or reduce to his own level, and the new that are equally remote from self,—are supernatural to him. Thus a savage when first visited by civilised navigators sees the supernatural in the winged ship that has come out of the sky at the meeting of heaven and earth on the far horizon, in his visitors themselves with their marvellous attribute of dress, and in all their implements and other possessions,

which we live and move and have our being, as the embodiment, the work, or the manifestation of the spiritual reality. If there is a professed creed that places a God without nature, we may be sure that in the mind of the nation there is another and more real faith that fills nature with spirituality. If there is not this, then there is materialism, and in the mind of the materialist matter is itself God, reason as he will. If our conception of God is free from delusion, in proportion as our conception of nature is free from delusion, it follows that there can be no real and thorough divorce between the mind of a rude uncultured tribe and its native superstitions, until there has been imparted to it a larger and truer knowledge of nature. The history of the world shews how little this has been attended to by propagandists, and the multitude of religions still existing in which ideas derived from the most heterogeneous sources are jumbled together without coherence and without reality, presents a commentary which may well startle those who think that the human mind can safely exclude the flood of spiritual light which flows from nature, when it is deeply and largely observed.

their arts and habits, which are entirely alien to his mind. They take a place as supernatural with the other things that he cannot reach or fathom. Although the Malgasis can now make cloth themselves, silk is still supernatural or a god to them.

If we look a little closer on the relation of the mind to the objects of its perceptions, it becomes obvious that the first impression it receives of something external to itself is necessarily strong and bewildering. The mere sense of something that is not us, that exists out of us, and has an independent material being, must powerfully operate on the mind, which is primarily filled with a consciousness of itself only and has not learned to discriminate between its own sensations and their external causes. The feeling with which the existence of outward and alien things is recognized and individuals successively distinguished, cannot be obliterated from the mind. It constantly returns into its brooding self-consciousness, and every time an external object is presented to it, the sudden apprehension or discovery of its existence is attended with an instantaneous but hardly appreciable renewal of this feeling. If the object be unexpected, or the reality differ from the anticipation, a more sensible shock is felt.

Every object has two aspects. The first is purely physical, involving the notion of material existence independent of the mind, or the attribution of extension, resistance, form, colour, &c. to outward objects. This conception is in itself spiritual. It is the transfer by the mind of its own sensations, and the convictions acquired by its own experience, to every object that affects its senses. It cannot rest with the mere consciousness of sensations or a recognition of properties. The idea of cause and effect constantly rules it. With a rapidity that gives the process an appearance of intuition, but which is merely an instantaneous and confident acting on an experience that matured in earliest infancy, it refers each impression to an outward cause, and individualises that cause. Our first sense of individuality must arise when we find that we are ourselves distinct from the objects with which we are surrounded, and this origin of the sense of individuality probably tends to give a spiritual colouring to all other individualities. But the action of the mind does not stop with the mere recognition of individuality in external objects as the possessors of physical attributes. With this sense of their individuality are associated many emotions which give to each a specific character. Every object not merely impresses the mind with its physical attributes, but excites various emotions often delicate, complex and unnoted, but always necessarily present. These feelings, which are of infinite variety in their origin, combinations and power, are, by the strong objective tendency of the mind, transferred to the external object itself, and forms its character which we describe generally as grave, sombre, grotesque, pleasant, melancholy &c., but which is mostly far too subtle and complex and too intimately tinged in each mind by individual

temperament, sensibility and associations, to be exactly analysed, or described, although some men of an extraordinary sensibility and fine discrimination can often awaken a sense of it in other minds by suggestive words, especially when by the musical accompaniment of verse, they bring the mind into the same state of harmony and serene equilibrium which it possesses when fully influenced by natural objects.* A kind of electrical or magical action and reaction takes place between the mind and nature when it is in this condition. Many different objects and ideas produce similar or closely allied emotions, and the shadows of impressions received from a hundred different sources may flit over the imagination and colour the object before us. So any feeling directly excited or momentarily suggested by the object or its associations, may be the parent of many different ideas. It is this transfer of the affections of the mind to the external objects that awaken them, that gives a human colouring to the spirituality of each. The more lively or powerful the feeling the stronger is the spirituality of the object. But all objects are and must be to man essentially spiritual, for he can have no knowledge of anything save in and through his own spiritual being. The sense of this universal spirituality of things may become weakened, like any other feeling, by the culture of a philosophical or dogmatic belief in matter as something entirely distinct from spirit, or by an acquired indifference and insensibility. In the mind that has been taught constantly to recognize nothing in the outer world save physical objects and forces, an antagonism will be established between its instinctive spiritual impressions and its reason or creed, and its consciousness will cease to dwell on the former as realities because it will consider them as unworthy of its regard, mere weakness or sports of the feelings and imagination. But whatever change takes place in man's view of these emotions, and in the philosophical conclusions which he may draw from them respecting nature and the human soul, the emotions and their transfer to external things never cease to exist. What is a living spirit, a god, to the rude man may cease to be so to the cultured man, but it has still a spiritual character. By the one sided cultures that prevail amongst modern civilised races, men's minds may be led to ignore the spirituality of nature. Ample experience proves that men may bring themselves to believe or disbelieve anything, if they only brood with sufficient devotion and intensity on particular ideas, and cease to observe and analyse the actual impressions made by nature. But the religious

* In tribes of which the religion has become dogmatic, formal or abstract, the individualising and spiritualising faculty chiefly works in poetry. In a healthy ethnic condition the philosophy and poetry of the age are combined in its religion, for the philosophical and poetical aspects of nature are both necessary to a real and vital sense of divinity. The division is artificial. In nature and the Spirit of nature there are no compartments, and the mind of every race must be deeply tainted with error that has not a living apprehension and feeling of this unity.

and poetic phasis of the mind is indestructible. Whatever man's philosophical system of nature may be, its spiritual basis remains untouched though the mind may cease to dwell upon it.

The main elements of spiritualism are thus: 1st, the selfism and absolutism of the mind, which tends to appropriate all things, or subordinate them to its own intelligence, power and desires, which can never understand *how* anything exists external to itself or independent of it, which refers all things to self, and consequently divides nature into what harmonises with it and what is inexplicable to it; 2nd, its seeking of a cause for everything, and its consequent inability to rest short of a first spiritual cause, akin to its spiritual nature but indued with creative power; 3rd, its strong objective and individualising tendency and the transfer to outer objects of its own sensations, emotions and convictions. Under all changes in the philosophical aspect of nature brought about by larger observation and severer habits of reasoning, spiritualism appears to depend chiefly on these necessary and inalienable elements of the human mind. It can no more be displaced than thought itself. But upon this everlasting basis, deep seated in its very essence, the mind may rear any creed whatever, and will in all times and races, in each national and in each individual culture, entertain one conforming to the phasis which science has assumed to the nation or to the individual. The spiritual sense irradiates whatever forms of belief the reason, the imagination and the feelings fashion to themselves as true, or have derived from former times. Give the mind a reason, adapted to its culture, why spirituality dwells in large measure in a particular object, and it will believe that object a god, be it a stone, an onion, a beetle, a cat, a man, the sun or any other real or imaginary substance.

I have considered spiritualism in its innermost and most abstract power, as capable of presenting all existence to the understanding as one living spirit, or of restricting itself to particular objects of any kind. Thus waiting ever on the reason and imagination of the race and the individual, it might appear an endless task to trace it in all its forms. But amongst its more limited aspects there are some of peculiar importance. Perhaps the most interesting amongst those which are not merely superficial and evanescent, is that which arises from the double aspect of nature, as purely physical and as organic. If all matter were indued, to the senses, with organic form and life, it is doubtful whether the spiritual sense would be developed as it is until mental culture acquired a certain degree of abstractness. The perpetual presence and predominance of the solid and amorphous material mass on which we and all things rest as on the foundation of being, and into which all things seem to return, must tend more than anything else to renew and vivify our sense of the wonderfulness and spirituality of organic objects. There is in our own minds too, something corresponding with the inertia of matter, a tendency to relapse into a

passive, stagnant, non-inventive state, which is in strong opposition to the unresting energy and exuberant productiveness and metamorphoses of nature. Viewed from this material and mental basis of inertia, not only the animal and vegetable worlds, but the less solid forms of unorganic matter, are transcendantly wonderful, mysterious and miraculous: for the mind in vain labours to find a cause in matter for its transformation into a tree or a bird, or its assumption of such forms and powers as water, wind, flame or lightning. There is nothing which the mind may not feel to be miraculous and spiritual when it considers it in relation to itself or to the idea of inert matter. The idea of void space must also be amongst the normal and unconsciously ruling possessors of the mind, and when it is filled with the sense of vacuum and inanity, or when its consciousness rests on its own dim, shadowy and boundless universe of thought, matter itself assumes a strange and supernatural character.

SECT. 2. *Progress from Naturalism or Naturology (i. e. the spiritualism and worship of particular natural things) to Pantheism and Monotheism.*

The history of the development of natural religion is the history of the feelings of man towards nature, of his consciousness of his relation to nature, including his fellow men. It therefore necessarily embraces the history of the development of intellect and science. As the object of a feeling varies, so does the feeling itself. Nature is one thing to the mind of a Humboldt and another to the mind of a savage of the Andamans. The impression left on the one mind by the contemplation of nature is widely different from that left on the other. Where the one sees harmony, serenity and beneficence, the other sees caprice, violence and malignity. The religion of the one is love and awe, that of the other is distrust and fear, often mingled with hate. The emotions wait upon the intellect. True, the whole mind sympathises with every impression made upon it, and an impaired nervous system, by rendering the feelings morbid, clouds the intellect. But in a sound mental and bodily constitution the state of culture of the intellect determines the feelings that dominate in the mind.

The scientific observation of nature is the culture of the intellect. In the lowest stage of culture the mind is rapid in its deductions. It has no distrust in its own feelings and imaginations. It springs at once from effects to causes. As yet it knows not a state of philosophical reticence and suspense. It cannot remain in doubt. The ample magazine of forces with which observation and fancy have filled its memory, and which form the body of its knowledge, supplies causes sufficient to account for all phenomena. Every individual action is referred at once to an individual first cause. The idea of secondary causes, and of a sole first cause, has not yet dawned. The divorce between religion and science has not taken place. Science and supernaturalism are one. In the

supernaturalism of each tribe is embodied the manner in which nature presented itself as a living reality to the greatest intellects, the spiritual leaders, of the tribe. It is by the study of this phasis of ethnic development, the elements of which must be chiefly sought for in a knowledge of the language of each tribe, that the primordial history of the growth of the intellect, science and religion can alone be restored.

Every peculiarity in the character of a tribe is imaged in its supernaturalism, for this is not a reality existing without the mind. It is only an attribute of the mind. At every step which the national mind takes in advance of its first position towards nature, a change comes over its supernaturalism, until at last, through a higher development of intellect, consequent on a bolder, deeper and more extended observation of nature, the permanence and regularity of all its grand phenomena are clearly perceived, and they are referred to One living will. Thus it is only after struggling through a long series of partial and timid deductions, that the human race arrives at the conviction that there is only one God. Unless miraculously illuminated it cannot attain this belief earlier. It necessarily attains it ultimately unless its intellectual progress be obstructed, and it remains stagnant.

The ethnic progress of the mind with relation to supernaturalism is the gradual establishment of harmony between itself and nature, embracing the reconciliation between the selfishness and absolutism of the individual and those of each of his fellows, through the recognition and dominion of the great ethical truths. In the lowest stage the more material minds are possessed by a dull, sensual selfishness, that sees nothing in life but animal wants and the means and obstacles to their gratification. In the more imaginative organisms all nature is still viewed through a medium of selfishness, but of a less sensual kind. It is full of spiritual powers that love or hate mankind, and work him good or ill. Far from thinking himself the dominant and sole rational being, he sees in the measureless earth many beings and powers surpassing him and full of mystery and vague terror for him, because between his soul and theirs there is no communion. He is a small, naked, feeble biped. A tree, a river, a rock, a mountain, the sea, the wind, lightning and thunder, the sun, the moon, the starry night, nearly all animals, are infinitely greater than he. As yet his spiritual sense only serves to fill him with a consciousness of his own insignificance in nature, with love for what is pleasing and innocuous, awe for all else, and with dark and shapeless images and feelings of nameless dread that crowd on his mind when, in solitude and in the black night, his imagination labours with the ideas of the great and incomprehensible powers, visible and invisible, which environ his existence.

The man of a civilised community living in a cultivated country must beware of measuring the feelings of the wild man towards

nature by his own. To the former most terrestrial objects are viewed as subordinated to the power and convenience of himself. The face of the country is parcelled out and carved, the very vegetation that covers it is his and exists because he wills it, the larger animals are his domestic slaves. Everything has passed under his dominion. But the savage is lost amidst the grandeur and wildness of nature. Every single tree of the myriads amongst which he wanders, far transcends him in power as in bulk, and the notion of being able to destroy it never crosses his imagination. As yet unarmed with implements, and unconscious of the latent power of the race, the sense of his feebleness constantly attends him, colouring all his observation and all his philosophy. He is one of the weakest animals of the forest. The foot print of the tiger, the elephant, the rhinoceros, the bear, fill him with dread. He listens alarmed to every unusual noise. It is in this lowest ethnic stage that naturalism has its greatest sway, and the powerful and deep rooted feelings and beliefs which then originate, long survive the condition of existence in which they take their earliest forms. All gods are then dread realities. No imagination is needed to clothe them with awe. They who have once seen a tiger seize its human prey, and are totally incapable of devising or conceiving any means of protection from a being so terrific are filled for ever after with feelings towards it which the dread of imaginary demons in other tribes cannot exceed in intensity.

It is not till man has gained courage through art, has learned to conquer other powers by his implements, his arms, his observation and his intellect, that he can view nature imperturbed and unblinded by his personal feelings. It is not till he has raised himself victoriously above his selfishness, and stands god-like on the serene height of pure intellect, that the scales fall from his eyes and he first sees the world as it really is, and understands the true position of his race. That which in the microscopic vision of each man's individuality, abounds in evils, antagonisms and perplexity, when viewed through the race is straightway resolved into harmony and unity. But this highest truth has also two forms dependent on the character of the mind. In the one, supernaturalism is vanished altogether, and nature is self-developed and purely physical. There is matter and nothing else. Organism is a property of matter, mind a property of organism. In the other, every thing is harmonised by the belief in a single spiritual unity. God exists and nothing else. This idea often emerges with great slowness from the forms of the primitive naturalism and there is a conflict between the notion of an absolute and immutable spiritual power and the old notions according to which the events which bring us good or ill were special acts of benevolent, irate or malignant gods. The reconciliation is attempted by the belief that natural laws and forces, although God-created, yet, when created, have a certain existence external to God, and that he can and does specially direct them accor-

ding to his feeling towards individual men. Left to itself nature would not fully work his will, but would sometimes oppose it. Hence he interferes miraculously to protect and benefit some men, and cause suffering or death to others. But to the mind differently cultured the notion of the possibility of any antagonism whatever between the laws of nature and God is a contradiction in terms. Such notions are allied to the extramundane conception of God. An idea of an opposite kind identifies him with matter. A more advanced belief is that God is not matter nor is matter external to him. He works and reveals himself in matter. Whether matter has any existence save as a vesture or manifestation of spirit, is a question which human science is inadequate to solve. But we see that all matter is constantly imbued with certain forces and properties, and that it is by the action of these that God manifests himself in the wonderful forms of organised nature. If we refer life and its organisms to God, the physical properties of matter, which evince the same intention and will, and matter itself, which we only know through its properties, must also be mere shows of the Spirit. Although the earth is a unity, not only physically, but in its organic phenomena, matter with its physical properties alone cannot convince the mind of God, because all matter is at all times instinct with these properties. Where there is universal uniformity, reason cannot conclude that it ever has been, or ever can be, otherwise. But when we look up from the dead physical level of matter, every organic being appears as a special miracle, disturbing the order of nature. Physical and chemical properties are of the essence of matter. In them matter is, and it is inconceivable without them. But every organic being is limited in time and space. The material world is neither lessened nor increased by it. Take it away and matter remains as before. It is not matter but an invisible, miraculous force that animates and shapes it for a time, and then lays it down. It is not the result of the inherent and universal forces of matter, a necessary form of matter. In its adaptation of matter, and to matter, it exhibits intellect, will and power, and this is especially shewn in the harmony and consistency which pervade the multitude of allied types, and forms of the same type, presented by the organisms which cover the surface of the earth as with a perpetual efflorescence. Matter does not spontaneously take organic form and vitality, nor can any combinations of matter by the highest natural intellect produce conditions under which matter exhibits will and organism. Man cannot cause matter to take life, much less can matter vivify itself. Wherever therefore we see an organic being, we see a sole universal spirit working and revealing itself in matter. Without speculating on the intention of nature, this great fact is very plain, that man sees in nature a Spirit whose action is a perpetual material self-development in a vast, and apparently boundless, variety of organic forms that array the earth in a living garment of every colour,

shape and texture. The gradual change that is taking place, especially in and through the highest organism, man, shews that individuals and even races are but evanescent forms, no ways necessary to the Spirit, and which it lays aside after a time. Before the single organism man, most of the larger land animals will probably pass away. Thus the organism of the earth is a slowly changing and growing development of the Spirit. Individuals perpetually perish, Races have vanished and are progressing to annihilation. But as yet the Human Race, the most perfect and most powerful mundane incarnation, advances, and we cannot conclude from nature that it will not be immortal.

It is certain that the advance of science does not render spiritualism more uniform. The ethnic character of the mind of the Human Race can never attain fixity. It must change for ever, and so must all its forms, external and internal. Monotheism is as many coloured as naturalism. Hitherto it has fluctuated chiefly between two extremes, the one that the universe is the necessary and eternal body of the Spirit, and the other that the Spirit is a metaphysical abstraction of human faculties transcendent and infinite. The more abstract and metaphysical or subjective races and minds have tended to the latter conception; the more objective and sensuous to the former, or to other material notions. Between them lie many forms of monotheism, such as the following.—All creation is an emanation of the Deity and is reabsorbed in him. The succession of phenomena, and even of universes, is but the endless pulsation of his life. They have no reality in themselves but are mere apparitions. Or the universe has an external reality, but as it arose at his word, so will it vanish and leave not a wrack behind. The active life of the Deity is in the universe, in its forms and motions he works and delights. He dwells apart in a material Heaven, and thence controls and directs the events of the world, either immediately or by subordinate spirits. Such are a few of the aspects under which the Deity appears to the monotheistic intellect. Those that have most influenced the ethnology of eastern Asia and the islands will be considered in the section on Monotheism.

The only safe and broad division of natural religions or super-sensual beliefs is into those which are scientific and those which are not. It is only in the lowest tribes that we can correctly speak of the religion of a race as a unity. Whenever scientific minds have arisen in a race, the religious beliefs cease to be uniform. In most if not all European nations at this moment, every kind of spiritualism may be found, from the purest and truest down to superstitions as gross as any which prevail in the Indian Archipelago. Whole classes of men belonging to the most civilised races still cherish naturalism under christian forms, or blend the lower with the higher faith in a mode of which we have many examples in the mixed religions of Eastern Asia. A man's religion it is

evident must always depend on the character of his mind. By scientific minds I mean minds which, from nature or culture, are thoroughly imbued with the first principle of all spiritual truth,—renunciation of self. From this comes faith in God and in nature as God revealed in action. From this come freedom from human authority and prejudices, and a rooted conviction that to every mind truth exists only so far as it has observed nature in a spirit of reverence and humility, and that all notions of God not directly derived from the observation of nature are necessarily imperfect.* All minds, whether in barbarous or civilized races, that are not, consciously or unconsciously, imbued with this sense of the relation of nature to the human soul, are unscientific. Between them and the open day of nature there is a veil of fears, aspirations and imaginations centering in self. It is necessary to distinguish between a scientific mind and a merely intellectually disciplined mind. An open, candid, self renouncing man, taking nature as a great fact through which he looks upon God, and finding nothing in himself greater than this wonderful God given and more than magical capacity of spiritual vision, possesses the true scientific mind in a greater degree than many men of science.† However advanced a national faith may be, its existence as a reality never ceases to be dependent on this scientific spirit. Whenever it is, or becomes, feeble, the religion is degenerated. Thus as the Hindu race lost this spirit, the simplicity and truth which distinguished their faith to a great extent 3,000 years ago, were lost also.

From the most elevated monotheism to the rudest fear of natural powers, there are numberless varieties of supernaturalism, all tinged by the character, culture, habits and locality of the race in which it is manifested. The tribes which we are investigating present many of these varieties, but they belong far more to the lower than to the higher kinds of faith, and it is therefore necessary to examine the former more closely.

* "Christ and the prophets always send us back to nature. In the Bible, and especially in the words of Christ, the deepest truths of nature are not merely recognised, but earnestly inculcated as the very basis of religion or spiritual knowledge."

† In the exclusive prosecution of particular sciences or culture of particular intellectual powers, there is as much danger as in any other one sided habit of the mind, that it will become inordinately attached to its own acquisitions and views, and lose the susceptibility of receiving impressions from nature as a whole. In periods when men pride themselves on an eager and incessant devotion to the methodising of one class of natural facts, it is only by getting below our superadded nature, to the pure human perceptions and sensations that lie at the bottom of it, that we can understand our true position in relation to nature. We must go back in the history of the mind, till we have reached the time when she was not yet habited by things external, if we would see all that material nature is to the soul. This needs neither the analysis of the philosopher nor the imagination of the poet. The mind, from early receiving a true direction, or from the natural strength of its sensibility, will and sincerity, may escape the ossifying influence of a narrow culture, and much of the prejudice which necessarily results from an implicit surrender of itself to the ethnic mould of its time and tribe. The man, however unlearned, whose mind has retained its own independence of feeling and vision, may see in any

SECT. 3. *Development of Naturalism and Naturology.*

The first⁴ religious or philosophical belief of man is, that all natural powers are living and spiritual, like that by which he himself is animated. This idea arises primarily from transferring the internal nature of which he has the nearest consciousness, to external nature. In this great and ever present and operative internal nature, action is the effect of living will, and the will is moved by desires and passions. The mysterious physical forces by which man is everywhere surrounded and pervaded, the abundant vegetable and animal life in external nature and the constant motions, actions and mutations which it presents, shew it to be full of animated powers. The actions of these powers must also be the effect of will moved by passions. Only that which affects man immediately or strongly, arrests his attention and becomes the subject of this unconscious reasoning. In tribes of the lower organic development, in which fear is strong and imagination weak, this idea probably first matures into a deep rooted and fixed belief in the individuality and malignity of natural powers when the ordinary course of nature is interrupted by some striking event or phenomenon, or when man suffers from her operations. Wonder begets worship. Whatever excites strong emotions has something supernatural in it. The nameless attributes of external objects, by which in nations of an imperfect or too physical civilization few souls will suffer themselves to be habitually thrilled save those of the child and the poet,—the power, the beauty, the terror, the sublimity, and mystery which to the human mind exposed bare to nature, reside in matter and its mundane forms, are living spirits to unscientific tribes. The naked and unarmed family that wanders in primeval forest-lands see irascible and capricious powers in the tiger, the snake, the pool in whose dark depth a child vanishes, the torrent that sweeps away a parent or a brother, in the gigantic and living forest itself, in the wind that awakens it from silence and gives it a thousand voices, or fills it with one mighty and awful sound which drowns the crash of fall-

weed miraculously unfolded from dead earth into a perfect living creature, clothed with beauty and grace, and yet devoid of all consciousness or faculty, all self-assertion or self-action,—a spirit which is in the weed, of which the weed is, but which is not the weed, and as in one creature, and that creature in it, so in all material things or nature and all in it, and yet not nature but invisible, spiritual substance, self existing, eternal, whereof nature is but the mystic, evanescent, spirit-woven garment. The unconscious Lily, which all may see can neither toil nor spin, a creature entirely mute, motionless, powerless, helpless,—whence that magical growth of its? Whence that beauty far transcending all human glory? Yesterday there was nothing seen here but the bare earth. To day we are startled by this wondrous apparition. Tomorrow it is not. What and whence was it? How came it? Whether has it vanished? The ignorant man who has kept his intellet pure and open can well understand that the flower so beautiful, so perfect, so harmonious in itself and in such harmony with all nature, was an object of deepest sacredness, was God revealing his being, his eternal power and godhead to sense. The lily was a word written before his eyes by the Invisible Spirit, and whereby the invisible attributes of the Spirit were shewn to him.

ing trees, above all in the mysterious disease which first prostrates and wastes the strong man, and then transforms him into a lifeless corpse. Everything from which we suffer is animated by a spirit which, whether always actively malignant, or only seizing its victims at rare and uncertain times, is ever living, ever conscious of our presence, and is to be destroyed or propitiated like a human enemy. The invisible and intangible, cause the greatest sense of supernaturalism and mystery. The corporeal or substantial only differ from human enemies because their nature is less understood and their action more uncertain. But if they injure us, they excite anger and revenge, and are to be destroyed if within our power. If they are beyond it, they become objects of fear only, or of fear and hate, and are to be propitiated. For as gods have man-like natures and malignant or beneficent, their enmity may be appeased and their good will excited by the ordinary means, submission, humiliation, adulation and gifts. Where this is not sufficient, and the gods are peculiarly vindictive and powerful, their vengeance must be gratified by offering them victims. Supernaturalism when indigenous is necessarily a reflection of the nature of the race. If the man delights to embrew his hands in the blood of him against whom his rage is kindled, so will the god, and human victims must bleed vicariously for the tribe or the family. The man too whose will, passions or intellect are beyond the common standard of the tribe, is seen by all to be possessed of something which is not in them, and this too is mysterious and supernatural like the elemental powers. Nay it is greater than them, for it is by the power he exercises over nature and man that he proves his god-like faculty. He who by his skill, his knowledge, or his courage, overcomes disease, foretells events, destroys fierce animals, forces other men to yield to him, escapes dangers or baffles the assaults of elemental enemies, does so by his communion with the spirits of nature or by his power over them. All men who rise far above their fellows, whose nature they cannot understand are gods. In the feelings with which individuals regard men of a stronger will than themselves, or who from physical power or position are lords over them, there is a primordial source of human deification. In certain ethnic stages women must regard men, and children parents, as transcendentally greater than themselves, as gods, because they are entirely subject to their will and caprice, and their lives are every moment in their hands. To the woman wandering in the wilds of primeval nature with her lord,—the single isolated pair from whom a tribe or a race are to descend,—his savage anger must have been more dreadful than the wrath of the elements, and his tenderness more grateful than the light of heaven. To the child the parent is still transcendentally powerful and loveable. Can we wonder if, in the dawn of human history, when the mother and her children were bereft by death of the hand which had staid them, of him who had often stood between them and death, and

whose will they had followed with mingled love and fear, she should feel towards his spirit as towards a god, call upon him to come to her aid in danger and distress, address him in endearing language, offer to him food and continue to picture him to her children as a superior being, till in their imaginations he became superhuman and his actions mythical. Nor is this belief in superhuman power limited to men absolutely or relatively great. Whatever peculiarity in a fellowman raises a barrier between us and him, and fills us with perplexity and uneasiness or dread, is also more than human. He in whose gloomy, malignant or sinister eye we cannot gaze without a sensation of fear at times creeping over us, is a god, has a god-like power, or is possessed by a god. In a word to every community in this ethnic stage there are two orders of spiritual powers, that of ordinary human nature, and that beyond it, whether it resides in god,—men or in elemental spirits. The same principle, in various developments, may be traced through every ethnic condition, and even in the higher organisms, where the intellect and imagination are powerful, all the soft, sublime and dread impressions which they receive from external nature, are reflected back upon it in supernatural forms. Nature evokes in us love, wonder and awe, and these feelings fill it with gods, heroes and mysterious powers.

SECT. 4. *Incarnation of the elemental spirits. Polytheism.*

When men have become gods, the greater distinctness of form and individuality which characterises them, must soon suggest the idea that the elemental gods have also human forms, and what thus presents itself as reasonable and probable will speedily be recognised as fact. The mind labours to individualize the beings of its spiritual world, and it naturally associates intelligence with the human form. It cannot in the ruder tribes, nor indeed can it after the highest experience and culture, obtain a distinct conception of immaterial spirit. The rude mind does not attempt such abstractions. It believes that every being is possessed of a limited and definite body, and those powers to which it ascribes the feelings of man, and which often and deeply stir its imagination and affections, are pictured as human in their forms. Probably a still earlier cause of the attribution of this form to spirits, is to be found in the conception of a thin or immaterial body, originating in the observation of wind, light and darkness, shadows of men and other objects, and in the images which occur to the imagination in dreams, or when the feelings are strongly excited, or which appear as spectres in certain diseased states of the ocular nerves. When a deceased relative re-appears with remarkable distinctness in the memory of the dreaming or brooding survivor, it is naturally believed that the vision is a reality. Unusual sounds too are often heard without the source being seen, and in diseased states of the brain or ear, words are sometimes heard when there is no person

near to utter them, or which are in the voice of one who is known to be far distant. Hence arises the idea of invisible spirits hovering in the air, and of spirits capable of assuming and discarding their sensible forms. The idea of beings with airy and intangible human forms having been acquired, the imagination will soon recognize them in natural appearances and in the spiritual world, and invest the elemental powers with similar bodies. The ideas of superhuman power, velocity and vastness derived from nature, are gradually transferred to the human gods who have ceased to exist, and whose lineaments, faculties and deeds have assumed a dim and transcendent character in the magnifying medium of antiquity and tradition. Thus all the beings of the spiritual world become assimilated in their character and are submitted to the mythic action of the mind. The elemental spirits are clothed with human forms, the human spirits with elemental powers and attributes, and the two orders even come to be confounded with each other. Naturalism passes partially or wholly into Polytheism. Gods become male and female and have their histories like notable men. It is doubtful whether there is any tribe in which pure naturalism prevails. The extent to which the human element predominates in all the spiritualisms of Asianesia of which we have any accurate knowledge, is a strong confirmation of the truth, derived from a consideration of the action and history of the individual mind, that spiritualism is nothing but the reflection of human nature on the outer world.

SECT. 5. *Possession, Sorcerers, Priests.*

The belief in the possession of supernatural power by men is almost universal. It is probable that all men of extraordinary intellect, strength of will, force of passion, fervid temperament or susceptibility of nervous excitement were at first considered as inspired by a superhuman spirit or as gods. Nothing makes a stronger impression on men's mind than the sight of a fellow man labouring under profound or violent excitement. If it be of an extraordinary nature, the result of disease, insanity, nervous impressibility or the unconscious or voluntary occupancy of the mind with one emotion, purpose, or notion, the acts and speech in which it manifests itself will be naturally attributed to possession by a god. It will soon be discovered that some individuals are peculiarly susceptible of nervous and imaginative excitement by external means. They themselves will believe with those around them that this extraordinary state is the result of the influence of a god.

The passage from this to the idea that man enters into communication with the great spirits of nature and causes them to aid him or do his behest, or that they voluntarily reveal to him the hidden and the future is an easy one. This led to sorcerers and priests. The superhuman power being an attribute of superior intelligence,

force of character or passion, may be used for benevolent as well as for malignant purposes. Hence in most tribes there are good as well as bad sorcerers, the former being the chief benefactors and the latter the greatest scourges of a community. It is to the former that the tribe looks to shield them from all supernatural evils, to avert the anger of spirits, to expell those that haunt the person, the house or the village, to detect wicked sorcerers and counteract their spells. It is through them that prayers, invocations and sacrifices are made. It is by their mouths that the gods declare their will. Standing thus between man and the unseen power from whom all good and ill come, their office assumes an influence which generally corrupts its possessors. To maintain and extend this influence, to conceal their failures and their defects of power, to save themselves from the revenge of disappointed credulity, they are compelled to have recourse to cunning and art. This does not renders them hypocrites to any greater extent than the priest, the statesman or the leader of more civilized societies who is driven by defect of self denial and by lust of power or fame to maintain his position in public opinion, at the expence of occasional, and sometimes systematic deviations from candour and truth. Quackery has various degrees and forms, and thorough uncompromising sincerity demands a courage and a self renunciation which are not always present even in the best of men. The creed that the end demands and justifies the means, has a constant though mostly an unconscious operation in life, in the family, the social circle, the public arena, and the temple. Most sorcerers are imposters to a certain extent, but they are believers too. The faith which calls them into existence is in their breasts also, and their arts as often proceed from a desire to exalt it as to benefit themselves. Pious fraud is common to all races and civilizations that the world has yet seen.

SECT. 6. *The change which spiritualism undergoes with the progress of the race.*

The change which a faith undergoes must be considered under many aspects. We have adverted to the more prominent and universal features which the progress of spiritualism presents. But there are many slowly operating causes of change to which every creed is subject, and which are inseparable from the nature of the human intellect. As long as a very simple and rude naturalism prevails, and the mind does not advance, it may be reproduced age after age with little alteration. But in every imaginative race, actual persons and events are soon transferred to the spiritual world, and they necessarily undergo a change from generation to generation, for in all rude tribes there is no exact discrimination between facts presented by the memory and those presented by the imagination, or rather whatever is lost or becomes obscure to the former is supplied by the latter. The mind too under the influence

of a deep reverence, love or admiration for the objects of its spiritual regard, tends involuntarily to exaggerate the traits that excite its worship. It is thus that traditions soon become mythic, and the gods and mythologies of former times acquire new characteristics. It is difficult for nations who have long been accustomed to perpetuate their ideas by writing, to appreciate the great metamorphic power which the mere lapse of time has upon a creed that wants this support. The greater number of the spiritualisms which we shall pass in review are in this predicament, and we shall even find that in different districts of the same country, inhabited by the same race, the most important facts of the national mythology have become singularly discrepant. Even after writing is introduced, this cause of change still subsists, for there are few religions in which the sacred books have not been altered for the purpose of expunging what the transcribers of a later age have deemed interpolations, because inconsistent with their own common sense or more enlightened ideas, or of adding what appeared to them necessary to render the text clear or reasonable.*

When men cease to be constantly environed by great natural objects,—forests, open plains, rocks or snows,—and to be frequently left in solitude or in small numbers, when they begin to live in villages and towns, and mental culture and arts advance, they become less simple, less earnest, and more bold, licentious, and luxuriant, in intellect and imagination. As the aspect of human nature, the material world and society, becomes more complex, and reflects itself in more abstract forms in the minds of the intellectual leaders of the race, the spiritual world also becomes more abstract. The methodical faculty that demands order, subordination and rules in the civil society, imposes them also on the mythology. The gods are ranked, and their attributes and powers are more strictly defined. Poetical and religious natures, partaking in the common culture, image them in forms more accordant with the spirit of the times. Every scientific discovery that rewards observation, enlightens them respecting the nature of the gods, or discloses the existence of will and order in directions where their presence had not been previously suspected. Hence follows an enlargement of the powers and functions of the old deities, or the recognition of new ones.

Of all the more exact physical observations those of astronomy are the earliest, and they therefore led to the discovery of many gods. The first distinct observation of the different seasons, the four quarters of the heavens, the motions of the sun, moon and planets were so many striking discoveries of great and intelligent spirits ruling in the sky and producing

* In books not guarded by their sacredness, the liberties taken by transcribers in semi-civilized races, such as the Malays, are almost unbounded. Every one who has a high opinion of his abilities thinks himself justified in *improving* the original *ad libitum*.

phenomena of so much importance and regularity. When the mind became the subject of scientific observation, a number of distinct powers were recognized in it, reproduced with varying intensity in every individual and still reappearing, unchanged and fresh, as generation after generation and age after age passed away. Every passion and faculty that operates mysteriously and inconstantly within the souls of all men in all times and at all places, was seen to be the inspiration of a god, viewless, omnipresent and undying.

Every system of supernaturalism is plastic to the mind of the individual and the nation. It is impossible that any system of religion can remain the same for all minds and races. When a man sincerely embraces a faith, an accommodation takes place between it and his old notions. Whatever tenets appear inconsistent with his common sense or deep rooted prejudices, he speedily places in a point of view which reconciles them. Thus the national faith varies according to the character of the individual and the philosophical culture of his age and generation. Periods of stagnation may confine and arrest this slow and continual metamorphosis, but as the national mind slowly changes the ancient religion changes also. The outer forms may remain the same but until the mind loses its faith, the system continues to receive new interpretations and explanations in accordance with the ever changing philosophy of the race. No two men give precisely the same account of a philosophical or religious belief when their faith is intellectual, earnest and living. It grows and entwines itself into the whole nature of each, and its objective representation differs accordingly.

I have not attempted to trace a regular and uniform progress of spiritualism in each race or in the human race as a whole, because I have not observed such a progress, and the first principles of ethnology are opposed to the expectation of ever finding it. The human soul constantly returns, in each new individual, to the normal state in which the race began, and amidst the infinite diversity of external life in which it matures, it is still possible for every past ethnic stage and every form of spiritualism, to be reproduced. I doubt not that at this moment there are small isolated human groups and even single families, pairs or individuals, whose spiritualism is not derivative in its forms, but is the direct effect of the action and reaction between their own minds and nature. Even in civilized communities it is possible for men of great sensibility, earnestness and intellect to make their spiritual culture in great measure an independent and natural one. In all tribes, and under every kind of established creed and worship, the human soul is constantly renewed in youth, and reproduced with varying power and sensibility. Hence no forms and creeds can long endure. When the mind is stirred with new ideas derived from any source, it begins to distrust the completeness of traditional faith and knowledge, and the efficacy

of traditional forms. They have only become fixed through a spiritual stagnation. When the soul is again roused into spiritual independence and activity, the individual feels a repugnance to what has stood between him and reality, and which still veils the truths of nature from the eyes of others. In periods of stagnation too it must always happen that insincere and cunning men, and formalists unconscious of their want of living faith, will use the established forms of spiritualism for their own selfish ends, and prey upon the blind credulity of the tribe. This too will become clear to the man who has felt and seen nature for himself, and will make him burn with a deep desire to destroy the false and the formal, to rouse his countrymen from their lethargy, and fill their souls with the living flame which glows in his own. The elements of change are always present, although long periods may elapse before men may arise of intellect so clear and earnest and will so strong and courageous, as to make them stand up against what is established. Every sudden spiritual revolution in a cultured race, is accompanied by violent social agitation, the disruption of natural ties and much individual suffering, and men of ordinary natures shrink from assailing what is established and trust to its being gradually undermined and falling with a less amount of temporary evil. In tribes of low organism light must come from without, because new ideas cannot arise to them in the limited and changeless round of their own experience. But the capacity of change is always present. We no more find a dead uniformity of spiritualism amongst rude races than we do amongst civilised ones. It is extremely difficult and often impossible to get at the spiritualism of the individual at all, but I have found so much diversity in this respect amongst tribes in which I have been best enabled to observe individual natures, that I am satisfied the fullest confirmation will be given by deeper ethnic research to the conclusions that may be drawn from the nature of the mind itself. One thing is very clear. While European philosophers speculate on heathenism, and the primordial condition of spiritualism and of humanity generally, as something far off, and only capable of being dimly described through the faint lights afforded by ancient writers, little real progress will be made in spiritual science. We must study it ethnically, and we shall find amongst numerous existing tribes in regions like the Indian Archipelago, examples of every kind of spiritualism through which human races have passed. The religions that are styled ancient and primordial are still as modern as our own. In Asia-nesia human victims still bleed to appease the wrath of gods, to propitiate the spirit of a house or a boat that has been newly built, of ground that has been cleared, or of grain that has been sown. The affection of relatives still devotes a spot for the haunt of the spirit of the deceased and duly offers him his wonted food, or kills for him slaves and consecrates to him an ample supply of clothes, weapons and provisions that he may want nothing in heaven. The

devoted boat is still annually freighted with the spirits of disease and mischief that infest the house and the community. Sorcerers have still the power of controlling the will, the heart and the blood, and producing love, hate, madness, disease, misfortune and death. The past, the future and the hidden are still revealed to the seer. Natural objects and even the products of human art are still indued with spiritualism. In his house, on the path, in his garden, in the forest and on the sea, man is surrounded by supernatural powers, to whose influence many ordinary and all extraordinary events and phenomena are owing. In the sky, and the air, on land and water, gods of many forms and functions have still their abodes.

We shall first consider the objects of spiritualism. The principal sections under the 1st head are on Elements, Natural Objects, Animals, Men, Spirits, Spectres, Manes; Future Life, Metempsychosis, Immortality of the soul, Heaven, Hell; Sacred and Spiritual places and objects, Idols, Fetishes, Relics; Omens, Lucky and unlucky days &c; Polytheism and Mythology; Supreme God; Monotheism. Under the 2nd head the chief sections will be on Oblations, Sacrifices, Consecration and Dedication of Objects, Invocations, Sorcery, Necromancy, Witchcraft, Evil eye, Inspiration, Revelation, Prophecy, Divination, Augury, Astrology, Spells, Charms, Curses, Amulets, Penance, Prohibitions, Rites appropriate to Individuals, to the Family and to the Community.

SECT. 7. *The blending of Religions.*

There is nothing that clings longer to a race than the religious faith in which it has been nurtured. Indeed it is impossible for any mind that is not thoroughly scientific to cast off entirely the religious forms of thought in which it has grown to maturity. Hence in every people that has received the impression of foreign beliefs, we find that the latter do not expel and supersede the older religion, but are engrafted on it, blend with it or overlies it. Observances are more easily abandoned than ideas, and even when all the external forms of the alien faith have been put on, and few vestiges of the indigenous one remain, the latter still retains its vitality in the mind and powerfully colours or corrupts the former. The actual religion of a people is thus of great ethnographic interest, and demands a minute and searching observation. No other facts relating to rude tribes are more difficult of ascertainment or more often elude enquiry. In many of the tribes which we are investigating, it is evident that more than one faith has been superinduced on the primary one, but our information is as yet too meagre to offer more than a glimpse of the fact, and the full ethnic value of these admixtures will only appear when the subject has been profoundly studied. We shall notice some cases in which it is obvious the religion is more or less compound. We shall be struck by the almost universal influence which Buddhism appears to have

exerted. It is the only heathen faith that has been preached in a large and catholic spirit, and there must have been a period when its apostles not only spread themselves amongst all the more civilised races of the east, but sought out many of the wilder tribes in their jungles and mountain wilds. We not only find it existing in greater or less purity, and with fewer differences than Christianity exhibits, among the various nations and sects of the west, in India, Tibet, Middle Asia, Japan, China, Anam, Burmah, Siam and Java, but we can trace its influence, often obscurely, amongst many of the less cultured mountain and forest tribes of the Himalayan and Vindyan chains, of Ultrahindia, and of the greater portion of the Indian Archipelago. I have found indubitable traces of its former presence even in the eastern islands, Halmahera, Ceram &c.

With these very partial remarks on the nature and developments of spiritualism I must dismiss the ethnic elements of a subject which would require many volumes to enter on it fully. It is of vast extent and has never been investigated as a whole by writers on mental science or on ethnology, perhaps because many of its phenomena were so long considered to have their origin not in the mental and bodily constitution which God has given to man, but in extraneous diabolic influences. A tendency of the mind so intimately connected with man's relation to nature and to God, and of which a correct knowledge seems so necessary in studying the different phases of religion amongst all races, is deserving of the most profound and extensive research, and I trust that the numerous facts that will be brought forward in the subsequent sections of this paper may attract the attention of some who have the means of prosecuting similar enquires in other parts of the world. How can we judge how much of a supernaturalism that took its character from the inexperience and misconceptions of archaic times may be preserved in the minds of a tribe that has embraced a truer faith, and continue to colour its tenets and mould its forms, unless we have made ourselves acquainted with the various ethnic developments of spiritualism, and traced the spread of particular dogmas and practices?

In Asianesia there does not appear to be any indigenous system of supernaturalism displaying a high intellectual culture. I shall therefore endeavour to confine myself as much as possible in the earlier sections to those religious elements which enter into the faith of the rudest tribes.

This will enable us in the later ones to see how far these are retained and how they are developed in the higher systems. But I shall not attempt to trace with metaphysical accuracy the development and forms of religious faith according to the culture and constitution of different minds and races. This would demand

more time and study and higher qualifications than I can bring to the task. But as each belief and practice comes under notice, I shall endeavour to ascertain on what intellectual tendency it depends. Although in most cases I cannot hope to distinguish what is original from what is acquired, I think that it will be possible in many cases to separate the more archaic religions of the insular tribes from the ingredients of Hindu and Mahomedan derivation. In each section, before coming to the particular faiths of the islands, I shall illustrate by examples the parallel creeds of continental races. This will tend to prevent our falling into those errors which are unavoidable in ethnology when the mind is too much fixed on one region or group of tribes.

The unscientific spiritualism which predominates in Asianesia is essentially the same throughout the human race and even now there is probably no nation, however scientific, in which it does not remain as a substratum, powerfully operating on uncultured minds and sometimes influencing those who think they stand above it. In its crude state it is the same in all races. It is only when it takes fixed forms, marked by strong individuality, that it throws light on ethnic alliances and migrations. Spirits of diseases, mountains, seas, rivers, forests, rocks, sun, moon and stars, deceased men, all or some of them, exist in the uncultured minds of all races, as do the ideas and practice of inspiration, sorcery, charms, invocation, sacrifice and oblation. But when spirits receive peculiar personifications or attributes, when they become true god-men, acquire social relations, and have their histories, their unions, their children, their hostilities, when each receives distinctive worship, it is possible to connect the religion of one tribe with that of another.

II. OBJECTS OF SPIRITUAL FAITH.

SECT. I. *Elements, Natural objects, Animals.*

In this section we shall consider the simpler and purer forms of nature-worship, reserving for subsequent ones the degradations which it undergoes when the spiritual feeling, losing its natural direction and subjected to artificial guidance, attaches itself to idols, fetishes, and other objects in themselves incapable of awakening any sense of the supernatural. I shall as much as possible avoid the consideration of any of the changes which it undergoes in cultured nations where the directions which the feeling receives are merely reflections of the philosophical and imaginative development of each race. I shall endeavour to adhere to those spiritual aspects of nature which only prevail in their purity amongst rude and simple tribes, although they have been more or less preserved with many modifications, by almost all nations that have hitherto flourished. It is difficult to select examples that will well illustrate the primitive spiritualism, because there are few if any tribes in which it has not become, to a certain extent, formal and artificial in its direction. When from accident or design, a particular object comes to be invested, in the mind of the founder or leaders of a family or tribe, with peculiar sacredness, it necessarily becomes a permanent object of worship, and the feelings that in each individual would otherwise have overflowed on all nature, and distinguished those objects that most affected his peculiar sympathies, expend themselves on that which he has been taught to consider as sacred above all other things.

Although the ancient Mongols believed in a supreme being, their principal worship was paid to the subordinate powers of nature and to tutelar gods; the malificent spirits being the most dreaded and most attended to. Such is still the faith of the Samoides. A similar system of naturalism prevails amongst the tribes of the Aino.

Amongst the American tribes all objects are spiritual. The sun, moon, stars, sky, sea, rivers, rocks, fire &c are gods. Every wonderful object or natural power has a god. A god dwells in the pulse and makes it beat, and in the flint and makes it emit fire. The sun was a principal object of worship to the Mexicans. The other heavenly bodies were also spiritual. The sky is a great god amongst many nations, as we shall notice more particularly hereafter.

The Africans have a luxuriant naturalism but it is in general degraded into idolatry and fetishism, or metamorphosed into polytheism. Amongst the Malgasi and many other Africans tribes everything wonderful or valuable is spiritual, and anything may become the object of this feeling. The Malgasi consider the

heavenly bodies, thunder and lightning, earthquakes, silk, rice, money, books &c as gods.

Naturalism prevails amongst all the tribes of Tibet, India, Ultraland and Asianesia and seldom with any other variations than those attributable to the peculiarities of each portion of the region. In Tibet and Bisaher the mountains predominate, and they are also gods of the Bodo, Dhimal, Raba, Khumi &c. The sun, moon and stars are worshipped by the Khonds, Ghonds, Bodo, Dhimal, Khumi, Garos &c. The spirits of rivers, springs and wells are revered or worshipped by the Ho, Khonds, Bodo, Dhimal, Lungkha, Khumi, rocks by the Silong, caves by the Karens, forests and trees or their nats by the Karens, Burnese, Rakhoings, Silong, fire by the Bodo, nats of the sea by the Silong, the spirit of whole visible earth by the Khumi, Bima &c.

Naturalism maintains its full sway amongst all the races of Asianesia and it is found in the most civilised communities as well as in the rudest, neither Hinduism, Mahomedanism nor Christianity having anywhere displaced it. There is not a tribe that does not believe that spiritual power is constantly operating and is the true cause of all striking natural phenomena, and of all wonderful and unexpected events, national and individual. Whatever indicates the presence of mysterious or inexplicable power of any kind is a spirit working. Whatever in nature raises feelings of solemnity, melancholy, terror or profound admiration, is haunted by gods. But spiritualism has in general settled into a belief in a multitude of specific divinities and powers of various kinds, or has invested particular objects with sacredness. These, which constitute the great bulk of Asianesia mythology, will be mentioned in other sections.

The Philippine negroes worship the sun, moon, stars, rain, the rainbow. The Mangkasars anciently worshipped the sun and moon and they enter into the myths of Celebes, the S. E. islands, the Malay Peninsula &c. Rivers, mountains, rocks and trees are almost everywhere spiritual or the abodes of spirits. Diseases and calamities are produced by evil spirits which abound every where, although many prefer or are confined to particular places. Spirits of deceased relatives and chiefs are almost universally objects of reverence, fear or worship. Besides the recognition of gods in all great, wonderful or powerful objects and phenomena, it is generally believed that most objects that are closely connected with man, or with which his good or bad fortune can be associated, exert a preternatural influence on him. Houses, boats, crises and other weapons, implements, plantations, domesticated animals, articles of dress, particular localities, trees, rocks, points, islets, mountains, rivers and portions of rivers, have a good or malicious virtue. Some tribes attribute the same kind of power or influence to wives. This subject will be best considered in connection with the conceptions and degradations of naturalism in subsequent sections.

Animals. We have already mentioned the origin of the feelings which man in early ethnic stages entertains towards the lower animals, exalting them to a spiritual place which they long retain

after his relation towards them has been totally altered by the progress of art. The larger carnivorous animals of every region must have been malignant gods to its first human inhabitants. The other animals must also have been viewed as being animated by spirits, mysterious to man, because although giving more direct indications of a spiritual being akin to his own than any other natural objects, he has not that access to their spirits which speech and a community of feeling gives him to his fellow men, and their forms are wholly alien and wonderful to him. All animals distinguished by their beauty, their ferocity, their size or their habits are gods that much attract his feelings. Those that most affect him whether hostilely or beneficially are most regarded and most worshipped. Animal worship long continues to cling to national faiths that have passed from the simplicity of pure naturalism. But it is reconciled to the more advanced religions by considering different animals as favorites or attendants of gods, or as forms in which they incarnate themselves. Even the more scientific beliefs are made to harmonize with the ancient and common creed by viewing the sacred animals as peculiar emanations of the deity who animates all things. Prichard, following some of the ancients, concludes that the worship of animals amongst the Egyptians had its origin in the doctrine of emanation. "Certain effluxes or emanations from the essence of the gods were believed to be embodied in all living creatures, and it was to these indwelling portions of the divinity that the people addressed their adoration." This explanation is arrived at by substituting the metamorphosis which naturalism undergoes in a late and highly intellectual age for its primitive form. The origin of animal worship, as we have seen, reaches back far beyond the refinements of divine essence, universal spirit and emanations.

The Bear is a god in all the arctic regions. The Samoides ascribe supernatural virtues to the white bear. The Ostjaks believe that the black bear is omniscient, and their oaths are taken on a bear's head. The wolf is also held in great respect by the Ostiaks. Each tribe of the Yakuti has a sacred animal, a goose, raven &c. whose flesh is prohibited food to it. Animal worship prevailed largely in America. The Mexicans worshipped the more destructive animals, tigers, snakes, &c.

"The head of a sacrificed person was strung up; the limbs eaten at the feast; the body given to the wild beasts which were kept within the temple circuits; moreover, in that accursed house they kept vipers and venomous snakes, who had something at their tails, which sounded like morris bells, and they are the worst of all vipers; these were kept in cradles and barrels and earthen vessels, upon feathers, and there they laid their eggs and nursed up their snakelings, and there they were fed with the bodies of the sacrificed and with dogs' flesh. We learnt for certain, that after they had driven us from Mexico and slain above 850 of our

soldiers and of the men of Narvaez, to be offered to their cruel idol, these beasts and snakes were supported upon their bodies for many days. When the lions and tigers roared, and the jackalls and foxes howled and the snakes hissed, it was a grim thing to hear them and it seemed like hell."

The North American Indians regard the buffalo and bear as sacred, and among many tribes the rabbit, tortoise and wood chuck are revered. Animal worship has prevailed in Africa from the remotest antiquity and the civilisation of Egypt only made it more complex, comprehensive and formal. Some animals were generally worshipped, but each district had its own sacred animals. The ox, cat, hawk, ibis and the lepidotus appear to have been universally worshipped and the dog and oxyrhynchus fish very generally. Among the animals sacred at particular places were the ape, monkey, shrew mouse, bear, weasel, dog, wolf, jackal, ichneumon, lion, hippopotamus, goat, sheep, cow, crocodile, hawk, horned snake, beetles, the killing of which was punished by death. They varied in rank, some being lodged and fed in splendid temples. "The expense incurred by the curators, for the maintenance of the sacred animals, was immense. Not only were necessary provisions procured for them, but imaginary luxuries, which they could neither understand nor enjoy. They were treated with the same respect as human beings; warm baths were prepared for them; they were anointed with the choicest unguents, and perfumed with the most fragrant odours. Rich carpets and ornamental furniture were provided for them, and every care was taken to consult their natural habits. Females of of their own species were kept for them, and fed with the utmost delicacy and expense; those only being selected, which were remarkable for their beauty. When any died, the grief of the people could only be equalled by that felt at the loss of a child; and in so sumptuous a manner were their funeral rites performed, that they frequently cost more than the curators had the means of paying. The same respect was extended to those which died in foreign countries; and when engaged in distant wars, they did not neglect "the cats and hawks, or leave them behind, but, even when it was difficult to obtain the means of transport, they were brought to Egypt," that they might be deposited in holy ground.

"Geese were kept for some of the sacred animals. Meat was cut into pieces and thrown to the hawks, who were invited by well-known cries to their repast; cats and ichneumons were fed on bread soaked in milk, and with certain kinds of fish caught on purpose for them; and every animal was provided with food suited to its habits. Whenever any one of them died, it was wrapped up in linen, and carried to the embalmers, attended by a procession of both sexes, beating their breasts in token of grief. The body was then prepared with oil of cedar, and such aromatic substances as tended to preserve it, and was deposited in a sacred tomb.

"The respect paid to the sacred animals was not confined to the outward ceremony of their funeral, nor to the external marks of grief the mourners voluntarily imposed upon themselves, by shaving their eye-brows on the death of a cat, and their whole body for the loss of a dog; all the provisions, which happened to be in the house at time, were looked upon as unlawful food, and were forbidden to be applied to any use. And so remarkable was the feeling of veneration in which they were held by the Egyptians, that, in time of severe famine, when hunger compelled them to eat human flesh, no one was ever known to touch the meat of any of them, even on the plea of preserving life. To destroy one voluntarily, subjected the offender to the penalty of death: but if any person even unintentionally killed an ibis or a cat, it infallibly cost him his life; the multitude immediately collecting, and tearing him in pieces, often without any form of trial. For fear of such a calamity, if any person found one of those animals dead, he stood at a distance, and, calling out with a loud voice, made every demonstration of grief, and protested that it was found lifeless."*

The Hottentots venerate a species of beetle. Other African tribes worship the tiger, the wolf and the snake. In some tribes each household selects one kind of snake as its tutelary god. Particular tribes too have their national tutelary gods like the Yakuti.

In India many animals are sacred. Some of the Koles venerate the dog. The Hindus habitually or occasionally venerate or worship the cow, monkeys, some fishes, the crocodile, snake &c. but most of the sacredness that attaches to animals is now attributed to their appertaining to particular gods, or to gods assuming their forms, and the worship of many is confined to the festivals of these gods. Offerings of milk and plantains are often placed before the holes of the cobra. The Karens believe that some animals are animated by *nats* or spirits.

Asianesia. In Banabe some animals are universally sacred and others to particular families. In Viti the shark, land crab, snake and hawk are sacred. In some parts of Timor the shark is a god. The *antang* (*falco pondicerianus*) is revered by most of the Bornean tribes, and particular animals are sacred or forbidden as food to several of them.

The deification of animals does not in general prevent their being killed. The Artic tribes slay the bear whenever they can. The Ostiaks, when they thus triumph over a god, stuff the skin with hay, kick it, spit on it, revile, insult and mock it, and having satiated their hatred and revenge place it in a yurb and retain it for a considerable time as an object of reverence and worship.

Connected with the spiritual attributes of animals is the belief of their appearance, motions, voices &c. prognosticating events or producing good or bad fortune [See section on Omens &c.]

The sacredness to particular vegetables is not so essentially connected with pure naturalism as the attribution of preternatural power to animals, and it will therefore be considered in a different section.

* Wilkinson's Ancient Egyptians, Vol. p. 93.

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

ON THE SPIRIT (NAT OR DEWAH) WORSHIP OF THE TALINES.

By E. O'RILEY Esq.

FROM the observation of travellers and others, who with various motives have penetrated the mountain fastnesses of India, the existence of a degraded superstition as a substitute for a more enlightened system of religion, has been long since known as forming generally the medium of adoration to those "nomadic" and solitary tribes and races, who, separated from their fellow mortals by a wilderness of dense forest replete with "malaria," are as it were cut off from the more civilized portion of the world around them. Thus left to their own resources, and impelled by that innate sense of dependence common to man to adopt some method of propitiation of those supernatural powers to which they are daily witnesses, it is reasonable enough that they should seek such objects for their worship as a mind strongly imbued with terror and incapable of any superior reflective faculties would suggest, and thus, aided by legendary tradition received through many generations of the past, we find each section of these tribes possessing a rude form of religion, made up of good and evil spirits—local presiding Genii, in fact,—with powers of inflicting sickness and death,—of destroying their crops and herds, and so on through the widely extended list of sublunary casualties;—others again who, properly invoked, have the gift of exemption from sickness, invulnerability in battle,

riches, wisdom and prolific qualities in their power to bestow upon their favored votaries.

With such a system of averting the evil and attaining "the good the gods bestow," prevailing with the "Karens"* of these Provinces, it has frequently occurred to me when traversing their localities to question them as to the efficacy of such a creed, and whether in their belief of the active agency of the supernatural powers of their worship, they included the eventual punishment of crime as a part of their divinity's attributes. The answer was invariably to the effect, that their duties to the spirit were paramount, and that a delinquent rendered his invocations of no avail, until either to the injured party or his friends, he had made sufficient "amende," and to the "Nat" his customary sacrifice. Such indeed appears to be the simple basis upon which the wide spread spirit worship, through all its various ramifications is raised; the end being attainable only by gifts to the "spirit"—whether in the simple form of spirits rudely distilled from rice, cereal produce, a portion of the flesh of the forest animals of the chase, tobacco &c. or of human victims offered by the "Khoonds" in their horrible rites of the "Meriah" sacrifice to the blood-stained "Kalee" of their worship, the object is identical.

This then may be regarded as the pure or rather *unmixed* spirit-worship in contradistinction to that which I have presently to remark upon. The former, the creation of natural impressions upon uncultivated minds in the deep solitudes of the wilderness, aided by the peculiar habits and notes of its feathered tribes, and the nocturnal roving of the higher order of its wild animals, which, gliding through the forest glades in the impenetrable gloom, appear to the easily excited fancy of the native in shapes extravagant and unnatural, a conviction of the spirit's presence follows, and thus their faith is sealed. The latter a gross and corroding superstition, less palliative than the former, because practised by a race once the supreme rulers of Burmah, who profess a creed of comparative purity in its moral maxims, in which no degrading worship of the kind is inculcated.

But, before proceeding to exemplify a custom at such apparent variance with a long established religious system, we must refer to the structure of that system, to gain some insight into the possible cause of such an anomalous interposition. Thus in the "Institutes of Menu" which form the basis of the Buddhist in common with the Hindoo or Braminical faith, the cosmogonic doctrine there expounded, places the divine mount of "Myenmo," in the centre of the "Tsakya," system, which is guarded by myriads of "Nats" or "Dewahs" comprising the "Gandappa" "Kongbans," "Galongs," "Nagas" &c., races of monsters with attributes peculiar to their functions as guardians of the "Sacred Mount," and of the sub-divi-

One of the numerous class of mountain tribes which inhabit the primeval forests of India, from Assam to the extremity of the Malay Peninsula.

standings of these spirit religions, some are described in terms that the wildest imagination can possibly conceive, as the "Wanadaya," a race of "Galongs" with wings 600 miles long, the body 6,000 miles; crest of the head 36 miles high, and bill like a crane's 1,800 miles long. Here then is material most ample and *orthodox*—were the ground work of a system wanting upon which to build a form of spirit or demonworship, a system founded upon terror of the tremendous spirits of the text would carry with it the heart homage of its believers. Such however forms no portion of the law of religious observances transmitted by "Guadama," (the last "Boodh") to his followers, amongst whom the Talines claim a standing contemporary with the Burmese themselves, who practise not the degrading ceremonies of "Nat worship."

In that portion of the Buddhist doctrines which treats of the "metempsychosis," that intermediate state of the soul is clearly defined in which as Nats or spiritual beings, superior to the state of man, the subject by good works "done on the body" attains a step nearer "Neikban" or total annihilation, that extreme bliss of the Buddhist faith, but to such a state of *progressive* purity all worship is regarded as unavailing. In the system the five superior "Nats" or rather demi-gods to whose charge the world is confided are alone of the spirit state considered worthy of adoration, and in time of sickness and great mortality, famine, murrain or failure of crops, to them is accorded the rite of "Yadzan-bu" or sacrificial propitiatory offerings; which is performed by the "Poongyees" or priests alone, with ceremonies and invocations appointed for that especial purpose in their holy records.

With the exception of the weighty circumstance of the possession of a language differing widely in its phraseology, but slightly however in its written character, and of the same monosyllabic structure, the Taliens may be considered of the same family as the Birmans in the Indo-Chinese races east of the Ganges, and the amalgamation is the more decided by the profession of one common faith, the subjection to the power of the latter, and religious and lay customs based upon and derived through the same sacred medium, the "Pali," as that of the Burmese. But despite this similarity of origin, faith and religious tenets, no sooner has a Talien adult passed the usual term of novitiateship in the monastery, a period in which his moral instruction previous to entering upon the duties of manhood is supposed to be perfected, than he consigns himself and his future fortunes entirely to the control and influence of the "Nats" for good or evil, and all besides becomes but of secondary consideration. When, following nature's laws, he takes to himself a wife, 'tis not to the written law of his professed creed upon this head to which he refers for guidance as to the favorable period &c for such a ceremony, but to the "Nat-Tsa-ya" or "Spirit Teacher":—he it is who points out the lucky day to the expectant lover. Settled in life he plants his paddy field, and in a secluded spot near it

he erects a "Nat-tseug," a rude form of miniature house for the spirit's accommodation, in which he offers a portion of his own food and occasional luxuries in the shape of arrack, incense &c. He cuts a portion of the forest for the purpose of forming a vegetable garden and on the stump of the tree first severed he places an offering of glutinous rice, salt, and ngapee,* with a few words of invocation to the "Nat" to prevent harm to himself for having in ignorance cut down a possible favorite haunt of his spirit-ship. He builds a house, and of certain kinds of forest trees usually employed for such purposes he selects only those for posts which have the "spirit's mark" upon their stems, these he erects with ceremonious care, and on their tops places a small offering of a similar kind to that last described, to propitiate the "Nat" and bring health, happiness and prosperity to his roof-tree; the last portion of the frame work being finished, upon the principal support he pours out a libation of arrack to the guardian-spirit of his house; and, when complete in all particulars and inhabited, he erects a "Nat-tseug" in close proximity with the dwelling, and provides it with miniature implements of husbandry and all others belonging to the necessities of life.—Nor is this all,—that the spirit of his worship may want for nothing in his power to bestow, the "Nat-haunted" man collects such articles of dress and adornment of person as he thinks will suit the spirit's taste, and these he places in a leaf-twined basket and hangs in a conspicuous position, high above the possibility of desecration from the foot of mortal, and which 'twere sacrilege to touch,—to steal were certain death.

Many and puerile are the superstitions attached to this all pervading spirit influence, and most of a debasing and ungenerous character. But see, the man, despite his utmost reverence to the "Nat" his greatest efforts to avert "the ills that flesh is heir to," is sick; native remedies have failed to cure him, and ere his failing strength desert him, he sends for the "spirit-doctor" and arranges for the ceremony of the "spirit-dance,"—the invariable last resource of the sick when means corporeal have failed.—And now, in the open space near his dwelling he causes a rude shed to be constructed, and at its furthest extremity he fashions an altar, upon which to place his offerings, cocoanuts and rice, tobacco, and spirits, plaintains and flowers, a few sticks of incense and such other articles of small value as spirits delight in. The band of discordance strikes up its highest flight of owl-screeching sounds to attract the attention of the "Nat" to the homage preparing for him, and the subject stands forth to the dance. He bends in reverence before the altar, invokes in silence the healing aid of the spirit and as the music and chorus again break out, he painfully and laboriously performs the evolutions of the dance. His very soul absorbed in the performance, he is dead to all extraneous impres-

* The villainous congener of "Balachong."

sions, nay, his bodily pains are for the time forgotten, and for a brief period the "grace of action," that in the eye of the native forms the chief charm of the tortuous movements of arms and hands, is full and timely maintained; but mark his swelling temples! the veins distend almost to bursting; his eye inflamed and wild protrudes beyond its wonted sphere; and the muscles of the neck and chest racked to the utmost tension give evidence of the struggle that is going on within; anon he falters and in a mighty effort to sustain his erect position, urged by the bursting crash of cymbals, drums, trumpets and human voice, with his body streaming with perspiration and with an expression of feature truly demoniacal, he falls exhausted to the ground.

In some cases the violent exertion of the performance above described has wrought the desired cure, and to the "Nat" of course is all honor given; the fact of such spiritual aid having been so obtained is not to be controverted to a native who may have witnessed the performance, and so they nail their faith to the spirits power. Perchance the man however is approaching the last "sad scene" and is past the power of bodily exertion; in such an extremity, it is considered equally efficacious for the wife, daughter, or any female of near consanguinity capable of the exertion, to perform the ceremony, and in the character of the "Nat-ka-dau" or "Spirit's wife" invoke the required aid. But, to avoid mistake as to the recipient of the "Nat's" favor, the dimensions of the sufferer are taken, i. e. with a piece of jungle creeper, his length from the crown of the head to sole of foot is measured, and breadth from extremity of hand to hand with the arms extended, this is made into a ring and suspended from the performer's neck, and is transferred to the next succeeding one should there be a plurality of "spirit's wives" on the occasion. The same swaying of the body and arms, the same capricity of sonorous sounds from the instruments of music are observed as those previously described, until the dancer becomes utterly incapable of further exertion and falls to the ground. But when after all this display of folly and superstition the "Nat" remains obdurate and the victim dies; his remains are borne to the place of cremation with the imposing rite peculiar to the Burman custom, and, after the orthodox prayers and ceremonies have been performed by the Buddhist priest, there burnt to ashes; the relics are then collected, placed in a vase and buried in the vicinity of a "pagoda," in which sacred ground the "Nat" he feared when living has neither power nor influence.

It were needless to enter into further description of the various forms and ceremonies which characterize this gross superstition, and engross the whole capacity of the mind to the utter exclusion of all other reason or reflection, there is however one feature of its effect upon the female portion of its votaries, not less extravagant than the foregoing, a slight notice of which may be interesting, as proceeding from a morbid state of the nervous system, or in other

terms, a peculiar form of "hysteria" induced by impressions of a supernatural agency. Thus it frequently occurs with females of adult age, and in particular the more matronly portion of the sex,—to express themselves by word and action as being possessed by the "Nat," which like the "evil spirit" of old, requires exorcising ere he be cast forth and the victim relieved. The following instance may be regarded as a general type of the disorder and its practised remedy.

A few evenings ago, an old Talien with a woe-begone look and address thus accosted me:—"Master! Give me your pity and your aid, my old wife is possessed with the "Nat," sits under the peepeel tree in the jungle, the gloom of evening is approaching, and she refuses to come away."

On enquiry he informed me that his wife was busied with her household affairs in company with her eldest daughter when with a sudden exclamation she left the house and proceeded directly to the spot, where after much searching and anxiety she was found sitting; he assured me that no interruption of domestic happiness had occurred, nor could he in any way account for the strange proceeding. I could only suggest the simple application of a jar of cold water over her head, a good sniff at a bottle of "eau de luce" which I exhibited, or the wholesome dread of a visit from the tiger if left alone,—but the old man shook his head and said that "no persuasion from human being could induce her to move, but if I would apply the *lightning wheel* (meaning a small electro-magnetic machine)—to her body, as I had done to himself on a former occasion when he had pains in the neck, that the "Nat" would certainly be scared away and all would be right." As this could not conveniently be done, I accompanied the man to see what I could effect in the way of remonstrance; and there in the jungle sat the burly old creature naked to the waist, with her chin resting upon her knees, her arms stretched out above them and swaying her body to and fro like one possessed. The villagers had already made a "Nat's house" of mats and bamboos, with all the usual offerings, and before her squatted the "spirit doctor" with a small wand in his hand, with which he occasionally touched various parts of her body, conjuring the spirit to speak through the medium of the woman's voice and say truly what "the matter was" but to all the questions put she returned the one unvarying answer. "It is the spirit's wish that I remain here until I have performed the "Nat" dance."

"Mother, I said, the evening has closed, get up and leave this spot and go to your home and children; they await you at the evening meal." "No" she replied, "I must perform the spirit's behest before I move from this spot or sickness and death will occur to my house." Further persuasion I found unavailing and therefore stood aloof to witness the consummation.

It was a strange sight. Ere the preparations were completed,

and all the instruments of the band collected, the moon had nearly attained the meridian, and in a small clear space near the peepeel tree, surrounded on all sides with dense jungle stood the "spirit's" house, before which the infatuated old wretch, with her pendulous breasts of enormous length bound tightly to her chest, was intent upon pleasing the spirit by the most grotesque movements of arms and body I ever beheld—"poetry of motion" formed no part of her attainments, for, as before stated, burly was she in form, low in stature and with an amplitude of person to excite the envy of any Hottentot Venus to behold, and so with eyes wild and staring like "Pythoness" of old, she waddled here and there, her head and arms in most ungraceful unison of motion, and after two long hours of senseless movements sunk on the ground exhausted—the band struck up a "crescendo," and in a tumultuous crash of "Natty" music the spirit took its flight and left the poor old woman "herself again,"—to resume without remark her ordinary pursuits of life.

I left the spot with feelings of pity strongly excited for this poor deluded race, and returned home to record the scene I had witnessed in this passing notice of the "spirit-worship" and its attendant rites.

1st June, 1850.

TRANSLATION OF THE ANNALS OF ACHEEN.

This is the Genealogy of all the Kings who have reigned in Acheen.

On Friday the 1st of Ramazan, in the year of the flight of the Holy Prophet of God, Sultan Juhan Shah came from the
601 windward and converted the people of Acheen to the Mahomedan faith. He married a daughter of Baludari at Acheen and by
631 her had a son, and died on Thursday the 1st of Rajab after a reign of 30 years, 11 months and 26 days, and was succeeded the same day by his son Sultan Ahamed at that time 32 years of age, who was called

Paduka Sri Sultan Rayait Shah and who reigned 34 years, 2 months and 10 days. He died on Friday the 4th of Shaaban in the
665 year 665 and was succeeded by his son aged 1 year, who was called

Paduka Sri Sultan Mahomed Shah and who reigned 43 years. This King removed from the port and built a fort inland which he called Dal-al Dunia, and died on Friday the 12th of Rabin-lawal. He was succeeded by his son called

Paduka Sri Sultan Perman Shah who reigned 47 years, 8
755 months, 13 days and died in 755, succeeded by

Paduka Sri Sultan Manshur Shah who reigned 56 years, 1
811 month, 23 days, and died on Monday the 10th Shaaban in the year 811, succeeded by his son Rajah Mahomed called

Paduka Sri Sultan Ala-oodin Juhan Shah who reigned 59 years,
870 4 months and 12 days and died on Thursday the 12th of Shaban 870. He was succeeded by

Paduka Sri Sultan Hassan Shah who reigned 31 years, 4 months,
901 2 days, and died on Wednesday the 1st of Rajaab in 901 succeeded by

Paduka Sri Sultan Ali Rayait Shah who reigned 15 years, 2
917 months, 13 days and died on Tuesday the 12 of Rajab in 917 (Note 1) He was succeeded by

Paduka Sri Sultan Salleh Oodeen who reigned 28 years, 3
946 months, 28 days and was deposed on Monday the 4th of Dulkeida 946, by his brother,

Paduka Sri Sultan Ala-oodin, the tyrant, who reigned 28 years,
975 6 months, 27 days and died on Sunday the 15th of Saffer 975, succeeded by

Paduka Sri Sultan Hassan Shah who reigned 8 years, 4 months,
983 12 days and died on Tuesday the 15th of Jimadiulakhir 983. He was succeeded by his son, aged 4 months

Pakuka Sri Sultan Muda who reigned 6 months, 28 days and
984 died on Friday the 12th of Mohuram in the year 984, succeeded by

Paduka Sri Sultan Periaman (*Note 2*) who reigned 1 month,
 22 days, and was killed on Thursday the 12th of Rabialawal
 984 985, succeeded by

Paduka Sri Sultan Rajah Jeinal (*Note 3*) who reigned 10
 985 months, 10 days, and was killed on Friday the 10th of Mo-
 huram 985, succeeded by the King of Perak

Paduka Sri Sultan Manshur Shah (*Note 4*) who reigned 8
 993 years, 3 months, 3 and days, and was killed on Monday the
 17th of Mohuram in 993, succeeded by

Paduka Sri Sultan Buyong who reigned 2 years, 11 months,
 and died on Tuesday the 17th of Dulkaidah in 996, succeeded
 996 by Firman Shah, the son of our former King, called

Paduka Sri Sultan Ala-oodin Rayait Shah who reigned 15
 years, 10 months, 28 days and was deposed by his son Sultan
 1011 Muda (*Notes 5 & 6*) who ascended the throne in the year
 1011 and was called

Paduka Sri Sultan Ali Mafait Shah, he reigned 3 years, 1
 month, 21 days, and died on Wednesday the 1st of Dulhajah
 1015 1015, succeeded by Maha Rajah Derma-Wangsa Tuan
 Paukat, called (*Note 7*)

Paduka Sri Sultan Iskunder Mudah who reigned 30 years, 7
 1045 months, 24 days and died on Saturday the 29th of Rajub
 1045. (*Note 8*) He was succeeded by his son-in-law Sultan
 Maghul, called

Paduka Sri Sultan Ala-oodin Mafait Shah, who reigned 4 years,
 1048 3 months, 7 days and died on Monday the 7th of Dulkaidah,
 (*Note 9*) Succeeded by Taajal Alum, daughter of our master
 Iskunder Mudah called

Paduka Sri Sultana Taaj Alum Sefait Oodin who reigned 35
 1088 years, 8 months, 12 days and died on Tuesday the 1st of
 Shabaan 1086. (*Notes 10 & 11*) Succeeded by

Paduka Sri Sultana Noor Aalam Fakait Oodin who reigned 2
 years, 3 months, 25 days. In this reign the kingdom of Acheen
 was divided into 3 provinces in the first of which there were 22, in
 1086 the 2nd 26, and in the 3rd 25 Mukims. The Queen died on
 Sunday the 21st of Dulkhaida 1086, succeeded by her
 daughter called,

Paduka Sri Sultana Anait Shah who reigned 11 years and 8
 1090 days and died on Sunday the 8th of Dulhajah 1090, suc-
 ceeded by

Paduka Sri Sultana Kamalat Shah who reigned 11 years, 4
 months and 2 days. This Queen was deposed by all the viziers
 and people in consequence of the arrival of a letter from Mecca
 sent by the Khali Malek Al Adil, in which he informed them that
 it was unlawful for a female to hold sovereign power, notwithstand-
 ing this 4 females reigned in Acheen for a period of 69 years, 4
 months and 17 days. (*Note 12*)

1111 On Wednesday the 20th Rabiulakhir 1111, succeeded Paduka Sri Sultan Bedralam Sherifa Hashim Jemal Ooil, who reigned 2 years, 4 months and 12 days when he abdicated. He removed from the Fort Dar Ul Dunia on Saturday the 17th Ramadhan, and died in retirement on Friday the 1st of Shawal 1113 following, during which interval of 14 days the throne of Acheen was vacant (*Note 13*). On the latter day succeeded,

Paduka Sri Sultan Perkasa Alam Sherifa Tetui Iba Sherif Ibrahim who reigned 2 years, 3 months and 2 days. This King was attacked by the son of the late King Bedralam and deposed 1115 on Wednesday the 17 of Mohurram 1115. An interregnum followed which continued for the space of 3 months, when on Sunday the 7th of Rabiulakhir, Badralam succeeded, called

Paduka Sri Sultan Jumal-ul-Alm Bedral Muneir who resided in the Fort Dar-ul Dunia 2 years, 9 months, 6 days, and on Monday the 13th of Mohurram 1118 removed to Malayu. After the 1118 King had reigned 24 years, 11 months and 26 days he was overcome in an insurrection of his subjects, and on Thursday the 1139 13th Rabiulawal 1139, fled in a prahu to Pedir. From this time there was an interregnum for 22 days, till on Friday the 5th of Rabiulakhir succeeded Maharajah Gompung Pahang called

Paduka Sri Sultan Johore Alalam Ama-oodin Shah, who reigned 20 days and died on Thursday the 25th of Rabiulakhir. At 1139 this time the country was governed by these 4 Mukims—1st Mukim Men Sat Siak, 2nd Lem Jenak, 3rd Peiang, 4th Hurrur, when after an interregnum of 7 days they gave the crown to Wande Tebbing called

Paduka Sri Sultan Shem Ala-alim who after a reign of 30 days was deposed on Saturday the 3rd of Jumadiulakhir in an insurrection of all the great men and people in the kingdom. Maharajah Leelah Malayu was now called to the supreme rule by the unanimous voice of the warriors and common people of the 3 divisions of Acheen, and reigned under the title of

Paduka Sri Sultan Ala-oodin Ahamed Shah, for the period of 1148 8 years, 8 months and 1 day, till his death which happened on Thursday night, 3rd Mohurram 1148. The former King Jumal Ool Alm who had retired to Malayu in 1118 went from thence to the Jawi Kampong on Sunday the 5th Mohurram, together with the Lemut people, the Pumantris of Delli and Pulida Lechat and lived in the Bait-al-Khaman Mosque. The 4 Mukims were at Kampong Pahang engaged in a war with the King's son Puchal Awak, after this war and interregnum had lasted 4 months and 1 day, peace was made and Puchal Awak ascended the throne by the consent of all parties, under the title of

Paduka Sri Sultan Ala-oodin Juhan Shah, on Thursday the 4th of Jumadielawal. In this King's reign on Wednesday the 1172 6th of Shaban 1172, the people of the 22 Mukims with Panglima Pulima Anak Muda Sakti, called Sri Muda Perkasa came down to the Coast at Riak in arms against the King. When they arrived at Kallan Sippeng on Tuesday the 12th of Shaban at about 7 p. m., the King ordered his artillerymen to cover the head of the river with their guns and fire on the advance of the Jiging army and Puchal Hajee its commander. After the war had lasted 2 months and eight days, finding that they could not withstand the artillery of the enemy and that many of their soldiers had been killed, they sent letters to the 20 Jermukims on Tuesday the 1st of Dulkaideh beseeching their assistance. In the meantime the King died after a reign of 25 years, 1 month 1174 and 10 days, on Friday the 17 of Mohurum 1174. As soon as the King's death became known the people of the 22 Mukims came down to the Mosque Bat-al-Khaman, and without consulting with the rest of the nation prepared to put to death Tuanku Rajah the late King's son, but were diverted from this by the viziers in the Fort Dar-al-Dunia opening their fire on the Mosque. After this display of energy a general assembly was held of all the viziers in the Fort Dar-al-Dunia, the 26 Mukeems, the 22 Mukims, Imam Samarang the son of Imam Muda Abahah, Imam Gandrung, the 25 Mukims, the 9 Mukims, Perbawangsu, Panglima Pumuda Beutang &c. the result of which meeting was that Tuanku Rajah was proclaimed King under the title of (Note 14)

Paduka Sri Sultan Mahomood Shah, on Saturday the 6th of 1174 Jemadielawal, after an interregnum of 3 months, 18 days. At this time the Maha Rajah Sri Indra Puchal Agam was put to death, a war broke out in consequence with Panglima Pulim in the course of which the trading ships received much damage from the shot of the opposing armies. Letters were sent requesting aid from the 22 mukeems, they at once in conjunction with Maharajah Bahar of Labu came to the King's assistance and 1176 at day break on Thursday the 6th Ramzaan 1176, a pitched battle was fought at Lam Chelling the abode of Paduka Mahamantri the Rajah Bundar of Anak Kachurunan, in which Panglima Pulim's army was beaten. After the King had reigned 3 years, 5 months, 21 days he was by the permission of God deposed 1177 by Maharajah Lebri, on Tuesday the 27th Shawal 1177, who forced his way into the Fort Dar-al-Dunia at 9 a. m., on which the King retired to the Kampong Jawee, and from thence went in a boat down the river till he got on board one of his own ships. On the King's flight there was an interregnum which lasted 28 days when Maharajah Lebri was advanced to the throne on the 1177 25th of Shaban 1177, under the name of Bedi Udin Juhan Shah. After reigning 2 years and 7 months this King was put to death by the people of the 26 mukims on Sunday the 27th

1180 **Safir.** Now the Rajahs, Imams, Warriors and all the people sought the deposed King Mahomed Shah, and in a general meeting of all the people attended by the learned Hullemahs the Tuanku spoke to them as follows:—

How is it Oh people am I your King or am I not, was Maharahjah Lebri your rightful King or was he not? Then the Hullemahs answered—Did you not Oh Tuanku conspire with others against you own people, and the Tuanku answered, I have never conspired with any one. If it is so, the people said, let the learned Hullemahs examine the book of the laws and see if in this case the Tuanku has lost his right to the crown or not; and the Hullemahs answered that the Tuanku's claim was good. On this the Punghulus of the Nobat were called with the viziers, and ordered to beat the great drum and proclaim the King which was done on that day, Saturday 10th Rabieulawal. The King Mahomed Shah reigned in peace and security for 6 years, 7 months and 3 days when he was 1187 again deposed on the 6th of Safar by the detestable 22 mukums and he retired to the Kasaluanga mukeem. On Monday the 29th of Rabialakier 1187, the Rajah Oodahanaleilah was placed on the throne by the 22 mukeems, but had occupied it only 1 month, and 29 days when by the blessing of God &c. &c. (here follows a long list of blessings) on Sunday the 27th Jimadialwal, Paduka Sri Sultan Ala-oodin Mahamood Shah left the 4 mukims at midnight and went to the mosque at Pulu Susu, and after consulting with all the people of consequence there, moved to Bundar Punuie and remained 2 nights conferring with the people there, and the next day, accompanied by many of the Rajahs and elders, fought a battle and stormed the principal gate of the Fort Dar-al-Dunia at mid-day on Wednesday the 1st of Jumulalakier. Rajah Oodahanaleilah was overcome, and fled to Kota Panji, from thence crossed the great river and arrived at Katangkap, and by the blessing of God, Paduka Sri Sultan Ala-oodin Mahomed Shah was again proclaimed King. This King reigned altogether 1195 20 years, 7 months, 13 days, and died on Thursday the 7th of Jimalieulakier 1195. There was an interregnum for 15 days, when the late King's son Tuanku Rajah, succeeded under the title of

Paduka Sri Sultan Ala-oodin Mahomed Shah and reigned 20 years, and 5 months, and was celebrated for his justice and moderation—1209 he died on Friday the 28th of Rajab 1209. (*Note 15*) An interregnum followed which lasted for one month when Hassan the son of the late King became King, under the title of

Paduka Sri Sultan Ala-oodin Juhore Alam Shah, and on the 1st 1231 of Mohurram in the year 1231, he set out from Passé to visit Pulu Pinang—at this time he had been on the throne of Acheen 21 years. (*Note 16*)

1230 On the 12th of Dulhaja, in the year 1230, at about 10 A. M. all the people of the 3 Provinces of Acheen assembled and received Sherif Abdullah Ben Saidna, Hussain Ben Saidna, Abdulrhaman Aidid, as King of Acheen, giving him the title of Paduka Sri Sultan Sherif Saif Alaalam Shah.

[Note 1] 1511. The Portuguese first arrived in Acheen this year. They inform us that Acheen was a dependency of Pedier and that Rajah Ibrahim, probably the King styled Sultan Sallih Oodin, was merely a governor appointed by the King of Pedier—that in 1521 this governor revolted and formed Acheen into an independent kingdom, consequently the previous Kings may be considered as fabulous. The fact of the first 7 of them having reigned for 300 years, would be sufficient of itself to throw doubts on the truth of the annals, even had we not this testimony of the early Portuguese writers.

From this time Acheen began to increase in importance, and the trade which had hitherto been carried on at Pedier and Passé soon centred in Acheen. The Portuguese having formed a Settlement at Malacca became rivals, attacks were made on their power by the Kings of Acheen almost yearly till the year 1641, when the Dutch sent a powerful force and not only drove the Portuguese out of Malacca, but destroyed their influence in the Western Archipelago. As a full account of the extraordinary exertions made by the Achinese against Malacca is to be found in Marsden's History of Sumatra, it will not be necessary to detail them here.

[Note 2] According to native writers of a later date, Sultan Pereaman was a man of weak character, very passionate and quite unacquainted with the business of government.

[Note 3—from native M. S.] Rajah Jeinal called Zeen-ul-abdin was a man of an exceedingly violent character, he was cruel and blood-thirsty to excess, it is said of him that he lost his appetite if he did not put some one to death daily.

[Note 4 from native M. S.] Ala-oodin Pera, son of Sultan Mahomed, called Sultan Manshur Shah. This is a favourite King of native writers, he is said to have been virtuous, and to have lived in the observance of the Holy laws, he wore a dress and beard like the Arab priests, fasted and prayed like them, and was very charitable to the poor, he was killed by wicked people who were shamed by his virtues.

[Note 5 from native M. S.] Ala-oodin Rayait Shah a virtuous King. On being deposed by his son his life was spared in recompence for his good actions when King, he lived 1 year in retirement and on his death was canonized.

[Note 6] 1600. The Dutch first arrived at Acheen but were not well received probably owing to the ill offices of the Portuguese.

1601. Two Achinese were sent this year on an Embassy to Holland. One died there and the other returned, but it does not appear that the position of the Dutch was much improved by the Embassy.

1602. Captain, afterwards Sir James Lancaster arrived bearing a letter and presents from Queen Elizabeth, to the King of Acheen. He had an imposing equipment and was well received, a treaty of peace and commerce was made, which was soon broken.

[Note 7] 1603. A long continued drought in this year caused a famine, and an epidemic disease arose which carried off great numbers of the inhabitants.

[Note 8] Sultan Iskandar Muda. This was the greatest of all the Achinese Kings, with the exception probably of Rajah Ibrahim who formed the kingdom. He has a great warrior, he took Delli, Siak, Johore, Pahang and Keddah where he confirmed the Mahomedan faith, breaking down the houses and driving out of the country all those who would not become Mahomedans. He styled himself King of Acheen, of Aru, of Delli, of Johore, of Pahang, of Keddah, of Pera, of Baroos, of Passawan, of Ticoo, of Sileda and of Priaman. He built in 1614 the Mosque Bait-al-Khaman at Acheen. Captain Best arrived with a letter and presents (among the rest 2 brass mortars) from King James 1st. Captain Best made a new treaty and for the 1st time the English were permitted to build a factory of lasting materials.

1621. Louis XIII sent Commodore Beaulieu with letters and presents this year to Acheen.

1635. The King died after a reign of 30 years leaving an enormous treasure notwithstanding his numerous warlike undertakings. He forced the peasants to

provide the arms and provisions necessary, and consequently at the end of his reign the country was in a state of extreme misery. After his death he was canonized.

About this time Acheen began to decline in power, probably on account of the loss of trade occasioned by the establishment of the Portuguese at Malacca, and to the general fact that Europeans were no longer content to go to Acheen and Pedir to traffic for goods which they could obtain at cheaper rates, at the places where they were produced.

The Art of Navigation among the earlier traders was so defective, that they found it an advantage to be supplied with the produce of the whole Archipelago at entrepôts such as Acheen and Pedir, without the risk and loss of time necessary for them to go to the several ports, collecting produce themselves, but from the better navigation of Europeans and their energy of character, they now began to visit the whole of the ports where they could barter their goods for the produce of the country, consequently Acheen, which rose to importance from its position as a trading entrepôt now began to decline rapidly. When that trade was withdrawn and 2 generations after Sultan Iskander Muda (who styled himself King of 12 different countries) the power of Acheen was confined to the country about Acheen itself. Beaulieu speaking of Sumatra in 1621 says *Le Roy d'Acheen possede la moitié et que est la meilleur.*

[Note 9] Sultan Mafait Shah was said to have been powerful, just and merciful. Under his sway, the country began to recover from the effects of the drain on its resources in the last reign. He put a stop to the tyranny and oppression of the nobles over the peasants, the Mosque Bait-al-Mashaada was built by him.

[Note 10] Sultana Taa] Alaam. This is the 1st of 4 Queens who reigned at Acheen during the period of 60 years, by no means a singular circumstance in the History of Mahomedan nations in the Malayan Archipelago. A radical change was now effected in the government of Acheen, the power which formerly was in the hands of a despotic prince, was seized by a council of 12 nobles, who allowed a Queen to be on the throne as a nominal ruler, the sole management of the country being in their hands, and although the importance of the kingdom declined under this system of government, this may probably be ascribed not to bad government but to the loss of trade and consequent wealth, as the few details we possess of the state of the country show a mild and equitable rule and a period less subject to revolutionary violence than any other in the history.

[Note 11] 1684. This year the Madras government sent Messrs Ord and Cawley on an embassy to the Queen to request permission to erect a brick and mortar factory at Acheen. This request was peremptorily refused and the ambassadors were informed that such was the jealousy in the government that not even the Queen herself would be allowed to erect any building capable of defence.

The Madras government sent this mission under the following circumstances. — Since the first arrival of Europeans in Sumatra the pepper trade had been the grand object of each nation and we find them contending with each other to secure a monopoly of it. Sir James Lancaster in 1603 formed a factory at Bantam where the English had traded in peace and security till the year 1677, when the young Sultan, having been allowed part of the authority of government during his father's life time, rebelled, and assisted by the Dutch (the English had taken no part in the affair except protesting against the undutiful conduct of the son towards his father) deposed his father and drove the English out of the country. It consequently became necessary for the English company to establish themselves at some other place in the pepper countries, and Acheen was judged to be the most favourable place for trade generally. On the refusal of the authorities there to allow them to build a factory, Messrs Ord and Cawley accepted the invitation of the chiefs of Bencoolen, and at once commenced to build a fortified warehouse, on the ground allotted to them. This situation not proving advantageous they removed the site 2 or 3 miles, building a new factory which was called Fort Marlborough. It was in 1763 made a separate Presidency.

[Note 12] This is the last of the female reigns and now the country after experiencing the blessings of moderately good government for 60 years, suffers under a succession of revolutions and civil war, which have lasted almost without intermission till the present day.

[Note 13] Sultan Bedraram Sherif Hashim Jamal Ooil. This King was obliged to abdicate in consequence of the muscles of his legs and arms having become contracted by disease, which incapacitated him from performing the offices of prayer an essential requisite in a Mahomedan sovereign.

[Note 14] 1762. In this year Captain Forrest, an officer in the Company's Mer-

cantile Navy visits Acheen, and favours us with some account of the King whom he visited as well as his son, whom he saw 20 years afterwards. He informs us that a strong feeling of jealousy existed against the nobles of the country, and that the King did not permit them to trade, confining the trade entirely to his own agent, who was a native of the Coromandel Coast. About 12 or 15 ships of 200 to 300 tons were said to come every year from the Coromandel Coast and one from Surat to trade at Acheen. 1764 Captain Forrest visited the King who was seated in an alcove about 5 feet high from the floor of the Hall, he appeared to be about 40 years age, and had an appearance of intelligence, there were two elderly women sitting at his feet one on each side. 1772 The Bencoolen government sent Mr Halliday to request permission to build a factory at Acheen, which request was refused. The country appeared to be in a disturbed state, armed mobs often coming about the King's palace at night.

[Note 15] Sultan Al-oodin Shah. This King in his youth was sent to make the pilgrimage to Mecca, the ship he sailed in was driven down to Mauritius, and the Captain was obliged to put in there for water. They remained about a month, during which time the prince had an opportunity of attending frequently at the Arsenal, and being of an enquiring turn of mind, and gifted with strong powers of observation, he became sufficiently skilled in casting metals, to be able on his return, to improve the arsenal at Acheen, casting guns, shells &c., there himself. He also learned to speak the French language and frequently conversed with Captain Forrest in that language.

Captain Forrest notices the fear entertained by the King of the great nobles, and instances the peculiar care with which he is guarded when in his Alcove, no one being permitted to enter it, but the two women before mentioned. The King was said to be intelligent, and to be actuated by a strong desire to improve the condition and study the interests of his people, who appear to be attached to him. His great stumbling block in the way of improvement was the jealousy of the nobles. 1782 Admiral Suffren called this year at Acheen, but did not see the King, owing to a difficulty on points of ceremony.

[Note 16] Sultan Johore Shah. This prince's mother is said to have taken measures to prevent her son from acquiring the education necessary for his rank in life, and in consequence when he arrived at mature age, he was found incapable of taking his proper part in the government of the country.

He gave great offence to the nobles by his neglect of the observance of the Mahomedan law, having become addicted, from constant association with a few Christians of low origin, to the use of intoxicating liquors, and to other vices which disgusted his subjects to such a degree that the great nobles ceased to attend his court and became very turbulent.

Mr Campbell who was sent to Acheen as Agent to the Governor-General in 1811, reported that the country was in a state of anarchy, and that the King, harassed by his nobles, was unable to collect the ordinary revenue. This state of affairs continued till 1815 when on the death of the Queen mother the nobles, headed by the Panglima of the 22nd mukims, deposed the King and sent letters to Pinang inviting Syed Houssain to send one of his sons to receive from them the crown of Acheen.

Syed Houssain was the grandson of an Arab of high lineage who arrived in Acheen in the commencement of the 18th century, and received in marriage a daughter of Queen Kamalat Shah, to whom he stands in the same degree of relationship as Sultan Johore Shah the deposed monarch. Syed Houssain left Acheen at an early age to seek his fortune in the Malayan Peninsula. He resided first in Salangore where he married, and after the English establishment was formed in Pinang he moved there and soon realized in trade an enormous fortune.

On the arrival of the invitation of the Acheen nobles, Syed Houssain after some hesitation decided in sending his second son Saiful Alam to Acheen, and accordingly he fitted out, in Pinang harbour, four ships well provided with warlike stores and an immense stock of goods to be distributed among the Achinese. The Pinang government favoured the Syed's claims and even went so far as to request from the Supreme government a force of 1,000 men with the necessary equipments for the purpose establishing a firm government at Acheen, as commerce had severely suffered of late by the anarchy and confusion which reigned there. Lord Hastings took Sir Stamford Raffles' opinion on the point, (1819) and the result was that a commission was sent to Acheen (against the wishes and indeed protests of the Pinang government) for the purpose of using the English influence to tranquillise the country and to establish that King whose claims were to be considered as superior. After an arduous struggle Sir Stamford Raffles succeeded in convincing his colleague in the

commission (Captain Coombs the agent of the Pinang government) that Saiful Alam's claims were spurious and that Juhore Shah should be supported by them. Accordingly Saiful Alam was driven out of the country and a new commercial treaty made with Juhore Shah, the restored monarch, who continued on the throne solely by English influence till his death in 1840, when he was succeeded by his son, the present monarch.

OBSERVATIONS ON DR. LITTLE'S ESSAY ON CORAL REEFS AS THE
CAUSE OF FEVERS IN VARIOUS PARTS OF THE EAST.

By J. C. Ross, Esq.

THE Doctor deserves to be gratefully applauded for his benevolently directed labours in attempting to discover the cause of the fevers in question—but I opine that it is not to be found in coral reefs, nor coralline formation of any sort.

During the times of the equinoxes the tides at the Cocos Isles are of equal height in the morning and evening, but during the Solstitial seasons, their inequality is very considerable and that proportionably to the extent of the sun's declination. Whilst that is North, the morning tides are higher than those in the evenings, and the day ebb-tides not so low as those of the night by a foot and more; when his declination is South the reverse takes place. Hence, in the former season the surfaces of the reefs not being exposed out of the water to the solar rays, the polypii grow up over these, as the bark of a tree grows over any denuded spots of the trunk or branches. But, when the low ebbs come on in the day-time, and warmest season of the year—the first clear day, with light wind and low ebb, whereby these surfaces are left above water, these recent growths are killed and next day appear as a black covering over all the reefs. In the course of a few flood-tides the dead animal matter is washed off, and the reef surfaces then appear white as chalk.

About the same time, if the wind be light and steady in direction, a quantity of reddish colored animal matter, resembling fish spawn (probably polypian gemmules) appears floating on the surface of the water of the lagoon, whence it is landed on the beaches to leeward, where if not by the next tide or two or by rain washed off, or comminated amongst the sand, it putrifies and emits the smell of fish similarly exposed.

Now, the Settlement is placed on a promontory, projected into the lagoon from near the middle of the side of the principal Islet of the eastern part of the chain, and being so situated, is during the prevailing winds in the locality, directly to leeward of many square miles of those reef surfaces, exposed as abovementioned, the leeward edges being within a couple of hundred yards distance from the houses—no elevated ground, no trees or bush being interposed, and the animal matter, whenever on the beach in front of them, not more than from forty to sixty feet from their doors.

Nevertheless this locality having been inhabited now more than twenty-three years has proved itself to be one of the most salubrious on the globe.

Fevers of island-origin, have not once occurred at it, and in

general, all persons who have come hither with fever upon them, have whenever not actually dying at the time* become rapidly convalescent. Of Pthisis there have been no cases, therefore nothing can be predicated on that point, but, after having formerly had to give much attention to that disease, I am of opinion that the situation is peculiarly favorable for its mitigation, or cure, if curable. For any of the diseases mentioned by Dr. L. for which the climate of Singapore is unfavorable, this locality is (so far as experience has been had) the reverse. Influenza, catarrhs, bad colds &c. have been now and then imported, and spread to some extent among the people, but soon without having produced any fatal effect have disappeared, until again similarly introduced.

Several ships proceeding from Java, have at various times come to the Isles, in distress by the sickness among their crews, in some instances to such an extent, as to be unable to get their anchors over the bows without receiving assistance from the Settlement; none have had to remain over a fortnight, before being enabled to proceed towards their respective destinations. Perhaps, however, the best proof of salubrity is the fact, that the population of the Settlement has during the time abovementioned, more than doubled their number exclusive of immigration, Malay families even having nine, eleven, fourteen and fifteen children, all of each by one mother and father.

Fort Marlborough Point (Bencoolen) is environed with a coral reef of the class named "fringing" (by Darwin) On its extreme, a few yards inland from and very little above the level of high water mark—the late Mr W. Baskett built a house, wherein he dwelt upwards of twenty years, without himself or any of his inmates, some of these having newly come from Europe, being ever attacked by fever, and he died at Batavia, when between 65 and 70 years of age, of a worn out constitution that had been debilitated in early life. A few years before he left Bencoolen he built another house in front of his dwelling, but equally near to the shore, no bush or trees intervening. This is, or was of small ground-plawarea, but of two lofty stories in height. The apartments of the upper he had finely fitted up with furniture from London in the view of lodging his guests therein, but these were almost unendurable during the heat of the day, because of the sea-wind bringing in the fishy stench from off the coral, which in the same seasons as at the Cocos, is exposed to the sun in the day time. A damp vapour also accompanied which completely mildewed the furniture, yet no one who occupied these apartments, myself among others, ever experienced any attacks of fever or derangement of health attributable thereto. In the meanwhile however that the occupants of these two houses were enjoying that immunity, the occupants of the other houses, situated considerably further inland, and having

* None have died of fever after having been landed alive.

elevated grounds intervening between them and the sea-shore, were every now and then falling victims to fever or dysentery. Of course the lower stories of both these houses of Mr Baskett's were exempt from feeling or receiving the fishy stench or vapour, these being elevated above their level by the heat of the day.

Rat Island, a small coral-composed Islet, lies on the S. Eastern extreme of an extensive coral reef six miles to seaward of the Fort point of the main. The surface is just awash at low water in the day time, the highest level to which living coral can ascend. It is of a semicircular form, with the concavity facing the coast. In that face, near the middle of its extent, there is a gut or lagoon which runs in nearly to the outer verge of the reef. On each side mooring anchors are laid—to which the E. I. Coy's. ships and others having to stop any time at the Settlement, used to haul in and make fast head and stern. Whilst so lying amidst a sheet of coral formation, the crews, except any that visited and strolled about the town, enjoyed health, as also did a party of Malay fishermen, who with their families lived on the Islet, and so favorable was the general opinion of the wholesomeness of the air at it, that sick Europeans were sometimes sent to it when convalescent, as all would have been—but for the difficulty of communication with the town, and consequently of obtaining the proper and requisite attendance. Whereas Pooloo Bay, although a most excellent little harbour and no exposed coral at or near to it, was, from fatal experience of its poisonous air, left unoccupied—except on the very rare occasions of a ship in the Roads being driven from her anchors and running into it for temporary shelter.*

From personal observation, I know that thirty-six years ago, Edam Island had on its surface a stinking pond or lagoon, at least in the month of April if not always, and though that may be now filled up, the exhalations from it (originally it is probable a volcanic vent hole)† may still be proceeding through that upfilling, but be that as it may, knowing that the coast of Batavia Bay is productive of fever-causing exhalations, the following circumstances would lead me to expect that the Island is unhealthy.

The land wind whenever uninterfered with by the 'long shore winds of the monsoons i. e. during the greater portion of the year, blows off the shore all around the Bay, it consequently is accumulated in mass and accelerated in velocity, (whilst passing out to sea) midway between the extreme points of the Bay. In that position Edam being placed, must receive during the night an

* I just mention here, for the Doctor's information, that Carang Hadji lies six miles from the nearest part of the shore of Minto Bay, in Banka Island. It is not altogether coral and there are no exposed coral any where nearer to that shore, or at most, none of any extent worthy of mention.

† The coral polypii can neither commence their fabrics on mud, nor continue to work in muddy water. It is therefore likely that all these islands were found as reefs, whilst the plains of Batavia &c. were still covered by the sea, when of course the shore and muddied water was far from those reefs.

accumulation of the exhalations conveyed by the wind amongst its jungle, to an amount which will be sufficient to produce fatal effects to people breathing air so loaded with deleterious particles, and the jungle will scarcely be freed of these by the sea breeze before the land wind again comes off to it. As to the distances to which such exhalations may be carried, that may be expected to be as far as the land winds extend. The rank stenchy effluvium from the South West Coast of Sumatra, is at times of N. Easterly breezes occurring in the night, quite recognizable at more than fifty miles from the nearest part. So likewise the pleasant scent as of new hay, which generally proceeds from arid lands, is perceivable at great distances from their shores. For instance, off the S. E. Coast of Africa—the west coast of Australia (South of the N. W. cape of New Holland) and off the eastern-coast of Arabia—whence the poetic phrase

“The spicy gales of Araby the blest.”

Onrust and Kuyper's isles lie at no more than about one and two-thirds of a mile distant from the bay-shore, Purmerende close outside of them. The former have no exposed coral on the sides facing that shore and the land wind. And Mr Wade Shields quoted by Dr Little, observed thus, “during the day time (whilst of course the sea breeze was coming on to these isles, over the exposed coral) there did not appear to be any danger of miasmata.” He also indeed, says, that “during the night the sick were easily secured, by closing certain apertures in their apartments” but I opine that such closures did no more than stop the thorough drafts of the land wind, without materially preventing it from being breathed by the patients and residents. Probably a much more effectual preventive of fever at Onrust, than the removal of all the coral in its neighbourhood, would be the suspension of a thick woollen curtain along the entire side of the habitations to which the land wind comes and the flanks at both ends along which it passes, the windows and doors of the farther side shut, and those protected by the curtain opened for the admission of the filtered air. That curtain should be stretched up from the ground to above the eaves of the houses, just before the land wind comes off, and after that is over in the morning, the lower edge hoisted up from the ground to poles stretching it, as an awing (through the day) from which the sun and sea breeze would carry off the damp and miasmatic atoms*. The efficacy of woollen tissue, interposed between the person and the wind, to ward off miasm, is well known to the monks, the herdsmen, and the charcoal makers, who sleep in the Campagna di Roma and other such places.

The station of H. M. S. Daedalus, whilst the squadron occupied the bay, was not nearer to, but nearly twice as far from the nearest

* The draining of the coast belt of the bay *might* be effected and thereby, I doubt not, that both the town and shipping would enjoy a comparatively salubrious air &c.

shore of it, as that of the ships anchored off Onrust at the side facing Java, where only ships do or can anchor at that or Kuyper's isle—and there are reasons for presuming that the shore of the bay, abreast of her station, is somewhat less productive of miasmatic exhalations than that nearer Onrust on the one side, and Batavia river on the other.

It is very rarely that any vessels lie anywhere nearly midway between Onrust and Batavia roads, but in respect to the latter, it is believed, and as I think justly so, that vessels anchored considerably to the eastward of the river's mouth, during the easterly monsoon, or to the westward during the other, are the least liable to have their crews attacked by the fever. These positions are however inconvenient for business, the cargo boats not being able always to get alongside of them with the land wind, and when they do not their services are lost for the day.

Middleburg and Amsterdam isles, especially the former, are very probably healthier than any of those which lie more exposed to the land wind blowing out of the bay. The picnic parties to these isles, of which Captain Brodie makes mention, did most likely pass out through the river, early in the morning, before the heat had elevated the exhalations therefrom, as otherwise they would not have reached the islands with the land wind. If they did, then some of the persons being attacked by the fever, was no more than might have been expected.

During the westerly monsoon, the land wind but seldom reaches to the outer islands in the bay, and therefore I do not suppose that there is then any danger to the crews of vessels anchored close to any of them.—I have in the latter part of December, lain eight days under the lee of Hoorn—none of the crew were taken ill there, and some who were sick when I left the roads, became convalescent.

The N. I. Government has been, during several years, employing men in lighters during the fair season (which is thereabouts also the most unhealthy afloat) in bringing coral from the isles, for the construction of the jetties.—These go off with the land wind, sleep at the isles, load the coral in the forenoon, and return with the sea breeze, but they are not more subject to fever than the crews of the fishing boats which go out to sea, and come back into the rivers at the same time.

Before the construction of these jetties was commenced, sharp-built boats, going off to the shipping late in the afternoon, when it is then in general nearly low water, had to be dragged by their crews a considerable distance through the mud outside the river's mouth before they could float over it. On these occasions, breathing through the nose was scarcely practicable, because of the pungent stench arising from the stirred up mud, although it was covered with a foot or so of the sea-water, and the sea breeze still blowing. Is it reasonable to suppose that the exhalations

arising or issuing from a few specks of coral, situated some miles distant from the shipping, can, even if actually existent, have any evil effects on the crews of the vessels at all worthy of being mentioned at the same time with those which certainly must be discharged from an extensive shore belt of marsh composed of such a material? As for the mud at Sourabaya, and in front of Malacca, Dr Little has been mis-informed on the point—it not emitting any such at these places, nor any noisome stench at all, worth notice.

In the time of the British Government in Java, I was in the month of July refitting in the roads the brig which I commanded in its service, when one night about 11 P. M. despatches for Minto were sent on board from the Secretary's office, with directions to sail as soon as possible. On giving orders to weigh, the first officer reported short of water, the long boat was immediately sent to the river for a supply with the Gunner, an Indo-Briton, 2 Indo-Portuguese and four Bengalee lascars as crew. They returned at 2 A. M. when we weighed and sailed. That day, between 9 A. M. and 3 P. M. every one of that crew was laid down by the fever. From Minto* I proceeded the day after my arrival thereat to Palembang with a detachment of native Indian troops, and remained there some time, the sick being attended by an able Surgeon, notwithstanding which two of the Bengalees died there, and at my return to Batavia the two others, and one of the Portuguese, had to be sent to the hospital there. The other and the Gunner, though convalescent, were scarcely recovered within six months afterwards, although the brig had not again returned to Batavia but been at sea and in the eastern ports of Java, Madura, &c.

That the fever is not always contemporaneously severe in the town and amongst the shipping in the roads, is precisely what should be expected by any attentive observer of the winds and weather, under the presumption that solely in the coast belt of land around the bay its cause is originated or proceeds from in both situations. When the winds blow more along than off and on shore and the weather cloudy, the exhalations of that belt are carried along the coast near the ground, and of course among the houses in the town, so not affecting, because not proceeding off shore to the shipping, but where the land and sea breezes are the prevailing winds, and accompanied, as these generally are, with clear weather in the heat of the day, the exhalations of the coast are in the day time carried inland over the tops of the houses, and dispersed in the higher regions of the atmosphere, but when the land wind commences, its coolness prevents these exhalations from ascending to any considerable height, condenses and conveys there off amongst the shipping.

With reference to the crew of the Arab, mentioned by W. C.

* Mintow or Muntok, as the name is sometimes written.

Leisk as having been infected at Edam, Dr Little justly supposes that they had imbibed the poison previously in the Roads. He thinks only in part, but I opine nearly if not quite altogether there, and that the work and exposure at Edam rendered it at once violently active, assisted very possibly by the miasmata, which having as above noticed been lodged in the jungle by the land wind of the previous night, was being discharged thereupon by the sea breeze.*

When I first became acquainted with Batavia, the town was inhabited by many Europeans, Armenians &c. In the construction of the houses, I did not perceive any obvious causes for the occupiers being subject to fever—except the impossibility of obtaining any effective drainage without incurring enormous expence, the town being seated on a level very little above that of the sea, and the tides being insufficient for giving motion to the water in the canals or drains. Against these same canals however, which were originally cut between every two lines of houses, much has been said and written by superficial observers, in ignorance of the fact that these were the drains of the city, and whilst it remained closely inhabited were the best that could have been devised. † Nor was it until recent times, when the means were no longer to be had for keeping these open, deep and clean, that they became those stagnant receptacles of mud and filth which they were when the British took Java from the French. Marshal Dændels had however done much in the way of improvement, with the very limited means which were at his disposal, and which only a man possessed of uncommon courage, energy and wisdom, would have ventured to employ in his circumstances. As for habits, the most pernicious that I noticed among the Dutch in the town, was that of sitting or walking on the stoops, or pavements of their houses, in the cool of the evening, and until considerably late in the night, all the while exposed, of course, to the miasmata which was rising and floating around them, reinforced from the filons of stagnant water on the bottoms of the gutters, which run in front of the pavements.

I was honored with the friendship and intimacy of the late Sir T. S. Raffles, from the time of our first acquaintance up to that of his death, and perhaps no man now living entertains higher respect for his memory, but I know that he came to Java imbued with the not very justifiable prejudices of many Englishmen towards the Dutch, and certain circumstances which occurred both during

* There is however one reason for presuming that beds of coral, in shallow water, may, at some places enhance the effects of Malaria brought thereto from elsewhere, but this reason being observable at the Cocos, Dr Little has, I suppose received, or may receive, information of it from Mr Leisk.

† Other than the general drainage of the coast belt, by deep ditches cut on lines running at right angles to the coast contour—quite (inland) to the firm dry clay margin of the plain, a plan not likely to be entertained by any company of merchants.

and subsequent to his Government of Java, and for which he was indisposed to make due allowances, tended to transmute these into feelings approximating to personal enmity. I say thus much of a deceased friend, and generally an excellent well meaning man, with the less reluctance because of having to acknowledge myself as being, I hope, but am not certain that I may say *been*, even much more subjected to the same failing. But if he, a man of talent and scholastic education, could be led into it, how much more likely was a lad coming with a generally unimproved mind, from a remote and solitary nook to take his opinions of foreigners from the conversation and sentiments of English sailors of that day and generation! Had Sir Stamford however been an experienced navigator of the Archipelago, he would doubtless have acknowledged that with all its disadvantages, Batavia is on the whole, the most eligible port which the region affords for communication with the commerce of the world, and as such, for having the seat of the European government near to it. As a port, in respect to having smoother water for lading, unloading, and repairing, and nearer vicinage to the Straits of Sunda, Bantam is somewhat superior, but its air is worse than that of Batavia. Very lately a Dutch ship of about five hundred tons which had laded there, and remained altogether only six weeks, came to the Cocos with the master and three others only able to go aloft. Of course on her making signals of distress, people proceeded from the Settlement, and brought her into the harbor.

In the history of early European intercourse with the east, as with the west, there is very little to be found, besides courage and enterprise, which any of the nations principally concerned can justly cite, as warranting them to employ reproachful language to any of the others. Generally speaking, all were as wicked as their power and policy enabled and led them to be. Nor is it fair to attribute to national character, the doings of volunteer and self-equipped invaders of a weak people, or those of mercantile monopolists, and their agents, acting beyond the effective control of their national government. But now, suppose a Dutchman, writing the history of the West Indies, to have used the following language:—

“The mines of America when they were first discovered, did not more strongly allure the Spaniards, or urged them to sacrifice, more relentlessly, the lives of the unresisting natives to their burning thirst for gold—than did the possession of the Sugar Islands lead the English nation, foremost in the track of wealth, through danger, injustice, and oppression. Besides the destruction of thousands of their own countrymen by the hurricanes, and the yellow fever, they dragged the unfortunate natives of Africa, to toil in slavery, and whip &c. tortures, until death released these victims of their infernal avarice. Nay, not content with prosecuting the horrible slave trade, merely on individual profit or loss account, they actually stimulated it by the payment of bounties

“from the national treasury, and made use of the grand victories gained by their great General Marlborough to obtain the monopoly of supplying those very Spaniards, whose cruelties they were not among the least loud in denouncing, with Africans to be their slaves. I mean that most infamous contract, commonly known by the name of the *Assunto*” &c. &c. What could Englishmen honestly and reasonably reply thereto? Why surely nothing better than this. “Let bygones be bygones amongst us all—our eyes have been opened, and we have seen the folly and wickedness of our ancestors in the true light, and we have, as far as our means and knowledge has enabled us to do, made compensation so far as our power extends. Let all Christian nations now go and do likewise.” Had Doctor Little contented himself with quoting from “*Raffles's History of Java*” only so much of the paragraph as had a bearing on his theory, namely that ending with the word “history,” he would have saved me the trouble of making the foregoing digression. Further I apprehend that the history of West Indian and Intertropical West African Epidemics, may take up the gauntlet which he has thrown down on Edam Island, after having thrown its fellow down on the Isle of Blakang Mati;—vide the last paragraph of page 577.*

With several of the places described by the Doctor's correspondents I am personally acquainted, and at none of them should find any difficulty in assigning more probable causes for the fevers thereat occurrent, than the existence of coral reefs in the vicinity, or oyster beds either. Indeed I should as readily believe that shoals of live fish swimming about at these places, emit pestiferous effluvia, as that live coral does so, and as for the dead, why the Doctor must analyse their bodies before he can be justified in assuming that these emit any effluvia more noxious than that proceeding from dead fish similarly exposed, only during an hour or two a day out of the water. Fishing villages are seldom quite free from such effluvia, yet even in these intertropical regions, these are rarely if ever found to be more unhealthy than their neighbours whose inhabitants are otherwise employed.

Dilli or Delli stands not “on the South” side of Timor Island—but on the W. N. Wn. at near the middle of that side. Having seen the coast of Spitzbergen, I must dissent from Mr Earl's dictum that “the coast of Timor is, beyond the limits of the European settlements, the most inhospitable in appearance of any in the world.” There are towns or villages, inhabited altogether or chiefly by natives to the Eastward of those limits. I have landed at one, to which, having seen it from the mast-head of the whaler in the offing, we proceeded with two boats, got some

Dr. L. seems to have employed only the microscope when looking for external causes of the fever at Blakang Mati. I may have to shew him that a telescope is needful to be employed in the search.

fruit, fowls and vegetables. The people, all natives, appeared healthy—were hearty and cheerful. To the westward of Delli there are several villages, also situated on the coast, from which the whalers in like manner obtained refreshments, and at times lay in the roadsteads a week or two in the S.E. monsoon, without experiencing any attacks of fever, for instance at Occuse, Sutarana and Batoo Gaday. Neither Dr Little nor Mr Earl are entitled to assume that coral grows with the rapidity that Jonah's gourd did,—up every night, to be killed and decomposed every day.

But here I must close these rather too hurriedly written observations. I do so however with the intention that if my life and health be continued, and the editor of the Journal be willing to admit any more of mine, I shall resume the discussion and follow it up—from Singapore to the Sulus, Labuan and the Arus &c. wherever else Dr. Little may have cited the witnesses "for the prosecution"—yea even, and nothing loth either, into the Pacific on the behalf of my Polypian benefactors. Poor architects! no gold or silver have they, wherewith to fee advocates. But having gratuitously constructed for me "whose path is o'er the mountain wave, a home upon the deep" it has become my duty to defend them from being convicted of so serious a criminal charge as that of "most feloniously, insidiously, treacherously, at (of course) the instigation &c. and of malice aforethought &c., mortally poisoning the lords of the creation—after having seduced these with the view of Islands so pleasant to behold and so conveniently placed "amidst the melancholy main," to advance within the sphere of their baneful Hydra-pythonic powers and influences." I trust however that the Doctor will not go on to charge them with being the veritable Syrens of whose doings the men of other days have indited wondrous tales for our edification, and as having since the time of St. Cecilia changed their system of hostile tactics from singing to building coral Isles &c.

THE PIRACY AND SLAVE TRADE OF THE INDIAN ARCHIPELAGO.*

1837. In March this year the steamer Diana was sent to the Straits by the Indian Government, and placed under the command of Captain Congalton who had for many years commanded the Zephyr and other Government Schooners in the Straits, and had been of much service while co-operating with the Wolf, Andromache &c., in their operations against the pirates, from his activity and great local experience. A native of the island of Siantan appeared at the Police Office, Singapore, on the 19th March, and stated that about two months previously a descent had been made upon that island by seven large and seven small Lanun prahus, who had seized himself and his family and carried them off, besides committing other outrages. After being about a month and a half in the hands of the pirates, during which they visited several islands, plundering and making captives, this man succeeded in making his escape while the prahus were lying near Pulo Tingie, where he concealed himself until he saw the pirates set sail in the direction of Pahang. He then obtained a boat in which he crossed to the neighbouring coast of Johore, and from thence found his way to Singapore. The larger prahus were manned with from 70 to 80 men each, and mounted one large and one small swivel. The truth of this man's story as to the presence of these pirates was confirmed by the commander of the brig Corsair, which arrived about the same time from Pahang, and who reported that the Lanuns, accompanied by Dyaks, were in considerable force about the rivers and ports of the East coast, blockading the rivers and murdering the fishermen who ventured outside, numbers having been decapitated by the Dyaks. The Rajah of Pahang stated the force to consist of 20 prahus altogether, and that the Dyaks had taken eleven fishermen's boats and killed about 40 persons. H. M. S. Wolf, accompanied by two gun-boats immediately proceeded to the East Coast to look for these pirates, and the H. C. steamer Diana afterwards joined them, but although they went up as far as Tringanu, they did not meet with the pirates. They found abundant traces of their presence a short time previously, and were informed that 98 fishermen in all had been killed or carried away by these pirates from the coasts of Pahang, Tringanu and Kalantan. While on her return to Singapore, the Diana observed a Cochin Chinese tope on shore in a little bay on the mainland of Johore, opposite Pulo Tingie, and stood in to examine her when three prahus quitted her and pulled away to the southward. Being pursued by the steamer's boats, the pirates forsook their prahus and fled into the jungle with all their arms. The prahus were destroyed. Five Cochin Chinese then came off from the tope to the steamer, one of them being in a wounded condition, and stated

* Continued from p. 410

that, two days before, the tope had been captured by the pirates, two of the crew slain, and other two carried away who it was supposed were murdered. The tope was got off and towed into Singapore harbour. The Wolf afterwards succeeded in capturing 14 pirates on Prlo Tingie, who were identified by the Cochin Chinese as being part of those who had attacked and taken their tope. Clothes and other property of the Cochin Chinese were also found in their possession. Eleven of these pirates succeeded in freeing themselves of their irons and jumped overboard while the Wolf was lying in Singapore roads. Five were recaptured, the others made their escape. These five men having been taken to Calcutta were tried before the Admiralty Court there, two were convicted and sentenced to death, and being brought to Singapore in the Wolf were executed. The other three escaped from deficiency of evidence. In the beginning of April a Siam junk on her way from Chantibun to Singapore with a cargo of salt, was attacked by a fleet of 9 prahus, a little to the southward of Pulo Aor, seven of the boats being of a large size having about 30 men each, and the two others smaller with about 10 men each. The attack commenced in the morning a little after sun-rise, the junk being becalmed, and continued until a late hour in the afternoon. The junk was armed with two six-pounders and five smaller pieces, and contrived to keep the pirates at bay until a breeze sprung up when she got away from them. The hull of the junk was pierced in every direction by the shot of the pirates and her sails and rigging much injured, but she had only one man slightly wounded by a splinter. On discharging her cargo it was found that a considerable quantity of the salt had been destroyed by water coming in through one of the shot holes. The brig Ternate on her way to Singapore was chased by two large pirate prahus on the 19th June near Point Romania. They used every effort to get up with the vessel but a strong squall coming on enabled the Ternate to drop them. The boats were of great length, low in the water, with enormous sails, and having each a barricade in the bow with a large gun. Twenty-seven Malays of Kedah, men, women and children, were in July sent from Rhio to Singapore, having been found at Linga by the Dutch Commissioner. These people had been captured by pirates while on their way from Kedah to Pinang, and after being taken to various places had at last been sold to parties in Linga. In July a letter was received by the Straits Authorities from the Praklang or Prime Minister of Siam on the subject of piracy, and requesting their assistance in extirpating the pirates from the face of the earth. It appears that serious ravages had been committed amongst the native craft of Siam trading along the coast from Bangkok to Chantibun, many having been cut off with valuable cargoes on board. The Siamese war-boats were sent out against the

pirates, but with little effect, and the Siamese government therefore deemed it expedient to call in some more effectual assistance. In the end of July three Borneo trading vessels on their way to Singapore were attacked near Pulo Tingie by four pirate prahus, supposed from their description to be Lanuns. One of the Borneo boats was taken and immediately burned. The other two made their escape. A trading boat on its way from Singapore to Malacca was attacked near Batu Pahat by a piratical prahu, which commenced firing into her, and drove her on shore when the crew immediately fled into the jungle. The pirates plundered the boat and then tore off several of her planks so as to render her unserviceable. The crew ultimately succeeded in reaching Singapore.

During the course of this year considerable efforts were made by the Dutch Government for the repression of piracy, especially in the parts near Singapore. The garrison of Rhio was augmented, in order that there might always be a part of it available for service in the boats cruising against the pirates. A frigate of the royal navy the *Castor*, three schooners, and a gun-boat, besides the gun-boats belonging to the residency, and the boats of the Sultan of Linga and the Rajah of Rhio composed the flotilla stationed at Rhio. The Resident of Rhio this year succeeded in releasing 200 Javanese who had been captured by pirates and sold into slavery. Active operations were also carried on against the pirates in the vicinity of Timor where they still swarmed with unabated audacity. The steamer of the Dutch royal navy *William I* having been wrecked on the *Lucipara* shoal, a boat was sent away to seek for assistance at Timor, or even Java if necessary. The crew consisted of a lieutenant of infantry, two European petty officers a European sailor and four native rowers. After a dangerous voyage across the sea of Banda, the boat was attacked on the 11th May 1837, near the island of *Wetter*, by several Lanun pirate prahus who captured it. They plundered the unfortunate crew of everything, even of their clothes. They were placed in a small prahu, naked, without anything to shelter them from the elements, and only supplied with a scanty portion of maize so spoiled that it was scarcely eatable. At last a bargain was made by which they were to be allowed their liberty on giving the pirates one thousand dollars, some balls of opium, a certain quantity of cloth and other articles. After this agreement had been made two other prahus arrived, the chiefs of which insisted that the prisoners should be put to death immediately, or at all events carried to Manila and sold there. Ultimately the prospect of a large ransom decided them to abide by their first compact, and the lieutenant and the European sailor were put on shore at the entrance of the bay of *Bima*, in order to seek for the ransom, which was to be brought within three days to a certain place agreed upon. The others were retained as hostages and the pirates threatened to put them to death on the least appearance of treachery. By the aid of a Dutch functionary at *Bima*

and of the Sultan of that island, the required ransom was collected and the rest of the crew rescued from their miserable captivity on the 19th July. In October 1837, the Dutch schooner *Maria Frederika*, Captain Gregory, was captured by Lanun pirates at Ampunan on the coast of Lombok. The schooner was afterwards taken to various places on the coast of Borneo and offered for sale. The same pirates to the number of 800 in 30 prahus were seen at the Tambilan islands off the west coast of Borneo, and from thence sailed for Mindanao, according to the information received by the corvette *Castor* and schooner *Argo* which had been sent in pursuit of them. When the French vessels the *Astrolabe* and *Zelee* arrived at Sulo, on their voyage of discovery, the natives were much alarmed thinking that they were Dutch vessels come to make reprisals for the capture of the *Maria Frederika* then at anchor in the port, and prepared to make a vigorous resistance.

1838. A small boat containing four Chinese on their way from Rhio to Singapore, was set upon by eight Malays in a sampan, who murdered three of the Chinese and left the fourth apparently dead. He contrived to paddle his boat to the beach where he remained for three days suffering dreadfully from his wounds and subsisting on the leaves of trees. He was at last picked up by a sampan pukut and brought to Singapore.

On the 18th May the H. C. steamer *Diana*, Captain Congalton, had an encounter with a squadron of six Lanun pirate prahus, the particulars of which are thus related in a local paper:—

“On the morning of the 18th instant, between 8 and 9 o’clock, six large Illanoon prahus were observed from on board of the *Wolf* making for Tringanu roadstead, in which she was then lying—but on nearing her, they bore up, and stood out towards a large Chinese junk in the offing. The operations of the prahus, as they closed on the Chinaman, were visible from the mast-head of the *Wolf*, and they were seen to commence the attack with a desperate fire, which was vigorously answered from the *Junk*. The sloop of war had immediately got under weigh, but had to work to windward, while her own armed boats, as well the gunboats in company, were unfortunately absent, having been despatched the preceding day to the Redang Islands, in search of some Illanoons who had lately killed and wounded some people from Tringanu. About mid-day however the Steamer was descried to the northward, and Captain Stanley with great promptitude despatched his gig and jolly-boat with two officers, some seamen and marines well-armed, to the *Diana*, with orders for her to proceed in the direction of the junk. It was not until about half-past 4 that the Steamer, with the party from the *Wolf*, came up with the pirates, who were then drawn up in line astern of the junk, and fired upon the *Diana* as she approached. But they had now a different sort of enemy to deal with, and the Steamer, stopping her paddles as she came opposite each prahu, and being able to get her

guns to bear with terrible effect, poured in a destructive fire, stretching the pirates in masses on their decks. The head-most and largest prahu, however, maintained a fierce resistance, protracting the contest until half-past six, when she was boarded in a half sinking state, which afterwards rendered it necessary to cut her adrift from the Diana. The other five, favoured with a breeze, hoisted sail, and edged away to the southward, with the Steamer in chase and closing upon them, when darkness coming on enabled them to effect their escape, in which they were further assisted by the tempestuous weather which succeeded. But it is believed, from the shattered and disabled state to which they were reduced by the severity of the Diana's fire, that they would be under the necessity of abandoning several of their vessels, and embarking their diminished numbers in one or two of the least roughly handled. It was observed that in the pursuit scarce any of the prahus could master more than two or three paddles a side. The prisoners we understand acknowledge to 360 men being on board of the six prahus—of whom 90 were killed, 150 wounded, 30 being prisoners on board of the Diana, eight of whom are desparately wounded.

They openly acknowledge that they are pirates, commissioned by the Rajah of Sooloo, to go and plunder on his account, and confess to having taken, during the three months they were out, three Malay boats laden with rice; one Chinese, a Siamese, and three or four Malays were found on board of the prahu which was taken—captures made on the Coast, and each of them decorated with a rattan twisted collar to make them fast at night."

The steamer on this cruize also captured a Malay pirate prahu between Sangora and Kalantan, on board of which were found several persons who had been seized by the pirates along the coast. Two pirates belonging to this vessel were brought to trial before the Recorder at a special Criminal Session on the 7th June at Singapore, and having been convicted on the evidence of some Siamese whose boat they had taken and plundered, they were sentenced to death which was carried into effect on the 11th.

Eighteen of the Lanun pirates captured by the Diana, were tried at the same session on a charge of piracy near the Sambas river on the 25th April;—other four were in the Hospital too severely wounded to allow of their being arraigned. The witnesses against them consisted of persons whom they had captured and who were found on board the prahu when taken. We shall give a short abstract of the evidence. Sabat the first witness called, swore that he resided at Pontianak on the west coast of Borneo. About a month previously he and eight others, being on a voyage from Pulo Laut in a boat laden with cocoanuts, oil, sago &c., were captured off Tanjong Datu by six large prahus well manned and armed. He and three of his companions were put below in one of the prahus, bound hand and foot, and had collars fastened round

their necks. He was told that the other five persons taken alongst with him being Hajis were released by the pirates and set on shore at Pulo Serhassan. The pirates touched at several places on the east coast of the Malay Peninsula near Kalantan and Tringanu. The pirates at last attacked a Chinese junk which resisted, and while engaged with her the steamer came up on which the pirate prahus endeavoured to get away. The steamer pursued and fired upon them, and the prahu in which the witness was confined was taken by the steamer but was so much injured that she went down after the people had been removed from her. The next witness, Francisco Thomas, a Christian, deposed that he was a native of the island of Luzon, and belonged to a place near Manila—saw the boat captured near Tanjong Datu. Had been on board this pirate fleet for several months before the prahu was captured and was compelled to work at the oar, being beaten if he refused to do so. His father, two brothers and himself were taken by the pirates while fishing, the father being shot by the pirates when they took them. The next witness, a Chinese, resided at Patani on the east coast of the Peninsula and had been captured by the pirates. The next witness Augustino the brother of Francisco, confirmed the evidence of the previous witnesses. Captain Congalton then described the engagement, the details of which we have already given, and stated that the prahus were quite different from Malay prahus—they mounted each one long gun in the bow with swivels along the sides, and the men were armed with muskets, spears and other weapons. The prahu captured by him was 56 feet long and 15 feet beam. Five of the prahus favored by night coming on got away but they had many men killed, as they suffered more from the fire of the steamer than the prahu taken. They were baling out apparently nothing but blood when they bore away and shewed scarce a man at the oars. The whole of the prisoners were found guilty but sentence was postponed until the court could make enquiry as to the circumstances under which the fleet had been sent out. In his charge to the Grand Jury the Recorder, Sir W. Norris, with reference to this point observed "piracy, as such, cannot be committed by a nation; and should it appear that these men acted under the authority, express or implied, of their Sultan or Rajah, I need scarcely say the case would be beyond the jurisdiction and powers of a Court of Justice. An evil so serious and extensive could only be met by force of arms or the security of solemn treaties, the infraction of which might furnish justifiable ground of war."

On the 3rd December following seventeen of the convicted pirates were brought up to receive sentence, the other man having died in jail. The Recorder stated that enquiries had been instituted by Government to ascertain to what extent they were encouraged and supported by the Sultan or chief to whose territory they belonged, or whether they acted under the sanction and authority,

direct or implied, of any Rajah to whom they owed allegiance. Nothing had been elicited to show that they were countenanced in their depredations by, or received support from any recognised prince or state, in which case the latter would have been held responsible for their acts. It only remained therefore to pass sentence, but in consideration of their long imprisonment since conviction and the anxiety they must have experienced as to their probable fate, the Court would not exact the full penalty of the law. Thirteen were then sentenced to be transported to Bombay for life—the other four who were very young, to be transported to the same place for seven years.

In June this year the Mercantile Community at Singapore presented Capt. Stanley of the *Wolf* with a sword of the value of one hundred guineas, in acknowledgment of his highly meritorious services in the suppression of piracy while in command of the *Wolf* on the Straits Station. The thanks of the Chamber of Commerce were at same time voted to Capt. Stanley, his officers and crew for their exertions in the suppression of piracy, by which so much had been effected to secure the native commerce of the port from the depredations to which it was formerly exposed, and lastly, Capt. Stanley and his officers were entertained at a public dinner by the merchants of Singapore. It must have been from inadvertence that no public testimony was given by the Mercantile body of Singapore of their appreciation of the services of Capt. Congalton of the *Diana*, since we believe they were always most warmly acknowledged both by the government and by the community.

On the evening of the 26th August the American ship *Eclipse* then trading at a village called Trabongan, about twelve miles from the port of Mukie on the West Coast of Sumatra, was visited by a party of twenty-four Malays, headed by the jurutulis of Mukie under pretence of trading. The second mate requested them to give up their arms according to a practise sometimes observed on that coast, which they readily did. They then waited until Captain Wilkins, who was indisposed and asleep in his cabin, came on deck about 10 o'clock, when the headman complained of the distrust which had been shewn by the second mate, and requested that their kris might be given back. Captain Wilkins having frequently before traded with this man, and confiding in his expressions of friendship, restored the arms, and they then proceeded to weigh some pepper which the Malays had brought off for sale. As the second parcel was being weighed the Captain who was seated by a light near the binnacle called out "I am stabbed," and at the same moment the 2nd mate who was stooping to take up the bags was stabbed in the loins, and an apprentice standing near the Captain was killed by the same man who had murdered Captain Wilkins. The second mate and several of the crew jumped overboard while others ran up the rigging, where

they were afterwards joined by the second mate and those in the water, who climbed up by means of ropes. Several of the crew were also wounded. The Malays then commenced to plunder the ship and finding the cook below in irons, he offered to shew them where the opium and dollars were if they would spare his life. They then broke his fetters and set him free, and with his assistance found four chests of opium and eighteen casks containing 18,000 spanish dollars, with which booty they left the vessel, the cook accompanying them. The 2nd mate and four sailors immediately left the ship and proceeded to the French barque *L'Aglae* which was lying at a port in the vicinity. The carpenter and two sailors went on shore to join the chief mate and four of the crew who were at that time at the village purchasing pepper &c. The chief mate afterwards took the command of the ship and endeavored to recover some of the booty which had fallen into the hands of the Rajah of Susu, but he was unsuccessful.

The American frigate *Columbine*, Commodore Read, being at Ceylon when intelligence was received of the piratical attack upon the ship *Eclipse*, immediately proceeded to the scene of the outrage and arrived off Kwallah Batu on the 22nd December. Having ascertained that one of the principal actors in the affair was at Kwallah Batu under the protection of the Rajah, the delivery of this man and the property in his possession was demanded. The Rajah did not deny that the man was in the place, but attempted to evade the requisition for his surrender, on which the *Columbine* opened a cannonade upon the town for a quarter of an hour, and then left the place and proceeded to Mukie. There were five of the persons concerned in the outrage on board the *Eclipse* at Mukie together with a considerable part of the plundered property, but the Rajah professed his inability to give them up. After waiting some time and no redress appearing likely to be obtained, a party of 30 officers and three hundred men were landed from the American squadron who in a short time completely destroyed the town.

Two native traders bound to Singapore were about the beginning of October chased by Malay pirates in the neighbourhood of Tringanu and were repeatedly fired into but succeeded in making their escape.

In 1838 the Dutch corvette of war *Boreas* was sent to the neighbourhood of Timor to enquire into the circumstances which had led to the murder of the commander and carpenter of the English vessel *Kingsdown*, but according to the information obtained it appeared that these persons had been the victims of their own imprudence. The *Boreas* however chastised the inhabitants of several villages on the coast of the island of Floris who had been guilty of piracy. A treaty was this year made with the Sultan of Indragiri on the east coast of Sumatra by which he engaged to suppress piracy. A treaty was also made with the Sultan of

Sumanap on the island of Madura, by which he undertook to maintain cruising vessels against the pirates.

In the Moluccas in 1838, the pirates did much mischief, particularly in the islands of Manipa, the Two Brothers, and on the coast of Hito, where it was necessary to send a detachment from the garrison of Hila to the assistance of the population. A vessel of war was also sent to act in concert with the native boats of the Sultan of Ternate. In this year an armed expedition was sent to the neighbourhood of Bali and Lombok, where several acts of violence had been committed, and amongst others two brigs, the Twee Gebroeders and the Teksing, had been plundered.

1839. This year Captain Van Iseghem of the French barque *L'Aglae* was murdered at Muckie on the West Coast of Sumatra by the Malays, who also seized the vessel for an alleged debt. The French frigate *Le Drogue* being in the Indian waters, on hearing of this outrage repaired to Muckie, where the commander demanded the surrender of the murderers, and the demand having been disregarded a party of 126 men was landed and the place again laid in ashes. In October and November several small trading prahus were captured by pirates in the Straits of Malacca and in the latter month the two gun-boats belonging to Malacca seized seven armed boats, which it appeared came from Gallang, and according to their own account, were bound to Pinang for *beche de mer*, having passes from Singapore.

In 1839, the repression of piracy was the subject of anxious deliberations and energetic measures on the part of the Dutch Government. They sent an expedition against the pirates who infested the neighbourhood of Linga and the eastern coast of Sumatra. Fifty-nine persons, sold into slavery by pirates were liberated. Overtures were also made to the English authorities for the purpose of concerting measures for a system of passes for native vessels. In the beginning of the year a force consisting of three armed vessels was sent to cruise in the latitude of Makassar and near the island of Buton. Several persons were this year carried away by pirates for the coasts of Cheribon, Tegal and Pekalongan in Java, and five native boats loaded with sugar and machinery were taken. They were pursued however by two gun-boats, who forced the pirates to take to flight and abandon the captured boats with twenty-seven Javanese prisoners. At a short distance from Tanjong Flesko on the north coast of Celebes, the schooner *Petronella* was attacked and captured by pirates. The crew and the passengers, amongst whom were three Europeans, were all murdered. On the 28th June, a detachment of Dutch troops near the shore on the east coast of Sumatra were attacked by about 200 piratical prahus, but the pirates were repulsed. The schooner *Haai* stationed at Sambas (west coast of Borneo) inflicted considerable damage on a fleet of thirty Dyak prahus which had dared to engage it. The coasts of Pontianak

were equally disquieted by the Dyak pirates. At Mumpawa an engagement ensued with them. The commandant of the place, Sherief Mohamat, having learnt that there were nine of their prahus at the mouth of the river, each manned by thirty or forty pirates, resolved to attack them with only three prahus. They fought so closely that they could not make use of any other weapon than the klewang (sword.) The commandant had thirty-seven men killed; the loss of the Dyaks amounted to forty. It appeared that these Dyaks came from Serebas. In this year a treaty was concluded with the chiefs of Ende in the island of Floris by which they engaged to repress all piracy, and not to permit any intercourse between their subjects and pirates, whether in the way of protection, or by assisting them in the sale or exchange of their booty.

1840. After the severe chastisement inflicted by the *Adromache*, *Wolf* &c and especially after the encounter between the steamer *Diana* and the Lanun pirates off Tringanu, cases of piracy of any moment became very rare in the vicinity of Singapore. We find none recorded this year until in the last week of May, when a small junk or *tope*, with twelve men on board and having a cargo of the value of about 1,000 Dollars, left Singapore for the island of Hainam, and was attacked off the mouth of the river Johore by seven or eight boats manned by Malays and Chinese, whom the *tope* endeavoured to drive off by a discharge of small arms. The pirates threw wooden spears, one of which killed the *nakoda* of the junk, on which the rest of the crew took fright and abandoned all further resistance. The vessel was then plundered of every thing it contained, but no further violence was offered to the crew who brought her back to Singapore. On the 29th May a Chinese trader named Tan Gim belonging to Singapore, left that place in a *prahu* of about 15 tons burthen with a crew of 5 Malays, a Chinese *nakoda* and supercargo, and five Chinese passengers, and a cargo consisting of a chest of opium, rice, tobacco and piece goods, bound for Rantow in the island of Bancalis on the east coast of Sumatra, where he intended to purchase raw sago. Before he left Singapore a Malay named Tunku Syed, with whom he was acquainted, proposed to sail in company with him, saying he was a relation of the Rajah of Rantow, and could be of use to Tan Gim in his trading operations. The Chinaman agreed to this and the two boats accordingly sailed together. On the 2nd June while lying at anchor off the Carimons, close to Pulo Babi, Tunku Syed with six of his crew came on board the Chinaman's boat, and pretending to engage in conversation suddenly called out *amok*, and commenced krising the Chinese. Tan Gim instantly sprang overboard and swam to Pulo Babi which he reached in safety, but it is supposed that all the other Chinese, except a boy, were murdered. After remaining for three days on Pulo Babi, Tan Gim was taken on board a

passing Malay boat and conveyed to Campar from whence he returned to Singapore. Another Chinese trader who arrived from Campar a few days later reported having met Tunku Syed at the mouth of the Campar river in a prahu with about 10 Malays on board, and with a chest of opium, rice &c. There was also a Chinese boy on board, whom the Malays appeared anxious to keep out of view.

A Chinese sampan pukat having left Singapore on the 9th of August for the island of Bintang, with a crew of 16 men, was attacked on the evening of the 10th by two sampans manned by Malays armed with muskets. The Chinese having three guns kept up a running fight until midnight when the pukat was taken, two of the crew being killed. The survivors betook themselves to the water, were picked up by a Malay fishing boat, and landed at Rhio. Information of this outrage having been given to the authorities at Singapore, and that the pirates had carried their prize towards Pulo Tikong in the Old Straits of Singapore, a gunboat was dispatched in pursuit, and succeeded in taking the pukat and the two sampans with six Malays. A portion of the cargo of the pukat was found in the hands of a Chinese on the island of Singapore, at the back of Bukit Timah, where also some of the pirates were captured. The English barque *Fairie Queen* on her voyage from Sydney to Batavia, on the 21st June struck on a reef near the Antelope Islands. On the morning of the 22nd the vessel was found to be surrounded by Malay prahus, and the boats with all the crew, except the Captain and two men, being engaged in taking out the anchors that an attempt might be made to get the vessel off, the Malays boarded in immense numbers in spite of every opposition, and proceeded to cut the rigging, sails, cables &c. in pieces and carry them away in the boats. The crew retreated to the cabin intending to defend themselves, but the Malays being several thousands in number, it was judged better to take to the boats and endeavour to fall in with another English vessel with which they had been in company on the 20th. They succeeded in getting on board the boats with two small kegs of water and a raw ham, and after three days pulling fortunately fell in with their consort. The barque *Mary*, South-sea Whaler, Captain Blossie, on her passage through the straits of Lombok requiring wood, the Captain and two boats with their crews consisting of 14 men went on shore at North Island. While they were engaged in cutting wood, the boats were seized by Lanun pirates whose prahus were lying unnoticed under the lee of the island. One of the seamen was killed in attempting to swim off to the ship, and the Captain and the rest of the crew were taken prisoners by the pirates who kept them, until the 10th when they were ransomed from the ship, with the exception of three men whom the pirates refused to give up. Every exertion was made by the *Mary*, with the assistance of Mr King of Ampanan and several masters

of merchants ships lying there, to capture the pirates, but owing to light winds they could not be come up with. In cruising along the coast of Buton some time afterwards the Mary had an engagement with a fleet of 200 piratical prahus from which she was fortunate enough to escape. It was also reported that these pirates had captured three American whalers.

In the year 1840, the Dutch Government reorganised their marine force, abolishing the colonial marine, and placing the vessels under the command of officers belonging to the Royal Navy. They continued to take active measures against the pirates. On the 7th July the schooner Alcinoe had an engagement on the coast of Floris with twenty-three pirate prahus. The schooner was surrounded on all sides, and the pirates only retreated after two of their vessels had been sunk. In this year the island of Roma to the north of Timor was devastated by the pirates.

(To be Continued.)

NOTICES OF PINANG.*

PROCLAMATION.

These are to certify that agreeable to my orders and instructions from the Honorable Governor General and Council of Bengal, I have this day taken possession of this Island called Pooloo Pinang now named the Prince of Wales Island, and hoisted the British Colors in the name of His Majesty George the Third and for the use of the Honorable English East India Company, this eleventh day of August, One Thousand Seven Hundred and Eighty-six; being the Eve of the Prince of Wales' Birth day.

In the presence of the underwritten.

(Signed) FRANCIS LIGHT.

Extracts from Journal of Captain F. Light.

Queda. 11th 12th and 13th July 1786. Embarking the people and provisions :—14th at 5 P. M. sailed in company with the Prince Henry and Speedwell Snow.

15th. Anchored off a small island on the north side of Pinang in 5 fathoms, sent a boat to sound, found no less than 2 fathoms close to the shore.

16th. At noon having a light breeze and flood tide got under sail, and run into the harbour, anchored in 13 fathoms within a musket-shot of the shore. The Prince Henry anchored close to the Speedwell, I ordered to run further to the southward, until she got into shoaler water, they anchored about $\frac{1}{2}$ mile from us in 8 fathoms soft ground; sent the boats to sound the bay, found good anchoring ground close to the eastern shore, and 11 fathoms within 2 miles of the beach.

17th. Disembarked Lieutenant Gray with the marines upon point Penagger, a low sandy point, covered with wood Employed clearing the ground.

18th. Landed the Europeans;—the marines and lascars employed clearing the wood and pitching their tents. The Data of Qualla Moodoo came. He brought a fishing net and desired permission to erect a house, which I readily granted;—a prahu from Queda likewise arrived with Captain China and some Christians of India, —they also brought a net which was very acceptable.

19th. People employed clearing the woods:—some of the inha-

* The following notices of the early history of the Settlement of Pinang or Prince of Wales Island, will be found of interest, presenting as they do minute details of the proceedings of the early settlers, and furnishing fuller information respecting the views and intentions of the Government in founding the settlement, than has yet been published. We hope that the contributor to whom we are indebted for these extracts and the running commentary by which they are accompanied, will be induced to continue them to a much later date, and thus put us in possession of much curious and valuable information otherwise inaccessible.—Ed.

bitants of the island, who dwell at the foot of the hills, paid me a visit and offered their service to assist me, I dismissed them with a present.

20th. Employed clearing and burning the woods. Snow arrived from Keddah, on board of which I had shipped paddy and attaps; she is commanded by one Loundes. Dug several wells, found the water indifferent, but stained with the roots of the Penagger which dies red; permitted the marines and lascars to build huts as the tents were not sufficient to contain the half of them.

21st. This morning had frequent squalls with rain. In the afternoon cutting down the trees.

22nd. Rain for the most part of the day.

23rd. Pleasant day, the people from Queda erected a small Bazar near the cantonments, appointed Noqueda Catchee to superintend the bazar and prevent impositions on either side, ordered him a guard of marines.

24th. A fine day, all hands at work.

25th. The same, brought ashore the 2 field pieces with their carriages. Employed building cantonments as I intend despatching the Eliza to Queda:—removed the Company's Treasure into the Prince Henry.

26th. Fine weather—landed the 12 pounders and tumbrils. Lieut. Halcombe not being acquainted with the Malay language requested of Captain Glass to go with him. In the afternoon the Eliza sailed;—the people all at work.

27th. Landed the 18 pounders and carriages, employed mounting the guns and clearing the woods.

28th. The Munster Lass, Captain Bett, arrived from Malacca. This vessel was run away with from Masulipatam by some Europeans, and seized by the Dutch at Malacca at the request of Lieutenant Stephenson; the people all at work.

29th. Fine weather and fresh southerly winds, every body employed, the Munster Lass returned to Malacca. In cutting the trees, our axes, hatchets, and hand bolts suffer much, the wood is so exceeding hard that the tools double like a piece of lead; requested of Captain Bett on his return from Malacca to bring some China axes and parangs from Malacca likewise a smith and washerman.

30th. A fine day—employed clearing the ground, employed as usual.

31st. The same.

1st August. This morning several squalls, with thunder and rain, people employed clearing the ground; several prahus arrived from Queda with several articles for sale, the bazar increases, and we receive a constant supply of fine fish.

2nd. Fine weather, marines and lascars constantly employed;—observing the Europeans to be very idle ordered them to make

the Gabions.—An officer of the Siamese arrived, who informed me that they had conquered Poogul and taken above one hundred pieces of cannon, that their army was now against Sagar, and as soon as the monsoon served they would attack the Burmese.

3rd. A severe squall, with rain in the afternoon;—began to line off the ground for a fort.

4th. Squalls with thunder and rain, the people at work whenever the weather permits.

5th. Fair weather.—The inhabitants every day paying me a visit, I requested their assistance in cutting down the large trees called Bore. They cut down four but I could not prevail upon them to attempt any more, having broke two of their Bluongs (axes.) Contracted with some Malays to bring Neebons for a stockade at dollars 6 per hundred 12 feet long each.

6th. The people employed in clearing the ground;—ordered the Chinese to dig up the sand and saw the roots of the large trees. This proves a slow and laborious work, offered to the Malays a dollar for every four trees they should cut down.

7th. A fine day;—erected a flag staff. The Eliza returned from Queda—brought some chunam, planks, fowls and ducks, and paddy, with several Christian families.

8th. Fine weather, the lascars building a store house and the Chinese sawing down the trees, the Malays accepted the offer of 1 dollar for four trees and went to work with great spirit.

9th. Fair weather, every body employed. The marines have made frequent complaints of the hardship they suffer in being obliged to work, this at a time when they are indulged with full Batta and provisions is a proof of their ignorance and unworthiness.

10th. Fair weather, two boats arrived with officers from the Vansittart and Valentine, Honorable Company's ships; they brought letters from the Government of Madras. The ships were just in sight, I wrote to the Captains, and requested their company ashore for a few hours in the evening, the ships anchored in the outer roads.

11th. Captains Wall and Lewin came ashore with several passengers, saluted them with nine guns, thought this the most favorable opportunity for taking a formal possession of the island, at noon assembled all the gentlemen under the flag, who unitedly hoisted the flag, taking possession of the island in the name of his Britannic Majesty, and for the use of the Honorable East India Company, the Artillery and ships firing a Royal salute, the marines three volleys. The Sullivan, Captain Pounce, was barely in sight, he sent his letter by another boat and sailed for China, in the evening Captain Lewin went on board and sailed for China.

12th. Fine weather, Tonkoo Ia a relation to the king of Queda arrived, he staid a few days with me and particularly cautioned me not to let more than one or two Malays visit me at a time. I had from the first given directions to Noqueda Catchee to allow no

Malays to come ashore armed and this has been faithfully complied with.—Captain Wall went on board and sailed for China.

13th. Fair weather, a boat from the General Goddard arrived with a letter from the Government of Madras. Captain Foxal requested if I had no particular service, he might be permitted to continue his voyage—accordingly on the return of his boat he departed. The Fort William, Captain Simson, came in and anchored under Ratt Island and saluted the fort with nine guns, which I returned.

14th. Captain Simson with his passengers came ashore—supplied him with a bullock as I had done the other ships, and with fowls, fruit, and I received the greatest attention from the Captains of the ships which came in, and got a supply of such necessaries as I wanted. The sight of three large ships, the report of their guns, and the number of Europeans coming ashore, serve to raise us considerably in the opinion of the Malays.

15th. The Fort William sailed. Employed cutting down trees, and erecting a fort. Having received a letter from the Christians at Queda requesting I would provide them a conveyance to the island, as Captain Loundes had no use for his vessel I engaged him to go to Queda and bring them. In the afternoon he sailed.

17th. Arrived the Prince George, Captain Robson, from Queda, he has lost his main top-mast, and wanted some other repairs. Employed the Malays of the island to cut them a top-mast, and lent our carpenters to refit his vessel. The people employed in erecting the fort, and clearing the ground; the Eliza taking ballast and water.

18th. Showers of rain, the Malays felling the trees. Having promised the marines and lascars a present on the ceremony of hoisting the flag gave them pieces of gurrahs.

19th. Most part rain, with fresh gales from N. W. ;—arrived some prahus from Queda.

20th. Frequent showers, and hard squalls from the N. W. the sea running very high upon shoals of Qualla Mooda, rebounded back into the north bay, and occasioned a surf upon the beach, which at high water broke over in some few places, this was soaked up by the sand, before it reached six yards,—the ships lay perfectly quiet and secure.

Such is the history of the birth and first few days of the infancy of Prince of Wales' Island as recorded by its founder Captain Francis Light.

It has been long and confidently believed that this Captain Light, having married the daughter of the king (or Rajah) of Quedah, (Keddah) obtained possession of the island of Pinang as his wife's dowry, and that he subsequently sold it to the East India Company for a sum of ready money and the appointment of chief of the settlement. This story, though widely circulated and fondly cherished by the descendants of that gentleman, has unfortunately

no foundation in truth. The Government of India had been for some years desirous of obtaining possession of a suitable spot for a settlement on the eastern side of the Bay of Bengal, and Captain Light, among others, was employed to look out for some eligible locality. This gentleman was connected with the Keddah trade, and resided a good deal at the capital of the Rajah, where he no doubt acquired considerable influence. Through him, an offer was made to the Supreme Government, of the island of Pinang, to be ceded to the Honorable Company on certain conditions. The Supreme Government, then under the presidentship of Sir John Macpherson, moved by the representations made to them on the subject, decided on forming a settlement on that island. Captain Light, who had gone to Calcutta with the offer from the Rajah of Keddah, was sent back to that place with instructions to negotiate for the cession of the island, which having successfully accomplished, he sailed to take possession of Pinang as described in the above extracts.

The object of these "notes" is simply to amuse and interest those who have become acquainted with this beautiful island in these its later days, by a recurrence to the earlier scenes and events in its history. So far as may be practicable, the rise and decline of the trade of the island will be traced as also the rise and progress of the judicial system, which, as it now exists is somewhat unique of its kind; but for political matters, and especially for any discussion on the "vexata questio" of the relations subsisting between Siam and Keddah, the pages of the Journal of the Indian Archipelago are no proper receptacle.

The following extract from a letter from the Government of India to Captain Light, dated 22nd January 1787, gives a view of the objects and intentions of the Government in keeping possession of the settlement and at the same time is very deserving of notice as exhibiting the Government of India of those distant days as the advocates of free trade. Here in 1787 are positive orders to render the port of Pinang free to all nations and to refrain from levying taxes of any kind on its commerce. Raffles and Crawfurd have, each in their time, been belauded as almost beyond their age, when advocating freedom of ports in the Straits, yet it seems that long before they probably had mastered their A, B, C, this policy had been advocated by a Governor General of India. Let Sir John Macpherson then have his fair share of honor in this matter, the more especially as it does not appear that these views were induced by any arguments or representations coming from the island itself.

Extract of Letter to Captain Light, dated 22nd January, 1787.

"At present our great object in settling Prince of Wales Island is to secure a port of refreshment and repair for the King's, the

Company's and the Country ships, and we must leave it to time and to your good management to establish it as a port of commerce. If the situation is favorable, the merchants will find their advantages in resorting with their goods to it, and as an inducement to them, we desire you will refrain from levying any kind of duties or tax on goods landed or vessels importing at Prince of Wales Island, and it is our wish to make the port free to all nations.

* * * *

"We desire to be informed with as much accuracy as possible, how far the settlement will answer the ends proposed, that having this information before us, we may be enabled to judge whether it will be prudent to continue or withdraw it altogether, and for this purpose we request to be particularly informed of the import and export goods, with the prices they bear, and of the arrivals and departure of vessels, together with the diary directed in your general institutions."

The following letter from Captain Light to the address of the then Governor-General of India (Lord Cornwallis) dated 18th June 1787, gives a summary view of the efforts made by himself and others to have an English settlement formed on the east side of the Bay of Bengal. He seems to have been well infected with the great dread of those times, the danger to arise from the extension of Dutch influence and power, while he was probably not very scrupulous in the means he might have recourse to, for the extension of our own influence and power. Had he met with the support he expected in 1785, he might have anticipated by upwards of half a century some of the fame acquired by Sir J. Brooke, by becoming a Rajah in his own person. It is a curious fact too, that so long ago as Warren Hastings' time we should have been on the point of taking possession of Junk-Ceylon, or as stated in Captain Light's letter "military possession by public subscription." The terms of a subscription for taking possession of a large and valuable island belonging to a power with which we were not at war, would be of themselves a curiosity.

"My Lord,

"I now do myself the honor to transmit to your Lordship a description of the island Salang. I had formerly given an account of this island to Mr Stratton, Mr Rumbold, and Mr Hastings, and so long ago as the year 1771, I wrote Mr Hastings particularly concerning the country of Queda and the utility of Poolo Pinang as a commercial port, recommending it as a convenient magazine for the Eastern trade. I had then an idea of a Naval Port being necessary on this side of India, and before the commencement of last war was convinced of the jealousy of the Dutch and their endeavours to exclude the British entirely from any part of the Eastern commerce. Their letters to the kings of Rhio and Salengore, forbade these Princes from having any commerce with the

English; I read their letter to the King of Salengore. On my return to Bengal in the year 1780, I represented these circumstances to Mr Hastings, and to facilitate the obtaining a settlement on Salang proposed the doing it by subscription. A plan was formed, the subscription made and presented to the Honorable Board, who gave it their sanction in a public letter. Before the vessels and troops could be made ready, a war with France was certain, Government at this time could afford no supplies and the merchants were unwilling to trust their property on the eve of a war, thus it was for this time neglected.

At the conclusion of the war Mr Hastings endeavoured to procure some place to the eastward and employed Captain Forrest to enter into treaty with any of the Malay Princes. While these negotiations were carrying on in a very languid manner, the Dutch had time to blockade the port of Rhio for six months, to suffer a seige at Malacca for six months more, and then with the assistance of their fleet from Holland to take both Rhio and Salengore. It was at this time I formed the resolution of obtaining this island (Pinang) as a barrier to the Dutch encroachments. I had still the same influence with the Governor of Salang and had he lived would have secured a possession of the island. His death, which happened in December 1785 altered the certainty of success to a dubious point. His widow, the only person of estimation, would willingly have given up her power. Her sons and nephews beseeched me to take the Government of the island. Could I have had assurance of support from Government, I should have embraced the offer and secured both these islands. I requested they would wait two months and if I did not return with troops to provide for themselves. On my arrival at Calcutta I found Mr Macpherson in the chair, who readily accepted the king of Queda's offer, but declined taking Salang as it would have required a greater force than could with any degree of convenience have been sent. As Government required a naval port with a port of commerce, Pinang is more favorable than Salang, its situation affording a safe and easy passage to all prahus in all seasons, an advantage Salang cannot possess. From May to December strong S.W. and N.W. gales with a heavy sea render the navigation too difficult and dangerous for Malay vessels, neither is the situation of Salang so convenient for ships passing to or returning from China. Not only the commanders of the British vessels but foreigners continually complained of there being no place of safety east of the Bay of Bengal for ships to take shelter in and to refit at. Every one seemed to think it a duty incumbent on the English East India Company, they enjoying the greatest possessions and the readiest means for effecting it.

I have the honor &c.,

(Signed) "FRANCIS LIGHT."

Prince of Wales Island, 18th June, 1787.

Early in 1787, Captain Glass of the Bengal Army, was appointed to the command of the troops in the new settlement of Prince of Wales Island and appears to have received instructions to report to the Governor-General on the general state and prospects of the acquisition. His first report is dated in April 1787, from which the following extract is made.

All the early reports on the island concur in describing its thickly wooded state and the difficulty experienced in clearing the jungle. An amusing story is current among the natives of the place of one of the means adopted by Captain Light to stimulate the exertions of the small body of Malays he had succeeded in engaging for clearing the jungle. He is said to have loaded one of the guns of the vessel attached to him with a bag of a dollars, and fired it into the jungle, leaving the Malays to pick them up, which they could not well do without at the same time clearing the ground of its under-wood and jungle. The clearings commenced at the point where the Fort now stands, and the first tents were erected on the beach in the neighbourhood of the esplanade, the first road made being that from the point to the present site of the Court house. It must be noted however that the present sea line from the fort northwards is far inland of that of earlier days, and many old inhabitants of the present day can recollect a carriage road between the sea and houses now lining the beach. During many years the sea made great annual encroachments on this side of the island, so much so that the Engineers confidently predicted that the town and fort would in a few years become an island separated from the main island, but of late years the encroachment has very much diminished in annual extent. Whether this be owing to the embankments and piling executed by individuals to save their property or the result of natural causes, does not seem to be determined.

“ My Lord,

29th April, 1787.

“ As we cannot get the survey of the Harbour &c. finished to transmit you by this conveyance, I have finished a sketch of the island on a small scale, which will serve to give your Lordship some idea of the place, but as it is neither large enough nor taken with the accuracy I could wish, for your Lordship to judge of the different situations in a military point of view, I shall not trouble you with any remarks on that subject at present, but content myself with communicating a few general observations which my local situation has enabled me to make.

The island is in length from North to South about 16 miles; its medium breadth I take to be 8 miles, so that in all it contains 128 square miles—its interior parts mountainous lands; but in general low towards the sea side, and so covered with wood, that it is impossible for any body of men to penetrate, and what will (with attention in those that may be entrusted with clearing it) ever

remain a security to the settlement against attacks by land.

The soil is in general light and sandy, but fertile, and everywhere mixed with a very productive tin ore which may hereafter prove an object to the Hon'ble Company; but till the King of Quedah's claims for the island is settled, I think it would be impolitic to allow it to be worked, as it may make him rise in his demands.

The timber of the island is in general durable, and fit for ship building &c.

As a Marine Port, its insular and central situations, fine, defensible, and covered;—harbour of easy access and recess; in all seasons provide amply for the shelter of a fleet.

Its fine climate, fertile soil, and contiguity to a plentiful country, where provisions may be had until raised on the island, provide for the health and refreshment of the seamen.

To improve the Harbour accurate draughts of the island and surrounding coast are necessary to enable every Commander to find the shelter he may want with expedition and safety.

As the tide rises and falls 9 or 10 feet, Docks might be constructed, but as heaving down Hulks is always a resource attended with much less expense and as the building of them here would raise a body of workmen ready in case a fleet should arrive in want of assistance, I think they claim a preference.

The expense of clearing woods in this country is not great or difficult, as practised by the natives. They cut down the wood at the beginning of the dry season and burn it at the end, what remains soon rots, but this mode is attended with one very great inconvenience; viz—burning the good wood with the brambles, for though they may leave the fine trees standing, yet the surrounding bramble in burning so affects the bark that they in general die.

To evade this inconvenience and assist the poor farmer, I would recommend that the ground be cleared under the direction and at the expense of the Company.

The aggregate of which expense I would recommend to be subdivided by the acres cleared, and the amount considered as the purchase-money, the interest of which should be the annual rent to the first settlers for 20 years certain. This would invest the territory immediately surrounding the settlement in the Company and the first settlers, occasion a quick supply of provisions, and the sale of the lands so cleared—at the expiration of 20 years would triply reimburse the first expense or form a permanent revenue of rents.

Besides the above measures, which relate simply to the poorer and major part of every Community, Grants to opulent Individuals, under restriction, would operate to the end proposed, if taxed with a necessity of clearing one-tenth of the Grant annually.

These measures superintended by men of principle, would soon render the access to the harbour safe and easy; procure the repairs

a fleet might want, and in a few years the refreshments necessary within ourselves.

To recapitulate, it appears we are become possessed of a harbour, fitted by nature for an effective marine port, improvable in the shelter, repairs, and refreshments it can give a fleet—situated advantageously for commerce—which advantage it is imagined may be pushed to *maximum* by putting it under proper regulations and by giving protection to the oppressed. For so oppressive are the Dutch regulations, that many will claim your protection to be freed therefrom.”

Shortly after the arrival of Captain Glass on the island to command the troops, Captain Kyd (afterwards well-known in India as General Kyd) of the Bengal Engineers was sent down to report finally on the capabilities of the harbour, on the nature and productions of the soil and on the advantages to be derived from the settlement generally. His report is drawn up at considerable length and contains much interesting matter, from which a few extracts have been made, but the following “morceau” from Capt. Glass is of prior date and will be found amusing by exhibiting the contrast between the present Fort Cornwallis and the nebong fence alluded to on the same site. It is curious to find the officer commanding, complaining of his men learning to gamble from the natives within less than 12 months from their first landing on an uninhabited island.

“Capt. Kyd is now well advanced in his survey of the harbour, and I believe his report will be favorable. But whatever alteration may be determined on, I am now convinced that while the Company keeps possession of the island, the point we at present occupy will ever remain the principal trading town, on account of its easy access and recess, and as it will be a long time before another work can be completed (supposing it to be found necessary), I have therefore with the advice of Mr Light began to strengthen the fort by doubling it with another row of nebongs, and by raising stages in the inside, high enough to fire over the parapet. The undertaking has also met with Captain Kyd’s approbation, and as I am carrying it on with the lascars and working parties from the sepoy corps, it will not be attended with any expence, nor will my employing the sepoys for a few hours in the day, I hope, prove prejudicial to good order and discipline; on the contrary, I think it will wean them from the vice of gambling, which had from the example of the natives begun to shew itself among the troops, and as it will add greatly to the safety of the place, I trust your Lordship will approve of it.”

10th June, 1787.

*Extract from Captain Kyd's Report, on P. W. Island,
dated, 1st Sept. 1787.*

"The island is on all sides plentifully supplied with fresh water, which comes from the hills in small rills and is collected into the harbour at about a mile from the fort point. This stream is sufficiently large to admit of ships' long boats, where at low water they can fill their casks with the greatest convenience, as the water runs the whole way from the hills over a bed of sand and pebbles, it is as pure as chrystal, and upon experiment has been found to be very soft and light, as is indeed all the water on the island. Water is also to be found on all parts of the island by digging a few feet deep, but it is in general very unpalatable having a strong taste of the roots of the trees which are thickly interwoven through the whole surface of the ground, for several feet deep, but were brick wells sunk below the roots of the trees there can be no doubt that good water would be got from them.

* * * * *

It does not appear that there are any ores on the island, only that of tin which is found more or less on every part of the Malay Peninsula and in the islands in the Straits of Malacca, although not always in such situations or sufficiently productive to admit of being worked with profit. Of the ore produced at Pinang an assay has been made and it has been found to be of a pretty good quality. It was explored here on the northern part of the island on high ground within a few feet of the surface, bedded in a matrix of white clay and gravel, but is a question of great doubt whether Government could reap any advantage from the working of the mines, and from what I could learn I should imagine not were they to employ their own people to do it. The only probable method of getting any advantage by them would be to allow the Malays to work the mines on their engaging to deliver all the tin they extract at a stated price, by which a profit could be got by sending it to China, but the Malays are so indolent a people that it is to be feared that much would not be got in this way. It is certain that if the Malay Princes did not enforce as a tribute, the delivery of a certain quantity of tin from each of their districts, that little or none would be produced, but it must also be observed that the established price they pay for it is much beneath its value, and for which they absolutely cannot raise it. It would therefore be worth while trying the experiment whether paying the Malays more liberally they would not be stimulated to industry. Great advantages must not however be expected from this article, as the real expense of raising and manufacturing it comes to nearly its value. It is singular enough that although the Malays have time immemorial furnished the Chinese with tin they cannot themselves extract it from the ore, the process of melting it being only possessed and exercised by the Chinese who of course make a great profit of it.

There is a great plenty of stone upon the island but it is all of one kind and seems very unfit for building, being a hard red sparry granite which there is no breaking but with gunpowder, and so very untractable that no tool will put it into shape but with infinite labour, but there is earth on every part of the island fit for making bricks, and a kind of white clay which when burnt remains of that colour and makes a very hard durable brick. Brick-makers are therefore only wanted and as there is such a quantity of fire-wood on every part of the island, bricks should not cost much, nor would they, were not labour so very dear on every part of the Malay coast, and while this is the case I do not think they would ever be able to get bricks so cheap as in Bengal; at this time they could not get a Malay to make bricks for less than ten dollars per thousand, which is four times the Calcutta price, nor have the Dutch at Malacca ever been able to reduce the price to less than four dollars per thousand.

I have not been able to discover that there is any lime stone on the island, or coral shells, or any thing from which lime can be made. At present the settlement is supplied from the town of Queda with lime made from small sea shells of which a great quantity could not be procured, but at Perlees, a river to the northward of Queda, an excellent stone chunam may be procured which, in appearance, is much like that from Sylhette. It is brought a considerable distance by land carriage from a range of hills to the river, which increases the price of it much; there has none of it yet been got but as a sample, but upon calculation it appears that it at least will cost as much as the Sylhette does at Calcutta. The only bricklayers they have on the coast of Malacca are Chinese and the wages they require are very extravagant, nor are they very dexterous at present, therefore any work in masonry would at least cost 50 per cent more than in Calcutta, but were brick-makers and bricklayers carried from Bengal I see no reason why it should not soon be as cheap as in that country.

* * * * *

The island of Jerajah is about two miles in length and one in breadth, it is very high and steep and thickly covered with wood in the same manner as Pinang, and upon this island alone are a very great number of Poon trees fit for masts for the largest ships. The water is very deep close to the shore of the island but on the Pinang side there is a mud bank that runs from the shore about 300 yards and is dry at low water. From this mud bank it immediately deepens into five fathoms and continues deepening gradually over to Jerajah where there is for the most part six fathoms. There are a great many rills of excellent water on the island, but one emptying itself at a fine Sandy Beach which would supply a large fleet and with a very small expence and trouble might be conveyed by an aqueduct to fill casks in boats.

As the hills rise very steep from the water's edge there is no getting along the shores of the island, and there is but very little level space of any kind on it, yet there are three small Bays lying close to one another where there is room enough for a marine yard, for Store Houses, and every necessary building that a large fleet could be in want of in refitting, and in one of these recesses there might with little trouble be a wharf constructed where large ships could heave down to careen, and come alongside of to take out their guns, masts, &c. There is also sufficient room on some of the projecting eminences for building Hospitals or Bungalows for the Officers of such ships as might be refitting. The whole of the ground opposite to Jerajah is overflowed at spring tides for near a mile and is thickly covered with mangroves and other aquatic trees. It would however cost but a little to embank a mile square of it for garden ground, for live stock and for a place for the seamen of the fleet to take exercise and recreation, and experience has shewn that a situation of this kind upon the Coast is not unhealthy although so noxious in many other climates, for the Fort Point has close to it an overflow of this kind and no place was ever more healthy, indeed Queda and most of the towns on the sea coast of Malacca are overflowed by the spring tides, which the Malays are not industrious enough to exclude by an embankment, but build their houses on stakes about six feet from the ground, and it is allowed that generally speaking the whole Peninsula of Malacca is remarkably healthy. There is a passage between Jerajah and Pinang to the southward where there is water enough for a ship of the line, but so narrow and intricate as not to admit of its being commonly used, but especially to enter the harbour, which on many accounts must at all times be very difficult, but principally from a certainty of having variable baffling winds off the high land of the island in a long and very narrow passage where a ship has not room to work and from being obliged to enter with a falling tide the ebb setting to the northward. But a person well acquainted with the passage and by laying buoys or boats on the banks may certainly take a ship of any size out with great safety and as it must be done with the flood there is the advantage of a rising tide. The bottom in both the outer and inner harbour is a soft blue clay, nor is there in any part of them either rocks, stone, coral or any thing that can hurt a cable, but vessels should immediately moor on coming into the outer harbour, for as the tides are very irregular in their setting it is very difficult when riding at a single anchor to keep it clear, in which case a ship is liable to drive in short squalls that frequently come off the continent; neither do I think the ground is sufficiently stiff to hold without the precaution of mooring.

* * * * *

The shops in the bazar which is now pretty extensive are principally kept by Chinese; at present there are sixty families and many

more are expected to settle on the island soon. This very industrious and quiet people are spread over all the Malay countries and exercise almost all the handicraft professions and carry on most of the retail trade. There are also a few Malabars, many of whom are settled in all the Malay ports and are the most extensive merchants, a few Malays are also to be seen, but these are itinerants who bring provisions and articles of commerce in prahus from the coast and return when they have disposed of them.

Soil. The soil of Pinang is various but in general light, and in some parts sandy, the low ground where the present establishment is made is entirely sand, only for about three or four inches on the surface which is mixt with a little vegetable mould produced from the decay of the branches and leaves of trees, but in digging a little deep nothing is found but mere sea sand, and it is matter of wonder how so barren a soil could give sustenance to such a number of large trees with which it was covered. It is however remarkable that the roots of these trees do never strike deep in the ground, but run along the surface to a great distance in search of the most nourishing soil which occasions their having but a very infirm hold of the ground, and of a considerable number of large trees that were left in clearing the Fort Point none have stood the common blasts of wind that have happened. In clearing away ground for building, it is therefore dangerous to leave large single trees, being in clumps alone enabled to withstand the effect of violent winds.

In advancing about a mile into the woods the ground begins to rise and the soil improve. It is here a light mould mixt with sand and seems well fitting for every purpose of cultivation. This soil is evidently formed from the decay of trees and vegetables for in digging about a foot deep a dead sea sand is again come to. In penetrating still further towards the foot of the mountains the ground continues to rise, becomes in some places very rich, and at others light and sandy. In digging in this situation a few feet deep gravel mixt with white clay is come to, and sometimes an entire stratum of very white clay resembling fuller's earth. The hills are composed of sand and gravel kept together by a mixture of fat yellowish clay, and there are here and there vast separate and detached rocks and stones of a hard red sparry granite.

In those parts of the island which are overflowed and thickly covered with mangrove trees, the soil for a foot on the surface is a rich black mould mixt with a small quantity of sand, and is evidently formed from the deposit of mud that is made in spring tides but in digging through this soil sea sand is again come to. The grounds that are thus overflowed are certainly the richest in the island and when cleared away and embanked could not fail of being remarkably fertile. Upon the whole therefore it would appear that there is none of the flat part of the island that might not be brought into useful cultivation or pasture. In most parts the soil is sufficiently good for the produce of all the grain and

vegetables common on the Peninsula of Malacca, and, that there are many spots so rich that any productions which the climate admits of may be reared. Even the very sandy soil on the point when dressed and manured affords good vegetables both from the seed of Europe and India as experience has already shown."

The following extract from the proceeding of the Supreme Government under date the 21st June 1787, is the first notice to be met with on the subject of police and criminal jurisdiction, Capt. Light's report of the crimes committed by the Siamese not being forthcoming.

There is something wonderfully simple and primitive about this arrangement for sending the Siamese to Bengal, and *giving out* that they were reduced to slavery for life, in the hope that the fearful story would have the effect of deterring others from the commission of similar crimes. Perhaps if the *story* had been left out the effect would have been greater, as involving in mystery the consequences of being sent to Bengal, while the mere being reduced to a state of slavery could inspire no very great dread in the minds of the Siamese who were perhaps slaves at the very time.

The plan of a court martial composed of officers and respectable inhabitants, whose sentence is to be confirmed by the Commander-in-chief seems clumsy enough. The difficulty no doubt was to provide a competent tribunal to punish offences, but the tribunal determined on was surely not more legal than magistrate's powers conferred on the Superintendent would have been. In those days however the fear of the Lawyers in the Supreme Court was paramount to every other consideration.

"Agreed that Mr Light be desired to send the Siamese, who were guilty of a murder upon Prince of Wales Island, prisoners to Bengal, making it understood upon the island for the sake of example that they are to remain here in slavery for life.

The Governor General in Council does not consider himself at liberty to make any permanent regulations for the Police of Prince of Wales Island without express authority from Europe.

Agreed therefore that it be left to Mr Light to preserve good order in the settlement as well as he can by confinement or other common punishment, so far as the inhabitants, not British subjects, are concerned, and excepting in cases of murder; in cases of this kind, the Governor General in Council is compelled to determine on the least exceptionable means of punishing them, and with this view, it is agreed that Captain Light be authorized to assemble a Court Martial consisting of not less than five members, to be composed of Officers of the Army and of the most respectable inhabitants to try and judge all persons, not British subjects, charged with murder; agreed however that their authority do not extend to carrying the sentence into execution without the approval of it by the Commander-in-chief and that during this reference the parties remain in a state of confinement measured in its degree of strictness by the circumstances under which they are accused."

The following is from one of Captain Light's reports, dated 10th January 1788 and gives an account of the progress of the Settlement.

"I have received a supply of rice from the king of Queda and the market has been amply supplied with all kind of provisions, but that we may not depend entirely upon the pleasure of our neighbours, I have employed upwards of 100 Malays in clearing the woods, it being now the dry season, and advised the inhabitants that all those who do not cultivate an orlong of land shall pay a duty next March (an orlong of land is 68 yards square.) I have agreed to pay the Malays 42 Spanish dollars for every orlong cleared fit for cultivation. This I shall dispose of again to the inhabitants; our new town contains 200 houses, Chinese, Malabars and Malays, besides these we have small villages at Soonghy Dua, Soonghy Cattoan, the Compoom (which retains the name of Pinang) and at Talloo Bohang. I have paid 510 Spanish dollars to redeem sixty people formerly inhabitants of this island, these are settled at Pinang. Hadjee Ally a Malay with his family consisting of 17 persons arrived yesterday from Salengore and has obtained permission to settle here. A considerable number of fruit trees, cocoanuts and plantains have been planted lately, the wild hogs, deer and monkeys are our greatest enemies, in one night they destroy the labour of many days."

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

NOTICES OF PINANG.

Extract of a Letter from Captain Light, dated 20th June, 1788,

“Agreeably to the instructions communicated to me in your Lordship’s letter of the 25th January, I have considered of the several modes by which some part of the expence of this settlement may be defrayed, and this without interfering with the plan of the remittance proposed by Price and accepted by your Honorable Board.

Although the motive for first settling this Island is altered and a commercial plan to be pursued, some reasonable time should be allowed the first settlers to enable them to bear the expence of building &c. I arrived here in July 1786. It is now almost two years but the inhabitants have not slept in their houses more than twelve months. I should not have scrupled to give my word to them that they would not be taxed in three years but as the necessities of government will not admit of a delay, I offer the following modes to your Lordship’s consideration.

1. That a ground rent be levied on every house after a certain time from the first clearing of the ground.
2. That a shop tax be levied upon all retailers.
3. That the privilege of retailing spirituous liquors be farmed to the highest bidder.

4. That a duty of 2 per cent be levied upon the sale of all houses, lands, and tenements, also upon the estate and effects of deceased persons. This is consonant to the customs of the country.

5. That a duty of 4 per cent be levied upon all India goods imported on foreign vessels.

6. That a duty of 4 per cent be levied upon all goods imported on Choolia vessels not immediately from any of the Company's settlements.

7. That a duty of 6 per cent be levied upon all China goods without distinction.

8. That a duty of 6 per cent be levied upon all tobacco, salt, arrack, sugar and coarse cloths the produce or manufacture of Java or any other Dutch possession to the eastward.

9. That a duty of 6 per cent be levied upon all Europe articles imported by foreign ships unless the produce or manufacture of Great Britain.

10. That your Honorable Board do send early for the ensuing season 250 chests of Patna and Benares opium to be sold here at a fixed advance of 20 per cent upon the medium price of the sales in Calcutta. That quantity will meet a ready vend and the produce of it after retaining what may be required for defraying the immediate expences of the settlement can be remitted to the Super-cargoes in China in money and goods.

11. That a port duty on prows of 2 dollars per coyan be a future consideration when a greater freedom of navigation is allowed.

12. That to encourage and extend the remittance of monies to China by English ships, it be permitted for the sake of despatch that vessels from any part of India or belonging to this port who have been trading at the Malay ports, and bring the produce of the Malay countries here for sale, be allowed to transport the same on board of English vessels without previous landing it, but that this indulgence do not extend to their trafficking with foreigners who ought to purchase from the Letters and not from the vessels or prows.

7. To levy a general duty on all goods which come to this port would defeat the intention of government in making remittances to China by the barter of the manufactures of India for the produce of these countries. The present situation of the surrounding kingdoms, distracted by foreign and civil wars which deprive their inhabitants of the privilege of bringing the produce of their lands to this port, added to the various impediments thrown into the way of the English trade by the Dutch who prevent the China junks and the Malay and Bugis prows from passing Malacca, while by threats they cause some of the Malay states and by force oblige others to desist from trading with the English, are obstacles too great to admit of the levying with success any general duties.

8. Further, as the Island produces nothing of a commercial nature in itself, but every article fit for the China market to be procured at it is brought from the surrounding countries by the Malays, whose chief inducement to visit it has been the great freedom of trade, that inducement ceasing the imports would become too inconsiderable to defray the expence of collecting duties on them.

9. I have pointed out the modes which appear to me at present to be the least exceptionable for defraying in some measure the annual expences of this settlement, but it cannot be expected that a revenue can be raised at so early a period equal to the charges of government. A little more time when the trade is extended and become established by proper support and encouragement may shew the Honorable Company the advantages resulting from this Island and point out further means of defraying the expences attending it.

10. As many natives of property are desirous of coming here who cannot immediately transport their families and effects, but wait until they have ground cleared both for habitation and cultivation, the imposing taxes in so hasty a manner will probably occasion them to wait some time longer until they are certain under what condition they are to be received.

It would be more agreeable and prevent murmuring hereafter if your Honorable Board would determine precisely the time to be allowed to every inhabitant before he is subject to a tax, this would prevent them from supposing it was the arbitrary will of the Superintendent and would encourage them to clear the lands.

11. Few colonies I believe in America or the West Indies were capable of making returns in the course of seven years from their settling, and this island it appears to me ought to be treated as a colony and the expence of maintaining it drawn from the lands and not from the trade, which should be encouraged as much as possible while subject to so many inconveniences, to the end that the export of the manufactures of the Company's territories in India may be extended and the remittances to China by the sale of these manufactures increased.

12. I have been honored with your Lordship's letter of 21st March, and have received the silver coin struck off for the use of this settlement, together with the mint master's letter of 27th December 1787 relative to it.

13. The silver coin of ten to a dollar is the most useful—a further supply is required to the amount of five thousand rupees value. The quarter dollars and half dollars are not yet come into much use, therefore I cannot determine what quantity may be demanded in future, but at present there appears to be enough in store to last a considerable time.

14. Agreeable to your orders I have sent the two Siamese who have been confined for murder on the Viper under the charge of Lieutenant Blair. As there appeared no proof against the wife of the deceased who was confined on suspicion only, I have released

her to her family. Since this accident there has arisen no great occasion for the exertion of justice, the greater number of thefts have been committed by our own coffrees who seem to have been prepared by frequent practice for any punishment. The most noted offenders I have ordered to wear shackles and to carry wood and water under the charge of a centinel. There are 2 or 300 Malays continually here who come from all parts to seek employment and after having earned a little money return to their families when they are succeeded by a new sett. It is indeed surprising to find so many strangers who are not at all averse to thieving in their own country conduct themselves with so much good order when here; I expected from the exposed situation of the settlement to have been very much troubled, but the Malays seem to be greatly civilised by their intercourse with this place and familiarised to its government, they also find themselves interested in its preservation.

Mr Hope arrived here on the 26th March and sailed on the following for Bencoolen and Batavia, but being unable to get round Acheen Head was obliged to bear up for Malacca. I shall in conformity to your Honorable Board's directions of 15th February afford the house of Price & Co. every assistance in my power though I see little prospect of their procuring either tin or pepper at this island the present season.

16 The Honorable Company's supercargoes in China having sent here this season ten Bricklayers and one labourer under an engagement that they shall be kept in constant pay by the Company, I have employed them in building a store room for the military stores which they have completed in a most excellent and workman like manner. They are now employed in building a custom house which is much wanted in order that every merchant may land and weigh his goods there to the end that an accurate account of the exports and imports may be obtained. I shall afterwards employ them in building a warehouse for holding the Company's goods which at present are exposed to considerable danger from fire in temporary godowns.

17. As these buildings are superintended by Captain Glass and myself they will not be attended with any considerable extra expence, more especially as the materials for buildings of a permanent nature become every day more plentiful and more reasonable than formerly and the wages of the Chinese workmen and Bombay artificers must be paid whether there is work for them or not.

18. With a little previous notice, materials can be now procured upon the island for building a permanent fortification of any extent."

It appears from the above interesting dispatch that the Supreme Government did not long adhere to the liberal policy of making Pinang a free port, and that the Superintendent, though in all probability lamenting this change of policy, was not slack in devising abundant methods of raising Revenue. Of the twelve modes pro

pounded by Captain Light, all, although not at the same time, were eventually adopted and all with one exception, that of No. 2, have been one after the other abandoned as pressing too hard on individuals or as injurious to the general interests. The Customs Duties were probably the last to be abandoned and that only in consequence of the determination to render Singapore a free port. Even Captain Light's tax No. 2, the arrack farm, is about to be abolished or at all events so modified as to be barely recognizable.

The halves, quarters and tenths of dollars mentioned in the 13th paragraph of this letter, would be absolute curiosities now a days, though still more useful, were there an abundant supply of them, than they were pronounced to be by Captain Light. The want of any current silver coin of lower denomination than the dollar has always proved a serious loss and inconvenience to all classes in these settlements, and it seems surprising that this remote corner of the Company's dominions should be virtually denied the benefit of a standard currency though not excluded from it by name in the Act of the Legislature settling the new Company's rupee as the legal tender throughout the Company's territories.

In the reply to Captain Light's dispatch the approval of Government is given to his various plans for raising Revenue, but, as he suggests, the tax on trade is deferred till he (Captain Light) reports that the island is well able to bear it. The following reference to the plan for farming the privilege of selling spirituous liquors is amusing when contrasted with the encouragement given in these days to dram drinking and the awfully severe penalties with which the Farmer's privilege is supported.

"2. That the privilege of retailing spirituous liquors be farmed from year to year to the highest bidder, but under such regulations with respect to time and quantity as shall preclude an abuse of this privilege to the injury of the health of the inhabitants."

On the 23rd April 1789, occurred the first grand fire in Pinang, in which property to the amount of upwards of 15,000 dollars was destroyed. In the letter from Captain Light in which this event is reported, he also reports the sale of the arrack Farm at 250 dollars per month, and forwards a list of articles (chiefly marine stores) which he requests may be sent to him "in order that I may be able to judge from the selling price how far it would be advisable to propose to your Lordship to recommend the Hon'ble Court of Directors to send an annual investment of British staples." The government were the chief merchants in those days and their servants participated in the profits.

In December 1789, Captain Light being in Calcutta, the government sent to him a copy of the elaborate report upon Prince of Wales Island which had been drawn up by Captain Kidd and desired to have his opinion on the following points. 1. Whether by encouragement the island might produce all the common wants

of its inhabitants without assistance from other quarters. 2nd. Whether cattle might be bred there to supply a fleet. 3rd. What "should be done to obtain all the use required of the timber said "to be on the island of Jerajah and fit for masts of ships." 4th. Advisability and expence of building a wharf at Jerajah where Men-of-war could heave down and careen. 5th. Whether it would be profitable to work the tin ore to be found on the island. This letter concludes rather ominously,

"Although the Company have been in possession of Prince of Wales Island for three years it has not been attended with any public benefit to their trade or any other public advantage, but the charge has been heavy."

Captain Light's reply to this call upon him is too voluminous to be published here, but as it contains much matter of interest even in these days, a general account with a few extracts is here given.

Captain Light's first object in his reply seems to have been to assure the Government that Pinang could even then produce a large quantity of rice and he enumerates the several quarters where it was then grown, concluding with, "From these examples the probability of the island affording sustenance for its inhabitants is no longer doubtful, it becomes a certainty." Alas! the certainty. It is doubtful whether so much rice has ever been grown since in one year, as Captain Light represents it to have been in 1789, viz. 6,000 maunds.

The next subject is the rearing of cattle in sufficient quantity to supply a fleet occasionally. Here Captain Light is more sanguine than the circumstances of the island seemed to warrant, for he admits that the Malays find it more profitable to bring cattle from Keddah than to rear them on the island, but *thinks* that when the demand increases the local supply will also increase. This part of his report concludes with as sanguine and as little realized a prediction as that concerning the growth of rice. He says, "I can therefore make no doubt of the island being capable to maintain sufficient stock of cattle, but will venture to affirm that in three years, a fleet of five sail of the line may be supplied with fresh meat, allowing the ships to remain three months in port. One or 200 sheep sent from Bengal every year, in 3 years will afford a constant supply of mutton for the hospital and officers, experience having proved that the Bengal sheep lose nothing of their good quality by being transported to Pinang." True enough, provided a sufficiency of gram be transported with them and that they be not stinted therein. Captain Light proceeds to dilate on the advantages derived from the position and trade of Pinang and augurs most favorably of the annual increase of those advantages. He concludes his dispatch by the following summary of such advantages, as he says are visible and undeniable.

1. "A Harbour with good anchorage, secure from bad weather and capable of containing any number of vessels.

2. "An island well watered, of excellent soil, capable of sustaining 50,000 people and abounding in all necessary materials for their service and security."
3. "A port favorable to commerce, the present imports amounting to upwards of \$600,000 per annum."
4. "A place of refuge for merchant ships where they may refit and be supplied with provisions, wood and water and protected from the insults of enemies."
5. "An emporium so centrally situated, where the merchants of all nations may conveniently meet and exchange their commodities."

Several statements accompanied this letter of which the following is one shewing the value of the trade of Pinang at that time. The Supreme Government seem to have been satisfied with Captain Light's explanations and expectations and nothing more is heard for a long time about the cost of the island to the general finances. The statement exhibiting the expences of the island in 1789, will be looked at with interest by those who are in the habit of examining the statements of expences now annually published in the local papers.

Abstract of the Annual Total Amount of Imports and Exports in Ships and Prows at Prince of Wales Island.

<i>Imports.</i>		<i>Exports.</i>	
1789		1789	
By ships and vessels from 1st of July to the 30th October	217,130	On ships and vessels to China and the several ports in India from the 1st of July to the 30th of October.	294,910
By prows from the 1st March to the 30th October.	128,904	On prows from the 1st March to the 30th October.	43,406
Honorable Company's opium not included, 250 chests.	59,192	To which must be added the sale of 285 chests of opium exported in prows and consumed by the inhabitants, not entered at the custom house.	94,050
Private opium not entered, 50 chests.	16,000		
	421,226		432,366
In this account is not included the charge of two ships from Pegoe, four from the Coast of Coromandel, 2 Buggisse prows and almost the whole of the retail trade of the China & Choollars.			

(Signed) F. LIGHT.

Annual Expence of the Settlement of Prince of Wales Island.

Troops	44,444 14
Cruiser	11,640 00
Dolphin Snow	2,624 02
Coffrees	4,000 00
Civil Charges	2,448 00

Artificers	1,000 00
Boats	384 00
Contingent Charges.....	3,000 00
Provisions	500 00
King of Queda.....	4,500 00

Sp. Dollars 74,540 46

or Current Rupees 181,143 5

Superintendent.....	12,000
Mr Pigou.....	4,800

Sp. Drs. 16,800

19,488

Military Stores estimated at..... 2,000

Current Rupees 202,631 5

(Signed) F. LIGHT.

The following letter from Captain Light to the address of the Governor-General is highly honorable to him, and places in a strong light the evil of the system then prevalent of allowing the officers of government, and especially those invested with high authority, to derive their emoluments from trade, which in remote places like this must have proved a monopoly of the trade in the hands of the Superintendent. The government in reply acknowledge the evil but decline to remedy it by an increase of salary to the Superintendent from the General Treasury, but express a hope that the resources of the settlement will soon provide for this as for all its other expenses.

“My Lord,

“Permit me to engage your attention on a subject which though it apparently concerns myself has some relation to the public welfare of the settlement.

“On my first appointment to the charge of settling this colony, I made no stipulation with government for any salary or future provision, I was requested to charge my expences. On your Lordship's arrival, I was honored with a salary of 1,000 rupees per month, this with the emoluments arising from trade enabled me to support the office of Superintendent without incurring any distress. My expences have amounted monthly to 1,500 dollars, including buildings, and I know not of one emolument appertaining to the office except the influence of having the opportunity of being the first purchaser of every commodity which comes to the port. This power though never exacted by me yet it is supposed to be done and occasions many malicious reports, with much uneasiness and vexation to myself. I must frequently give judge-

ment against myself without reason, to avoid the imputation of partiality and suffer many oblique reflections which in any other situation I should either escape or resent. It is not what I do at present, but what may be done when the weight of office is made to act with the merchant, when the simple trader is given to understand that he can buy or sell with the chief and no other person. A monopoly under the influence of authority, is the more grievous as it cannot be counteracted either by knowledge or industry.

The settlement is increasing and the best means to invite people of property to reside in it, is to free the commerce of the port from all restrictions, partial privileges and monopolies.

When Mr Hope was about to settle here, he told me he was sensible that unless I concurred, it would be fruitless to attempt breaking in upon my privileges. From others I received the same implication, these apprehensions will continue to predominate as long as the Superintendent has it in his power to be chief trader, my petition is therefore to your Lordship that you would not only free me from these accusations but deprive me of the power of deserving them, by such increase of salary as will support the office with decency and enable me to make a small provision for approaching old age."

I have &c.

(Signed) F. LIGHT.

Fort Cornwallis, 19th May, 1790.

The following extracts from Captain Light's dispatches dated 24th August 1792, give a graphic and interesting account of the state and prospects of the settlement and of the difficulties he encountered in keeping such a heterogeneous assemblage of people from all parts in order. We complain sadly at the present day of the high price of labour and consider it to be the great check to Agricultural progress and improvement. What must it have been in 1792, when, as Captain Light here states, labour was 75 cents per day and a wood-cutter (meaning probably a jungle clearer) earned nine dollars a month.

The November letter was probably written under the apprehension of being soon obliged to declare Pinang to be a customs port and no longer free to the commerce of the world. This much have proved a grievous subject to a man of Captain Light's apparent liberality of views, and he tries hard to prove the value of the settlement and the amount of revenue already yielded by it which he says he is confident will soon cover the expenditure. This consummation however, so often promised, was never fulfilled and probably never will be, but the real question to be solved is, whether Pinang as a British settlement was ever of that value to British interests as to cover the expenses incurred on her account. This question however involves many political considerations which cannot well be discussed here, among them, that of the benefits

which our presence here may have brought to neighbouring countries, but a fair statement of all the pros and cons, moral and pecuniary, would prove both a valuable and interesting paper.

“Our number of inhabitants increases very fast, people from the Celebes, from Malacca, Sumatra and Salengore, no fewer than one thousand, five hundred men, women and children are now on their passage hither, from different parts of the Eastern countries. The number of strangers belonging to ships and prows are one month with another from 1,500 to 2,000 people. The inhabitants 7,000, the Company's servants with their followers 1,000. To maintain 10,000 people on an island, not 6 years inhabited, is a proof of the goodness of the soil, and that the port is convenient for commerce. To regulate and adjust the disputes and complaints of so many people of various descriptions, is a work of laborious anxiety.

I cannot inform your Lordship of the exact quantity of paddy ground in present cultivation, much land which produced paddy the first year of its being cleared is now applied to other uses and will not again be sowed with paddy. Cocoanuts, beetlenuts, fruit trees, gutta gambier and pepper, are now upon these lands, the low lands which are annually overflowed by the rains will be constantly sowed with paddy, the whole if at present cultivated by a Malay measurement amounts to 3,000 acres. Those cut down but not cleared about one thousand, much more would have been done could we have procured people from Queda to come and work for hire, the price of a day labourer is 75 of a dollar per day. A wood-cutter earns nine dollars per month. Our stock of cattle is increased too much, the want of pasturage drives the cattle into cultivated grounds to the great loss and trouble of the planters.

As far as we have yet examined, the body of the hills is a compound of Oriental granite covered with clay, mould and earth, produced from decaying vegetables, the sides of the hills very steep in many places inaccessible, the ridges narrow and cut in many parts by pretty deep ravines, many copious streams flow from different parts of the mountains, forming cataracts, the principal of which is on the north side. A road is cut from the entrance into the woods to the fall 2 miles and 73 yards, it affords an agreeable and healthy retreat, the water falls in one view 342 feet, in some parts perpendicular in others down a very steep declivity, breaking over the rocks in several streams of white foam until they join in one fall of 60 feet perpendicular height. At the bottom is a small bason of rock, from this it descends with great rapidity over various precipices for several hundred feet, the whole is shaded with very high trees and though it is less magnificent than the great falls of America, yet more pleasing, romantic and picturesque. The air is cool and pleasant, the thermometer at midday 76. The hills are covered with large trees and rattans, the ebony, sassafras and several kinds of red woods extremely good for furniture are produced here. The coolness of climate upon the mountains will favor the production of

almost every kind of European fruits, upon the summit of one of the highest hills tin ore is found. Upon a hill which ascends from Roddams hill was discovered a tree whose fruit so nearly resembles the nutmeg that the Buggesses and a Dutchman who had been at the spice islands declared it to be the real nutmeg. The nut possessed no aromatic flavor, but the mace was very hot and pungent, the outer rind formed like a peach and of an acid flavor, their growing in a thick forest excluded from the rays of the sun, and to twice their natural heights may occasion the fruit to be imperfect. Unfortunately this tree was cut down before the discovery was made, other trees of the same kind are found, which bore no fruit this year. Upon the low grounds are several trees but not very plenty, whose fruit resembles the wild nutmeg. I have great hopes that this fruit may be improved by cultivation so as to become an article of commerce.

Seyad Hussain and Seyad Juffer, two Malays of Arabian extraction and of considerable property, with very large families are come to reside here, they are importunate to obtain a written declaration of the laws they themselves are subject to and a licence to govern their own families, slaves, and dependants, with an independent power, and in all cases to be judged by the Mahomedan Laws, and that if they found their residence here inconvenient or disagreeable they might without molestation depart with their families, this was a matter of long debate before they would resolve to remain here, I do not think myself authorized without the approbation of your Lordship to execute a compact of this moment. I represented to them the impropriety of any subject having an entire independent authority, that a reasonable, and as far as the general welfare would permit, an independent authority would be allowed them over their families and dependants, that their religions, laws and customs would be undisturbed, and that they might inflict any punishment upon their children and family excepting mutilation or death. If the crime committed was of such magnitude as to require more than a whipping, the culprit should be committed to prison and tried by the laws of the island, that if the case concerned one of their people and one of the inhabitants, or if any of their people committed a public breach of the laws, they should be tried publicly, that they and their families might quit this island whenever they thought proper. The pride of the Seyads, who boast of being descendants of the prophet, will not allow them to submit to any authority but their own, they are so much respected by the Malay Princes that their persons are held too sacred for punishment, the only chastisement they inflict on them is either a fine or dismissal from their country, they trade duty free and for the life of a slave they would think themselves degraded to give an answer, their jealousy is extreme, should any man be found in private converse or in the apartment of the women, his death would be inevitable. This is the motive though not mentioned for their demanding a written

contract to preserve their persons from being brought before a Court of Justice, a medium rule may be drawn which will prevent these people from yielding to sudden and excessive gusts of passion, without offence to their religious character.

I have appointed Hakims or notaries to keep Registers of marriages, births, deaths, slaves, and sales of land and houses, they are imperfect at present but by degrees will become regular and prevent much litigation.

We have been much infested by thieves, house breakers and other disorderly persons lately, whipping and confining them to the public works, or sending them off the island, is the punishment I have inflicted.

A China man was found dead with his throat cut in his house in the town about 3 o'clock in the afternoon, no mark of violence was found upon him, nor any person upon whom any proof of guilt could be discovered, the Chinese officers reported the man to have been delirious from a fever and that his father and grandfather were both guilty of suicide.

A Malay and his wife quarrelled in the evening, the woman was dead among the sugar canes, and the man wounded in his house. The man was carried to the hospital, the wound between the neck and shoulder was three inches deep, that on his belly very slight. The account he gives of himself is that he was asleep, his wife took the creese from under his pillow and stabbed him in the neck, on his rising up she made another stroke at his belly, which he in part prevented, wresting the creese from her, he stabbed her in the neck and side, she ran out into the garden, where she expired. As no person was present it can only be determined by the nature and degree of their dispute and from the wound, which the Doctor thinks was too deep and too near the vital parts for the man to have given himself. I find myself much distressed how to act in the many vexatious complaints from and against the commanders of vessels and their officers and crews. With your Lordship's permission I think a Court of enquiry might be held here composed of two of the Company's officers and three or more nautical gentlemen with authority to send the offenders to Bengal to be disposed of according to your Lordship's directions." (24th August 1792.)

"The primary intention of government in forming this settlement being somewhat changed, the objects that remain and are at present in view I apprehend to be comprehended under the three following heads.

1st. To fill the island with inhabitants and from their industry to provide provisions, refreshment and succour for shipping.

2nd. To increase the commerce of this port so as to be beneficial to our Western settlements and to facilitate the annual remittance into the Honorable Company's Treasury at Canton from the produce and manufactures of India, and

3rdly. To procure a Revenue equal to the necessary disburse-

ments without obstructing the accomplishment of the former objects.

These being the principal views of government it remains to shew how far their intentions have been accomplished and what further measures it is expedient to pursue, and

1st. The population of the island is already a subject of wonder, and the agriculture of it is as much advanced as can reasonably be expected considering that the island when taken possession of six years ago was one entire wood. It already yields grain nearly sufficient for the consumption of the inhabitants, but for the numerous strangers who are always here both in prows and in ships it is necessary to import rice from other parts which has always been procured.

One object of government therefore for forming this settlement, the furnishing shipping with refreshments and succour in distress, has hitherto been accomplished.

2nd. That the commerce of this port is annually increasing needs no proof. The Buggesse prows alone have brought gold and silver this year to the amount of two or three hundred thousand dollars to purchase opium and piece goods, and if they meet with such favorable markets as to induce them to continue the trade, I entertain little doubt from the information I have received of the purchases they were accustomed to make formerly at Rhio, that they will in a few years import gold and silver annually to the extent of half a million of dollars, part of which will be carried in gold to the Coast of Coromandel in payment of the Coast piece goods, and the other part will form a fund for the purchase of goods for the China market. Thus by encouraging this branch of commerce the Coast of Coromandel will be benefited, and the remittance to China be facilitated.

This settlement has already been of considerable use in serving as a depôt for goods for the China market, and as ware-houses are constructed will become daily more useful in this respect.

The measures already pursued for increasing the commerce of this port viz. a general freedom of exchange, having been successful, I see no reason to make any alteration in the system.

3rdly. The Revenue of the island has been annually increasing and from the amount now collected I entertain no doubt but in the course of a little time it will be equal to the expenditure.

The collections were

For the year 1789-90	2,599 72
For the year 1790-91	4,719 45
For the year 1791-2	11,536 98

Estimate for the present year from which I see no reason to depart..... 24,250

And I have in contemplation to farm several other articles of consumption which I expect will raise the revenue for the year 1793-4 to thirty thousand dollars.

It has been suggested to me that the expenses of the set-

tlement might be defrayed by the Honorable Company becoming the sole venders of opium, but it does not appear to me that this would answer the end proposed, nor should I have applied for two hundred chests of opium on the part of the Company in addition to the usual allotment for the year, had the capital of the merchants on the island been equal to supply the demand." (12th Nov. 1792.)

In a dispatch to government of March 1793, Captain Light forwards a statement of the trade of Pinang by Malay prows for the years 1790-1-2, of which that for 1792 will be found below. The totals of the several years, as exhibited in these statements are as follows:—

	1790	1791	1792
Imports.....	119,028	185,395	224,533
Exports.....	123,949	136,466	317,414
Total Sp. Drs...	242,977	321,861	541,947

Imports. 1792.

Cocoanut Oil,	1,354	Gantons	\$1,354
Tin,	541	brs. 154 lbs.	27,614 55
Rice,	355	coyans 127 gantons	17,775
Paddy,	133	" 482 "	3,204
Aglawood,	5	piculs	8,824 50
Rattans,	8,824-8	bundles	8,824 80
China Tobacco,	1½	picul	45
Canes,	1,200		24
Dammer,	872	piculs 65 cattie	2,516
Elephant's Teeth,	35		350
Benjamin,	30	piculs	210
Rattans Mats,	77	corges	1,078
Bees Wax,	24	piculs 10 cattie	1,296
White Betelnut,	829	laxa	2,487
Gold Dust,	80	cattie 1 buncal	38,422
Gram,	5	coyans	250
China Ware,	18,000	pieces	900
Gold Fish,	5	small boxes	150
Piece Goods,	57	corges	2,280
Bird's Nests,	2,734	piculs	32,804
Soft Sugar,	319,71	"	1,755
Java Tobacco,	1,224½	baskets	4,285
Nails,	2	piculs	30
Buggesse Cloth,	1,364	corges	27,280
Sago,	11	coyans 400 gantons	690
Sticklack,	71	piculs	710
Pegu Cloth,	2	corges	40
Sugar Candy,	54	piculs	54
Gambier,	14	piculs 94 cattie	119

Brimstone,	1,755	piculs	66 cattiees	10,533
Pepper,	711	"	18 "	10,665
China Torches,	608	No.		180
Salt,	3	coyans		60
Tripong,	345½	piculs		2,070
Tiles,	85,000	No.		425
Slaves.	46	No.		1,840
Balla Cloth,	3	corges		60
Water Jars,	37	"		740
Nutmegs,	200			20
Bullocks,	255			1,350
Chickney Nut,	642	cattiees		32
Cinnamon,	2	piculs		24
Mace,	9	cattiees		..
Tea,	1½	piculs		50
Spanish Dollars,	9,250			9,250
Sapan Wood,	33	piculs	30 cattiees	106
China Root,	1	picul		6
Doll,	5	coyans	150 gantons	250
China Flour,	20	piculs		180
Buggese Nut,	37	corges		185
Candles,	1	picul		40
Acheen Cloth,	360	corges		360

Sp. Dollars. 224,533 65

Exports. 1792.

Piece Goods,	1,132	corges		67,920
Opium,	483	chests		173,880
Spanish Dollars,	.....			28,251
Coast Tobacco,	475	bales		950
Java Tobacco,	166	baskets		380
Cotton,	270	piculs		4,050
Raw Silk,	1,135	cattiees		4,540
Red Nut,	550	piculs		2,750
Rice,	13	coyans		1,040
Stielac	435	piculs		4,350
Salt,	157	coyans		2,925
Pepper,	6	piculs		90
Buggese Cloth,	274	corges		6,850
Rattans,	1,752	bundles		175
Handkerchiefs,	31	corges and 10 pieces		1,102
Gunpowder,	40	barrels		1,200
Java Cloth,	17	corges		272
Nails,	45	piculs		470
Steel,	14½	"		203
Tripang,	100	"		800
Tea,	3	"		150

China Torches	174	corges	3,480
Iron,	164	piculs	1,312
China Ware,	7,050	pieces	705
Cocoonut Oil,	100	gantons	133
Acheen Trowsers,	6	corges	48
Guns,	2		200
Batta Cloth,	5	corges	100
Soft Sugar,	11	piculs	88

Total Exports in 1792 Sp. Drs. 317,414

In forwarding these statements Captain Light takes the opportunity of pointing out that Pinang being a free port it was impossible to obtain anything like a correct return of the trade by square-rigged vessels, and therefore he refrained from drawing up what must prove fallacious returns. He says "I have been accustomed to demand the account from the Masters of the shipping, some of whom have rendered in faithful, while others have given in a mutilated account, and in fact it often happens that the Commanders of vessels who bring goods on freight are unacquainted with the quality of the goods they bring, by which means, although from the custom-house account I may be informed of the number of bales or packages landed, I find it impossible to ascertain the just value which is directed by His Lordship's instructions." These words seem equally applicable to the present day, notwithstanding a special Act passed for the purpose of obtaining correct returns of the trade, yet by means of guessing or assuming the quality and value of the bales and packages alluded to by Captain Light, returns of the trade are annually made up.

Among the items communicated by Captain Light as forming the Import trade by prows into Pinang is one that happily has long ceased to figure there, that of slaves. These seem to have been valued at 40 dollars a head all round, but no mention is made of age or sex or whence brought. The numbers thus imported were, in 1790 only 9, in 1791 7 and in 1792 the number rose to 46. The quantity of opium exported by prows appears to have increased annually at a rapid rate being only 105 chests in 1790, 193 in 1791 and 483 in 1792.

As appendices to some dispatch of Captain Light in 1798 (the letter itself not forthcoming) are given some detailed statements, of which abstracts are here given.

The first is a detailed statement of the receipts and disbursements of the Local Treasury for the official year 1792-3.

RECEIPTS.

Sale of Stores.....	14,583
Ditto of Opium.....	31,680

Revenue.....	25,637
Miscellaneous.....	3,020
	Sp. Drs. <u>74,920</u>

DISBURSEMENTS.

Civil Establishment.....	11,137
Local Military.....	3,730
Do. Marine.....	7,025
	Sp. Drs. <u>21,892</u>

CONTINGENCIES.

Advances to Malay Families (Settlers).....	680
Expence of Clearing Lands.....	2,224
Making and Repairing Roads and Bridges.....	957
Surveying and Buoying off South Channel.....	2,639
Executing Criminals.....	73
Expences of Ambassadors from Siam.....	890
Erecting a New Wharf.....	2,131
Lent to Buggese as encouragement.....	500
Miscellaneous.....	2,929
	<u>13,023</u>

Total Local proper Expences 34,915

Military (Bengal).....	42,134
Marine (Bombay Cruizers).....	17,067
Convicts.....	745
	<u>59,946</u>

Total Disbursements Sp. Drs. 94,861

As no statement is given of the profit derived from the sale of Opium and Stores, the full cost of the Settlement for the year is not shown. The Revenue consisted of the following items:—

Arrack Farm.....	6,200
Opium Ditto.....	3,600
Gambling Ditto.....	14,673
Pork Ditto.....	90
Shop Tax.....	431
Miscellaneous Duties.....	643
	Sp. Drs. <u>25,637</u>

The ' Civil Establishment in 1792-3 consisted of

Mr Light, Superintendent.....	5,728
„ J. Gardyne, Storekeeper.....	1,146
„ Bacon, Monthly Writer.....	720
Adam Ramage, Beach Master &c.....	608
Long, Malay Writer.....	360

Naquodah Ketchee, Cutwal.....	360
Commission* on Sale of Opium and Stores..	2,215
Total Sp. Drs.	11,137

The sum placed opposite to Local Military includes two items, the nature of which is not readily ascertainable, viz. Maintenance of the Hon'ble Company's Coffrees, 3,292 and expence of the Provost Guard 438. It may be that neither of these is a Military item. The coffrees may have been seamen or slaves and the Provost Guard what are now called Police Peons. At all events, there appear no other items that can be considered as connected with Police or Justice except indeed the execution of criminals, but who or what these criminals were and how condemned does not any where appear. There was no power of life and death on the island, but criminals were to be tried by Court Martial and if found guilty of crimes deserving death, the sentence was dependent on the Commander-in-chief in Bengal. These criminals may have been so sentenced, but there is no allusion to any such criminals in any records now extant.

The next statement forwarded by Captain Light is as follows:—

“A statement of the value of the goods and merchandise upon the Prince Wales of Island on the 1st June 1793, belonging to British subjects, inhabitants of that island, according to the accounts they have rendered in”

Messrs James Scott and Co. value of their merchandise.	123,219
Owners of the ship Eagle.....	38,650
Mr James Gardyne.....	5,000
„ Thomas Pigou..	15,833
„ Abel Machell.	

Sp. Dollars 182,702

Exclusive of outstanding debts which will amount to more than... 50,000

(Signed) F. LIGHT.

P. W. Island, 28th June, 1793.

This is followed by “An account of the vessels and their cargoes belonging to British subjects, inhabitants of the P.W. Island, at risk in the Straits of Malacca, and to the Eastward, at the beginning of June 1793, according to the most accurate account that can be obtained.” An abstract of this, gives

Messrs James Scott and Co.	7	Vessels.	131,073
Mr James Gardyne	2	Ditto..	34,500
„ Abel Machell	1	Ditto..	3,000

Sp. Drs. 168,573

* The rate of Commission and the distribution of the amount are not mentioned.

The next is "An account of deposit of goods at Prince of Wales Island for China and other markets but mostly for China, on the 1st June 1793, according to the most accurate account that can be obtained."

The total of this statement is Sp. Drs. 266,408.

Next is "An account of the Brick buildings upon the Prince of Wales Island, belonging to different persons with an estimate of their value."

This statement shows about 20 houses, and numerous godowns and shops, belonging to Europeans and Natives, the whole valued at Spanish Dollars 88,850.

The last on this list is "A Bakehouse and godowns, belonging to the Hon'ble J. Cochrane, Spanish dollars 4,000."

Who the Hon'ble gentleman may be that appears thus to have been the first Pinang Baker, is not known.

The statement which follows gives the value of the government buildings on the island at Spanish dollars 126,000.

In a subsequent dispatch is given a statement of the revenue of the island from 1788-9 in which year probably the first revenue was levied.

1788-9	Sp. Drs.	
Arrack Farm.... ..	780	
Sundries.... ..	212	
	—	992
1789-90		
Arrack Farm..... ..	2,500	
Sundries..... ..	99	
	—	2,599
1790-1		
Arrack Farm.... ..	4,100	
Sundries..... ..	619	
	—	4,719
1791-2		
Arrack Farm..... ..	4,835	
Opium Ditto..... ..	3,499	
Sundries..... ..	301	
	—	8,536
1792-3		
Above given..... ..	—	25,637
1793-4		
Arrack Farm..... ..	6,600	
Opium ditto..... ..	5,500	
Gambling Ditto..... ..	9,500	
Sundries.. .. .	1,692	
	—	23,292

THE GEOGRAPHICAL GROUP OF CELEBES.*

CHAPTER I.

Amongst the number of the Dutch possessions in the Malayan Archipelago, the island of Celebes, of which we shall give a succinct sketch, is worthy of our attention as well with reference to its astonishing fertility and its fecundity in spontaneous productions, as to the richness of soil which promises numerous and varied sources of prosperity for agriculture, and renders it fitted for a very considerable development of the rural industry, above all as regards the rearing of cattle. Its beautiful climate as well as its physical constitution, assure its inhabitants a salubrious residence, exempt from those deleterious miasms so common under equatorial climates, and above all in the large littoral districts, periodically inundated by the numerous mouths of rivers which expand in woody deltas of many hundreds of leagues, such as those which are found on a great extent of coast in Borneo, as well as in some coast districts of the island of Sumatra. These thick masses of jungle and of wood of the largest size, which cover a great part of Borneo and some districts of Sumatra, with an impenetrable net work, and everywhere extend along the courses of the rivers, as well as the sea shore, are not found in Celebe. Great plains level or slightly undulating, covered with grasses or brushwood, occupy the space between the sea and the limit of the mountainous and woody regions of the interior of the country.

The state of civilization amongst the natives, is found nearly stationary, in the same degree of social order which existed with the Javanese towards the close of the 18th century; but the agricultural and manufacturing industry have made less progress, in all respects, than in the island of Java; the commerce of Celebes also is reduced to an almost insignificant condition, the inhabitants being unacquainted with the resources which the arts offer to agricultural industry. They prefer to all others the chances of maritime traffic, consisting the most often in the barter of the productions of the soil, and which, under the appearance of peaceable traders, permits them to devote themselves without restraint to their ruling passion, that of wandering over the sea, with the view of there committing piracy whenever a favorable opportunity occurs.

The force of arms of the conquering Malays, obliged the inhabitants of Celebes to adopt the religion of Islamism; it was introduced in 1616 in all the places over which the power of the despots of Goa (Makassar) then stretched. The state of Boni which already gave evidence of the preponderance which it afterwards

* Translated from Temminck's *Coup D'Oeil General sur les Possessions Neerlandaises dans L'Inde Archipelagique.*—vol. III.

acquired, accepted by means of convention some dogmas of this religion, and Malay priests, as fanatic as ignorant, became the propagators of it amongst the natives of the Alfura race, driven by the Malays into the interior of the island. The precepts of the Koran are consequently carelessly observed, and the spirit of its ordinances and its laws are forgotten by the sectaries of Celebes.

All the population obey to a certain extent the authority of the Dutch Government, and the maritime commerce is carried on under its flag, seeing that, since the establishment of the Company of the Indies and the expulsion of the Portuguese in 1660, nearly the whole of the coasts have submitted to its authority or recognized its sovereignty.

This island, of which Government appears at present to appreciate the great importance, is without doubt destined soon to become one of the most flourishing possessions of the state. It does not yield to the island of Java in beauty and salubrity of climate, nor in the richness and abundance of productions which its soil is capable of furnishing; it is not less favorably situated for the development of trade and industry, whilst the inhabitants of the coasts by their natural taste and their ruling passion devote themselves exclusively to navigation; so that all the elements of well being and all the sources of prosperity are found united in its bosom.

Celebes is situated in the centre of the tropical zone; it occupies a very large space in the Molucca sea and stretches from $1^{\circ} 15'$ Lat. N. to $5^{\circ} 45'$ Lat. S., and from $113^{\circ} 10'$ to $116^{\circ} 45'$ Long. East of the meridian of Greenwich. This gives to this island of the first rank, a length of 192 French leagues from north to south, and a mean breadth of 25. According to Crawford, its superficies would only be 2,558 square geographical miles; the more recent calculations, made by Lieutenant Melvill de Carnbée, give it 3,578 square miles or 1,963 square myriametres, which makes Celebes 694 myriametres larger than Java.

The amount of the population is reckoned at 3,000,000, which appears to us to be much in excess of the real number, the approximative estimate made in 1838, only bringing the population under the immediate authority of the Dutch government to 410,000. Mr Melvill de Carnbée gives the whole population at 1,104,000, which appears a very probable estimate.

This island, like Sumatra, Borneo and some other smaller ones, has neither received from its native inhabitants nor the Malays of other islands, a distinctive name including its whole extent. The inhabitants of the southern parts, designate Celebes under the name of Tanah-bugis (the country of the Bugis) on Tanah-Mangkesser (the country of the Mangkassers) which has been contracted to Makassar; a name received and generally adopted, and which has been borne, since the conquest of the island by the Europeans in 1617, by the principal city at which the Governor of this part

of the possessions of the State resides at the present time. Can this island have received its present name from Pigafetta having mentioned it in his writings under name of Celebi?

The very remarkable form which marks the land of this part of the Archipelago, is owing to the irregularities of its coasts, of which the indented and grotesquely winding shores, present a great number of bays, gulfs and capes. Three large bays or arms of the sea extend from east to west penetrating the island to its very centre, and causing it to assume the singular form of four narrow peninsulas. We shall notice each of these peninsulas separately, and also mention the islands lying in the vicinity of these tongues of land.

Before however proceeding to give a topographical and physical sketch of this country, we will take a glance at the principal events which have occurred in the Southern Peninsula, from the first appearance of Europeans to the present time.

The Portuguese flag, already puissant in all parts of the Indian Ocean, in 1540 seized a part of Celebes. The Governor of Ternate, Antonio Galvano, founded a factory at Menado in the northern part of the island. The Portuguese had a superintendent of trade at Makassar in 1660 the name of Francisco Viera, who is supposed to have been the last of the governors of that nation.

The English and the Danes were also established on some parts of the coast, but their factories were not long kept up there.

The period of the first arrival of the Dutch is not exactly ascertained. We know that in 1607 Admiral Matelief (afterwards Governor-General) anchored in the bay of Tello, when he found a superintendent of the Company's trade at the village Rakeka. On the return of the Admiral to Amboyna, the headquarters of the first mercantile operations, the Company sent two commissioners to Makassar, but it suppressed this factory in 1625, and afterwards established itself temporarily at a number of places on the coast. It was not until the end of 1637, that Governor General van Diemen concluded the first treaty with the King of Makassar.

The prince with whom this treaty was made was a barbarous despot; one of his favorites assassinated him. The eldest of two sons whom he left, *Krain* (prince) Sambauake succeeded him. He was of a warlike disposition and in a short brought under his power the inhabitants of Mandhar, of Boni, and several other provinces. Hassan Ud-din reigned after him; his disputes with the agents of the Company, secret practises which he entered into with the Portuguese of Goa, as well as the arbitrary acts which he committed against the Dutch Agents, caused the Government of Batavia to form the resolution of exacting redress for all these grievances by force of arms. In 1660 the Company equipped a fleet of twenty two vessels of war and nine transports at Amboyna.

It was accompanied by 1,200 European and 400 native soldiers independently of 1100 men forming the crews of the vessels. This expedition was put under the orders of J. Van Dam and J. Truitmans. The fleet having arrived in sight of the coast of Celebes, two vessels were sent to Makassar to summon the prince to give satisfaction. They rejoined the fleet at the close of day, giving information to the commander that six armed Portuguese ships were at anchor under the guns of the forts. The next day all the fleet proceeded towards Makassar, two of the largest vessels directing their attack against the Portuguese ships which in a short time were defeated; the ship of the commander blew up, two took fire, two made their escape, and the sixth was captured.

After this severe lesson given to the Portuguese the Makassars having no other assistance to hope for, nevertheless had the courage to make a valiant defence. They hoisted the red flag in token of a stubborn defence. The night was employed by the commander of the squadron in devising measures for inflicting a severe punishment on the audacious Makassars. On the 12th June, at break of day, the vessels arrived opposite the first fort, against which they discharged their broadsides; they then steered towards Sambupo, the principal fortress, in which the Portuguese who had escaped from the action of the previous day had taken refuge. Whilst a vigorous fire was opened against this fort, a detachment of troops landed and carried the fort of Pannakoke by assault, the defenders of which were put to death. This fort was quickly put in a state of defence and a considerable corps directed against the Makassars who endeavored to retake it. The enemy were driven back and pursued into the town of which a part was burned down. After this the conquerors retired in good order into the fort, before which the fleet came to an anchor.

On the following day, a deputation on the part of the king presented itself before the commandant of the squadron to solicit a suspension of hostilities, but he declined to enter into negotiations, unless all the forts as well as the town were surrendered. However a truce of two days was granted, and during this period the king was required to send as hostages some of the principal nobles of his court, who should at same time be entrusted with his full powers, and who should be sent to the government at Batavia in one of the vessels in the roads, in order to negotiate the conditions of a treaty there. Obligated to yield to this injunction the *krain* Papuwa, accompanied by several nobles of the court, departed for Batavia; the treaty which ensued was ratified by the king on the 16th November 1660, after which commercial relations were again re-established. But the false and crafty king completely disregarded this treaty in 1665, when he violated it by the pillage of a ship of the Company which had stranded, as well as by the attempt to make himself master, by surprise, of the Dutch fort in the island of Buton.

The sinister designs of the despot were frustrated, thanks to the energetic measures as well as fidelity of Rajah Palakka, who had taken the side of the Company. This prince bore an inveterate hatred towards the tyrant Hassan Ud-din, one of whose ancestors had condemned his grandfather to be pounded alive in a mortar, and his father had besides been stabbed by order of the reigning sovereign.

The design of Raja Palakka to make common cause with the Dutch, and to range himself on their side, being speedily known in the palace, he was obliged to fly from pursuit and sought refuge with the Sultan of the island of Buton, the ally of the Company; but the king of Makassar pursued him with armed prahus, by means of which 25,000 of his troops were successively landed on this island. In 1666, Admiral Speelman arrived very opportunely in the road of Buton with fourteen ships of war; he immediately attacked the Makassars, and pursued them in such a manner that a small number only escaped from this bloody conflict. From thence the Admiral came to invest Makassar, where the king to avert a complete ruin, consented to pay 1400 rix-dollars, about 7,200 francs, in compensation for the pillage of two vessels shipwrecked on the coast of Celebes; and 1000 *mas** of gold were also paid by him to cover the expenses of the expedition.

But the torch of war was not long in being again kindled. Many engagements as well by sea as by land took place; they had the effect of striking a decisive and fatal blow at the authority of the king of this part of Celebes. Seeing his dominions overrun, his villages burned, and defection swelling the ranks of the enemy, he at last consented in 1668, to cede to the Company the principal fort, called Ujong Pandang, commanding the town of Makassar, and to which Admiral Speelman then gave the name of Fort Rotterdam which it still bears.

By the treaty of 18th November 1667, so glorious to the Dutch arms, the prince of Makassar Sultan Hassan Ud-din ceded the island of Bonthian to the Company. The Company placed this country under the dominion of its adherent Rajah Palakka. But this prince having died in 1696, without leaving any male heirs, the Company resumed Bonthian, and kept it under its own immediate administration.

Amongst the number of treaties concluded at this period, we will only cite two, seeing that these documents, known under the name of the Bongaay contracts, verify the rights of Holland over the island of Celebes, as well as over a part of the Moluccas, all these islands not having been previously under the power of the

* The *mas* of gold in 1650 was a coin having currency at Makassar; it was reckoned in the books of the Company at 5 francs 50 cents silver, or in Indian currency 6 francs 35 centimes.

Company. The first of these documents bears date the 18th November 1667, and is couched in the following terms :†—

“Articles of a firm and everlasting peace, good friendship and alliance, concluded between the most powerful Padua Sere, Sultan Hassan Oddeen, the Kings and other petty Powers of Maccassar, and the Honorable Cornelis Speelman, late Governor on the Coast of Coromandel, Superintendent of and Commissioner to the easterly Colonies, Admiral and General of all the navy and land troops in India serving under the Honorable Dutch Company, in the name of His Excellency John Maat Suiker, and the Honorable Members of the Council of India, representing the Supreme Government, and vested with the high authority of the Right Honorable the Court of Directors of the United Honorable Dutch East India Company.

1. It is hereby agreed, that the treaties concluded on the 19th of August and 2nd December 1660, at Batavia, the first between the King of Papoa, plenipotentiary of the great and mighty King of Maccassar, and His Excellency the Governor-General in Council; and the second between the first Maccassar high power, and Jacob Gaamo, Esq. Commissioner on the part of the above Honorable Dutch Government, are confirmed and to be held good and observed in all their parts, as shall in the following articles be more fully explained.

2. All European servants and subjects of the Honorable Company, who are at this time in the Maccassar dominions having lately deserted the service of the Honorable Company, and all those who having deserted it long ago may still be found, shall immediately and without any delay and exception, be delivered into the hands of the Admiral.

3. All rigging and tools, guns, treasury, and every other articles, without exception, which have been taken from the Honorable Company's, ship *Walvish* (the Whale) cast away at *Salyer*, and from the Honorable Company's *Yacht* or *Barge*, the *Lioness*, cast away at the island *Don Douange* shall be restored to the Honorable Company. In that restoration however the eight iron guns, from the *Whale*, said by the above high Maccassar power to have been paid for, shall remain in their possession, if it be proved that the sum of 4,000 Spanish Dollars has been actually paid for them to the late Commissioner *Gaamo*, on behalf of the Honorable Company.

4. A ready and signal punishment shall be inflicted, in the presence of the Dutch Company's Resident, on all such persons as shall be found alive and guilty of the murders committed in

† Mr *Temminck* only gives an abstract of this treaty, but as it is important as forming the basis of the Dutch claims on Celebes, and contains besides many singular clauses, illustrative of the history of the European powers who were then seeking to establish themselves for commercial purposes in these seas, we have given it at length from *Blok's History of Celebes*. *Tr.*

divers places on subjects, or servants of the Dutch Company; and for that purpose the said high power of Maccassar shall deliver such persons as abovementioned, in order that, as an example to deter others from such atrocious acts, they may be dealt with accordingly.

5. The great and mighty King of Maccassar and his Grantees shall have to mind and to care, that first of all the debtors of the Honorable Dutch Company, without exception, do come forth and discharge their debts and arrears to the Honorable Dutch Company, if not in the present season, in the next at farthest; to the performance of which, the said high powers of Maccassar do hereby solemnly bind themselves.

6. In conformity to the last treaty concluded with the said high powers of Maccassar, all Portuguese and their followers, without exception, wheresoever they may be found within the Maccassar territory, shall be caused to remove and leave this country. And as the English are considered by the Honorable Dutch Company as the instigators and authors of the breaking of the former treaty, it has been thought necessary for the welfare, prosperity, and general tranquillity of both contracting parties, that the said high powers of Maccassar do likewise cause the removal from their land of the English settlers and traders with their followers; that measure therefore with respect to the two nations shall take place at the first opportunity; and hereafter none of them shall ever again be admitted to come to this country on any occasion whatsoever. The entire removal of all individuals of both the said nations is and remains positively fixed to the end of——. It is further agreed that the said high powers of Maccassar shall never in any province or district under their jurisdiction, either now or hereafter, under any pretence whatever suffer to enter, admit, or tolerate subjects of any European nation whatsoever, nor grant licence to any native powers not in alliance with the Honorable Dutch Company, to trade, or settle in their kingdom.

7. A free trade in Celebes, and principally in the kingdom of Maccassar, shall be secured solely to the Honorable Dutch Company, excluding therefrom every foreign European nation and all Asiatic or other nations, be they Moors, Javanese, Malays, Atchins, Siams, or any others without exception; and the said Honorable Company shall alone bring and import here for market or sale any cloths, merchandise, or wares from Coromandel, Surat, Persia, Bengal, and China. Should there be at any time any of the above articles introduced in transgression to this, all such merchandise so imported, shall be confiscated to the profit of the Honorable Dutch Company, and the transgressors be moreover punished according to circumstances. The common sort of Javanese cloth is however not comprehended in the exclusion.

8. The Honorable Dutch Company is hereby acknowledged,

by the high Maccassar powers, to be free from all import and export duties without exception.

9. The high Maccassar Government and their subjects shall not hereafter navigate to any foreign ports except to those of Balie, Java, Jacatra, Bantam, Gambi, Palimbang, Johor, and Borneo; for which purpose it is at the same time stipulated, that they shall be bound, whenever they intend to navigate to any of the above ports, to take out a pass from the residing Dutch Commandant, and that all and every one who shall be found at sea, or at any of the above ports, or elsewhere, without being provided with such a pass, shall be considered as enemies of the Honorable Dutch Company, and they shall be captured and their ships confiscated. The same high powers, or their subjects, shall send no vessels to Beema, Salor, and Timor, &c. nor to the East-point of Lassem in Celebes, being the East-side of the strait of Salyer. The same prohibition extends with regard to the North and East-side of Borneo along the coast of Celebes towards Minado, or the islands thereabout; and the transgressors of this prohibition shall forfeit their lives and goods according to circumstances.

10. As all the fortifications and strongholds on the coast of Celebes, under the dominion of the high Maccassar powers, must be considered as prejudicial to the Honorable Dutch Company, it is hereby stipulated and agreed, that with all promptitude the strongholds of Barambong, Panekeke, Goesse, Marisson, Borebas, &c. shall be demolished and levelled with the ground. To the great King of Maccassar shall remain the large and strong fort of Samboupo only, and no new forts, strongholds or batteries shall hereafter be raised in the room of those which are to be demolished, or elsewhere, except with the consent and approbation of the Honorable Dutch Company.

11. The large and strong fort on the North-side of Maccassar, called Ojon-pandang, shall, after this treaty has been sworn to, be immediately evacuated by the native Maccassar garrison, and delivered in a proper state to the Honorable Dutch Company to be garrisoned by their troops; and the town and adjacent country belonging to the above fort Ojon-pandang shall remain under the jurisdiction of the said fort Ojon-pandang, to be possessed by the Honorable Dutch Company, without the Court of Maccassar having any right to interfere or meddle with the inhabitants thereof, they being in future to be considered as subjects of the Honorable Dutch Company. The merchants shall have to pay to the great King of Maccassar such duties on their goods as shall hereafter be agreed to between the said high Power and the Honorable Company. The Honorable Dutch Company on their part agree not to admit, shelter, or protect within their jurisdiction, any person whatever, being a malefactor, or debtor, subject to the said great King, or to the Grandees of Maccassar, unless

such person has been emancipated and has received permission to emigrate to the territory of the Honorable Dutch Company. It is further stipulated and agreed, that the lodge of the Honorable Dutch Company shall be forthwith erected by the said high Court of Maccassar, in the same order as it was left by the Dutch merchant Verspreeet, either within, or without the fort, according to the pleasure of the said Honorable Dutch Company.

12. The Dutch money current at Batavia, consisting of rix-dollars, shillings, doublejees and pitjen, shall at the same rate be current at Maccassar; and should the natives object to it, the high Maccassar powers promise to do their utmost to make it acceptable to them, and to promote its currency in the bazars.

13. As an indemnity for the violated peace, the great King and the Grandees of Maccassar stipulate and promise to pay to the Honorable Dutch Company 1,000 slaves, male and female, all young, healthy and full grown people, reserving to themselves liberty to make the above promised payment either in slaves, or in jewels, gold or silver, at the current rate among the Maccassars of two and half tail, or forty Maccassar gold Maze for each slave, which liberty is granted, provided half the payment be made by the Maccassar Embassy at Batavia in June next, and the other remaining half in the succeeding season at the farthest.

14. The great King and Grandees of Maccassar shall in future not interfere, or meddle with the land of Beema and its dependencies, and the Honorable Dutch Company shall be left to act according to their own will and pleasure, without the high Maccassar Court, now and hereafter, directly or indirectly, entering into any correspondence with the dependent Princes of that country, and assisting them in any way with their advice, or with their arms against the Honorable Dutch Company.

15. The said high Court of Maccassar acknowledging the truth of the abominable murders which the King of Beema, his son-in-law Careeng Dampo, the Rajah of Tambora, and the Rajah of Sangar, with their adherents, to the number of twenty five men, mostly Beemanese people, have committed on the subjects and servants of the Honorable Dutch Company, engage to deliver up into the hands of the Honorable Dutch Company the criminal Rajah of Beema, and as many of his accomplices as may be found in the Maccassar dominion, in order that they may receive the punishment due to the atrocity of their crimes. It is also hereby stipulated and agreed, that the said high Court of Maccassar shall deliver up into the hands of the Honorable Dutch Company, the Maccassar Prince Careeng Montemarano, for him to humble himself before the Honorable Dutch Company, and beg their pardon for the offence he has committed against them.

16. Restitution shall immediately be made to the Court of Bouton of all such people, as in the last war, at the invasion of the Maccassars, were taken and carried off by them, as far as they

may still be found alive, without exception; and to the King of Bouton shall be paid the money which has being received by the high Maccassar Court for such Boutonese as since the sale of them have died, and cannot in consequence be returned. The said high Court of Maccassar does besides renounce, now and for ever, all and every pretensions to the said kingdom of Buton, and solemnly promises to abide by that renunciation.

17. To the King of Ternate shall be returned, as stipulated in Article 16, all the people of the island of Xula who, in the last war with the said high Court of Maccassar, have been taken and carried away by them, and also ten iron guns, two brass guns and three lelas (small brass pieces riding on poles,) which have likewise been taken and carried away; and the said Court shall besides relinquish all pretensions to the said island of Xula. To which the above high Maccassar Court have agreed, renouncing now and for ever all their rights not only to the island of Xula, but also to that of Salyer, and restoring them to the King of Ternate. The same high Court of Maccassar do further renounce all authority over the principality of Pantchiana, and over all the provinces laying on the coast of Celebes, from Minado down to Pantchiana, over the islands of Bangay and of Copy, and over all other provinces and islands of the said coast. In the same manner the said high Court of Maccassar do renounce all sovereignty over the provinces of Lambagy, Candipan, Bool, Tontoli, Dampellos, Belessang, Silensac and Cajelee, which extend between Mandhar and Minado, and which, from ancient times down to the late war with Maccassar, had lawfully belonged to the Crown of Ternate; and the said high Court of Maccassar do hereby solemnly promise now, or hereafter never to disturb the court of Ternate concerning these provinces.

18. The said high Maccassar Court renounce further all authority and dominion over the Booghees and over the kingdom of Lobo, acknowledging the Princes of these kingdoms to be free born Kings, Princes and Lords; and promising for the future never to entertain the smallest pretension to the said countries. The said high Court besides solemnly pledge themselves to liberate without delay the aged King of Soping, and to restore to him all his lands, wives, children, domestics, and property without exception, and to deliver him into the hands of the Honorable Dutch Company. All such Boogheese Nobles, their wives and children as to this day may in the Maccassar district, or elsewhere, remain imprisoned, or exiled, shall without exception in virtue of these presents be restored to liberty and to their country, in order thereby to lay the foundation of an upright peace and sincere friendship between the high Maccassar Court and the Honorable Dutch Company.

19. The said high Court of Maccassar further acknowledge

and declare the Kings of Layo and Bancaba, together with the entire districts of Toratte and Badjeeng and their dependencies, to be free Kings, and free countries, as having during the last war put themselves under the protection of the Honorable Dutch Comaany; and do hereby solemnly promise never to pretend any authority whatever over the said Kings and countries.

20. All lands, conquered during the war by the Honorable Dutch Company and by their Allies, from Boolo Boolo to the country of Toratte, and from thence inwards to Bongaya, shall remain in the possession of the Honorable Company, or of their allies by the right of conquest and according to the law of war; and to and over them and their inhabitants the great King of Maccassar shall retain no right, or authority whatever; but the whole shall be at the disposal of the Honorable Dutch Company, to do therewith according to their will and pleasure. Wherefore on the arrival of the Kings of Panna and Bacca, it shall be pointed out to them, what lands on the North-side the Honorable Dutch Company think proper to keep in their own hands.

21. The countries of Wadjo, Boolo Boolo and Mandhar having misbehaved towards the Honorable Dutch Company and their allies, the contracting high Court of Maccassar, promise and engage most solemnly to abandon the above mentioned countries, leaving them entirely to the disposal of the Honorable Dutch Company; and further pledge themselves henceforth never, either directly or indirectly, to interfere or correspond with them, and never to assist them either with people, arms, gun-powder, shot, provision, advice, money, or any means whatsoever tending to the prejudice and disadvantage of the Honorable Dutch Company.

22. It is mutually understood and agreed to between the two high contracting powers, that the Booghees and Toratterees, who have Maccassar wives, and the Maccassars who have Boogheese and Toratterees wives, shall be allowed each to take his own with him, in case he wishes to return to his own country. And it is further agreed, that all such persons of the above said nations as should wish either to remain where at present they are, or to return to their own respective countries, shall be at liberty to stay or to go according to their own will and pleasure. Such of them, however, as may be recalled by their lawful sovereigns, shall not be detained by the other but sent to their country, all other provisions of this article notwithstanding.

23. The said high Court of Maccassar promise and pledge themselves strictly to observe the letter and the spirit of the foregoing Art. 16, and in consequence to shut their dominions against all and every foreign European and native people, and never to allow any one of them to settle there. In case any of the said foreign nations should attempt to come and form a settlement against the will of the said high Maccassar Court, that Court shall oppose such attempt with all their force, according to the tenor of the

present treaty; and if the said high Court of Maccassar should find their own force not sufficient for the purpose, they shall apply to the Honorable Dutch Company as their protector for assistance, which shall be forthwith furnished to them. It is further to be understood that, as the same High Court of Maccassar do acknowledge the Honorable Dutch Company as their principal ally, protector, and arbitrator, they promise and engage themselves likewise to assist with all their power the Honorable Dutch Company here, as well as any where else, against their enemies, promising at the some time most solemnly never to enter into any negotiation of peace, or any other with any nation either European or Native, at war with the Honorable Dutch Company.

24. On all the points of this new treaty, concluded between the said great King of Maccassar, his Nobles, and the Honorable Dutch Company, is founded an everlasting peace, friendship, and alliance, in which are and must be comprehended the great and mighty Kings of Ternate, Tidore, Batchian, Bouton, and, in this island of Celebes, the Kings of Boni, Soping, Lobo, Toratte, Layo, Badjeeng, with all their dependant lands and subjects, also Beema and all such Princes and Lords, as after this treaty may come into the alliance as confederates.

25. In case of any misunderstanding and difference arising between the allies and respective Kings, the parties shall not immediately disturb each other by war, but they are to make the case known to the resident and commandant of the Honorable Dutch Company at this place, who shall, if possible, remove by his mediation all discord between them, and reconcile and bring them back to a good understanding, harmony and brotherhood. But in case one of the parties should be unwilling to listen to the mediation of the resident and commandant on the part of the Honorable Dutch Company, and not yielding to reason should remain obstinate in his rancour and animosity, the general Confederation shall then, as far as the occasion and the interest of common tranquillity may require, come to the assistance of the opposite party.

26. When this treaty of peace and alliance shall have been signed, sealed and sworn to, the great King of Maccassar and his Nobles shall be bound to send with the Admiral an embassy to Batavia, consisting of two of the most eminent Nobles, chosen out of the King's Council, in order to lay the said treaty of peace and alliance before His Excellency the Governor General and the Honorable Members of the Supreme Council of Dutch India, and to solicit the approbation of it from His Excellency in Council; concerning which that embassy may assure themselves that they will return home very much satisfied. His Excellency the Governor General however, shall, if he thinks it proper, be at liberty to require two sons of the most eminent Noblemen to be sent to and reside as hostages at Batavia. But in such case it shall depend on the pleasure of the great King of Maccassar to relieve them, after

an absence of one year, or more from their home, by sending two other young Princes in their room to Batavia. And the Honorable Dutch Company promise and engage themselves on their side to treat and maintain such Princes residing at Batavia with the respect and honor due to them, and not to suffer them to be in any way molested by any body whatever.

27. In execution of the 16th Article, it is allowed, that the Honorable Dutch Company may seize upon the English being in the country and their goods, and transport them to Batavia, without the great King of Maccassar having any opposition to make to the measure.

28. Also in execution of the 15th Article it is promised by the said high Maccassar Court that, should the King of Beema and their accomplices, with Montomaran, be not found either living or dead, within ten days, the sons of both these Kings shall, as a security, be put into the hands of the Honorable Dutch Company.

29. The said high Maccassar Court promise moreover and bind themselves to pay to the Honorable Dutch Company in compensation of their war expences the sum of six dollars 250,000 within five successive years, either in guns, merchandise, gold, silver or jewels, according to the computed value of each article.

30. That all the above articles of peace and alliance may be more religiously observed, they have, by the great King of Maccassar, and the undersigned Grandees, and also by Admiral Cornelis Speelman on the part and in the name of the said Honorable Dutch Company, and by all the Kings and Princes comprehended in them, after first invoking the Lord's holy name, been sworn to, sealed and signed, each in his accustomed manner, in a tent on Friday the 18th November 1667, about, or near Barombong, on the Honorable Dutch Company's own ground."

Such is the treaty which we may justly regard as having laid the Dutch dominion in the Molucca Islands on the most solid foundation, and at the same as an imperishable monument raised to the glory of the Dutch arms.

In the course of the month of March of the following year, some other conventions were concluded with the Kings of Tello and Linkes. The style of these documents adds much to their importance in an historical point of view, above all if we advert to the period when the stipulations they contain were imposed on the fierce and warlike sovereigns of Celebes. We shall only give here such clauses as were adopted and confirmed by these princes.

"I the undersigned, Paduka Sri Sultan Arung-al Raschid, King of Tello, having become by the last treaty of peace concluded with Makassar, the friend and ally of the Dutch government, and remembering the fidelity and the paternal solicitude which that government has always shown towards its friends and allies; declare

by these presents that after having taken the advice of the nobles of the State, that of my brothers and my subjects, I have resolved to draw yet closer the bands which unite me, mine and my entire kingdom, with the Dutch government, and to beg it to take me under its protection, not only me, but also my children and my descendants, in order that they may be considered and known, during my life and after my death, as the allies and friends of the Dutch Government in the East Indies, which has taken us under its paternal protection in order that no one may annoy or molest us.

“And considering that my Lord Admiral Cornelis Speelman, in the clemency and sincerity of his heart, has been pleased to accede to the petition which I caused to be addressed to him through the kings of Ternate and Linkes, I bind myself by the present writing, for me and mine, to the most entire fidelity towards the Dutch Government, entirely confiding in its high care and protection; and as its friends and enemies are equally ours, we will be ready at all times to fight for it everywhere, and as often as our assistance shall be required by it. When I die, my children and grand-children shall remain under the paternal guardianship of the said Dutch Government, and in case of my or their not leaving heirs, my brothers or other relations not less than the nobles of the kingdom shall not elect a king to succeed us, unless with the previous assent of the Dutch Government. Moreover, if any one of my descendants shall not conduct himself conformably to his rank, I recognize by these presents the right and power of the said Government to put in his place another of his relations by blood, confiding myself in this respect, with full confidence and in all the sincerity of my heart, to the equity of the Dutch Government.

“The strict observation of the clauses of the present convention has been solemnly sworn on the Koran, in presence of the Dutch commissioners, by me and my witnesses the kings of Ternate and Linkes, and confirmed by placing the seals of the state, and of the said kings, and lastly by our signature and that of the said commissioners.

“Thus done at Tello, the 9th March 1668.”

The history of the sovereign princes of Celebes exhibits many episodes which were favorable to the power of the Company of the Indies, and which it knew how to avail itself of to extend more and more its dominion over that country. This mercantile association, sovereign of very extensive possessions, had also its times of reverse; it was many times under the necessity of having recourse to all its disposable means, for the maintainance of the power so valiantly acquired by its arms, in the obstinate war sustained against the flags of Spain and Portugal. But, after having established its power in Celebes on solid bases, by means of the Bongaay contract, of which mention has been made above, it had

still to sustain fierce and bloody struggles with some of the princes of the confederation; these insurrections of its vassals were more than once nearly fatal to it, and menaced seriously the supremacy which it had acquired, particularly from 1724 to 1739, during which years a Makassar prince, who had fled from Goa on account of having murdered a daughter of the king of that country, was able to overcome some of the princes of the confederation, and raised up a numerous party. This *hrain* (prince) of the name of Bantalankas, reduced the power of the Company to the brink of ruin; but the courageous resistance of the garrison of Fort Rotterdam allowed, while yet in time, of the arrival of the necessary forces to resume the offensive, and again to reduce all the country under its dominion.

From that time until 1816, the era of the restoration of the possessions in the two Indies, to the new government established in Holland, the Company steadily maintained its supremacy over the princes who had given in their adhesion to the federative compact; it often abused it, even to the detriment of the industry and prosperity of the natives. It made use of its power according to the interests of its policy, and according to the system of commercial monopoly, the basis and actuating principle of all its diplomatic transactions. In order better to exercise this ascendancy over the princes of India under the influence of its policy, it did not scruple to foment those misunderstandings and jealousies amongst them, which at all times have been the principal causes of quarrels and deadly wars, which have decimated the populations of the Malay Archipelago.

The Company took advantage of the inveterate hatred which some of the Celebes princes bore each other, and turned to its profit the misunderstanding between the state of Boni and that of Goa (Makassar); but the incessant broils between the Bugis and the Makassars at last excited some fear in the European power, particularly in consequence of the supremacy which the sovereign of Boni arrogated to himself. He aspired to the precedence, and wished that in formal assemblies, the envoys of Boni should have the right of presenting the delegates of the other courts to the European governor of Celebes, residing at Makassar.

For some years the coldness affected by the sovereign of Boni or *Rajah Bugis*, had awakened the attention of the servants of the Company, when in 1823, the king of that state Arung Palakka died. After the period devoted to the usual mourning, the nobles and the people elected the deceased king's sister, named Arung Datu, to the vacant throne. Envoys presented themselves before the governor, to invite him to take a part in this election to the throne, and to request the sanction of the Governor-General. It was hoped that by this act of submission, the ancient relations of good understanding and vassalage would be renewed.

The new government of Boni, nevertheless, did not abate its pretensions; they were not slow in manifesting them on the occasion of the visit which the chief of government, the Baron Van der Capellen, made to Celebes and the Moluccas in 1824. When the Governor-General received the homage of the chiefs whose ancestors had been parties to the Bongaay contract at a solemn audience, the Baron van der Capellen made known to the envoys of the respective Courts, that, having come personally amongst them to take cognizance of the interests of the inhabitants of the Moluccas, as well as to renew the ancient treaties, it was his intention to modify these for the benefit of the natives, in order to ameliorate their condition and provide for their welfare. The envoys received these benevolent expressions with the usual demonstrations of submission, and prayed the orders of the Governor-General as to the time he would fix to receive the homage of their sovereigns. The Queen of Boni had sent to compliment his Excellency through Aru Lompo, her brother, who was accompanied by a numerous suite of nobles and chiefs of her court. He declared that he was not authorised by his sovereign to accept the clauses of the new treaty. Upon this, at his request, fifteen days were allowed him to bring the assent of the Queen of Makassar; it being explained to him at the same time that the government could not tolerate in any way the proceedings of Boni towards the other princes, nor permit that certain districts belonging to government should be any longer occupied by the delegates of that state, and finally, that it was proposed to punish severely the princes of Tanette and Supa, for not having been represented at the audience and having shown an intention of making common cause with the Bugis. All the other princes as well as the Rajahs of the neighbouring islands, came in person to do homage and swear fidelity to the Dutch Government.

During the British occupation of Celebes in 1814 and 1815, the state of Boni having for auxiliaries the forces of the states of Tanette and Supa had engaged in hostilities with the English; they had occupied from that time the provinces of Segerie, Labakkan and Pankajene, formerly possessed by the Company of the Indies. When the Dutch government resumed its rights in 1816 it required their restitution; but the princes evaded compliance under various pretexts, and the commissioners sent to settle these matters did not succeed in removing the difficulties. The desire of maintaining peace amongst the Celebes princes induced the postponement of repressive measures against these small states. The time had now arrived to put an end to this forbearance towards these conceited chiefs, who attributed this inaction to the inadequacy of our means. Before leaving Makassar the Governor General sent the flotilla which he had at his orders, to summon the prince of Tanette to restore the countries occupied by him,

and to return to his duty. On his refusal to comply with the clauses of the treaty, they came to a rupture. After the ships had opened their fire against the fortress of Tanette, the whole population of the town came in a crowd and submitted; the king was dethroned and took to flight and his sister elected as queen in his place. The expedition continued its route, brought some other chiefs to submission and reduced a part of the country usurped by the king of Tanette. The success which they obtained caused the commander of the troops to form the resolution of attacking the defences of the king of Supa; but the chances of war were less propitious to the expedition before the head quarters of that state, where the assailants experienced an obstinate resistance; they were even obliged to retreat after having been repulsed in two attacks with a serious loss in officers and men. The Bugis, until then inactive, profiting by this disaster, made themselves master of the position occupied by our troops and obliged them to act upon the defensive. The march of reinforcements from Makassar, the auxiliaries of that state joining with those from Sinding, held the troops of Boni in check, and gave the government time to send a more formidable expedition to the island of Celebes.

After the submission of Tanette the Governor-General had left Makassar in the frigate *Euridyce* on his return to Batavia. The events which we have mentioned above took place a few days after the departure of that vessel. The check experienced rendered it necessary to send more reinforcements; a flotilla and troops left Batavia and General van Geen, the commander of this expedition, landed at Makassar in the beginning of 1825, when hostilities were resumed. The bravery of the military and naval forces soon changed the state of affairs in that country; the districts overrun by the enemy were speedily again occupied by the Dutch troops; the Celebes princes were defeated at all points; they were driven from their entrenchments, the capital of Boni fell before the power of the conqueror, and this state was deprived for a long time to come of the means of exciting any fear of a rising on its part.

Scarcely had this expedition been brought to a favorable termination by the re-establishment of our power in Celebes, than a struggle much more obstinate was preparing in the princely residencies of Java. The army of General van Geen which was covered with glory in Celebes was called to reembark and brought effectual succour to the town of Samarang, menaced by the rebels, at the head of whom was the prince Dhipo Negro.

Since that time peace and tranquillity have prevailed amongst the confederated princes of that part of Celebes, and the government has been able to introduce into the administration of that country all the improvements dictated by a policy more in accordance with its true interests, than that formerly pursued by the Company of the Indies. The laws promulgated since that time respond in every respect to the wants of the Malay populations,

over whom its power extends; for these ordinances have successively abolished all those fetters which bore in a fiscal as well as inhumane manner upon the trading and agricultural tribes of the vast Archipelago of the Moluccas.

In connection with the modifications effected in the Bongaay contracts, the Governor General van der Capellen, having visited the greater number of the spice islands, became convinced that the ancient system must be reformed; and in effect he introduced important modifications by abolishing amongst others the laws relative to the destruction of spice trees. The importation and exportation by the natives were subjected to duties, and the result of this new system sufficed in five years to quintuple the revenues of these provinces.

Since 1816, an epoch ever memorable for these countries, tormented for more than two centuries by oppressive laws, the Governors who have succeeded Baron van der Capellen have successively abrogated in the Bongaay contracts all the conditions opposed to the welfare of the people of these countries.

The opening in 1846, of the port of Makassar to the commercial flags of all nations is one of the principal consequences of this new system. Governor General Rochussen, at present ruler of Netherlands India, was the promoter of it. By his proclamation of the 9th September 1846, the port of Makassar was opened from the 1st January 1847 to the free trade of all nations, and the Governor of Celebes was empowered to permit foreigners to reside at Makassar for the purpose of trading there. One of the provisions of this publication, amongst others, allowed the free importation and exportation of fire arms and munitions of war, as also of opium, traders in this article conforming to the regulations of the opium farm. Similar provisions were recently made for the freedom of the port of Menado, in the northern port of Celebes.

This full and entire liberty regarding articles of great importance to the illicit trade of the smugglers of Singapore, has led to no other result than to envenom more and more the diatribes which the pamphleteers of that island indulge in; and this because, since the introduction of these articles has been permitted to the flags of all nations in the two ports opened on Celebes, arms and munitions of war are considered as objects of lawful trade for all the vessels which resort to the Archipelago; and thus the profits upon these formerly prohibited goods no longer form part of the very lucrative speculations of the contrabandists of Singapore.

It is, we regret to be obliged to say, but too well established, that the English merchant is rarely contented; our Government, whatever may be the sacrifices which it may make to the pretensions of the commerce of Great Britain in our Indies, will never be able to satisfy the immoderate desire of English industry to extend more and more the outlets which are necessary for the colossal product of its manufactures; this necessity of exporting

the enormously disproportioned excess to the requirements of consumption, and of which the amount accumulates day after day in a frightful manner, impels the commerce to insist incessantly with the Government, that new markets should be opened to it. These incessant clamours oblige the British Government to abuse the supremacy which she exercises upon the ocean, by employing means opposed to the rights of nations, only with the end of satisfying the exactions of English commerce.

Her pretensions will soon cease to be restricted to the admission of her flag into the ports which are open to it in the principal islands of our Archipelago, where already it exercises the supremacy; her commerce will seek more extensive concessions to satisfy its unmeasured ambition.* She will insist upon a British possession in the centre of our Archipelago; perhaps English policy nourishes the desire, in the wish which has been expressed and already made mention of by the periodical press, to form a line of steamers between Singapore and the northern part of Australia; for this purpose perhaps it meditates a renewed violation of treaties, similar to those of the occupation of Labuan and the establishment of Singapore. But we cherish the hope that Netherland will have been instructed by the lessons of experience so dearly bought by her; her navy in the Archipelago will for the future be sufficiently numerous to allow her, by its demonstrations, to render less easy any spoliation whatever in the centre of our intertropical possessions, which the first duty of the Netherlands flag is to guard against all attack; seeing that it is called to protect an inheritance the most precious and most necessary to the well being of the nation, an inheritance transmitted by our ancestors, and of which they acquired possession by their perseverance, as well as the price of their courageous devotion.

A better situation than that of Makassar could not be chosen for a free port; placed almost at the extreme south-west of an elongated peninsula, which projects into the Java sea, about 250 miles distant from the nearest part of Borneo, and at about 500 miles from the north-east point of Java, it is situated directly in the line of navigation of the Straits of Makassar, of the principal ports in Java and of the Molucca islands. It is placed in the maritime route followed to the south towards Australia, a country in the direction of which navigation and commerce tend more and more; then to the north, towards the ports which China has opened to all flags; and it is finally, admirably situated to favour and extend the coasting trade. If in 1816, the system of monopoly adopted and rigorously maintained by the Company had been unreservedly abandoned, and if the new colonial government had conceived the

* On Borneo, the ports of Pontianak and Sambas enjoy free trade open to all flags; but notwithstanding, England has possessed herself of the small island of Labuan.

happy and salutary idea of admitting no restriction to a free trade in the Moluccas, while Makassar was at the same declared a free port, it is probable that Singapore would never have attained the degree of prosperity which that free port has enjoyed until now.

Makassar is situated on the west of the peninsula, near the sea, and the approaches to the town are protected by Fort Rotterdam.

This town still presents in part, a faithful picture of the manner in which the first Europeans who inhabited these countries built their houses. At sight of these thick walls, these small arched doors, these houses founded and constructed of stone, one involuntarily recalls the dangers which in the early times threatened Europeans. In considering the boldness which characterises the construction of these remarkable arches, the traveller is struck with astonishment, and their sombre architecture, causing them to resemble so many prisons, excites a kind of terror in his breast. This impression becomes still more vivid when he compares these massive dwellings, evidently built with a view to security and defence, with the open and tasteful houses erected in later times, and which are so much better adapted to the climate of these regions. The roadstead of Makassar is as beautiful as it is safe.

The environs of the town are flat, so that the eye catches nothing but the high mountains in the distance, which form part of the chain stretching from North to South. They are covered with forests; the plain, on the contrary, presents a succession of rice fields and numerous villages, which all attest the fertility of the soil, and evidence the prosperity of the inhabitants.

The shore near Makassar is composed of white sand, and has a slight inclination; it presents here and there, under the shade of trees, small fishing villages of a picturesque aspect. Not far from the town towards the south, the river Goa discharges itself into the sea; the banks are well cultivated, very populous, and offer many fine points of view. Upon the right bank, about a league above the river's mouth, is situated Goa, the capital and residence of the king of Makassar. The old town was destroyed in the war of 1778; and nothing now remains of it but some brick tombs, which contain the remains of the ancient royal dynasty of Goa. Proceeding towards the south we arrive in the dominion of Turatte, then we come to the principality of Gelissong. At some leagues to the north of Makassar the principalities of Tello and Maros are found, from whence we discover the beautiful chain of mountains which border the great lake of Tempe. Further on, at the distance of six miles, we reach the limit of the kingdom of Tanette; the large bay of Bajukike, situated on this coast, offers an easy anchorage where a hundred ships could find a shelter. Ten miles further towards the north, we arrive at a large extent of country still little known, the kingdom of Mandhar, of which the northern boundary abuts on the gulf of Cajeli, situated towards

the confines of the peninsula which forms the north part of Celebes. In the central parts are found the principalities of Soping and Lamaeru. In the first of these kingdoms, lies the inland sea or large lake of Tempe, situated at more than a hundred feet above the level of the sea, and from which flows the river Chinrana which has its embouchure in the kingdom of Boni. The capital of this state of the eastern coast is Boni, but the Prince or Rajah who governs it resides at Chinrana. Navigable rivers to any great distance inland are not found in this part of Celebes; the small breadth of the peninsula (only thirty leagues) prevents the rivers on both sides of the mountainous chain which stretches from south to north, from being fed by tributaries except at their outlets; and besides, these rivers, by their rapid declivity, form cataracts and are obstructed by banks which impede the navigation.

The states over which the N. I. Government exercises a less direct influence, although acknowledged by treaties, are situated to the north of the kingdoms of Soping and Boni. Wajo is a very extensive province which forms the shore of the bay of Boni; its government is democratic; forty princes or regents have the right to vote and take part in the government. These princes are divided into three classes, or are united under three flags; the first is known under the name of the parti-coloured flag, the second is yellow, and the third orange. These three flags are subdivided into thirteen sections; the first has fourteen. These sections contain an equal number of individuals, from amongst whom they elect a superior chief, who in concert with the three chiefs of flags directs the affair in conformity to the laws of the republic, although under its responsibility. The king of Makassar, fearing the influence of this state, rendered himself master of the whole country; later, in 1670, this country concluded a treaty with the Company.

The second state, situated to the north, forms the western part of the peninsula. Sidenring, also called Ajatamparang, is an aristocratic state, which placed itself from 1677 under the protection of the Company of the Indies, and over which the Dutch Government continues to exercise its influence. These two states, as well as the mountainous parts of the interior, are very little known in our days, never having been visited by Europeans capable of making the requisite observations.

The civil authority is at present exercised by a Governor who resides at Makassar; he has under his orders five residents, stationed in different districts. For the administration of justice, there is at Makassar a council, a magistracy and circuit judges; for the finances, a receiver general, a collector of duties, a director of magazines and a Chamber of Orphans. However many changes are contemplated in the civil government as well as in the administration of justice of Celebes.

The islands which geographically constitute part of the south peninsula of Celebes are Tanakeke or the land of sorcerers, formidable from this cause to all native navigators; nevertheless it is inhabited by those hardy marines who pass their lives in fishing for tripang, and whose custom it is to addict themselves to piracy when they find a favorable opportunity for its accomplishment. The island is surrounded by many islets, which form so many isolated rocks. The group of Tonin, Nusa Keras, Nusa Komba, Rotterdam, Medemblik, and the very numerous islands of this little Archipelago; the group of the hen and chickens; the archipelago of Hartebceest or the stag, the Spermondes, the Noord Wachter of the south, and several other isles, small and desert, which are joined to the very extended peninsula of Balabalaga. In the bay of Bonthian we find the islands of St. Andrew and St. George, and the group of Salayer. The large island of this name is very important and deserves the attention of government, and we will therefore enter into a few details on the subject. Further in the Straits of Salayer, the islands Buserun, the islands of the south, the north and the middle which form the two passages or channels between Salayer and Celebes, along the east coast, the small groups of Balaranga, of Singay and Kol-Pieterse.

Salayer is the most remarkable island in the southern part of Celebes; those which depend on it are Tambolongan, Polasse, Buloang, hogs island, Pani and Luekang which form part of the group of Bugeruns.

Formerly Salayer was reputed infertile, or at least as not being able by its produce to maintain its inhabitants; it was considered as a burdensome charge on the Company who were obliged to assist the inhabitants by supplies of rice. From an enquiry made in 1824, it appeared, that so far from being an onerous possession, this island was not only able to feed a numerous population from the products of the soil, but that under a better and more liberal system of administration it afforded a profit to government. These results were obtained not only by the abolition of monopoly, but also by the energetic and systematic repression of piracy. This destructive scourge which incessantly decimates the peaceful populations of the Malay archipelago, joined to the no less devastating monopoly of spices, had always interposed an obstacle to the agricultural industry of the inhabitants of all the small and thinly peopled islands scattered in such great numbers over these seas. When the inhabitants did not take any part in the infamous trade of the pirate, they saw their island the object of incursions from these brigands, reducing to the severest slavery the industrious population of the coasts, and everywhere sweeping away the fruits of their labours, whilst the annual tours of shameful memory, undertaken with the view of extirpating the spice trees in these countries, combined to the ruin of commerce, and dried up the springs of welfare of these industrious islanders, worthy of a better lot.

The extent of Salayer is 45 square miles or 24,7 square myriametres. Its population, comprising that of the adjacent isles, amounted in 1824 to 30,525 souls. It is divided into 14 districts or regencies, of which Bontobangon is the principal, the most populous, and that where the Sultan resides. A European resident, assisted by some subalterns, administers the civil power, under the Governor of Makassar. In the time of the Company Salayer was placed under the jurisdiction of Makassar in all that related to the administration of justice and police; at present these are administered by servants of government on the spot. The forced labour and vexatious duties which pressed upon the inhabitants have been abolished; the only remnants being the labour necessary for the repair of the forts, as well as those required by the plantations, and the care of the teak forests, for which kind of services a fixed reward is paid. In former times the teak required at Makassar was imported from Java; at present it forms an article of export from Salayer. A duty of 2½ cents is levied on each cocoanut tree in bearing, the greater part of the inhabitants possessing plantations of this palm of which they sell the fruits, or exchange them for other articles of which they are in need. At Salayer, maize, millet and a little cotton are also cultivated; the last it is thought is capable of considerable extension. The culture of coffee and pepper, meets with less opposition on the part of the inhabitants and the Government takes effectual means to encourage it. Superstitious ideas, credited by the population, would appear to have prevented them from devoting themselves to the cultivation of rice, as well as the erroneous supposition that they should not plant rice, because the soil of their island is not at all fitted for its cultivation; for it is known from experience that the rice of Celebes is of superior quality to that of Java, although it does not keep so long.

The Strait of Salayer is the passage most used by all vessels going from the Sunda islands to the Moluccas, or vice versa. In these latitudes, near 120° 30' east longitude, the influence of two opposing monsoons is felt. When the rainy season prevails in the Sunda islands, and on the western coast of Celebes, in the Moluccas, Amboyna, Ceram and on all the eastern coast of Celebes the fair season or the dry monsoon prevails; this phenomenon of the reversing of monsoons takes place in the Straits.

NOTE ON MARITIME MALAYS.

By D. J. MACGOWAN, M. D.

MALAY sailors are best known to the world as sanguinary pirates, a character which they possessed long before their coasts were visited by Europeans, but the trait was not fully developed until the whole race had been goaded by the cruelty of the latter, whose valuable cargoes were tempting to their cupidity, rendering revenge peculiarly sweet. The extermination of these merciless marauders, so far as it has been effected, should be deprecated by none;—that is a spurious philanthropy which condemns the decisive measures of Sir J. Brooke, and can find little sympathy amongst those acquainted with the perils incident to the voyages of every race traversing seas infested by them.

Unhappily the long continuance of these depredations, has occasioned a prejudice against Malay sailors generally and they experience much injustice in consequence. It is not to vindicate their character as seamen,—for the facts that they are preferred above all other Asiatics on board European vessels, and are supplanting lascars in China sufficiently indicate the high estimate formed of them by those most competent to judge,—but to plead for their better treatment, that space is solicited for this note in the Journal of the Indian Archipelago. No apology is needed for introducing such a subject in a work chiefly devoted to ethnographical investigations, for this science is eminently philanthropic, as by leading to a better knowledge of the human family it tends directly to its improvement and elevation. Nor are precedents wanting,—the valuable paper on opium smoking by Dr Little, as well as several other articles, evince that moral subjects are not out of place in this Journal.

Probably there is no mercantile service in which there is not room for improvement in the treatment of sailors, but whilst European seamen toil under the ægis of equitable laws, those of Asiatic origin generally either have no legal redress for injuries or are destitute of the knowledge and temerity to seek it. It is chiefly owing to this that the mariners of Eastern Asia are divided into two classes.—Those who tamely submit to any amount of insult and injury,—such are the Indians generally; and those who resent ill usage by revenge when there is a prospect of doing it with impunity,—such are the Malays. Now men who are so spiritless as the former must ever be inferior in any grand pursuit, and as seamen fail to compete with the more manly Malay. The latter is of course more likely to be guilty of insubordination and mutiny, but is this unfavorable to his character as a seaman? Certainly not,—for he is not rendered so by slight

causes, and as it indicates some degree of self respect and self confidence, he is thereby worthy of more confidence.

There are too many officers having Malays under them, who abuse their authority: deeming them an indolent and perfidious race, they imagine it necessary to govern by brute force and to preserve discipline by inspiring terror. Some not content with the blows inflicted by syrangs and tindals (petty Malay officers themselves,) daily beat offenders for the slightest offence, and not unfrequently when guilty of no offence at all. In the first place he comes on board an injured man, the dupe of the worst species of "landshark," the ghaut syrang, whose bondsman he has become, and who has possessed himself of nearly all his advanced pay. From this time till the close of the voyage he is subject very often to the most cruel tyranny, overworked, underfed, and treated as a beast. Ordinarily no every obvious evil results from this, but how many mutinies have been the consequence? How many vessels have been lost from the sudden refusal of men smarting from injustice to perform duty in the hour of danger? From my own observation I should say that all mutinies, and numerous wrecks are owing to unfair treatment of Malay sailors.

Men who are accustomed to drive their crews by oaths, and blows and kicks, will be affected by no considerations of humanity, but though generous or manly feeling be wanting there are inducements to a different course which may be presented at least to the sordid with some hope of success.

It is a fact that those who are most successful in breaking dogs and horses do not employ the whip, and it is equally true that those commanders who treat their men with the greatest kindness have the most orderly and effective crews. The Malay is a better sailor without flogging than with it—incomparably better. Kindness so far from being incompatible with good discipline will prove when fairly tried its best support; it should of course be blended with firmness, and then it will be appreciated by none more than Malays. Though quick to feel injuries and slow to forget them, though prone to resort to their kriss, and loath to confide in the white, they may be rendered by proper treatment all that sailors should be. Like all of that profession they are imprudent and reckless and those who would do them good must act as guardians for them. The Master of a ship may at the outset protect them from the rapacious ghaut syrangs by becoming himself responsible for them, and thus save them a good part of their wages. If bound for climes to which they are unaccustomed let provision be made for their health and comfort. At sea treat them like men, and in storms they will be firm and faithful. Men so situated have something to live for, and besides the charms which life has for them, gratitude to their officers will beget an emulation which more than doubles their efficiency and insubordination will never appear.

This is not the mere theory of a landsman; the experiment has been tried and with the happiest results. A vessel sailing from Singapore requiring forty-five hands controuled in the usual manner, is now worked by less than half the number, on the fair dealing principle. The sailors are protected from land pirates and at sea are never beaten but a regard shown for their comfort. On board that vessel the same men ship voyage after voyage, a proof that they can appreciate such treatment. Their regard for their situations was manifested lately in China in a most unequivocal manner. Their Captain was requested to take some men who wished to return to Singapore in exchange for a part of his crew. He expressed not only his willingness but encouraged the application which was made to his men, by the Master of an opium receiving ship. The wages were more than double and almost nothing to do, with several other inducements. Now the mere love of variety will generally lead a sailor to change ship when he can, independently of gain which he loves yet more, but not one of the sailors here spoken of would quit his ship even for such tempting offers. The mode of discipline here recommended, besides being far easier for the officers, has the advantage of not unfitting them for good society. One cannot be coarse on shipboard and refined on shore, a tyrannical Captain can never make a good friend, parent or husband.

The gain, for this is the tack I have chosen, is not to be calculated by the mere saving of wages, though this is not inconsiderable under what I should designate as the rational in opposition to the present arbitrary system; it consists in the greater efficiency of the crews, in more rapid and safer voyages. It were no exaggeration to say that an incomparably greater loss of life and property has been occasioned by maltreating Malay sailors, than by Malay pirates, more done by the former to retard commerce and civilization. It is not easy to estimate the advantages which would accrue to intertropical navigation were more liberal views and practices to prevail on the subject.

Manila men are now in less repute than formerly, and though Javanese are physically less effective, their greater pliability gives them generally the preference even as a seacunnies or helmsmen. Compared with Indians, Malays are less amiable and patient, but capable of enduring greater fatigue, occupying a middle position between these and Europeans, and on the whole they are preferable to the latter for hard service in equatorial regions. Should the commerce of the West set Eastward across the Pacific, the number of Malay sailors will greatly increase but they should never be taken to very cold regions;—even on the east coast of China they suffer from the rigours of winter. Many who have brought them up the coast have provided them with suitable garments, but this is frequently neglected, at the cost of life to some of the poor creatures, and of limb to others from freezing. Ordinarily it is

known they never go below, but sleep on deck in all weathers, which though allowable perhaps in their own climates should not be permitted in high latitudes, else they will speedily fall victims to pulmonary or rheumatic complaints.

The greatest defect of Malay sailors is owing to their religion, which however sits more lightly on them than on the other Mahomedans, and therefore remedies are more available. Believers in fate, they are quickly paralysed when menaced by danger. It is no uncommon thing for them to skulk away just at a time when everything depends upon a vigorous and persevering exertion. Seamen who have been educated under the influence of a better faith, are animated by hope, their efforts becoming more strenuous as perils thicken, they labor on to the last. A recent wreck on this coast illustrates this. When the ship was in such danger that it became necessary to cut away the masts, the Malays, who till then had done well, gave up in despair, they would not move, the operation was performed by the officers. As the prospect lightened their courage returned and they worked like men and prepared a raft capable of affording a passage to the shore for all on board. But this was no sooner ready than a large body of Chinese passengers took possession of it, and threatened to plunge a Malay kris which each one had provided himself with, into any sailor who dared to venture on it. They floated safely away and the Malays again gave themselves up to fate. Their officers however had secured a frail gig into which they all entered, and although their lives depended upon hard pulling they were only kept at the oars by the loaded pistols cocked before them. This trait in their character is to be counteracted by a good discipline which consists in making them obey every command with a hearty good will.

Superstition is a second nature to sailors, and the Malay has his share. Besides whistling for the wind, a practice which Indian and Chinese sailors seem to have borrowed from Europeans, as they do it in a spluttering awkward manner, in calms the Malays send their cook aloft as high as he can go with a bowl of rice, where after making a great noise he scatters food to invoke the presence of Æolus, repeating the ceremony at intervals until they raise the wind. They are not particularly scrupulous about the use of pork and are thus a scandal to their Mahomedan brethren the Bengalis, some of whom will not use hog's fat for any purpose on shipboard. A short time since a Malay who was tossing things from below to a lascar on deck, got hold of a ham and threw it up also, which the latter let fall as if it had been red hot iron to the great amusement of the Malays and the chagrin of the Bengali part of the crew. They are greatly addicted to gambling and from this cause and dissipation are generally in debt to their syrangs from whom they borrow money at an exorbitant rate. The syrangs seldom keep their gains long, either losing them like the sailors, or in speculations.

Drunkenness is a vice which they are not generally chargeable with, though they never refuse grog when offered, their money chiefly goes to prostitutes and hence they are often victims of disease consequent on this sin.

A fondness for dandy dresses and ornaments is particularly observable in this class. On this coast where opportunities for spending money are limited and their wages liberal (\$9 per month and found) their penchant for dress is carried to a ludicrous extent. One was pointed out to me lately who rejoiced in the possession of twenty-seven monkey jackets! These and their vests generally are made of silk, satin or velvet, with edging and lining of other colors, gilt buttons—green pantaloons, glingary caps, several sashes of different gay colours, flashy handkerchiefs, &c. Few Western dandies spend more time at the toilet; their curls, rings and trinkets must be all fancifully arranged.

The sailors of no country are more musical, which of itself is a favorable indication. It is amusing to see them in the evening gather around one of their number who is beating a drum or tambourin and singing some martial or amorous song or recitation, in the chorus of which they all join with the greatest glee and animation, but they most enjoy sports of a Thespian character. A translation of some of these would throw considerable light on the character of the race. Whether regard be had to their numbers or utility, these men have a claim on the regard of all who have it in their power to improve their condition. Most of the vessels where the Malays are cruelly treated are owned by Chinamen in the Straits, and in such cases appeals can only be made to the officers themselves, but where owners are Europeans, we have a right to expect from their superior civilization that human beings on board their vessels, should have the full advantage of that mode of treatment which experience shows to be most conducive to the interest and welfare of all parties, and of which Christian benevolence is the basis.

Ningpo, 29th June, 1850.

NOTICE OF THE BETSIMISARAKS, A TRIBE OF MADAGASCAR.*

I will now proceed to give you a description of the Malagaches, or rather one of the tribes of the natives of Madagascar called Betsimisaraks, as I am better acquainted with them than with the others.

Location, numbers &c. The Betsimisaraks are a tribe originally inhabiting a portion of the East coast of Madagascar, situated between $17^{\circ} 0'$ and $18^{\circ} 5'$ South latitude, having for neighbours, the Antanvarasti to the Northward, the Antsianakas and Ankovas to the Westward, the Betanimena to the Southward, and bounded by the ocean to the Eastward. This district is better known to Europeans than any other part of this large island, the town and Port of Tamatave being situated in it—a place of great trade, and where many Europeans and Creoles of Bourbon and Mauritius resided for many years, being also the seat of the bullock trade, from whence the above mentioned islands obtained most if not all their cattle. It is under the Hova government. They are also to be met with in the islands of St. Marie Nossibé, and Mayotta. The first of these islands is I believe entirely peopled by this race (to the amount of nine or ten thousand) with the exception of a few Frenchmen and Creoles who compose the European part of the population at Nossibé, while at Mayotta they are not numerous, as it is some distance from their land and they neither like nor agree well with the natives of that island.

The Betsimisaraks may be termed agriculturists, inasmuch as almost their sole occupation is cultivating rice in considerable quantities which forms their chief article of food. They likewise grow maize, sweet potatoes, manise or cassava and millet, but in small quantities. When the season for planting, weeding and gathering rice comes on, every one is hard at work, men, women and children; every thing else is set aside for this particular duty, and it is difficult to obtain a few coolies should they be required. But when the harvest is gathered in, they can be procured in any quantity for any remuneration.

Physical appearance. The eyes are large, brilliant and restless, ears large, nose short and flat, though not so much so as in the negro, lips moderately thick; height middling and limbs well proportioned, lower jaws large and mouth well garnished with teeth, of which they make good use at meal times, color dark; hair jet black, thin and curly, occasionally inclining to woolly (but this is mixed blood I presume.) Beard very slight—this applies to men. The women are generally small, and well proportioned; usually plain but some of them very handsome. They are about the size of the native women of India.

* Extract from a letter from H. Martindale Esq. Johanna, Comoro Islands.

Like most other natives, the Betsimisarak has not very extensive ideas, but at the same time is by no means stupid or unobserving. Easily led by kind treatment but as stubborn as a mule if abused or maltreated. If you once strike them the sooner you get clear of them the better, as they do not forgive you. Indolent like other inhabitants of a tropical climate, but hospitable, good humoured and easily pleased. I have generally found them honest, seldom telling falsehoods and proud of their name as a tribe. Their sight, hearing, smell and touch are acute, particularly the two former, moderate in eating, having only two meals a day. Very amative, fond of their own rude music and amusements which are simple in the extreme, and consist of singing, dancing and playing at a particular game called Fifangai. In this game they use a piece of board with holes in it and in each hole they place two beans, the number of holes is thirty two;—whichever party succeeds in taking the beans from the holes on his adversary's side wins the game. It requires a little calculation—and some of them are very expert at it. They are frank in their manner, generally speaking out what they mean. Murder amongst them is unheard of, and theft so rare that until they settled in the French colonies they had not even a name for, much less know the use of a lock or secure fastening. On going into their villages you see the doors merely shut and a piece of stick put in front to signify that the inmates are absent. They may perhaps be two miles off working in a rice field. I have frequently been by myself in their villages for some time and never had any reason to complain of them.

I suppose it would be difficult to find a race of men more timid or more averse to fighting than these. They would sooner run a mile than strike a blow and have consequently been driven here and there by their neighbours, particularly by the Hovas, who have all their territory under subjection and treat them very badly, indeed they are but little better than slaves. They are naturally averse to leave their country, but I suppose it is owing to the bad treatment they meet with from the Hovas that they have fled to St. Marie and the other islands. I have repeatedly heard them regret that their land was not governed by Europeans. The soil is very rich and produces many kinds of grain very abundantly and with little labor, but it is very sickly to a European constitution. The rice grown there is equal in quality to the South Carolina and thousands of tons could be produced, besides many other valuable articles of commerce.

Religion. It is very doubtful if they possess any fixed idea of a supreme being. That they acknowledge that there is one is certain from the name which has been assigned to express it—Zanahar, but I never saw any form of worship or any building appropriated for a church. They are however fearful of evil spirits and place implicit confidence in their sorcerers and soothsayers—

who are very numerous and are consulted upon all matters of importance and difficulty. They go through a great, many forms and utter a lot of gibberish whenever they are consulted but unlike ours in the olden times are contented with very small fees. All the natives wear amulets about either the neck, arm or loins, consisting of different pieces of woods, beads, a little bag of skin containing powder and a variety of other articles. They also suspend them about in different parts of their huts in order to keep away evil spirits. The native name for these amulets, Aouli, pronounced as in French.

Arts. The women manufacture a cloth called Seekie-Lai from the Rafia, it is woven by hand, the loom being of a most simple kind, and is generally coarse although at times made so fine as to be with difficulty distinguished from silk. The Rafia is the exterior covering of the central fibre of the leaf of the traveller's tree, which when dried is split into threads of the desired thickness and then dyed various colours, as required, by preparations of Indigo, Turmeric, and various Barks or Roots which produce the desired colour. It is strange that all their colours are fast and never wash out. They also make hats, small baskets and mats from a leaf something similar to the brub leaf and a peculiar kind of scull cap of straw. They carve spoons and ladles out of wood, some of them very well executed and also wooden bowls and platters.

Their arms peculiar to the country is the assagai or spear, the head of which is formed of iron very sharp and well made, the shaft is of ebony or some other hard wood about six feet long and very slight. In the use of this weapon they are very expert and will sometimes bring down a bird on the wing with it. They have however obtained from Europeans gunpowder, fire-arms and bullets. They take great care of their arms and are very fond of firing them off, as they like noise. They however seldom take aim and as bullets are rather scarce load with pieces of coral, previously putting in a double charge of powder to make sure of its going off. They use axes, knives and files when they can obtain them.

The only implement they make use of when planting rice is a sharp pointed piece of wood with which one person makes small holes in the ground, (which has previously if situated on a rising been burnt, or if marshy been trodden out with bullocks,) another man follows him who drops in each hole a few grains of seed and is succeeded by a third party who covers the hole lightly with a little earth. They are very particular in keeping the ground planted free from weeds until the rice has attained a certain height when being then strong it is left to itself. A large quantity is transplanted after it is of the height of a foot above ground, and the reason given for this proceeding is that it produces a more plentiful and finer grained crop.

The cattle &c. are buffaloes, goats, hogs, dogs, cats, poultry, fowls, turkeys, ducks, and geese. I think they are indebted to Europeans for the last two named, as they call them duck and drake and geese, while all the rest have native names.

They make use of two kinds of canoes called *Laca Adzilon* and *Laca Viara*. The former is simply the trunk of a tree, hollowed out and pointed at either end, and is propelled by a sail made of the native cloth mentioned above and paddles. The latter called *Laca Viara*, Anglice *Razor boat*, so called from its shape, more properly belongs to the *Saccalave* tribes and is not met with on the *East Coast* of *Madagascar*. These canoes are well finished, carry a large sail, are likewise propelled by paddles and sail; and are very fast. Both kinds have outriggers. The *Laca Viara* is only capable of carrying a crew of five or six men, while the *Laca Adzilon* has sometimes a crew of fifteen to twenty.

The trade is mostly barter. I think their knowledge of the precious metals as coin only dates from their acquaintance with Europeans. The money made use of is the *French* and *Spanish* dollar, and in order to obtain smaller coin they cut the dollar into several pieces each having a proportional value to the whole.

They will eat all kinds of animal food, but their principal diet consists of a large dish of boiled rice, accompanied by a bowl of boiled fowl or fish and another containing the liquor in which it has been boiled. Their principal drink is water but after every meal they partake of a small bowl of *Ranow Pangow*, which is hot water poured upon grains of rice which have been previously parched or burnt, and tastes much like toast and water. In the season they eat maize either boiled or roasted on the embers. They are very partial to spirituous and vinous liquors but only manufacture one kind from the juice of the sugar cane fermented with embrevade leaves which is called *Bes*, it does not intoxicate unless taken in large quantities. They use tobacco but neither smoke nor chew it. Their manner of using it is as follows:—The tobacco is ground into snuff mixed with wood ashes in equal parts and then rubbed on to the teeth by the finger, it is retained between the gum and lip for a certain time and then discharged. Of this they are very fond, indeed are never without it. Their cooking is very rude and simple and consists in boiling, broiling and roasting on the embers. They make use of earthen-ware pots and carry fresh water in bamboos when they can obtain them; they are partial to crockeryware, bowls, cups, plates and iron cooking pots.

The dress of the male consists of a piece of cloth, either European or native manufacture, secured round the loins, which descends a little below the knee and another piece thrown scarf-wise over the shoulder. Head and feet generally bare, except the former which is sometimes covered with a scullcap or straw hat. The women wear a short boddice called a *canzou* which fits tight to the person

and covers from the neck to the waist as also the arms down to the wrist, and a large cloth called a Scimboo which is secured round the waist and comes down to the ankles. Both sexes are very fond of bright coloured European goods and sometimes show great taste in selecting them. The dress is very becoming.

The women always have the head uncovered and have their hair curiously plaited all over the head, which has a singular appearance. The men have theirs braided also, sometimes into innumerable small plaits, which make them look like a human body having a black mop for a head piece. They are constantly washing their bodies, but are not so particularly clean about their clothing.

They live in huts which are small and always have a partition which divides it into two rooms. They are well built and occasionally very neat. The walls are formed of wood or rather a long kind of reed called falaf. I do not know the European name for it. The roof is thatched with leaves of the same plant. They have no floor but spread mats on the ground inside the house, sleep on raised bed places on mats, and use a pillow stuffed with blossom of a shrub which when newly gathered is odoriferous.

Chastity is unknown amongst them and they have I believe no ceremony of marriage. They live together as man and wife as long as either party feel inclined, but should they disagree can separate without its being thought any disgrace; they are not very careful of their children but always feed them well to judge from their appearance. Great respect is paid to the parents and their most minute orders are punctually obeyed. As for Government, they are under perhaps the rule of the most tyrannical government in the world, that of the Hovas. Under the French of course they live happily.

DESCRIPTION OF MALAKKA AND OUR ESTABLISHMENT THERE.

By FRANCOIS VALENTYN,

Lately Minister of the Gospel in Amboyna, Banda, &c.

[Valentyn's great work on the East Indies was published in five thick folio volumes at Dordrecht and Amsterdam in the year 1726. The details they contain respecting the more eastern islands are the fullest that have ever been published, and the work continues to the present day to be the sole authority on matters connected with the Moluccas. The mass of information collected in these five volumes would be calculated to excite surprise as the labour of a single individual were it not that in those days an author was satisfied with producing one great work, which thus became the labour of a life. In the present number we present the reader with a translation of the first chapter of his account of Malacca, having only had occasion to abridge the list of names of the subordinate officials, which occupies much space, and cannot possess at the present time the interest that may have attached to it at the time of publication.]

CHAPTER I.

Malacca.—Description of the City.—The Fortress.—Its favorable position for commerce.—Comparative scarcity of provisions.—Wild Beasts.—The inhabitants, more especially the Malays.—Their behaviour and disposition.—Dress of the females.—Their superiority.—Commodities to be obtained. The Factories dependent on Malacca.—Perah.—Kedah.—Oudjong Salang.—Indragiri.—Pulo Dinding.—List of Governors.

As the City of Malakka and its dependencies is one of the most important of our Indian possessions, and was obtained for us by the good swords of our countrymen, both the interests and the credit of the nation demand a full description; and in order to effect this with some degree of regularity, the city and the dependent factories will be first described, after which the more immediate affairs of the establishment will be entered upon.

The city of Malakka is situated on the main-land of the Malay coast, in lat. 2° 20' N. and long. 122° 20' directly to the eastward of the eastern part of the island of Sumatra, distant about 30 miles. The country in which it is situated was called by Ptolemy and the Ancients Terra or Regio Aurifera, or the gold-bearing country, and Aurea Chersonesus or the Golden Peninsula, the latter name being conferred on account of its being joined to the countries of Tana-sery (Tenasserim) and Siam by a narrow neck of land. It is the southernmost country of the continent of India, and is separated from the island of Sumatra by a fine strait, which is known by the name of the Strait of Malakka, and sometimes by that of the Strait of Singapoera (commonly called Sincapoera) after a very ancient town on its shores. This strait has to be penetrated many miles before the important city of Malakka is reached. It lies on the shores of a bay, and is erected partly on a

hill which rises in its centre, and partly on level ground which is very marshy and unsound on the land side.

The town is 1800 paces or about a mile in circumference, and the sea-face is defended by a high wall 600 paces in length. There is also a fine stone wall along the banks of the river to the N. W., and to the N. E. is a stone bulwark, called St. Domingo. A wall called Tappa runs along the water side to the fort St. Jago, and there are several small fortresses with two more bulwarks on the S. E. side, which contribute much to the strength of the place. We do not give their names, as they do not occur to us at this moment. In the upper part of the town lies the monastery of St. Paulo; and those of the Minnebroeders (foster-brothers) and of Madre de Dios are erected on neighbouring hills, beyond which the land is everywhere low as on the sea coast, where the slope is so gradual that the mud bank which fronts the shore is dry at low water to the distance of two musket shots, and so soft and muddy that great difficulty is experienced in landing. The territory of Malakka is about 120 miles in length, and from 39 to 40 in breadth.

Opposite to the town lie two small islands, Ilha das Naos (Ship-Island) which can be reached by a musket shot from the shore, and Ilha das Pedras, where the stone employed in constructing the houses is obtained, but this is rather out of musket shot. Within these islands the Carracks and Galleons of the Portuguese used to lie in from 4 to 5 fathoms water.*

On the northwest side of the town there is a wall, a gate, and a small fortress: a river also enters the sea here, the water of which is fresh at low water and salt at high water. It is full 40 paces wide, and the stream is usually very strong. It is called the Crysorant. There is another river on the east side of the town.

The land on the opposite side of the river is of average height with that of the town, to which it is joined by a wooden bridge;—but that on the southeast side is very marshy, and is generally flooded after rain, except a narrow slip along the beach, which is somewhat higher. There are several handsome and spacious streets in the town, but unpaved; and many fine stone houses, the greater part of which are built after the Portuguese fashion, very high. They are arranged in the form of a crescent. There is a respectable fortress, of great strength, with good walls and bulwarks, and well provided with cannon, which, with a good garrison, would stand a hard push. Within the fort there are many strong stone houses and regular streets, all bearing tokens of the old Portuguese times; and the tower, which stands on the hill, has still a respectable appearance, although it is in a state of great dilapidation.

This fortress, which occupies the hill in the centre of the town, is about the size of Delfshaven, and has also two gates, with part

* There is scarcely half this depth at present.--ED.

of the town on a hill, and the outer side washed by the sea. It is at present the residence of the Governor, the public establishment, and of the garrison, which is tolerably strong. Two hundred years ago it was a mere fishing village and now it is a handsome city.

In former times the fort contained 11 or 12,000 inhabitants, but now there are not more than 2 or 300, partly Dutch and partly Portuguese and Malays, but the latter reside in mere attap huts in the remote corners of the fort. Beyond it there are also many handsome houses and tidy plantations of cocoanut and other trees, which are occupied chiefly by Malays.

This is a city remarkably well situated for trade, the Straits having been long frequented by shipping, especially from Bengal, Coromandel, Surat, Persia, Ceylon, Java, Sumatra, Siam, Tonkin, Tsjina (China) and many other parts; so that the gross revenue in the year 1669, consisting of import duty at 10 per cent, export duty at 3 per cent, with certain local taxes, amounted to 74,959, 18, 0, *florins*. In that single year, besides the Danish, Portuguese and Moorish shipping there arrived 116 Javanese vessels. This proved uncommonly serviceable to our ships passing through the Straits from Japan to Bengal, Coromandel, Surat and Persia, and also to vessels coming from those places and bound to Batavia.

The neighbourhood is not very productive in provisions, except fish and some fruit, so that everything besides has to be brought from other places. The country for productiveness will not bear comparison with the coast (Coromandel) Bengal, Ceylon, &c.

People are not safe here from wild beasts when out in the forest. The Heer Van Naarsen, (a friend who himself related to me the occurrence) was once accidentally ran against by a tiger and on several other occasions he encountered this animal, when his horse always became unmanageable. There are also many elephants and other beasts. This gentleman also related to me that he once saw a tiger spring upon a deer that had taken to the water to escape, but the deer got away, and the tiger was in the mean time pulled down by an alligator.

The E. I. Company maintains here a Governor, who has the controul of all their officers and affairs. He is assisted by an Upper Merchant as second in rank, a fiscal, a paymaster, and a similar staff of officers to those described in the account of Amboyna, who perform the same duties and receive the same pay;—with this difference, that here there are several Superintendents of detached factories, and also an especial Shahbandaar, or Collector of Customs. From among these officers (as at Amboyna) a Council of Policy is formed, who have the controul of the entire territory; and also another which administers the law and controuls ecclesiastical affairs.

The Malayens are also called *Orang di Bawah Angin*, or Leeward people, and sometimes also Easterlings or Eastern people

and in like manner the natives of the countries to the west, more especially the Arabians, go by the name of *Orang Atas Angin* that is Windward people, and also Westerlings;—not that these names are confined exclusively to the Malayens and Arabians, but they are the most famous, the cleverest and the most polished of those nations which bear them.

The Malayens are considered the most ingenious, the most crafty and the most civil people of the entire East.

Whether they are so or not we will examine presently, when we come to enquire into their origin and the circumstances connected with their early history.

Their complexion is yellow, and they are much fairer than any other Indians; they are also much more friendly and polite, and generally so bland of speech, that no other people can compare with them.

Their language, *Bahasa Malayu*, that is, the Malayan language, is not only used on this coast, but is the general language of inter-communication between different nations throughout the Indies, and in all the Eastern lands, as are French and Latin in Europe, and the *Lingua Franca* in Italy and the Levant;—so that people acquainted with this language are never at a loss for a medium of communication even as far as Persia on the one side, and the Philippines where it is much used, and generally understood, on the other. People in the East are considered to be very ill educated who do not understand this language, besides which the Malays themselves endeavour to improve it by studying Arabic and Persian; indeed some among them acquire a knowledge of Sanscrit, the mother tongue of most Eastern languages, with the same object in view.

This language is nowhere spoken so clearly and purely as here, although there is a great difference between that used by the Court, and the dialect spoken by the common people, as many Arabic words have been introduced into the first, which the upper classes delight in using for the purpose of showing their superior learning. This language is so high (*hoogdravend*) and so different from that in common use, because every nation that speaks Malayan introduces words of its own peculiar dialect. The high language, which is spoken by the chiefs, courtiers, and priests, is the language of learning. It is in itself uncommonly sweet, smooth, and attractive and at the same time exceedingly expressive. Many works written in this language, to which we have previously alluded, and a multitude of poetical pieces in which old legends are related, afford clear proof of this.

The clothing of the men consists of a pair of breeches, a wide blue, red, or green surcoat, like a loose frock, and a turban placed wreath-wise on the head.

They are usually of a cheerful disposition, but are very suscep-

tible of offence, and have always the hand ready, so that it is necessary to be cautious in your intercourse with them.

I do not know any people in India more crafty than them and the Macassars, so that they are not always to be trusted.

The dress of the women closely resembles that of other Indian women, especially the Javanese, consisting of a long petticoat which reaches to the feet, and is fastened round the body above the breast, leaving the shoulders naked.

The hair of the head is bound up in a knot, but some wear it in a different fashion, similar to that adopted by the Mistices.

These women also have usually a more elevated spirit than the generality of Indians, whom they also greatly surpass in beauty and wit.

The other inhabitants are Portuguese, who are well known, or other Indians who have been already described as Chinese, Guzerattes, Bengalis, Coast-Moors, Achinese and others.

The commodities produced here are these:—

Calambak, Agel-wood, and Camphor, in the kingdom of Pahang.
Tin.
Gold,
Pepper,

Pedra de Porco (*Query* Bezoar stones?) Elephants (tusks.)

The imported Goods consist of:—

All sorts of cloths, more especially Petas Malayu, or Malay cloths.

Surat Cloths,
Bengal Ditto
Guinea cloths (coarse blue Calico)
Salampories,
Bafta Brotsja,
Bethilis,
Coast Chintz,
Opium,
Red Woollens,
Copper,
Rupees,
Reals of eight, (Spanish Dollars?)

The charges of the garrison and other expenses run very high, sometimes as much as 200,000 guilders (2 tonnen gouds) the reason of which is that the clear income during the year is often much less than the outlay.

In the year 1664, and during several previous years the expenses were much higher, and it was thought proper to reduce the strength of the garrison and bring the expenses within the sum mentioned, 200,000 guilders. Subsequently it was deemed proper further to reduce the expenditure by 40,000 guilders. Orders were given by their Excellencies in 1669 to reduce the extent of the fortifications.

and a certain Ensign (Vaandrig) was established there from the 17th of January of that year, and entrusted with the duties of engineer.

There are several detached Factories under Malakka, some of which are on the same Coast, and others on the E. Coast of Sumatra, the Superintendents of which are appointed by the Governor and Council.

These are Perah, Keidah, Oedjong Salang and Andragiri.

The first named, Peirah, is situated on the Malay Coast, and is subject to the King of Acheen. The establishment, which is under the controul of an Onder-Koopman, is maintained by the E. Maatschappy solely for the trade in tin, which is obtained for ready money or piece goods at the rate of 50 Rix-dollars the Bahar, but the people are very foul and murderous, and they made no scruple in 1651 of killing all our people. In subsequent years their Excellencies frequently had occasion to order the Governor and Council to leave the place alone until a good time arrived for avenging this detestable act;—which was afterwards taken in hand, with a result, of which we shall speak more fully presently.

The second Out-Factory is Queda or Keidah, also on this coast, and about directly opposite to Acheen, which is also ruled by an Onder-Koopman. Its object is to carry on trade in tin, gold, and elephants with the King, but he plagued us so much at times that on several occasions we were obliged to abandon the factory for a time.

The third factory is Oedjong Salang, where there is also an Onder-Koopman, and tin and elephants are obtained in exchange for cloths and opium, but the trade is of small importance. There is an island in the vicinity which is governed by a King.*

We have also a Factory at Andragiri, a kingdom on the east coast of Sumatra, to the west of Malakka, conducted by an Under-Koopman or Book-holder, and several subordinates who collect pepper, gold, and whatever comes to hand, for the E. Maatschappy, in exchange for piece goods and ready money.

Commercial Agents have been sent occasionally to Ligor and Tannassery, (Tenasserim), places under Siam, to purchase tin, and also to Bangkoelo (Bencoolen) before the English came there, to obtain gold maas (goude maasen) and Pedra de Porcos, but the latter trade has now been abandoned. At Ligor, however, we have still an Under-Koopman as Factory chief

The island of Dinding is also a dependency of Malacca and post-holders have been stationed there from time to time.†

* Oedjong Salang does not appear in modern Charts. According to the old Dutch drafts it lies at the south extreme of the Kedah territory, near the mouth of what must be the Karian river, the southern boundary of Province Wellesley.--ED.

† A very graphic account of the Dutch establishment at Dinding in 1688, by the celebrated Dampier, has been given in the 3rd volume of this Journal, p. 450 *et seq.* The island has been ceded to the E. I. Company by the King of Perak.--ED

The matters connected with the succession of governors and other public servants here, at least as far as I can unravel them, will be learned from the following list.

List of Governors of Malakka.

Johan Van Twist, Governor and Extraordinary Councillor of India....	.. from 1641 to 1642
Johan Van Vliet, Do. Do....	1642-1646
Arnold de Vlaming Van Outshoorn....	1646-1662
Johan Van Rebeek, Commander and Resident.....	1662-1665
Balthasar Bort, Do. Do.....	1665-1679
Jacob Jorrisoon Pits, Governor..	1679-1680
Cornelis Van Quaalberg, Do.....	1680-1684
Nicolaas Schagen, Governor and Extraordinary Councillor of India....	1684-1686
Dirk Komans, Commander..	1686-1686
Thomas Slicher, Governor and Extraordinary Councillor.....	1686-1691
Gelmer Vosburg, Governor....	1692-1697
Govert Van Hoor, Do....	1697-1700
Bernard Phoosen, Do....	1700-1704
Johan Groolenhuis, Commander	..
Karel Bolner, Governor	1704-1707
Pieter Rooselaar Do	1707-1709
Willem Six, Do.....	1709-1711
Willem Moerman, Do....	1711-1717
Herman Van Suchtelen.....	1717

Superintendents of Peirah (Established in 1655.)

Isaak Ryken.....	.. from 1655 to 1656
Pieter Buytzen....	.. 1656-1656
Cornelis Van Gunst.....	.. ..

Factory abandoned 1656 re-established 1659.

Johan Massis.....	1659-1660
Abraham Schats..	1660-1660
Adrian Lucassoon.....	1660-1661

Superintendents of Ligor.

Balthasar Bort.....	.. 1656 to 1656
Johannes Zacharias....	1656-1657
Michiel Curre.....	1657-1660
Johan Massis.....	1661
Nicolaas Muller....	1667 to 1669

Superintendants of Oedjong Salang.

Cornelis Van Gunst..	1656 to 1658
Jacob Jorrison Pits....	1658-1660
(Abandoned in 1660.)	

Superintendants of Keidah or Quedah.

Pieter Buytzen....	1654-1656
Arend Classon Dray.. . . .	1656-1656
(Abandoned in 1657 re-occupied 1660.)	
Jacob Kerkhoven....	1660-1662
Henrik Pelgrom.. . . .	1710
Pieter du Quesne.....	1711

THE
JOURNAL
OF
THE INDIAN ARCHIPELAGO
AND
EASTERN ASIA.

ON CORAL REEFS AS THE CAUSE OF BLAKAM MATI FEVER,
AND OF THE FEVERS IN VARIOUS PARTS OF THE EAST.

By ROBERT LITTLE, Esq.—*Surgeon.*

PART IV.

CHAPTER I.

SUMATRA.

THIS, our next field of observation, is situated betwixt the latitudes of $5^{\circ} 45'$ N. and $5^{\circ} 55'$ S. and betwixt the longitudes $95^{\circ} 10'$ E. and $105^{\circ} 40'$ E. The equator nearly divides it in two, while a line drawn in its extreme length will make an angle with the meridian of about 36° . This direction being a little W. of N. W. by N. gives it a length of 925 geographical miles. Its average breadth appears to be about 2 degrees, its extreme breadth seldom reaches more than 3. Lying as it does to the south of Eastern Asia its shores are washed by the Indian Ocean, Straits of Malacca, China, and Java Seas. From the two latter seas it is separated by the thousand islands which line its coasts, and the Malay Peninsula, which in its turn is protected by Sumatra from the Indian Ocean. Its northern coast is only partially sheltered by islands, and off the west coast, lies a range of islands distant one to two degrees

which would be insufficient protection, without the coral reefs which more closely hug its shore, preventing the heavy surf from washing away the soil, not naturally adapted like the rock girt shores of our native land for warding off the sea's incessant efforts towards their annihilation. Through the length of the island runs a belt of high land commencing at Acheen head, and ending in the Straits of Sunda. This high land in various places reaches an elevation of many thousand feet, while many peaks almost raise themselves into the regions of eternal snow, such as Gunong Singalung and Gunong Berapi, which are not much under 14,000 feet. In the vicinity of these high mountains we have all varieties of climate, from the luxurious heat and moisture of a tropical, that quickly advances into early maturity all animal and vegetable beings, to the invigorating and refreshing coolness of the temperate zone that braces the frame and fits it for the attainment and enjoyment of the highest mental and physical pleasures. But only in the interior of this beautiful island do we find this great variation in temperature, as to the east and west of the mountain range, in the plains, whose breadth ranges from 70 to 100 miles in some parts, and in length that of the island, we have the usual tropical temperature of countries contiguous to the Equator, where the thermometer seldom falls below 75 or rises about 86. It is to these plains and their sea coasts that our attention will be now particularly directed.

These coasts may be described as four in number, the *North* stretching from Diamond Point to King's Point, the *West* lying betwixt the last point and Flat Point, the *South* from that again to First Point nearly opposite to Lucepara island, and the *East* Coast from the latter to Diamond Point from whence we started.

The North Coast, stretching for nearly 154 to 160 miles betwixt Diamond and King's Point with an inclination W. $\frac{3}{4}$ N. "is low in some places close to the sea, but the country inland is all very high, with some remarkable mountains."*

This description of Horsburgh's evidently taken from a distance, is not exactly in accordance with that of many traders on that coast, who describe it as a fine bold coast with patches here and there of low land, but with deep water to the land's edge, so that almost every where on the coast a ship can anchor at $\frac{1}{2}$ a cable's length from the shore, except from Tanjong Rajah to Kwalla Batu where the anchorage is from $\frac{3}{4}$ of a mile to $1\frac{1}{2}$ from the shore, owing to sand-banks—(Captain McKellar.) There is little alluvial deposit, as the coast is washed by the heavy surf of the Indian ocean and the rivers are small, and soon disembogue themselves into the sea, while bars of sand considerably lessen the depth of water at their mouths. Marshes are to be met with only to a limited extent. Marsden says, "Acheen is esteemed com-

* Horsburgh.

paratively healthy, being more free from woods and swamps than most other portions of the island, and the fevers and dysenteries these are supposed to give occasion to, are there said to be uncommon." Free of swamps and comparatively of wood, this coast is also free of coral reefs, which nowhere show themselves above water.

The West Coast in its general features is very different; it stretches from King's Point to Flat Point, and is about 294 leagues in length, the equator dividing it nearly mid-way betwixt these points. This coast is exposed to the full force of the Indian Ocean, though that is somewhat broken by a belt of islands, lying parallel, at distances ranging from 30 to 90 miles from the mainland. Outside of these we have what is called the outer channel; betwixt these islands and smaller ones, which line the coast, is the middle channel distant from the shore 4 to 10 leagues. This is a dangerous passage for vessels, "from the currents, faint and baffling winds, no anchorage and in some parts towards the main, dangerous coral shoals from one to two and three fathoms below the surface, with deep water at the edge of soundings." The inner channel close to the coast betwixt it and the islands, has in many places moderate depths for anchoring, and occasionally is preferable to the middle one, with which it is connected in many places.

"It has been said that all the shoals on this coast are white coral rocks, discernible from the mast-head a mile off in the day time even when they are three or four fathoms under water; on the contrary many of the shoals consist of black rocks." (Horsburgh) Generally speaking, this extended coast is lined by coral reefs, through which channels have been made by fresh water and other influences, while all the smaller islands contiguous are more or less surrounded by them, and many of the bays are formed by these shoals which exert more or less influence on most of the Settlements. The plain betwixt the sea, and the belt of high land, is of moderate breadth, seldom exceeding 25 miles and generally an elevation commences at five or six miles from the coast. The rivers are numerous and small, compared to those on the East coast, marshes, mud flats, and alluvial plains are not numerous, but in their place we have sloping hills and fertile vallies, through which meander the rivers that serve as pathways into the interior.

The South Coast extends betwixt Flat point, and First point opposite to Lucepara Island. Horsburgh describes this coast as "low land, clothed with trees with several rivers falling into the sea and shoal banks projecting 2 or 3 leagues from the land, these banks consist of fine grey sand, or of coarse sand and gravel."

The East Coast which stretches from First Point in a north westerly direction to Diamond Point possesses many points of similarity with the South Coast. Its shores are washed by the seas of Banca, Mandel, and Malacca Straits. Along this coast we have

an extensive and broad alluvial deposit through which flow the principal rivers of Sumatra, as the Palembang, Indragiri, Jambi, Siak, Racken and Dellie rivers. In conveying a general idea of this extensive coast the description that represents a part equally represents the whole. Anderson describes the East Coast of Sumatra between Diamond Point and Siak, which forms the principal part of the western side of the Straits of Malacca, as with few exceptions very shallow, the numerous small rivers which are continually rolling down immense quantities of sand, and the extreme velocity of some of them, cause the formation of innumerable sand banks and shoals along the whole extent of the coast, within several miles of which vessels of a small size only, can approach. The whole of the coast, with some inconsiderable exceptions, says the same author, is low and swampy, the mangrove trees growing to the water's edge. To the southward of Batu Bara the breadth of the level country may be stated at from 50 to 100 miles and from thence to Siak the average width may be 140 miles.

Horsburgh says the Sumatra coast from Diamond Point to the Arrow islands is low and woody, fronting the sea, and the soundings consist of mud or mud and sand.

Lieutenant Rose describes the coast of the kingdom of Jambi as "low and swampy, covered with moderately high trees; it is lined to the distance of $3\frac{1}{2}$ to 5 miles by a sand flat rather dangerous of approach, towards the mouth of the river the country is low and swampy." Reviewing the appearances of these coasts, we find that they may be classed under three General Heads. 1st. The *north coast* may be described as presenting a free sea frontage, alike destitute of coral reefs and mud flats, and possessing but few marshes. 2nd. The *west coast* presents but limited alluvial deposits and few marshes or swamps but is characterised by its lining of coral reefs. 3rd. The *south and east coasts* have no coral reefs, but possess extensive alluvial plains, permeated by many and large rivers, possessed of extensive swamps, and skirted by mud and sand flats, covered more or less with mangrove jungle.

So different as these coasts are in their appearance, as different are they in their salubrity. The north coast may be described as salubrious, the east and south as less so, and the west coast as decidedly insalubrious. This difference in the healthiness of the respective climates, cannot depend upon any thermometrical or barometrical conditions as the difference in temperature and atmospheric pressure is not greater between these coasts than between parts of each.

THE NORTH OR PEDIR COAST.

The almost complete immunity from fever which the north coast enjoys is quite in accordance with the principles laid down in this essay, and is owing to the absence of coral reefs, and fresh water swamps, to any extent. Mr C. Scott in answer to my

queries says "I have been several voyages to the Pedir (north), and west coasts, but was seldom detained beyond a few days at any of the ports of the first, but longer in many of the latter, and that was as far back as 1817 and 18 while my last was in 1831 to the west coast. I have therefore but an imperfect knowledge of the points on which you require information, but such as I have will be given you. Having visited most of the ports in the Pedir Coast while engaged in the betelnut trade I have a tolerable acquaintance with this coast; it is mostly bold and steep, with deep anchorage close in shore unless is some of the eastern ports, as Teluk Samoy, Passier and Cartoy, where there is shallow water, while mud and sand banks extend a considerable distance from the shore; the coast west of these ports is almost clear of coral reefs, rocks and banks, unless where the latter exist at the mouths of the rivers, and which extend only a little distance from the shore. Rocks mostly abound about Point Pedro off the Golden Mount." Mr Cowasjee Shapoorzee, Owner and Master of a trading vessel and very conversant with this coast, in his answer to my queries writes—"I have been acquainted with this Coast of Sumatra upwards of 20 years, and know it thoroughly,—it has very good anchorage of mud and sand, but no coral reefs and few or no swamps on the shore." Many other traders to this coast have given me nearly similar descriptions, the sum of all being that it is a bold, free coast, with anchorage almost at a cable's length off the shore, and equally destitute of swamps and coral reefs. From this I would infer that it was a healthy coast and that inference is in accordance with the opinions of all whom I have consulted. Mr C. Scott says "during my experience I do not recollect of any of the crews of the different vessels in which I have sailed, having had fever" and Mr Cowasjee Shapoorzee says "I have not heard of any visiting these ports, being subject to fever" and Captains W. Scott and Congalton, whose ample experience makes their opinions most valuable, consider the north or Pedir Coast to be a healthy station for the crews of ships and free of Endemic fever. Captain McKellar, while in command of the *Amelia* and *Sophia Fraser*, made four voyages to the Pedir Coast during the years 1845, 46, and 47, loading at the many ports on this coast during the betelnut season, which was betwixt June and November, and never had a case of fever amongst his crew.*

* To the above almost universal opinion I find that there is an exception, and that is in the case of Captain Scott, master and owner of the Brig *William*, who in the month of May 1844 lay about a month opposite Burong and Murdoo; during that time he had 7 hands attacked with fever, the 2d Mate presenting symptoms of remittent, the others of intermittent fever; no lives were lost. The 2d Mate was delirious. Leeches were applied which bled profusely. The crew were much exposed in boating and a cold land wind blew nightly. Even this seeming exception will not prove the existence of Endemic fever, as the Mate's sickness may have been inflammation of the brain from exposure to the sun, which I am inclined to believe was the case, seeing he was so much benefitted by profuse bleeding which would have killed him if affected with true remittent fever, and as for the intermittent

THE WEST COAST.

Directing our attention to the west coast, stretching betwixt Acheen head and Flat point, we find the nature and appearance of the coast changed as well as its salubrity. I have already from Horsburgh, the first authority extant on this subject, shown that this coast is more or less lined by coral reefs. Mr C. Scott describes "the whole coast from Acheen Head downwards to the southward as lined with coral reefs, and rocks, all more or less exposed at low tides, particularly the inner line or range of coral reefs and islands, many of the latter being planted with cocoanut trees, which seem to grow well, though only very little elevated above high tides. Most of the anchorages at the Old ports are shallow and surrounded with coral reefs exposed to the influence of the sun at low tides." Mr Shapoorzee says "the west coast of Sumatra is lined by several islands, coral reefs and rocks, and at some places the anchorage is good." All who are acquainted with this coast well know it is most unhealthy, that few of the ports are exempt from Endemic fever, either of the remittent, or intermitent type; and this insalubrity is not confined to one or two ports, but is shared by all. Mr C. Scott says "in two voyages I made to this coast the different crews had fever and I myself in 1831 had a strong attack of fever passing through its stages." From Mr Scott's description of his fever it seems to have been remittent ending in intermitent fever. My Parsee acquaintance already mentioned, says "those visiting the west coast, seldom escape from fever; of the ports on this coast, Susoo is the most unhealthy in the south west monsoon. I cannot say on what this unhealthiness depends but there are more marshes at this than any other port. I once was attacked with fever at Susoo in the month of August and it was a year and a half before I got rid of it." But if marshes abound, so do coral reefs, as I have just seen a gentleman who a few years ago visited it and saw extensive reefs close to the shore and exposed at low water. This is further confirmed by Captain Finlayson master of the brig Reliance, who in 1825 and subsequent years visited this and other Pepper ports. While here the vessel anchored in $3\frac{1}{2}$ fathoms with a coral reef exposed on the starboard bow from which at low water he remembers the strong smell peculiar to coral emanating. While at Acheen he was attacked with fever caught at Susoo and was cured in a singular way. The owner and supercargo, a native, seeing him labouring under symptoms of fever, persuaded him to bury himself up to the neck in pepper just collected, and to prevent him sinking over head and ears, a board was placed below his chin. He then had administered to him a glass of strong brandy and water, when he speedily fell into a profuse perspiration, and profound

fever of the lascar crew, that proves but little, as we know they will, when hard worked and exposed to chills, contract a mild type of fever, upon the slightest occasions. And still further, the vessel had lately left the Nicobars where Endemic fever exists.

sleep, from which he wakened next morning at 9 o'clock, free from fever, and only suffering from languor and lassitude, which left him on bathing. From the fever of this port being prevalent during the south west monsoon, and during the month of August, when the winds are blowing from the Indian ocean on the land, if exposed coral reefs can generate fever I may ascribe the Endemic to this cause more than to the marshes which doubtless contribute their share of the poisonous malaria. Another pepper port called Sinkel is placed on the mouth of a river of some size, while the roadstead, according to Horsburgh, is inside a coral reef to the S. E. of the river and about a mile distant. This port is well known for its baneful climate, which has compelled the Dutch who had a factory there, to abandon it. The type of fever is remittent.

Barroos, Tappanooly and Natal, other Pepper ports, have many coral reefs in their harbours (according to Horsburgh) especially the last, which also is pre-eminent for its unhealthiness.

Padang, another pepper port of some consequence on this coast, has its houses built on the banks of a river where only small craft can enter, vessels of any size always anchoring under the lee of Pulo Pisang. This island is situated about 2 miles S. by W. of Padang head, being only about $\frac{1}{2}$ a mile in diameter and having a coral bank stretching about 40 yards from the shore with deep water all round. In 1848 in Singapore Roads I attended the crew of the schooner Isa, for fever, and learned the following particulars from the Captain.

The schooner Isa lay at Padang, west coast of Sumatra, for 20 days, the first 14 in the river, the rest in the roads. The wind during this time blew from the sea, chiefly from the westward. While in the roadstead the schooner lay under the lee of an island surrounded by coral reefs, that are much exposed at strong tides but only partially at ordinary. During the six days they lay there notice was taken of a bad stench evidently proceeding from the coral. About the time of leaving, and when at sea, one of the crew after another took sick until 10 out of 12 were attacked. They took from this port 23 natives as passengers not one of whom was attacked with fever. The only other vessel in the roads, was a Dutch Frigate which on account of the anchorage lay about a mile from the schooner. The schooner lay close to the island. The inhabitants of Padang consider the town healthy, it is distant from the island about 4 miles. There is no coral at the mouth of the river.

From this statement we can draw certain inferences, viz. as the crew were not attacked till they had left Padang, we must suppose that it was not during the stay in the river that the crew imbibed the seeds of malaria—but rather while she lay for 6 days under the lee of the island, as that period corresponds to the usual time that the seeds of fever lie dormant in the system before breaking out. Moreover the healthy state of the town, and the fact of the

passengers escaping fever who had just come from the town, tend to fix the latter part of the vessel's sojourn as the period when the poison was imbibed. The distance from the shore, and the proximity to the island points out this rather than that as the source of malaria, while the direction of the wind from the sea, the S. W. monsoon blowing at the time, strengthens this supposition, and the fact of coral, and exposed coral too, being present lining the shore of the island, which island is rocky and without marshes, proves almost to demonstration that such was the source of malaria which affected the crew of the schooner. Nor must we overlook the important, though in appearance, trifling fact of the frigate's crew being healthy, she having been obliged to anchor at some distance from the island on account of the shallow anchorage, thus escaping from the influence of the coral lining the island. If the cause of fever had been produced on the mainland, we would have found that the crew while lying in the river would have been attacked, that the passengers and not the crew would have been the sufferers, that the town would not have been healthy, and that the unhealthy season for the shipping would have been in the N. E. monsoon when the wind blows from the land. But none of these conditions were found to be the case.

BENCOOLEN.

Bencoolen was the principal Settlement of the English on the west coast of Sumatra while they had their establishment there and has long enjoyed a very doubtful character for salubrity. In 1685, our nation in order to retain a share in the pepper trade, came to the resolution of forming a Settlement, and pitched upon a locality on the coast called Silebar for that purpose. This is about 12 to 15 miles south of Fort Marlborough, and as usual with our infant colonies was found to be the most unhealthy spot they could have selected. This spot was soon deserted, and the settlement for convenience of boating &c, was made at the mouth of the Bencoolen river, situated at the bottom of the bay to the N. E. of the point on which Fort Marlborough is now built, and about 1 mile and a half distant. This locality was also found to be unhealthy and that was attributed to the fresh water swamps lining the river. In 1714 Fort Marlborough was commenced, it and the town being built on Ojong Carrang, a point of land, having a level appearance and moderately elevated, with the country to the N. E. high and hilly. The usual anchorage in the roads is midway betwixt Rat Island and the town, but there is another called the inner road, inside the north and south breakers, with $4\frac{1}{2}$ fathoms water. Nearly abreast the Fort there is a shoal patch of coral in $3\frac{1}{2}$ fathoms. Rat Island, less than a $\frac{1}{2}$ of a mile in diameter, is distant from the shore about 6 miles and is surrounded by an extensive coral reef partly dry at low water. As the result of many enquiries as to the anchorage, which I have made of the

residents and visitors, the conclusion I have arrived at is, that the ground anchorage is coral, that the shore at ebb tide is composed of coral and sand, but the living coral is not exposed to any great extent, nothing equal to many of the other ports in the same coast. The information which I have gleaned from many sources as to the climate of this port differs so much that I cannot arrive at any positive determination. One gentleman who held an official situation connected with the harbour, says "that for the 4 to 5 years he was resident there, he does not remember any European dying of fever." Another writes, "I have resided there for 25 years and during that time to the best of my belief near 100 persons died from remittent or intermittent fevers." A third in answer to my queries says "I resided in Bencoolen from 1819 to 1825, during which time I was only once attacked with what is called Sumatra fever. Fevers do not generally attack Europeans and natives residing in the town of Batavia." A Parsee gentleman at present residing in Singapore, who was for many years a resident in Bencoolen, considers it a healthy place, much more so than any other port on the west coast. In my opinion Bencoolen has got a worse character for insalubrity than it deserves; unhealthy it has long been reputed to be, even by Sir Stamford Raffles; but that reputation may in part be derived from being often mixed up in our associations with the other unhealthy Pepper ports of the west coast where pyrexial diseases abound. It was also the place where Sir Stamford Raffles may be said to have landed in his fall from the governorship of Java, a vast height for a poor clerk to have raised himself to in 6 short years, but high as it was, it was not too high for his ambition, backed as that was by talents of the first order, which enabled him to overcome all difficulties, to wield with ease the power of government by which he restrained the powerful oppressor, and raised the debased slave to his station as a man. He fell in rank, but not in the regard of his friends, nor in the good opinion of the public, and stepping as he did from the delegated sovereignty of the finest Island in Eastern Asia, to the governorship of a miserable factory which he describes himself as the "worst selection that could have been made for a settlement" being "completely shut out of doors, the soil being comparatively with other Malay countries inferior, the population scanty, neighbourhood or passing trade it has none, and farther wants a harbour, to say nothing of its long reputed unhealthiness," it cannot be wondered at that he should not look with a favourable eye on this "his land of banishment" where some of his children and not a few of his friends, and many that were not, met with early deaths. But many of these deaths would have occurred in other lands, whose reputation for healthiness has never been questioned, if the same pampered officials had plunged into a career of gluttonous dissipation restrained only by sickness and cut short by death.

As a digest of much word of mouth information and written answers to my queries, I must conclude that Bencoolen is not at all times an unhealthy settlement, that the inhabitants of the town are more subject to fever than the residents in the country, that the most unhealthy time of the year is during the South E. monsoon when the wind blows from the sea, that is from April to October,* while, during the months the wind blows from the land there is little or no fever. The greater unhealthiness of the town cannot be attributed to marshes, as there are few or none, while the limited extent of exposed coral reef in the harbour will account for the few Epidemics and the gentle Endemics to which this port has been and is subject. To the southward of Fort Marlborough about 12 to 15 miles is an excellent harbour called Pooloo Bay, the Old Silebar of the first settlers; as this bay is surrounded by marshes and more or less encircled by coral reefs, it is doubtful to which cause to ascribe the fever Endemic here. In conclusion, I cannot avoid giving the substance of a communication I lately received from Captain Connew of the brig Gallant. While in command of the ship Benares of Bombay he visited the west coast of Sumatra during the years 1841-42 and 43, in three different voyages, and during each voyage was on the coast for 4 to 6 months. He commenced trading in the northern ports, visiting each in succession to Bencoolen, including Soosoo, Sinkel, Baroos, Tappanoolly, Natal, Padang and Bencoolen. During the first voyage, while the ship lay under the lee of Rat Island off Bencoolen, Mrs Connew was first attacked with fever, afterwards Captain Connew and as the vessel was under orders for Padang they were carried there labouring under fever. He thinks that the coral off Rat Island may have been the cause as he often remarked the disagreeable stench that proceeded from it. At the same time during his stay there was much rain. During this cruise the greater part of his crew was attacked with fever of whom three died. In the 2 subsequent voyages he and Mrs Connew escaped a second attack of fever, as well as well those of his crew who had been attacked on former voyages, confirming the prevalent opinion that Sumatra fever attacks one only once. To shipping, the ports of Sinkel, Padang and Bencoolen are, he considers, most unhealthy. At Padang he lay under the lee of Pulo Pisang which he describes as surrounded by a coral reef, and covered with low brushwood but no marshes. He finally winds up his communication by stating, that he "considers the existence of coral on the west coast of Sumatra, as the principal cause of the severe fever of that coast."†

* Called by the natives "Angin Batavia" or "Angin Java." "The influence of the south wind in Java so welcome to us, and considered so healthy, is here reckoned very noxious."

† It will not be inappropriate here, and quite sufficient in a note to advert to the observations on my Essay by J. C. Ross Esq., premising that if he in any future paper furnishes me with more pertinent remarks, I will devote as much

Before finishing the description of this coast, I cannot but glance at the climate in the interior, which seems to be all that man could wish for. Leaving the sea shore on either the West or East side, after alluvial plains limited in extent on the West Coast, and

as a Chapter particularly to him. The pith of his rather diffuse observations is that the island he inhabits is healthy and its climate salubrious, and as there is coral on it and round it, in all the states intermediate between living and dead, from which if malaria can be generated it ought, but as the island is healthy judging from the number of his children and children's children and that of his dependants, so must my theory "that exposed coral reefs generate malaria" be erroneous. This paper of Captain Ross must have been written previous to my last paper published in February 1850, for therein he would have seen the reason, and a sufficient reason too, that the *Cocos* should be healthy, although surrounded by a margin of decaying coral generating malaria, and that reason is the perfect ventilation which these islands enjoy from the free currents of air that mingle, disperse and dissipate, the malaria as it is formed, unchecked by hill or jungle. As to Mr Ross's observations on Batavia, and the fever Endemic there, it is not at all necessary to overturn my theory, for him to suppose a fact to exist and then make an inference from it in his favour. If he had stuck to what he avers to have seen 37 years ago, that Edam had on its surface a stinking pond or lagoon, then we could have supposed that its endemic fever many have proceeded from that cause, but when to strengthen his case, he supposes the island to be a volcanic vent-hole, and through it pictures the mephetic exhalations carrying sickness, and death to all around; then must a plain matter of fact man like myself, leave him to his imaginings. The pond on Edam has, I am given to understand, been filled up, and yet the island has been, and is unhealthy, nor can the other reason of the worthy Patriarch of the *Cocos*, that the land wind blowing off the shore of the Bay, accumulates over the island of Edam, account for it, for never knew I yet, that a current accumulates in mass or accelerates in velocity, by passing from a narrow, through a broad channel, by increasing rather than diminishing its limits, or that the modifications generated on the shores of Batavia roads, would be increased in the intensity of their effect by being diluted and dispersed in the wide regions of space. The statement that Captain Ross makes of having lain under the lee of Hoorn for 8 days without his crew contracting fever, is a fact in my favor not in his, as the anchorage is rocky and free from exposed coral reefs; and the other supposed fact of the men in the lighters bringing coral for the construction of the jetties, not being more sickly than the crews of fishing boats, cannot tell one way or another, unless we knew the health of the fishermen; but let me give Captain Ross a fact, not yet published, but too well attested, *that since the construction from Coral of the Public Works at Onrust, the mortality amongst the workmen and Government officials has been awful.*

Turning to Bencoolen, the fact of the exposed coral, round the point on which Mr Baskett's house was built, giving forth an unendurable stench, is valuable, from most satisfactorily accounting for the fever which attacked the inmates of the contiguous houses, the number of which cases were not few nor far between, on the authority of those who have lived there for some years. That Mr Baskett should have lived in that feverish locality for 20 years, without being attacked with fever, and then at the age of 60 or 70, die a "good old man," is nothing unusual, not more so than the career of my reviewer who has for more than 40 years lived in a tropical climate, during which he has dared more perils by land and sea, than many of his contemporaries, and will I trust live many years yet, ere his time honored head be lowered in the grave; but, from this alone, would I be entitled to draw the inference, that a life in India, exposed often and long to the influence of insalubrious localities, is conducive to longevity? rather, is he not an exception? can he point out, or suppose, that 10 in the hundred are yet alive, who like him started from their homes, half a century ago.

I may as well point to the case, given by Captain Owen in his Narrative, and draw a like inference, of the Portuguese Governor of the town of Ibo, a most unhealthy spot, who laughed at the fever, and ridiculed the notion of the place being unhealthy, though he had outlived more than three generations of officials, because he had been a Resident there for 37 years and escaped the fever, and if Mr Baskett had remained at Bencoolen the like fate might befallen him with this Governor, who a few weeks after was numbered with the dead from the same disease that he had mocked at the existence of

extended on the East, we come to a country where beauty and grandeur are blended together, sublime from its towering mountains, and endless forests, wherein is no step nor tread of man, rich in the fertility of its vallies, its rivers teeming with life and gold, with an atmosphere clear and bracing and temperature varying according to the elevation, from a little above the freezing point to the pleasant coolness of 60° and ascending to the luxurious heat of the tropical zone. We have not much certain information regarding the salubrity of these regions, but as Sir Stamford Raffles and others made many excursions for weeks together without any disaster from sickness, we must conclude that the interior is superior in the healthiness of its climate to the Coast. In 1818 Sir Stamford Raffles with a party made an excursion into the interior of Sumatra to Pasumah, all were healthy till their return to the Coast, when Dr. Arnold was taken ill at Cawoon and died. At this place as far as Bencoolen, numerous coral banks line the shore, from which the sufferer received the miasm to which he was predisposed by the fatiguing nature of the journey and the solar heat. On another occasion Sir Stamford Raffles found it necessary to send a mission with a detachment of Sepoys to Palembang. By crossing the hills they reached their journey's end in 11 days with "not a sick man, or a single want the whole way." A more modern authority, Mr. Willer, Assistant Resident at Majokerto while he acknowledges that parts of the country of the Battas is healthy, though the climate is "rough" from the variations of temperature during the day, finds as might be expected in the *great vallies surrounded by hills*, with little or no variation of temperature, in which are fertile sawas or paddy fields, that the climate is such that he cannot call it salubrious. "Fever prevails very frequently and very generally."

The *South Coast* is described by Horsburgh as low land clothed with trees—several rivers disembogue themselves, while shoal banks project two or three leagues from the land; these banks consist of fine grey sand, or gravel with coarse sand. I am sorry I have no information to impart regarding the climate of this coast from the want of all authorities on the subject, while the paucity of inhabitants and settlements, limits the extent of their trade to the coasts adjoining by which I am prevented making personal enquiries.

But what will Captain Ross say to the following facts furnished me by persons whose evidence is impartial, as they have neither a theory to uphold nor one to overturn. Mr Cursetjee Muncherjee, a Parsee Merchant from Bombay, visited Bencoolen in 1821, and lived for some months in Mr Baskett's house during his absence. He had not been there above 15 or 20 days ere he was attacked by fever, under which he laboured for 25 days, during which he was attended by the Government Surgeon. Mr J. Burrowes, at present a resident in Singapore, lived for many years in Bencoolen. His house was situated about 100 yards from Mr Baskett's on the other side of the road, with no intervening hill, and fully exposed to the influence of the sea. While residing in this house 2 children died and he himself and many of his servants were attacked with fever, and having heard of my theory can ascribe the fever to nothing else than the adjacent coral reef. He further

But from the similiarity in the nature of the coast, its appearances, and atmospherical conditions to the East Coast, I presume it cannot differ much from it, and it, we will find obnoxious to intermittents, rather than remittents, and decidedly not so unhealthy as the West Coast.

The East Coast, I have included betwixt that part of Sumatra, opposite to Lucepara Island at the commencement of the Straits of Banca and Diamond Point. The length of this coast roughly reckoned may be 700 miles, with the equator bisecting it $\frac{1}{3}$ from its northern extremity. Its shores are washed by the seas of the Straits of Banca, Mandol, and Malacca, while inland there is a vast alluvial plain, of an average breadth of 70 miles, stretching the whole length of the island. This line of coast includes the great Malay countries of Palembang, Jambie, Siak and a hundred other petty ones. Horsburgh describes this part of the "Coast in the Straits of Banca, as consisting of low marshy land inundated at high water, with only the trees visible, and ought not to be approached on account of a shoal mud bank."

Major Court, in his description of Palembang, considers it as holding the first rank amongst the native states of Sumatra. It occupies that portion of the island to the southward of the equator included between the latitudes of 2° and $4^{\circ} 30'$, bounded on the N. E. by the Straits of Banca, south by the Lampong country, W. and S. W. by the ranges of mountains which separate this state from Bencoolen and its dependencies and on the N. W. by country of Jambie. A vast accumulation of water empties itself by several mouths into the Straits of Banca, by one of them, the Soensang, the town of Palembang can be reached by large vessels. This town is only accessible on the north and eastern sides by the medium of the rivers just mentioned, the whole Coast of Sumatra along the Straits of Banca presenting nothing to the eye but a low flat of interminable swamps and jungles, very few

recollects that Captain Allen and his Lady, while residing in Captain Baskett's were attacked with fever, as well as a Captain Marquiseur and many others, whose names at the moment escaped him, but to the best of his recollection Captain J. C. Ross, the writer of the observations was one, or at all events he lived in a contiguous house exposed to the sea and suffered dreadfully from fever. Is it possible Captain Ross has forgot his own sufferings?

That Rat Island may be healthy, I may not doubt and I think it is, as it resembles the Cocos in possessing perfect ventilation; but I can fancy that the crews of vessels anchored under its lee may contract fever from its exposed coral bank, as happened to Captain and Mrs Connew. In conclusion I beg to coincide with my learned observer that living fish may be perfectly harmless and inoffensive, nor do they emit "pestiferous effluvia," but deprive them of life and place them in situations favorable for decomposition and the transmission of malaria, then like fresh dead coral will they become a nuisance, and a plague, and affect those adjacent. Nor is it a fact, though cited by the worthy Captain, that fishing villages are rarely more unhealthy than neighbouring ones, for in the Eastern Archipelago we find that wherever a village is inland it is more healthy than one adjacent to it on the sea shore, and that even in Europe Epidemics, as Cholera, Small Pox &c. have been always more severe amongst villages on the Sea coast than those at a distance from them.

villages intervene betwixt the town and the coast, and the banks of the river present the same forbidding aspect as the sea coast.

Lieutenant Rose describes the country of Jambie as bounded on the N.E. by the straits lying to the west of the Lingin Archipelago, on the N. W. by Indragiri, on the S. E. by Palembang. Its sea coast is low and swampy, covered evenly with moderately high trees, and lined to the distance of $\frac{3}{4}$ to 5 miles by a sandy flat rather dangerous of approach. From the kingdom of Jambie to Diamond Point the coast presents the same uninviting appearance, large rivers pouring their contents into the sea, through many mouths, generally interrupted by bars of sand or mud. Sand and mud banks lining the coast for some miles, low flats and swamps, producing mangroves, rattans and the sago palm, with other water seeking trees, infested by wild animals, among which the alligators and vast Pythons are the most numerous, but little cultivation and but few inhabitants, until after several days journey inland from the flat swamps higher grounds are reached, and the gloomy dense jungles of the coast are exchanged for paddy fields, gardens of fruit trees, and populous villages. In Horsburgh we find the coast described from Diamond Point to opposit the Arrow Islands as low and woody fronting the sea, and the soundings consisting of mud, or sand and mud, and from this last point to Siak river nearly opposite to Malacca the coast is mostly all low land covered with trees and intersected with several rivers, while shoal banks stretch out a great way from the shore in several places. Another writer Mr Anderson describes "the whole of the coast from Diamond Point to Siak river, with some inconsiderable exceptions, as low and swampy the mangrove trees growing to the water edge. To the northward of Batu Baru the breadth of the level country may be stated at from 50 to 100 miles, and from thence to Siak the average width may be 140 miles."

As regards the climate of this coast we find that the town of Palembang is healthy and the country round about, but at the entrance of the river the inhabitants of the village of Soesang are troubled with intermittents, as might be expected from the nature of the surrounding country. Even crews of vessels stationed at the mouths of the river are more or less affected by the malaria, from the immense swamps of the flat land. Mr Drysdale who has lately returned from this locality describes the Coast of Sumatra from Lucepara northward, and Tanjong Boon as "low swampy land, at some places nearly dry with generally a mud bank some two or three miles distant from the shore. At the mouths of the Palembang river the coast may be said to be composed of islets surrounded by the different outlets of the river. The tide rises about 10 feet and as far up the river as Palembang 45 miles inland although the water is perfectly sweet almost to the bar. Palembang although very hot, the thermometer frequently rising to 98° in the shade is said by the Dutch inhabitants to be healthy. I was

informed by the Surgeon of the Boreas frigate that the Straits of Banca, particularly about Muntok and Palembang, is reckoned a very unhealthy cruising ground for the Dutch ships of war, their crews being subject to intermittent fever, generated by the low stagnant marshes of Sumatra."

According to Lieutenant Rose, the atmosphere of Jambie is by no means healthy towards the mouth of the river, where the country is low and swampy.

Campar, a Settlement which carries on a considerable trade with Singapore, situated 2 days journey from the coast, is a collection of houses built on rackets or rafts, in fact a floating village with swamps surrounding it on all sides. From what the native traders have affirmed to intermittent fever is very common, not remittent.

Mr John Anderson in 1822 undertook a commercial mission to the different chiefs on the East coast from Diamond Point to Siak. He had a small brig in which were 60 souls in all. This trip extended for three months and was attended with much fatigue and exposure to all; yet there was only one death from fever. "About the same time two sepoys who accompanied me up the river, with the lascars and my servants, were all attacked with fever, and my clerk and myself felt feverish. 2 days after we had a further addition to the sick list making in all 17 sick with fever." The vessel then proceeded to Malacca and on the voyage and during her stay there they all recovered. Mr Anderson thus accounts for this attack, but the reader will remark he confounds predisposing with exciting causes. "At Batu Baru the mouth of the river being left dry at each ebb of the tide becomes a bed of mud exhaling death and disease. It was from this fatal source that my people contracted the fever with which they were seized, to the excessive indulgence in fruit, particularly plantains fever may be ascribed, but probably it was chiefly produced by sleeping in the heat of the day after eating a hearty breakfast. The bad quality of the water may be assigned as another cause." Consistent with the theory inculcated in the first part of this essay the first presumed cause cannot be considered as one, seeing that all spots under tidal influence in these latitudes are healthy, and the other reasons, —consumption of plantains, hearty meals, bad water and sleeping in the sun are more likely to produce other complaints, than fever of a specific type. The most probable cause in my opinion is the fresh water swamps formed by the river, which opinion, is confirmed by the fact that all the party who proceeded in the boat inland with Mr Anderson, were the victims of fever, and they were not exposed to the exhalations from the mudbanks under tidal influence.

Assahan and Batu Baru are considered the most unhealthy localities on this coast, at both of which places dews and fogs are particularly heavy. From these causes and the quantity of marshy

ground, and stagnant water near the sea, fever is generated. The fever is mentioned by Mr Anderson to be fever and ague and its existence cannot be wondered at, when we consider the miles upon miles of fresh water marshes, that must exhale very pestilential vapours. To the northward, we have the port of Delhi, between which and Pinang there is a great trade. This port has the reputation of being healthy. Captain Smith while in command of the brig Rung Mullah in 1838 visited this port in the month of July and lay in the river for 15 days; he and his crew during that period were perfectly healthy. From his experience of the east coast he does not consider it as very unhealthy at all events much less so than the west and the fever that is contracted is "fever and ague." The east coast is like the south, characterised by its low and swampy nature, and its want of coral reefs, for scarce a patch is to be seen from Flat Point on the south coast to Diamond Point on the north. As the result of this description of coast we have fever more or less endemic but not virulent compared to the West Coast. The type of fever in the East coast is intermittent while on the opposite it is remittent.

As a general summary, Sumatra presents *three* descriptions of coasts, *three* descriptions of climate, and *three* descriptions of produce. The North coast bold, free and rocky. The West coast lined with coral reefs, and the South and East coasts possessed of flats, marshes, and large rivers. In the north coast the climate is salubrious, fever is not prevalent and when it is met with, is of a mild intermittent type. On the West coast or that lined by coral, fever is very prevalent, very deadly, and of the remittent type. In the third description i. e. the south and east coasts, when compared with the west, fever is less prevalent, less deadly, and of the intermittent character.

In the North coast we have as the staple produce, betelnut. In the West coast, pepper and in the south and East coasts sago, rattans and dragons blood, productions peculiar to grounds low and swampy.

ON THE CULTURE OF COTTON IN THE STRAITS SETTLEMENTS.

THE difficulties that the Home manufacturers are labouring under with regard to the supply of raw cotton, have been so often brought before the public in the course of the last twelve months, that the subject must have become familiar to all who take an interest in the statistics of Great Britain. The *Economist*, a London Journal conducted by an eminent statistic, also gives the following details as to the state and prospects of the cotton market in its issue of the 6th of December last; the article of which it forms a portion being apparently intended as an appeal to the colonies to exert themselves in producing a more satisfactory state of affairs:—

“ 1. That our supply of cotton from miscellaneous quarters (excluding the United States) has for many years been decidedly, though irregularly, decreasing.

“ 2. That our supply of cotton from all quarters (including the United States) available for home consumption, has of late years been falling off at the rate of 1000 bales a week, while our consumption has been increasing during the same period at the rate of 3600 bales a week.

“ 3. That the United States is the only country where the growth of cotton is on the increase—and that there, even, the increase does not on an average exceed three per cent. or 80,000 bales annually, which is barely sufficient to supply the increasing demand for its own consumption, and for the continent of Europe.

“ 4. That no stimulus of price can materially augment this annual increase, as the planters always grow as much cotton as the negro population can pick.

“ 5. That consequently, if the cotton manufacture of Great Britain is to increase at all—on its present footing—it can only be enabled to do so by applying a great stimulus to the growth of cotton in other countries adapted for the culture.”

This appeal has been amply responded to by the West Indian colonists, who have applied themselves to the culture of cotton with a vigour that bids fair soon to convert their abandoned sugar estates into cotton plantations; and more recently the Legislative Council of New South Wales has voted prizes for the best samples of this material, with the view of extending its culture in the southern colonies. The object of this essay is to enquire as to whether the circumstances of the Straits Settlements will enable them to enter into competition for the prize which the increasing demand and enhanced value of cotton-wool hold forth to successful cultivators.

The elements necessary to the cultivation of cotton on a large scale are extent of territory; soil; climate; labour; intelligent super-

intendence ; and capital. The extent of territory adapted for the better description of cotton, which according to experience does not arrive at perfection if grown at a distance from the sea coast, is limited to the islands of Singapore and Pinang, with about 40 miles of coast line in the Malacca territory, and 25 miles in Province Wellesly, but should a greater extent be required, no difficulty would be experienced in obtaining the entire western coast of the Malay Peninsula, the present possessors of which would readily turn it over to government for annual pensions.

Soil. There can be no difficulty on this point, as the cotton plant is of all others the least fastidious with regard to soil. Mr. G. R. Porter, in his "Tropical Agriculturist" states as follows :—

"Cotton may be cultivated on soils of such very moderate fertility, that it would often be difficult to procure from them any other kind of harvest.

"The cotton plant succeeds better in light and sandy soils, than in such as are heavy and clayey ;— in those which are only moderately moist, than in such as are either arid or greatly impregnated with humidity. Its roots do not require any great depth of vegetable mould, but they put forth a great number of slender and delicate fibres, whence it is requisite for the soil to be light and well broken by tillage. It is however necessary, that the principal tap-root should be able to penetrate to a certain depth. Should the growth of this root be stopped near to the surface by a bed of rock, or by very tenacious earth, it would expend its vigour in putting forth lateral fibres ; the plant would not have a proper hold of the soil, neither would it be equally hardy, nor would its produce be abundant. If the soil be too rich, the shrub will push forth vigorously and produce a great quantity of flowers, but these will soon fall, and the hopes of the planter will be disappointed. The same misfortune occurs when the ground is surcharged with moisture, besides which, the seeds first, and at a later stage the roots, are liable to rot in the ground, so that in one case the plant never appears, and in the other it quickly perishes. A variety of cotton is indeed cultivated with success in places where the soil is naturally very moist, as in Guiana ; but there the evil is remedied by the adoption of an efficient system of drainage." (p. p. 8-9.)

Climate. This is the only point on which any doubts are likely to be raised with regard to the successful culture of cotton in the Straits. Singapore, the only Settlement in which it seems to have been attempted, can scarcely be said to have a decided dry season, and the failure of the experiments made by the late Sir Jose d'Almeida about 10 years ago was attributed to this cause. The seeds introduced were those of the Bourbon cotton, with a long and fine staple, and the Pernambuco variety, with a long, but harsh and wooly staple, both of which were perennials. The plantation was formed at Tanjong

Cattong, near the beach, on a sandy soil enriched with decomposed vegetable matter, and evidently well suited to the plant, for it thrived vigorously, put forth numerous blossoms, and produced cotton which was highly approved of by judges of the article both in Bengal and Great Britain. But there was no regular crop. The pods opened throughout the year, and if allowed to remain in that state on the tree until a sufficient number had accumulated to repay the labour of picking, the heat of the sun and the moisture combined were calculated to draw the oil from the seed, discolouring the fleece, and consequently deteriorating its value. The trees had, therefore, to be constantly watched, and the amount of labour required to collect the crop rendered the speculation unprofitable. The failure was attributed to peculiarity of climate, but it seems rather to have been owing to peculiarity of the perennial variety of cotton, which is liable to flower in tropical climates at all seasons of the year. This variety has long ceased to be cultivated as a staple product, on this very account. Formerly it appears to have been the only known species, if it can be so called, for the annual variety now cultivated in the United States and elsewhere was originally a perennial. In the West Indies, where the cotton plantations were usually attached to the sugar estates, the wives and children of the negroes were employed in collecting the crop, and as they were unpaid and had no other employment, the inconvenience of the perennial variety was not felt. But the case was different in the United States. There the autumnal frosts nipped the plants, and it was found necessary to cut them down close to the ground towards the end of the year, to preserve them for the next season. It was found, however, that the sprouts or ratoons, as they were called, did not produce so well as the original stems, which induced the American cultivators to collect the seeds of those plants which flowered earlier than the others, and to cultivate them as an annual crop. Their success was such, that although the late pickings were often nipped by [the frost, they at once superseded the cultivators of perennial cotton in the West India islands, who ceased to produce for export. The West India planters have lately recommenced the cultivation, but now with the *annual* variety, and consequently with success.

A similar state of affairs may be witnessed in our immediate neighbourhood. Cotton is cultivated as a perennial in every island of the Archipelago as far to the eastward as New Guinea, but never with a view to a *crop*. The plants are scattered about the gardens of the natives, and are visited daily by members of the family to collect any pods that may have opened. It is only in Java, Bali, and Palembang (the latter was colonized from Java) that cotton is planted as an *annual*, and singularly enough these are the only countries that produce it in sufficient quantities to form an article of export, or of large domestic consumption.

The introduction of the annual variety in Java was also the result of necessity. The inhabitants of the plains had no means of growing cotton except on their rice lands, which are flooded during a portion of the year. The seeds are sown in June, after the rice crop has been gathered, and in November the lands are flooded and the plants destroyed, so that only four clear months are allowed for the collection of the crop from the time the seed is sown. Yet it is believed that more cotton is thus grown in Java than in all the other islands of the Archipelago put together.

When we find this useful plant adapting itself so readily to circumstances, are we to suppose that the Straits Settlements, so highly favoured by nature, are denied participation in the fleecy harvest. It would be treason to think so until the annual variety has been tried and failed. The dry season which ended with last month (October) has surely been sufficiently decided for the collection of a cotton crop, and we have the authority of the Editor of this Journal (Vol. II p. 112) to prove that this is in the ordinary course of events at Singapore. I submit that if seeds of the four-month-blowing Sea Island or "Black Seed" * cotton are planted in any eligible spot in Singapore during the months of November to February inclusive, there is no peculiarity in the seasons here to prevent a full crop being gathered during the ensuing summer months. Rain may fall occasionally, but only in showers, and not in greater abundance than on the coast of Florida and Alabama during the cropping season. In October the plants must be uprooted, and the land prepared for fresh seed, and now comes the difficulty that has hitherto prevented the introduction of the finer descriptions of cotton in countries within the tropic. The plant is still in full bearing, and it seems utter wantonness to destroy it. But it must be done, or there will be no regular crop during the next season.

In the paragraph from the Economist given in the Appendix (B) it will be seen that the United States furnish our market with more than double the amount supplied by all the rest of the world,

* I am induced to recommend more particularly the introduction of "Sea Island" cotton, as it is the most valuable description produced, and it would be almost as easy to obtain the seeds of that as of any other variety of *annual* cotton. The character of the coast of Singapore and of the western coast of the Malay Peninsula seems also to be admirably adapted for its culture. The extent of territory on which it can be grown in the United States is very limited, and has long been occupied, so that the amount of Sea Island cotton produced has not been on the increase for many years past. Its market value has consequently become very great. The Upland Georgia, a short stapled green-seed cotton, which constitutes the bulk of the produce of the U. States, would seem to be better adapted for inland cultivation. It is grown chiefly on tracts of light sandy soil mixed with vegetable matter called "Pine barrens." I understand that the seed introduced by the E. I. Company for cultivation in Hindoostan was principally of this variety. This is also an annual, indeed perennial cotton has not been cultivated in the U. States for more than fifty years. The seed of the Egyptian cotton, which is also an annual, and is celebrated for strength and fineness of fibre, should not be neglected, as it would be well to try several varieties, and seed could be obtained during the present season.

and that Egypt furnishes more than all our colonies put together. These are the only countries too which produce cotton of sufficient fineness for the more delicate fabrics. Yet cotton is a purely tropical product, where it is indigenous, and that it is an exotic in Egypt and the United States is proved by the plant being unable to withstand the winter. The superiority of their produce over that of all tropical countries, both with regard to quantity and quality, can therefore only be attributed to the cotton being planted as an annual, and I have long felt morally convinced that if planters within the tropics were to adopt from choice, the system which the others have adopted from necessity, and root up their plants at the close of the fine season, the home manufacturers would soon have occasion to cease their appeals for more raw material. The complaints made by the Singapore experimentalists respecting the labour of collecting the crop, are common to all planters of perennial cotton throughout the world.

Labour. Field labourers of the best description can be obtained at the rate of three dollars per month or five pence per day, to any amount that may be required.

Capital. One of the greatest advantages connected with the production of cotton consists in the small amount of capital required. No expensive machinery is necessary as in sugar culture. The *Chungkal* or native hoe is the only implement required for experimental culture, and a very effective *gin* for separating the cotton from the seed can be obtained in New South Wales for twelve dollars. It yields a return, also, during the first year, which would probably more than repay the expenses incurred. Extended operations would of course require an enlarged capital, but the state of the market at home renders it evident that capital would be forthcoming the moment successful cultivation became certain. The first shipment of long stapled cotton to Europe would speedily produce an influx of capital sufficient to extend the culture to any amount that the field would bear.

Superintendance. This is the most important element of successful cotton planting, and a superabundance of all the others would be of little avail if a deficiency existed in this particular. The Anglo-Americans could never have availed themselves as they have done of the necessity for renewing the plants annually, if they had not been able to bring into action a body of intelligent planters, to watch the changing of the seed, year by year, until the staple attained the closest approach to perfection. It is well known also that the efforts of the East India Company to improve the general produce of Hindoostan, carried on through a long series of years, without regard to expense, have been rendered abortive by the absolute impossibility of providing intelligent superintendants for such an immense extent of cotton lands. The model plantations they established under American and European superintendance, produced cotton equal to the best samples of the

southern States of America, but the improvement went no farther. The native cultivators would almost as readily change their religion as adopt a different mode of culture from that followed by their forefathers, and the general crop continues to be the same description of rubbish as before, which scarcely pays the freight to Europe. It remains to be seen whether the Chinese will shew the same readiness in adopting European improvements in this instance that they have evinced in others. But should the culture be successfully introduced here, and the Chinese display their usual spirit of imitation, the improvement would soon spread to Sumatra and Borneo, in fact over the entire Archipelago.

The experiment can now be carried on more favourably than on the former occasion, when the European inhabitants all resided in the town and vicinity, only visiting their country plantations occasionally. Now many reside permanently in the interior, and can therefore give daily attention to the experiment. At Pinang, also, where much land has been cleared for sugar plantations, the cultivation of which has in some instances been abandoned, the proprietors may follow the example of the West Indian planters by converting their abandoned estates into cotton plantations.

In the next number of this journal I propose entering into a few details illustrative of the mode of cultivating the annual variety of the cotton plant.

G. W. E.

APPENDIX.

A.

Extract from Col. Low's Dissertation on the Soil and Agriculture of Pinang and Province Wellesley:—

Cotton has never been extensively cultivated at this settlement. It has, however, been long introduced, and the staple of one of the varieties now cultivated,—but whence obtained cannot be easily ascertained—is of a very superior quality. It thrives luxuriantly on the light as well as the stiff soils, and equally well on the hills, as in the valley. The chief obstacles to the cultivation are, the price of labor, and the sudden vicissitudes of climate from dry to wet—the latter being apt to injure the pod.

Bushes of the above mentioned variety—which has a yellow blossom—have been observed, for the last six years, in almost constant bearing. They begin to bear in six or eight months after planting.

The following calculation was given to me, several years ago, by an intelligent Chinese who intended cultivating cotton, but abandoned the project for one more lucrative.

One hundred orlongs (about 130 acres) will contain 435, 600 bushes, and each bush will yield, annually, 50 buds of cotton, or one tael—which is the lowest averaged rate—being 272 piculs and 25 catties for one year's produce.

The expense of cultivation and cleaning the cotton—about 1,100 drs. after the first cost—will be nearly 2,000 drs. yearly (p. 68.)

Here is a calculation of the expenses and profits of cotton culture, lately made in South Wales.

“A plantation is considered capable of producing from 1000 to 1500 lbs. of merchantable cotton for each able-bodied man employed. The following statement of the produce of an English acre in cotton appeared lately in one of the Sydney journals:—

Produce of an English acre, after the separation of the cotton seed by the gin, 800 lbs. at 9d. £30 0 0

EXPENSES.

Preparing the land for seed £2 0 0

Planting and attending to weeding the crop 2 10 0

Rent of land 2 0 0

Gathering the Crop.

Forty women and children, at 2s per day.. 4 0 0

Carriage to gin 1 10 0

Bagging for bales, and other expenses 3 0 0

————— £15 0 0

—————
£15 0 0

B.

(From the Economist of the 6th December, 1849.)

We have seen that of the American cotton crop, our annual supply during the last five years has nearly reached 1,120,000 bales; and that—the yearly increase of the crop being balanced by the yearly increasing demand for the United States and for the Continent—there is little probability of our ever getting more than this on an average. Let us suppose that a due advance in price raises the production of Brazil to what it had attained in 1830, and that of India nearly to what it was in 1841, and that Egypt and our own colonies will again send us some appreciable and increasing imports.

	Bales per annum.
United States	say 1,200,000
Brazil	200,000
India	250,000
Egypt	50,000
Our colonies	50,000
	—————
	1,750,000

This would allow us a supply of 33,500 bales a week—the apparent consumption of this year. For any addition to this we must depend on the increase of the colonial supply, or on that which a still higher range of prices will enable us to wring out of

India or Brazil. The conclusion from the whole clearly is, that in order to secure such a supply of the raw material as is needed to meet our own present consumption, we must be prepared to pay a decidedly higher range of prices than has of late years obtained ; that in fact the average prices for the last five years have proved quite inadequate, in spite of large crops in America to draw to this country sufficient cotton to enable our actual machinery to work full time. Higher prices, therefore, must obtain in future ; nor should spinners and manufacturers wish it otherwise ; for experience has fully shown them that no circumstances can cause them so great or so certain a loss as an inadequate supply of the raw material ; and higher prices can alone avert this supreme evil.

CEREMONY OBSERVED AT THE COURT OF ACHEEN ON THE
 KING'S GOING TO THE MOSQUE BAIT AL RHAMAN ¹ IN
 THE MONTH OF RAAMLAN. ²

Translated from the Majellis Ache, with explanatory notes.

When His Majesty goes to the mosque, in the month of Raamlan, these are the customs observed;

The Panghulu Bilal³ gives notice to Sri Udahana Gambaran, the Kajerang Gandrang,⁴ to beat the Gandrang⁵ Rayah; and the keepers of the Saleh⁶ approach the Royal presence to ask permission to carry out the Salver with the Saleh, and the Salvors with the other necessary paraphernalia; which permission having been granted, they quickly bring out these articles, and the arms to be used in the procession, from the places in which they are kept. Those who are to assist at the procession, arrange themselves in front of the Balei Pedang.⁷

The Khali⁸ Malik-ul-Adil⁹ now appears in the presence, and informs the king that everything is prepared for him to go to the mosque. His majesty proceeds to pray on the great fast day in the mosque Bait-al-Rhaman. When he appears, the Gandrang Rayah is again sounded, and all the people salute him. The keepers of the Saleh and the king's paraphernalia, arrange themselves in procession, according to their ranks and are followed by the soldiers,

1. Bait-al-Rhaman, Arabic, House of Mercy.

2. Raamlan, the 9th month of the year, is observed as a solemn fast by Mahomedans, in commemoration of the first revelation having been received by the Prophet: in it good Musulmauns are commanded to fast every day, during the month, from day-light in the morning, till dusk in the evening. The fast extends to eating, drinking, smoking, and every unnecessary indulgence, or pleasure of a worldly nature, even to the swallowing of the spittle.

3. Bilal, a Mezzuin or caller to prayers. The name of Mahomet's first Mezzuin was Bilal, and the Malayan Mahomedans retain his name for the office. His duty is to summon the people to prayers, at the regular times every day. In addition to extraordinary prayers, there are five regular services appointed every day. 1st Magrib or sunset, 2nd Eshé when it has become quite dark, 3rd Soobh day break, 4th Doorh noon, and 5th Asr or midway between noon and night fall. At these several times the Mezzuin or Bilal, ascends to the gallery of the chief Minar (steeple) of the mosque, and chants the Adaan or call to prayer. The following is at sample of an Adaan. "God is most great" (repeated four times) "I testify tha there is no deity but God" (twice) "I testify that Mahomet is God's Apostle" (twice) "come to prayer" (twice) "come to security" (twice) "God is most great" (twice.) "There is no Deity but God."

4. Kajerang Gandrang, an officer of the Court, whose duties appear to be equivalent to those of the Lord Chamberlain, and Lord Marshal of a European Court.

5. Gandrang, a great drum, used in mosques.

6. Saleh, a mat used for prayers.

7. Balei Pedang, hall of swords, guard room.

8. Khali an officer whose duties are of a mixed nature; partly civil, as judge of Civil Law; and partly ecclesiastical, as confirming and dissolving marriages, overlooking the affairs of the subordinate clergy, &c.

9. Malik-ul-adil, a title, means a just Lord, and possessor of justice.

Fakirs,¹⁰ Sherifs,¹¹ Imams,¹² Khatibs, Hafiz,¹³ Karis,¹⁴ Makris,¹⁵ and Enaams¹⁶ who magnify God,¹⁷ repeating his holy name, the whole way to the mosque.

When the procession has arrived at the Pintu Kerbang,¹⁸ the people file off to the right, facing the gate; and on the arrival of the King at the gate, they salute him, and when he arrives at the Dewal,¹⁹ the Gandrang Rayah is shifted to the opposite side. The Khali, and Fakih²⁰ Sri Maharajah Fakih, follow him, and stand at the porch door. Those who carry the Saleh, and the paraphernalia, now go up to the Astaka,²¹ holding up the hilt of the Pedang Sallih,²² in the king's presence. His majesty follows, distributing alms on the way, and being saluted by the Hulubalangs,²³ and

10. Fakirs, religious mendicants.

11. Sherifs, descendants of the blood of the Prophets.

12. Imaams, Priests Parochial. In Malayan countries wherever 44 families live together in a district, they are entitled to have the Kutbeh read in their mosque, and they constitute a Mukim or Parish. To each Mukim 4 officers ecclesiastical are attached, to serve the Church; and over them, with a jurisdiction or diocese, including many mukims, is the Khali. Pinang has two Khalis, and about 40 mukims. The 4 parochial officers are, 1st the Imaam, who teaches the theoretical part of the faith, and attends to the duties of ablution, and burial. 2nd the Khatib or preacher, who recites the Khutbeh in the mosque on Fridays, performs the "Nikah," or marriage service &c. 3rd the Bilal or mezzuin, who calls the people to prayers, and at funerals recites the "Talkhin," or advice to the deceased, and 4th the Panghulu Mukim, an inferior officer of the Imaam, to whom is entrusted the care of the mosque, he also assists at funerals, gives notice to the parishioners about attendance at the mosque, and reports to the Imaam on the misconduct of any of those who do not attend to their religious duties &c. These officers are all elected by the elders, with the advice and assistance of the Khali and in addition to small fees, on the occasion of births, deaths, and marriages, are entitled to a gantang (about a gallon,) of rice yearly, from each individual attending the mosque. They are not invested with any religious character, or immunities, and may be discharged by the elders, when they return to their original state among the people; and others are chosen in their place. The choice is directed solely by personal fitness for the duties of the office, and many if not all of them are traders, or otherwise employed in secular affairs. The Khali confirms marriages, grants divorces, and settles difficult points in divinity, he is also ex-officio guardian to all the orphans in his district, and assists the elders in the management of the *Wakuf* property, that is, property bequeathed for charitable uses. In explanation of the term Talkhin used above, Mahomedans suppose that the soul remains with the body during the first night of burial, and two angels are commissioned from heaven to come down, and make enquiry, as to the performance of the duties of the deceased, while on earth; on their decision it depends, whether the soul, on being released from the body, is to wait for the great day of judgement in the place appointed for good souls, or is to be sent to the prison in which wicked souls wait their doom. The Talkhin, therefore, is advice given to the deceased as to the answer he ought to return to the question put by these angels.

13. Hafiz, one who has the whole Koran by heart.

14. Kharris, readers of the Koran.

15. Makris, readers.

16. Imaams, followers in religious processions.

17. In these processions, there are certain persons who constantly call upon God magnifying his name.

18. Pintu Kerbang, large outside gate.

19. Dewal, Porch.

20. Fakih, Doctor of Mohamedan Law.

21. Astaka, a place in the campong where the people congregate, previous to entering the mosque.

22. Pedang Saleh, good or just sword, i. e. sword of justice.

23. Hulubalang, this word was formerly applied only to champions, or great

other of the procession holding their hands above their heads.

His majesty now enters the mosque, all the Hulubalangs and others, moving in order to the left, as they follow him. And as soon as the Khali-malik-ul-adil, who is in attendance on purpose, see that the king has entered, he salutes him thus.—“Salaam aleekum wa rhamat Alla—Daulut makuta.” (May the blessing and prosperity of God be upon you. Hail oh King.) The King returns this salutation by saying slowly, “Salaam Khali!” (Peace be with thee oh Khali,) and then enters the place prepared for him; and the Bentaras²⁴ having placed the Saleh and other necessary articles withdraw. The music now ceases, and all those in the procession arrange themselves in the mosque, according to their respective ranks.

The King now repeats the Tuhait-al-mesjid,²⁵ twice, and performs the Rakait²⁶ twice, on which the Imaam repeats the

warriors, but now apparently every person about the court, whose profession is arms, is entitled to be called Hulubalang.

24. Bentara, Herald or Arrangers of ceremonial.

25. Tuhait-al-mesjid, mosque prayer, a form of prayer.

26. Rakait, an inclination of the head, or more properly a genuflection; a series of prayers or a service is accompanied by a Rakait, and one speaks of the length of his service or prayers, not by the time occupied, but by the number of Rakaits made. Mr Lane in his interesting and instructive work on the Modern Egyptians, gives the following account of the forms used in certain prayers, which will explain the term more fully:—

“The worshipper standing with his face towards Ckib’leh (that is, towards Mek’keh), and his feet not quite close together, says, inaudibly, that he has purposed to recite the prayers of so many Rek’ahs (soonéh or furd) the morning prayers (or the noon &c.) of the present day (or night); and then raising his open hands on each side of his face and touching the lobes of his ears with the ends of his thumbs, he says “God is most great!” (Alla’hoo Akbar) this ejaculation is called the tekbeer, he then proceeds to recite the prayers of the prescribed number of Rek’ahs.

“Still standing and placing his hands before him, a little below his girdle, the left within the right, he recites (with eyes directed towards the spot where his head will touch the ground in prostration) the Fát’hkäh, or opening chapter of the Ckooor-a’n and after it three or more other verses or one of the short chapters of the Ckooor-a’n; very commonly the 112th chapter; but without repeating the Bismillah (in the name of God &c.) before the second recitation. He then says “God is most great” and makes at the same time an inclination of his head and body, placing his hands upon his knees and separating his fingers a little. In this posture he says “(I assert) the absolute glory of my Lord the great” (three times) adding “may God hear him who praiseth him. Our Lord, Praise be unto thee!” Then, raising his head and body he repeats “God is most great.” He next drops gently on his knees and saying again “God is most great” places his hands also upon the ground, a little below his knees, and puts his nose and forehead to the ground, (the former first) between his two hands. During this prostration he says “(I assert) the absolute glory of my Lord the most high!” (three times), he raises his head and body (but his knees remain upon the ground), sinks backwards upon his heels, and places his hands upon his thighs, saying at the same time “God is most great!” and this he repeats as he bends his head a second time to the ground. During this second prostration he repeats the same words as in the first, and in raising his head again he utters the Tekbeer, as before. Thus are completed the prayers of our rek’ah.” In explanation of the terms soonéh and furd used in the above extract—prayers furd” are those appointed (by divine revelation) in the Koran, and prayers soonéh” are those appointed by the Prophet without any declaration of

Takbir²⁷ thus, Alla-akber, Alla-akber, Allaakber, Lailahailul ihu, illahu akber, Allahuakber, Wullilahilhamdu" (God is great, God is great, God is great, there is no God but God, God is great, God is great, praise be to God), then the Bilal mounts the Mimber,²⁸ and calls out "Alsatu Jamaah Rahima-kam-ulla." (May the blessing and compassion of God be with all the congregation.) This he repeats three times.

The Imaam now performs the service for the festival, with two rakaits, and one salaam, the first rakait with seven Takbers, and the second with five. The Takber is as follows "Subhana Alla, ul-hemdullilah, Alla, illaha, illulaha, alluha akber." (Praise be to God, ever to be praised, there is no other God but God, and God is great.) When this prayer is finished, this Bilal brings the Khatib's²⁹ staff, with which the Khatib mounts the pulpit, and read the Khutbah.³⁰ After the Khutbah is finished he descends, and the Imaam goes round to salute³¹ and give his benediction to each individual member of the congregation.

ed by the Bujangs,³² now leave the mosque, and arrange them- a divine origin. In noticing Mr Lane's work, which explains and lays open in the most intimate and familiar manner the domestic life and manners of an oriental nation, in such plain and clear language as to render it a valuable boon to all who are desirous of becoming acquainted with the subject, it may be permitted to complain of the orthography he has thought proper to use, in rendering Arabic words, in Roman character; for instance the word "Koran" is written Ckoor-a'n." Now it is difficult to discover any reason for altering the spelling of this word, which is almost naturalized in English. Moreover the orthography adopted is even farther from correctness than

that generally received. The word in *original* is قرآن Koran, or Karán, and is almost always used by Mohomedans, with the article ال prefixed thus القرآن Alkrán or Alkárán which gives it the meaning we attach to bible, that is "the book" by pre-eminence, قرآن being derived from قرأ reading aloud or reading well and thence the subject of the reading, a book, and thence with the article ال prefixed, "the Book."

27. Takber, a formula, exalting the name of God, as the one given in the text.

28. Mimber, Pulpit.

29. Khatib's staff, to rest the book on.

30. Khutbah, a sermon, which generally commences with the praise of God, and his Prophet Mahomet, then goes on to exhort the hearers to good works, and a righteous observance of the precepts of the Korán, and finishes with a prayer for the well being of the ruler of the country. There are said to be about 60 in use by Malayan Khatibs, all of them indeed (as all writings on religion are) being in the Arabic language.

The Arabs will not permit the Korán, or any of their religious works, to be translated into the language of the countries in which they propagate their faith, consequently they still retain their high position in the Church, as interpreters of the divine law, and in fact as High priests of Mahomedanism. A very slight perusal of the Koran will point out how admirably it was calculated for the wants and wishes of the nations in which it was adopted, as well spiritually as temporally. The system of ethics taught is such as to command the attention of Eastern nations as it is compounded of the particular moral laws and obligations of several of the most refined of them, and, in addition to this, it contains in itself an almost perfect code of Civil Laws.

31. It is the custom of the Imaam, after prayers, to go round to greet and give his benediction to each individual member of the congregation.

32. Bujang, widows, also unmarried young men and women, in this case probably it is meant for Pages of the Court.

The Hulubalangs having the king's orders, which were delivered at the Astaka, having first taken up their armour, and wait for the king, who soon comes out from the Paksi Rajah,³³ to the Astaka. On his approach, all in presence salute, by raising their hands.

The Band, in front of the Astaka, now commences to play various tunes, and the Bentaras, who carry the Saleh, and the other paraphernalia, as well as the Hulubalangs, again salute the king who now proceeds on his way homewards. The Gandrang Rayah is beaten; the king passes through a lane formed by his soldiers, and others, and the guns, and rantakas³⁴ mounted on elephants, are fired off during the whole journey, making a very awe inspiring noise. When they arrive at the Grang,³⁵ the Band changes the tune, and when at the Meidan³⁶ Kheiali, all the Hulubalangs retiring and forming at the side of the road, salute the king, the Band changing the tune to the Ragam Malegei,³⁷ and when they approach the Pintu Kerbang, they play the tune of "Kambali³⁸ deri mesjid."

Now the Halubalangs alight from their elephants, and after saluting, retire in order to put them into their proper stables. The king proceeds into the fort, Dar-ul-denia³⁹ (abode of the world), and on his arrival at the Haluman,⁴⁰ the Hulubalangs being arranged in order in front of the Bali Pédang, salute him :

If the Koran was translated into the various languages of its professors, innovations and changes might be expected to creep in, in course of time, which would reduce the power and influence, first of the Arabs, and then through them of the Church itself, by division and consequent weakness. Whereas now, after a lapse of twelve centuries, an Arab priest emigrating to any country professing Mahomedanism, is qualified at once to perform the functions of priest and Judge of Law; an advantage enjoyed by no other church. After the discovery of the Pandects at Amalfi in 1130, the Roman Hierarchy exerted all possible influence, to have that code introduced into every country in Christendom, to supersede the Municipal Laws of each, which at that time were gradually being formed; partial success attended their exertions in almost all the continental states, but happily the Common Law of England had already arrived at such a state as to be capable of being opposed to the new code, and the Englishmen of the day were too sturdy to give up their rights on some points of inheritance, in which the civil differed widely from their own Municipal Laws, consequently they failed in introducing it into England. The elucidation of the consequences of this rejection on the subsequent condition of England would form a most interesting chapter in the Constitutional History of England. Mr Hallam touches on it very slightly in his valuable History. It will be evident to every one what an enormous power it would have given to Rome had this law been of universal effect in Europe.

33. Paksi, a summer house, or more properly a pleasure house for enjoying the air and prospect, equivalent to the Dutch term "lust haus," it appears to be rather misplaced in speaking of a mosque.

34. Rantaka, a gun carrying a ball of about half a pound weight.

35. Grang, the name of a place (unknown) in the town of Acheen.

36. Meidan, an open plain or square, Keiali (*Ar.*) fantastic, strange, probably meant for an ornamental plain.

37. Ragam, tune; malegei, palace;—palace tune, perhaps national air.

38. Kambali deri mesjid, returning from the mosque.

39. Dar al Denia, abode of the world, as Acheen itself is styled, "dar al selaam" abode of peace.

40. Haluman, Court yard.

and when he has arrived at the Cheb-ka-indraan,⁴¹ the bearers of the Saleh, and other paraphernalia, salute, holding the chiranas⁴² above their heads, the Band changing to the tune of "Kuda-berlari"⁴³ (horses run.)

On the king's arriving close to the Beiram⁴⁴ Pintang, the Tindals, and others in the Fort, come forth to receive him, scattering yellow rice mixed with gold on the ground.⁴⁵

The Majuts receive, and tend the Royal elephant at the Beiram Pintang, and the king enters the Dewal of the Malegei. The band ceases to play, and a majut brings the orders of the king to the Balei Pedang.⁴⁶

41. Chet Ka Indraan, (name of a place) apparently of Sanscrit derivation—as *Indra* in Sanscrit "the regent of the visible heavens, and of the interior deities," but used by Malayan authors, with a wider signification; as not confined to one person, but extending to a class of supernatural beings, the "Indras." *Chit* is also Sanscrit and means gratification, pleasure, &c., so that the term may be translated, as "the place favoured by or loved by the Indras."

42. Kudah berlari, horses run.

43. Chirana, a salver.

44. Beiram, elephant; pintang, gate; probably the name of a particular gate of the fort.

45. A mode of giving alms which Malayan authors describe *con amore*, when writing of any of their princes, as a piece of flattery pertinent.

46. A polite mode of expression, equivalent to dismissal from the particular service or attendance last in hand.

Pinang, 21st October, 1850.

THE PIRACY AND SLAVE TRADE OF THE INDIAN

ARCHEBELAGO.*

1841. In April reports having been received at Singapore from various native trading vessels, particularly Cochin-chinese, of their having been attacked by pirates when approaching Singapore, a gun-boat was despatched in search of them. She proceeded to the Eastward of Point Romania, and on the 14th April saw a pukat and sampan at anchor inside of a small bay called Telok Pungi. The pirates immediately got under weigh, but finding themselves gained on by the gun-boat, whose fire they returned several times, they stood in for the shore and ran their vessels on the beach keeping up a fire on the gun-boat as she approached them. The pirates, however, after receiving one or two discharges of grape, fled into the jungle and the two boats were taken possession of. They were found to contain blunderbusses, muskets, spears, and other articles, and the pirates were about 25 in number, consisting of 20 Chinese and 5 Malays. The ship Sultana, Captain Page, having been struck by lightning on the 4th January in the China sea, was soon afterwards discovered to be on fire, and the crew and passengers, amongst whom were several females, with much difficulty succeeded in saving themselves in the boats which proceeded to Borneo Proper. Here they were most inhospitably treated by the Sultan, who plundered them of all their property. After enduring much misery a part of them left in a prahu belonging to the Sultan for Singapore, and succeeded in reaching that place after a tedious passage and encountering a number of pirates who were very anxious to take possession of the Europeans. The rest of the party belonging to the Sultana (with the exception of 9 lascars) were brought away from Borneo Proper by the H. C. Steamer Diana, which had been promptly despatched from Singapore, on news being received of their detention by the Sultan. Mr Brooke had also previously sent his schooner Royalist from Sarawak for the same purpose, but the Sultan refused to permit Captain Page and his people to go in her. A large fleet of Lanun prahus this year committed great devastation on the coast of Borneo and the neighbouring islands. They established themselves on the island Serhassan, cutting down the cocoonut and fruit trees, and doing other injury to the inhabitants.

The H. C. Steamer Ariadne, in November was forced to put into Ambong on the coast of Borneo for supplies. While parties from the steamer were on shore cutting wood, several prahus approached them, the crews of which landed and attacked the wooding parties, but the latter taking to their arms succeeded in reaching their boat without loss, after killing three of their assailants. The steamer opened a fire upon the prahus which had increased to 10 or 12 manned by about 30 men each. The steamer

* Continued from p. 628.

then stood in towards the town and took possession of 3 large and nine smaller prahus.

In 1841 the pirates captured the Dutch gun-boat No 6, commanded by a person named Cornelis of known courage, a little to the east of Tjotek (on the eastern coast of Java between Bezuki and Banyuwangie.) The gun-boat engaged the pirates for about two hours and a half, during which time the commander and a number of the crew were killed, and out of 20 men only nine were able to save themselves. The action took place in sight of the schooner of war *Cameleon*, which was becalmed at the time, and could give no assistance. The government schooner *Doris* was also attacked and only escaped with great difficulty.

In the end of this year, by the resolution of the inhabitants adopted twelve years previously, domestic slavery ceased in Malacca, having apparently, though contrary to the English law, been permitted to exist up to that time by a compact between the government and the inhabitants.

1842. The ship *Viscount Melbourne* having been wrecked on the *Luconia* shoal on the 5th January, the crew and passengers left her in the boats steering for the coast of Borneo. On the 10th a Malay prahu approached the boats, the nakoda of which tried to persuade the shipwrecked party to go on shore. This being declined, the prahu went alongside the jolly boat and plundered the crew of every thing they had. The prahu then fired several shots at the launch, wounding one of the European seamen in the head, but did not attempt to board her as she was well supplied with fire arms. In the beginning of April the steamer *Diana* was despatched from Singapore to the eastern coast of the Malay Peninsula in search of some pirate vessels which had been seen there. A number of trading boats had been destroyed by them, three having been observed in flames. A Cochin-chinese junk bound for Singapore was attacked near the Red Cliffs, within sight of the harbour, on the 4th May, by a number of Malays in two sampans. The junk was boarded and plundered of a part of the cargo, the Cochin-chinese being totally unarmed. Some days later another Cochin-chinese vessel was attacked at the same place, by a large band of Malays, most of the crew murdered or driven over board, and the vessel plundered. One of the Cochin-chinese was picked up floating on a piece of wood, and the vessel itself was met drifting about by an English ship which towed it into the harbour, only one person being found on board who was desperately wounded. The bodies of some of the unfortunate crew were afterwards picked up. A Malay boat in August on its way from Malacca to Singapore with a crew of 13 persons, was attacked near Pulo Pisang by two prahus, which fired into her, killing the nakoda and two of the crew, while another jumped overboard and was drowned. The rest of the crew ultimately took to the water, when the boat was plundered by the pirates.

During the course of September 1842 the Dutch Colonial brig De Hoop, Captain J.W. Neys, was attacked near the land between the islands Comodo and Floris, by four large pirate prahus, (paduwakan) having been previously during the same month chased for about 50 miles, near to Bima, by pirates. These four prahus, favored by a calm, approached the brig rowing, towards 10 in the morning, they were however received with a brisk fire, and retreated after having returned it several times. When beyond the reach of the brig's fire they remained stationary, and appeared to hold a consultation. In the afternoon they renewed the attack, but were again beaten off. The brig suffered considerably from the fire of the pirates but none of the crew were wounded. On the 23rd September the Dutch schooner Young James, Captain Umphelby, fell into the hands of some pirates near the island of Nusa Radja, during the voyage from Sourabaya to Timor, the commander and crew making their escape in the boats.

1843. On the 17th February, the Nakoda of a Chinese tope of 35 koyans burthen arrived at Singapore and gave information that he had left Cochin China in his vessel for Singapore with a crew of 15 men about eleven days before. Six days afterwards while off Pulo Tingie they were attacked by five Malay sampans, with about 30 Malays on board, armed with spears, krisses, swords and muskets. The Malays boarded the tope, the crew of which were totally unarmed, killed two of them, and carried away the most valuable part of the cargo, after which they scuttled her. The crew were taken to Pulo Tingie, but were liberated the same day and allowed to depart in their sampan being strictly enjoined not to go to Singapore. They arrived at Singapore in a miserable condition having been five days without food or water. In the beginning of March a Cochin-chinese junk was attacked near Pedra Branca by two Malay prahus who wounded seven of the junk's crew, and would have taken her, had they not been put to flight by an English vessel which was lying at anchor within sight and which fired upon them several times. On the 26th March another Cochin-chinese vessel was attacked about 11 o'clock at night near Bedra Branca by a piratical prahu which appeared to be manned by Malays and Chinese. After wounding three of the Cochin-Chinese the pirates were beaten off. On the 2nd April a Cochin-china boat was attacked near Point Romania by two Malay sampans, but succeeded in beating them off. The Malays were however speedily reinforced and after killing one Cochin-chinese and wounding another, captured the boat. On the 11th a Cochin-chinese junk was attacked by Malay pirates, who killed three of the crew and wounded two, but did not succeed in taking her. In the beginning of May the Nakoda of a tope from Pontianak arrived at Singapore who reported that the west coast of Borneo was swarming with Lanun and other pirates. He saw a fleet of 120 boats near Tanjong Datu which

had captured a tope belonging to Pontianak bound to Singapore and two other trading boats. The nakoda of the tope was liberated on the payment of a ransom of 200 dollars. A Cochin-chinese tope on its way from Singapore to Cochin-china, was attacked near Point Romania by several sampans manned with Malays who plundered her of every thing she contained, at the same time wounding one of the crew. A Chinese junk of about one hundred tons, was attacked in the middle of May near Pulo Aor by three Canton junks, who fired upon the vessel repeatedly and then boarded, plundering her of cargo to the value of five thousand dollars. On the 26th May as H. M. brig Algerine was on her passage from China to Singapore, while in Lat. 4° 20' N. and Long. 104° 58' E. she saw about 7 P. M. what was supposed to be a vessel on fire and immediately bore up to close it. At about $\frac{3}{4}$ past 11 they heard several persons calling for help, on which the brig was rounded to and a boat lowered which picked up five Chinese who were floating on planks or wreck. The vessel on fire sank before the Algerine could reach it. The Algerine arrived at Singapore on the 31st, and the five men were given over to the authorities who obtained the following statement from them. They left Singapore on the 22nd May in a Cochin-chinese junk of about 40 koyans, bound for Cochin-china, having a crew of 22 and 26 passengers. The junk was armed with 6 guns and had a cargo of 6 chests of opium and other goods. Four days after leaving Singapore they were attacked by a Canton junk, armed with large guns, which fired several rounds into their vessel wounding a great number of the men. Thirty of the pirates then boarded her and commenced slaughtering the people on board, forty-three being speedily killed and thrown overboard, while the five who escaped concealed themselves below. Every thing of value was taken out of the junk and she was then set on fire. The five men were soon forced by the fire to betake themselves to the sea upon planks, and they floated at random for about twenty-four hours before they were picked up by the Algerine. These men stated that the piratical junk was in Singapore harbour when they sailed, as they knew her well having lain at only a short distance from her. There being no one on board the Algerine acquainted with the Chinese language, no measures were taken to pursue the pirates, until after she reached Singapore, when the Steamer Diana was despatched but did not succeed in meeting them. In June the brig Brothers while lying becalmed within a short distance of the Great Natuna, was approached about 8 o'clock at night, ahead and astern, by two large prahus, each containing from 50 to 60 men, which came so close that they were seen preparing their guns and small arms. They were hailed and desired to keep off, but paying no attention the brig fired at them they returned her fire with their guns and muskets and a brisk exchange of shots was kept up for about two hours, when a light wind sprung up which enabled the vessel to make sail,

and the pirates returned to the shore. One man on board the brig was seriously wounded. In July a pirate prahu was captured near Pinang by the Diana, after trying to get away, and being fired upon by which eight of the pirates were killed. The pirates stated that they were from Linga and had been sent out to pirate by a person there. Two captives were found in the boat. On the 4th a small boat coming to Singapore was attacked by a piratical prahu manned by about 30 men, who killed the nakoda and wounded three of the crew. The boat was carried away by the pirates. The ship Harriet Scott left Pinang on the 15th September for Bombay, having on board 14 Malay pirates who had been convicted of piracy by the Court of Judicature, and sentenced to transportation for life. When off Acheen the pirates, who do not appear to have been properly secured, rose on the men on deck, whom they overpowered, killing the captain, and severely wounding the mate and others of the crew. The pirates kept possession of the deck for nearly five hours, but being fired upon from below, by which one was killed and three mortally wounded, they lowered the quarter boat and made their escape in it. They were afterwards picked up by a native brig in sight of Pinang and represented themselves as having been ship-wrecked, but the name of the Harriet Scott and her captain being painted on the stern sheets their story was disbelieved, and they were carried to Pinang, where being tried, they were sentenced to be hanged, which was carried into effect. On the 25th September the brig Robert Spankie, commanded by a Parsee named Cursetjee Framjee, left Pinang for the Pedier Coast (Sumatra) and at Murdoo took in a quantity of betel nut, and then prepared to sail to another port called Samalangan. The Rajah Mudah of Murdoo, the brother of the Rajah of that place, requested a passage for himself and about thirty of his followers which was granted. While the Commander and Supercargo were looking over the side at a fishing boat, they were stabbed by the Rajah, and both fell over-board and were never again seen. The crew consisting of twelve persons were unable to make any resistance, and the vessel was then plundered of all her cargo. The vessel was detained some time, and then despatched to Pinang in charge of the Mate, with a letter from the Rajah to the Authorities representing a person named Hajee Abdullah, who was sent on board in chains, as the principal actor in the outrage. Hajee Abdullah, being tried before the Court of Judicature, was found guilty as being accessory to the murder of the Commander and Supercargo of the Robert Spankie and sentenced to be transported to Bombay for life. In February 1844 H. M. Sloops Harlequin and Wanderer, with the H. C. Steamer Diana, proceeded to Acheen to demand redress for a robbery committed on a British vessel called the Fattal Khair at Battu on the Pedier Coast, and the murder of the Commander and Supercargo of the Robert Spankie at Murdoo. The town of Batu was destroyed, the Rajah

having professed his inability either to surrender the person who had committed the robbery on the Fattal Khair or to return the money which had been taken by him. The vessels then proceeded to Murdoo and on the boats approaching the shore a brisk fire was opened upon them. The enemy were however dislodged and the boats proceeded up the river driving the Malays from their entrenchments. The town was destroyed and the party then returned to the vessels. Two men were killed and ten or twelve wounded on the part of the British, while the loss on the side of the enemy is thought to have been heavy.

During the course of this year H. M. ship Dido, Captain the Hon. H. Keppel, visited the North West Coast of Borneo, and had several encounters with Lanun and Malay pirates, besides destroying the haunts of the Serebas pirates. As full accounts of her proceedings have been already published, it is unnecessary that we should repeat them at any length here. We may briefly mention that on arriving off the coast of Borneo in the beginning of May, the boats were despatched to visit the Islands of Marundum and South Natunas. On arriving off Marundum the party suddenly came upon five large prahus with several smaller boats, the larger prahu having about 40 paddles and 60 to 70 men each, and being well armed with guns and small arms. The pirates did not allow the Dido's boats to close, but made off, cutting adrift the smaller boats and firing at the same time. They were followed by the men-of-war's boats who returned their fire, but through their extraordinary swiftness in rowing they made their escape in the direction of the Natunas. On the following day when off Pulo Sirhassen, six large prahus approached the boats beating their tom-toms and yelling, and although a white flag was held up to them and signs made of a wish to speak them, they paid no attention to this, but a smart fire was opened from all the prahus as well as the shore, which was then returned by the boats. The prahu continued firing for some minutes but the fire from the boats beginning to tell fast, they gave in and asked for quarter. This was granted and the prahu taken possession of. One was found to belong to the Rajah of Rhio, having been sent to collect tribute at the Natunas, the other five belonged to the island. They mounted three brass guns each, with a crew of 30 men, well armed with muskets, spears and krisses. They pretended that they mistook the boats for Lanun pirates, but it is more probable that they thought them a party of ship-wrecked persons, and therefore likely to be an easy prey. They were, however, in consideration of the severe lesson they had received, released, the wounded being assisted by the surgeon who accompanied the expedition and the boats departed to rejoin the Dido. While the Dido lay at Sarawak a party was despatched under the second lieutenant Mr Hunt in a large boat, well-armed, to cruise in the neighbourhood. When they got outside they saw three prahus and chased them, but soon lost

sight of them. The boat anchored for the night close to the shore. About three o'clock in the morning the crew were aroused by three or four cannon being discharged at the boat and on looking out found that they were closely pressed by three large prahus. No time was lost in replying to this salutation, and a warm engagement ensued which ended in one of the prahus being taken while the other two made off. The expedition up the Serebas river was fully successful, the head quarters of the pirates, Paddi, Paku and Rembas being taken and destroyed. All these places were found strongly fortified and mounted with cannon. The pirates against whom these proceedings were taken consisted of Malays and Dyaks, the latter having probably in a great measure been originally led into a piratical course of life by the former.

The Dutch Government was active during this year in taking proceedings against the pirates in different parts of the Archipelago. At the commencement of the east monsoon a squadron consisting of a steamer, a brig and two schooners, was sent to the seas to the east of Java. In the south-east of Salayer, they found two piratical haunts and burnt or destroyed thirty-four Magindano and Tabello piratical prahus. In the Straits of Bonerate, they had an obstinate engagement with seventeen Lanun prahus, two of which were captured and burnt, one of them mounting 15 guns with a crew of above 100 men. The rest escaped by the night coming on and a contrary wind preventing pursuit. The following is the account of this engagement given at the time in a Dutch newspaper:—"By the latest accounts received from Java, the expedition against the pirates, commanded by Captain J. T. A. Coertzen, was to the south-east of Celebes, and had succeeded in destroying the retreats of the piratas in the islands of Tannah Djampea, and Kaloetoea, near Saleyer, with thirty large pirate vessels, taking forty pieces of cannon. Some days afterwards the Hecla discovered a great number of pirate vessels in a bay of the islands to the south-east of Celebes, which on seeing the Hecla immediately put to sea, and attempted to save themselves by flight. Being soon overtaken by the Hecla (a steamer), an engagement ensued in the Strait of Bonerate; the pirates seeing they could not escape, prepared to make a desperate resistance, and waited for the steamer. The pirates on this occasion fought with a degree of intrepidity of which there are few examples. One of their largest vessels, on board of which was the serang or panglima of the pirates, and which is said to have had a crew of 150 men, fell into our hands, with 37 slaves, among whom were eight women, five children, and five of the pirates, one of whom was the serang, who, however, afterwards died of his wounds: the others lost their lives. Another vessel, with about 100 men, having been much damaged by our balls, turned to the shore and ran aground; the crew fled up the country. These two vessels were well provided with guns. The largest had 13 mounted, two of which were six

pounders. The other pirate vessels fled, favoured by the approach of night and a high wind. We have to regret the loss of seven killed and twenty-six wounded. After the steamer fell in with the pirate vessels, and soon sunk one of them, the others retreated, and our people thought they were rid of them; when, after some debate, as it seems, having killed the women and thrown the bodies that were on board into the sea, resolved to conquer or die, they came on in greater numbers than before, and, notwithstanding the destructive fire opened upon them, they boarded the steamer, where a deplorable conflict ensued, which in all probability, considering the greater superiority of the pirates, would have ended to the disadvantage of the steamer, so that the *Hecla* would have been captured and the crew carried into slavery, or put to the sword, had not the Captain, with extraordinary presence of mind, thought of using the fire engine to pour boiling water on the pirates. They being quite naked, burnt, and scalded, with fearful cries, sought for safety in flight, so that the Captain, who had not been able to use either his guns or his small arms, had now the opportunity of completing, by his fire, the destruction of the flying pirates and vessels. Persons who are acquainted with these pirates and their vessels, are convinced that if they had unhappily taken his Majesty's steamer, they would have obtained a degree of power which might have had the most fatal consequences for coasting vessels and merchantmen." The expedition took forty pieces of cannon, destroyed 36 prahus, some of which were from 65 to 70 feet long and burned two piratical haunts. Three men were killed and 20 wounded on the part of the Dutch. On the 19th May an English Whaler, the *Sarah* and *Elizabeth*, Captain Bellinghurst, anchored in the bay of Amfuang, forty miles from Kupang in the island of Timor, to procure wood and water. Three days afterwards, two boats with the 2nd and 3rd mates and 14 men were sent to the shore for this purpose. They had only been occupied for a few minutes in cutting wood, when five large prahus, followed by some smaller ones, appeared at the entrance of the bay, and landed some men who put the two boats crews to flight. The second and third mates John Adams and Ebenezer Edwards, and the apprentice Thomas Gale, fell into the hands of the pirates. The occurrence having been witnessed from the vessel, and the prahu closing fast, the muskets were got out but the cartridges could not be found. The crew then took to the boats, and approaching the shore picked up seven of the wooding party, but the rest could not be seen. During this time the pirates had boarded the vessel and plundered her. The boats then pulled out to sea, and were picked up the same day by another whaler. Two other whaling vessels being in company, boats were sent from all these vessels towards the *Sarah* and *Elizabeth*, which lay about sixteen miles distant, but she was observed to be on fire, and before the boats neared her she

blew up. The captain and the crew were landed at Kupang. The 3rd mate Edwards made his escape from the pirates, and by the assistance of Bajau fishers reached Menado on the 10th July, having been six weeks in the hands of the pirates. The following is the account given by him of his captivity:—"After having tied our arms and feet, the pirates carried us in their prahus towards the vessel. They made us go on board, untying us. The vessel had been abandoned by the captain and the rest of the crew. They asked for opium, rice and money, but as we told them that there were none of these articles on board, the pirates broke open everything, plundering the vessel, and carrying away whatever was of use to them, such as powder, muskets, sails &c. and placing the plunder in the only ship's boat which was left. After having again bound us, they set fire to the ship, and rowed away along the coast of Timor. They then proceeded towards Celebes making several excursions in the three boats belonging to the Sarah and Elizabeth, and taking in fresh water at the different islands they touched at on their route. After a voyage of 48 days they arrived at Buton. One of the prahus parted company at Buton. On quitting Buton they were chased by three large boats which appeared to be pirates but they did not overtake them. The pirates remained some days at Buton fishing, and made a descent upon the coast from whence they returned with some prisoners, as well as pieces of bambu filled with gold dust. The prahu in which I was mounted four guns, had some muskets, with a crew of 36 men and eight prisoners. There were amongst the pirates 9 persons who appeared to exercise some authority, and who passed their time in smoking opium without taking any part in the navigation. I was transferred from one prahu to another, but I did not suffer any bad treatment at their hands although I was indisposed to work. Our only food was a little rice and water, very insufficient to satisfy our hunger. As far as I could understand these pirates came from Balagningui. They repaired their prahus upon a sand bank near the entrance to the bay of Gorontalo. The last place where the pirates stopped was the small island of Banka, at a short distance from Gorontalo, where they engaged in fishing. Here I managed to make any escape in one of the boats belonging to the Sarah and Elizabeth." Edwards did not know what had become of the others taken along with him. He was sent from Menado to Batavia. During the month of November the steamer Phoenix carefully examined the islands of Solombo and Pulo Laut, the places between the Kanjean islands and Pulo Panjang, and the Straits of Lombok to the east coast of Java. On the 12th November in passing between Panjang Tjanker and Sumanap, the Phoenix discovered at about 10 o'clock in the morning, six prahus near Pulo Lawak in the neighbourhood of Gili Genting, who were soon recognized to be pirates. The pirates tried to escape to the eastward, but the Phoenix soon gained upon them, and opening a fire upon

them at last succeeded in capturing the whole having reduced them to a sinking condition. The chase lasted five hours the pirates returning the fire of the steamer and offering an obstinate resistance. Three of the crew of the steamer were seriously wounded. Eight pirates were taken, and six natives who had been taken prisoners near Sumanap by the pirates were also picked up. The rest of the pirates, estimated at 70, were killed or drowned. On the 15th the Phoenix took another prahu belonging to this party, making prisoners six of the crew who tried to escape by swimming. These boats were from Tanah Passir on the south east coast of Borneo. An expedition was sent out from Rhio for the purpose of endeavouring to intercept a number of pirates which had been ravaging the coasts and the islands of the Straits of Malacca. The pirates could not be met with, but 30 persons who had been taken by them and sold at different places were recovered and sent to the authorities at Singapore, most of these persons belonging to Pinang and Province Wellesley. The Governor General of India and the Governor of the Straits Settlements acknowledged these services in a suitable manner. On this occasion positive proof was obtained that these piracies had been promoted by Linga nobles, in particular by the Tomungong of Mapar, a descendant of the ancient kings of Linga. His son Inchie Montol had fitted out several prahus and had also made some voyages. Inchie Dolla at Sinkep was also implicated, having plundered and burned a Chinese wankang which was repairing at that place. Serious remonstrances were addressed to the Sultan of Linga, who at last delivered up these chiefs, and ten other famous piratical chiefs.

1844. In May a Cochin Chinese junk was attacked near Pedra Branca by three pirate boats who fired upon the junk, killing one man and wounding another. A large ship appearing in sight and night coming on the pirates drew off and the junk made the best of her way to Singapore. A Chinese fishing boat was about the same time attacked near Singapore by pirates who took the boat, the crew escaping on shore. Five persons were afterwards captured one of whom was identified by the fishermen as having been engaged in the attack upon them. A boat found in the possession of the pirates was also claimed by the Chinese as theirs. On the 15th May a Cochin Chinese tope bound to Singapore, when near Point Romania was approached by three sampans, two containing Malays and the other Chinese. On the appearance of the boats the nakoda and six of the crew went to a barque then in sight to request assistance, but not being able to make themselves understood the barque stood out to sea, and the seven men were afterwards picked up by a Chinese junk and brought to Singapore. The pirates took possession of the tope, the crew remaining on board, 10 in number, offering no resistance, plundered her, towed her to the beach and set her on fire. They were about to kill the crew but they jumped overboard and made for the shore, from which they

were taken by a Chinese trader passing at the time and landed at Sidilli on the east coast of the Peninsula. The steamer Diana having gone to Sidilli the Cochin Chinese were sent on board by the Rajah. On the 27th June the British barque Premier, Captain Brownrigg, struck on a rock in the Straits of Makassar, and remained fast. The ship soon afterwards caught fire and the crew, consisting of seven Europeans and twenty-two lascars, were obliged to take to the boats. On the 28th they landed on an uninhabited island where they remained for the night. On the 29th the Captain and Europeans re embarked in the launch, but the lascars refused to leave the island. The same day the Europeans fell in with a prahu belonging to the Sultan of Gunong Tabor on Borneo, which they accompanied to the Sultan's residence, where they were very badly treated, it being evidently the intention of the Sultan to treat them as slaves, if he did not murder them. The Sultan went to the island where the lascars had been left and brought back six of them, the rest having been taken by another chief. They remained here in a most miserable condition until the 20th September, expecting to be either killed, or sold as slaves to some Sulo traders who were at the place, when they were relieved from their captivity by the Dutch Government schooner Egmond, which fortunately arrived at the spot, and which carried them to Banjermassin from whence they were forwarded by the Dutch Authorities to Batavia. The six lascars were sold by the Sultan to a Sulo trader, by whom they were taken to Sulo, where they were ransomed for 100 dollars each by Mr Windham, an English merchant residing there. Twelve of the lascars were taken by the Rajah of Bulungan, four having left the island on a raft who are supposed to have perished. H.M. ship Samarang, Captain Sir E. Belcher, visited Bulungan in January 1845 and succeeded in procuring the release of the twelve lascars who were held in captivity there.

In August, Captain Keppel, having been informed of the continued piracies of the Malays and Dyaks of Sakarran,* proceeded to the coast of Borneo in the Dido, accompanied by the H. C. Steamer

* Captain Keppel received the following letter from Muda Hassim on the subject. "This comes from Pangeran Muda Hassim, Rajah of Borneo, to our friend Captain Keppel, in command of Her Britannic Majesty's ship (after usual compliments.) We beg to let our friend Captain Keppel know, that the pirates of Sakarran, whom we mentioned last year, still continue their piracies by sea and land; and many Malays, under Seriff Sahib, who have been accustomed to send or to accompany the pirates and to share in their spoils, have gone to the Sakarran river, with a resolve of defending themselves rather than accede to our wishes that they should abandon piracy.

"Last year Captain Belcher told the Sultan and myself, that it would be pleasing to the Queen of England that we should repress piracy; and we signed an agreement, at his request, in which we promised to do so; and we tell our friend of the piracies and evil actions of the Sakarran people, who have for many years past done much mischief to trade, and make it dangerous for boats to sail along the coast; and this year many prahus which wanted to sail to Singapore, have been afraid. We inform our friend Captain Keppel of this, as we desire to end all the piracy, and to perform our agreement with the Queen of England."

Phlegethon, Captain Scott. On the 5th the expedition set out and reached the Batang Lupar. On the 7th the boats attacked the fort of Patusan, the steamer anchoring in front of the place, but she was of very little use, her guns proving unservicable from the defective state of the detonating priming-tubes. A fire was opened from the fort on the steamer and boats, but this did not check the advance of the latter, which pushed on, and the crews landing, carried the fort. One man was killed and two severely wounded on the side of the British. Sixty-four brass guns, besides many of iron were found in and about the fort. A magazine of gunpowder was found containing about two tons of gunpowder, and a number of small barrels of fine powder marked "Dartford." Several other places were destroyed, more guns and arms being taken. In advancing to the attack of a party of the enemy, Lieut. Wade of the Dido was killed by two rifle shots. On the 17th the boats proceeded up the Sakarran as far as Karangan which was destroyed, and the boats then returned to the steamer. During this advance Mr Steward of Sarawak, who was in a Malay boat, was killed in a sudden attack made by a strong party of Dyaks.

During the month of April 1844 some piratical prahus showed themselves in the vicinity of Billiton. The government schooner Niobe, with two gun boats, was sent from Banka to look for them but did not succeed in the search. The pirates attacked the village of Ranghan and carried away some fishermen. In May following forty Lanun prahus appeared on the coast of Bangaai (to the east of Celebes.) These pirates attacked some villages situated on the shores, killing 25 persons and carrying away 60. On the coast of Borneo a prahu captured 48 Chinese fishermen near Singkawan. On the 18th October the small island of Gili near Bawean was attacked and plundered by 11 prahus. The population saved themselves by flight, except two who were killed and three who were made prisoners. The pirates kept possession of the island for 18 hours, fortifying themselves and hoisting red flags and white ones with a red cross on different parts of the island. Being informed that a number of vessels were being fitted out at the neighbouring island of Bawean to attack them, they left the same night. Some days afterwards two of them engaged a prahu from Bima which suffered much from their fire, two of the crew being killed, but it succeeded in sinking one of them.

The Belgian brig Charles having been wrecked on the 17th February, on the coast of Borneo opposite the Koti river, efforts were made to get her off, but a large fleet of prahus immediately proceeded from the shore, on which the crew took to the boats. The prahus surrounded the brig, fired into and boarded her. Some of the prahus then chased the boats, firing upon them, but they succeeded in escaping and arrived safely at Makassar.

While the French corvette Sabine was watering at Basilan, a

party from the vessel was attacked by the natives, a Lieutenant being murdered and two men carried away, The men were ransomed through the intervention of the Spanish Authorities at Zamboanga. The French squadron afterwards proceeded to the island to avenge this insult, and suffered some loss during the operations.

DESCRIPTION OF MALAKKA AND OUR ESTABLISHMENT THERE.*

By FRANCOIS VALENTYN.

CHAPTER II.

Byzondere Zaaken van Malakka.

IN order to describe Malakka with accuracy, and to convey correct information concerning the affairs of chief importance that have happened there, we must dig up from the darkness of the most ancient times those events concerning its origin and foundation which have been buried, as it were, from posterity, by the lapse of years, by forgetfulness, or more probably by indifference. If I had not been provided with certain very scarce books, written in the Arabic character, and which cannot now be purchased for gold, I should not be in a condition to communicate to the world those events in the history of Malakka which I now furnish, and which I am assured that few men could give; for of the thousand who are acquainted with the Malayan language, scarcely one is to be found who can read it when written in the Arabic character, the less because in the high Malay many Persian as well as Arabic words will be found.

These books are now called "Tadjou-essalatina" or "Makata Segalla Radja" that is "the crown of kings", "Misa Gomitar," and "Kitab Hantouwa" or "Hangtowa," that is the "Book Hangtowa," otherwise commonly called among the learned in the tongue by the name of "Soulalet essalathina" that is the "Descent list" or "Genealogy of kings" (that is to say of Malakka.)

These are three jewels that are very rarely found in libraries, and those in our possession, although filled with many fables and useless occurrences, are yet held to be the best written works in the Malayan tongue, and are not only the most serviceable to students, but also afford much useful information concerning events in Javanese and Malayan history that cannot be obtained from any other source. The Mahomedan chiefs in India and their priests are the only individuals in whose possession the books are to be found, and the greatest difficulty in the world is experienced in inducing them to part with them.

I have become acquainted with all that the above three writers have written concerning the Malayan language, but it appears to me that although the two first, and several other books, throw a considerable light on the subject, still the last is the best, as it goes back to the earliest history of the people.

I must nevertheless state, that before I possessed this last book I obtained great light on the subject from a preface by my present

* Continued from p. 703.

colleague, the Heer Petrus van der Vorm, to the new edition of the dictionary of D. Gueynier, of which I have partly availed myself here.

Who the writer of the book *Hangtouw* may have been I do not know, but I feel bound to state that it is one of the best Malayan books that I have read; and I shall have occasion to present the reader with some details extracted from it.

If we attempt to trace out accurately the origin of the Malayan nation we must examine whether they derived their name from the Malayan land or coast, or from the city of Malacca; or whether these localities derived their name from the people. That the people did not derive their name from the city is evident from the circumstance of the Malayan nation having been known and celebrated before the city was built; and that they did not derive their name from the country, we shall be able clearly enough to shew in the following pages, for they were inhabitants of another region for nearly ninety years before they settled on the Peninsula.

This people formerly resided on the great island of Sumatra, (which in old times was called *Andelis*, and also *Maningkabo*, before it was discovered that this last was a separate kingdom on the island) in the territory of Palembang, on the inner west coast; the country they chiefly occupied being the banks of the river Malayu, which wound round the hill *Mahameirou*, and then joined the river *Tatang* which ran into the sea opposite the island of Banca.

One would be inclined to suppose on hearing the name of this first river that the *Orang Malayu* derived their name from the river, as being the first people who had established themselves there; but there are not wanting those who assume that the river itself, which is also called *Mallayou*, *Malladjou*, and *Maladjou* was so named from this diligent, restless, and emigration-loving people, having settled on its banks, as they have done elsewhere; and also because the Malays distinguish this restless and emigrating propensity by the term *Maladjou*: but I am of opinion the Malays originally derived from the river the name which they carried to so many coasts and lands where they established themselves, as these countries were formerly only inhabited by fishermen, who acknowledged the authority of the king of Siam before the Malays took possession.

After they had resided on the banks of this river without a king for a period which the writer has no means of ascertaining, and were yet well contented with their lot, they thought fit, while they werestill heathens, to chose themselves a king in the person of *Sri Touri Bowana*, who gave himself out to be a descendant of Alexander the Great. This chief to whom *Demang Leibur Dawang*, a minor chief who then held the rule, had quietly resigned the government, in consideration of his high genealogy, and the celebrity of the chief from whom he was descended,

reigned forty-eight years, having come to the throne about A. D. 1160 or perhaps some years before.

It was under this chief that the tribe first migrated from Sumatra to the opposite coast, and established themselves near the S. E. point of the same, which is called Houdjongh Tanah, that is the "lands end," and also Zier-baad, which in Persian means "to leeward", where they subsequently acquired a new name of "The leeward people" and also that of "Easterlings" which name was afterwards extended to all the eastern races. This land henceforth went by the name of Tanah Malayu or the Malayan land, which afterwards came to be extended to the entire coast from 2° to 11° N. lat. where it joined Tanasery, although latterly the name has been applied only to the territory of Malakka and the neighbourhood, the Malayan people beyond these limits being generally distinguished by the name of the kingdom they inhabit; as Malays of Patani, Pahang, Peirah, Keidah, Johor, Bintan, Lingga, Gampar Harou, or elsewhere.

This is the renowned and far-famed land that many of the ancients, as well as moderns, consider to be the land of Ophir, mentioned in Scripture as the country from which King Solomon obtained gold and other Indian rarities, on which account it had been named *Regio Aurifera*, that is the Gold Coast, or the Gold Region. It is certain that navigators could sail without compass down the Red Sea, and so along the coasts of Arabia and Persia, of Malabar, Coromandel and Bengale, and at length by the coasts of Arracan, Pegu, Siam, and Tanasery, to the Malay Coast, but that the land of Ophir was not here, but more probably on the Island of Ceylon, I have already shewn in the first volume of this work and elsewhere.

After the Malays had remained here for sometime they built a city which they called Singapoura, a name which the small Strait that lies immediately to the south still retains.

In these times the king of Madjapahit, a kingdom of Java, was one of the mightiest chiefs in these parts, who not only made himself universally feared by the power of his arms on the island of Java, but also conquered many places in *Java minor*, and Sumatra, thus further extending his kingdom. As Madjapahit was one of the first and most important places in this part of the world, the king was induced by his vain-glory to attempt the expulsion of this new people, the Malays, and so add a fresh pearl to his crown. He attacked them at various times and obliged them to strengthen their defences.

After Sri Touri Bowana had reigned over them as a brave chief for forty eight years, he died in 1208, and was succeeded by the second chief Padouka Pikaram Wiru. The latter did not reign long, and during the fifteen years that he was king, performed nothing of importance beyond extending the limits of the town, and strengthening it to resist the attacks of the king of Madjapahit,

who never left them unmolested. He died A. D. 1223 and was succeeded by the third king Sri Rama Wikaram. This was a young and spirited prince who reigned with great moderation for 13 years, and was beginning to make himself feared abroad when he died A. D. 1236, to the deep sorrow of his people, by whom he was tenderly respected. His successor was Sri Maha Radja, the fourth king, who was also a good prince and extended the city considerably. He reigned 12 and a half years with great prudence, respected by his people, and feared by his enemies, and died in 1249.

During the same year the throne was occupied by Sri Iskander Shah, the last king of Singapore. For three years he held the place against the power of the king of Madjapahit, but at length in 1252, he was so hard pressed that he was forced to abandon Singapore, and betake himself to a spot to the North West, where in 1253 he founded a new City which soon became the third in rank in the East, the first being Madjapahit, and the next Pasi, in Sumatra. He gave to this new City the name of Malakka after a certain tree called kayu Malakka, otherwise Mirabolaan, or the five-sided tree, from the circumstance of his having rested when hunting under one of these trees, while the dogs drove the game from above; an occurrence which is related at great length in the book Hangtouwua.

Andragiri formerly had its separate king, but the king of Madjapahit, after the conquest of Singapoura, undertook an expedition to Sumatra and conquered the kingdom.

In the mean time the City and people of Malakka attained great power and respectability, and laid the foundation of a vast dominion. The king died in 1274 after having reigned 25 years, 3 in Singapore, and 22 in Malakka, feared by his neighbours and respected by his subjects.

Sultan Magat succeeded him as the second King of Malakka. His reign was not of long duration, as he died two years after ascending the throne, thus completing 115 years and 6 months of the Malayan Kingdom, during which period chiefs and people were still heathens.

In the year 1276 he was succeeded by Sultan Mohammed Schah, the first Mahommeddan King of Malakka, who during the 57 years of his reign rendered himself famous by his success in introducing the new religion, and in extending the limits of his Kingdom, which had now spread to Linga, and Bintam, or Bintang, to the south of the Peninsula, including Johor, Patani, Keidah (otherwise called Queda) Peirah and other states, and even extending to Gampar and Haroe in Sumatra; indeed all the neighbouring countries appear to have acknowledged his supremacy. But not content with this, in the last year of his reign he married the Princess of Arracan, heiress of the king, thus becoming by inheritance the sovereign of that state, appointing as the chief

one of his own countrymen, who was also installed Mangkobumi, or chancellor of Malakka. After attaining a great age, he died in 1333, leaving a peaceful kingdom to his son, Sultan Abou Sjahid, who only reigned one year and five months, when he was stabbed to death by the king of Arracan.

He was succeeded the same year by Sultan Madafar Shah, who reigned with much wisdom and prudence. His wisdom was displayed by a book full of honorable institutions called the Statutes of Malakka. His courage was displayed in every event of importance that occurred during his reign of 40 years.

About the year 1340, there reigned in the kingdom of Siam (then called Sjaharnow, or Sornau) a prince called Boubatnja, who had swallowed up all the small states around him, and hearing of the power of Malakka, jealous of its prosperity, he summoned the city to surrender; but this not being acceded to, he sent his general, Awi Tsjakar, to attack it, whereupon a severe contest ensued, in which the Malakka general, Sri Nara Derida, conducted himself with such bravery that the Siammer was forced to retreat with great loss and disgrace.

Shortly afterwards the king of Siam died, and was succeeded by a certain Tsjoepandan, who did not allow the matter to rest, but again attacked the king of Malakka, and beleaguered the city; but he was as unfortunate as his predecessor, and was so repeatedly beaten by the Malakka General that he died of chagrin. It was at this time that Malakka assumed the third rank among the eastern powers, Madjapahit and Pasi holding the first and second.

Shortly after these occurrences the king died, and was succeeded by his son, Sultan Abdul, afterwards known as Sultan Mantsoer Shah, in whose reign, which lasted 73 years, many remarkable events occurred. The kingdom of Andragiri on the east coast of Sumatra, was at this time governed by a viceroy of Madjapahit, but Mantsoer Shah having married a daughter of the king, a princess of great fame, the king of Madjapahit transferred the Government to his son in law, and it has continued to be a dependence of Malakka until the present day.

At this time 1380 the king of Madjapahit was so powerful that he deserved the name of Emperor rather than that of king; for he not only had several kings under him, but dealt out the thrones to them according to the estimation in which he held them as members of his Council. The most important throne in his gift was that of Daha; the second that of Tanjong Poera in Java, the then sovereign of which had married one of his daughters, Nasa, or Niay Casoema, and afterwards succeeded him on the throne of the Madjapahit. The third throne he presented to the king of Malakka, his son-in-law.

The king Mantsoer Shah also entered into a marriage contract with a daughter of the Emperor of China; and about this time he fell out with the king of Pahang, and conquered his territory.

Malakka had now become the first City of the East; Pasi the second; and Haroe the third; the former having attained a very high position in point of power and respectability. Mantsouer Shah also fell out with the king of Pasi, Sainalabdin, and defeated him.

Shortly afterwards, in 1420, Krain Samarlouka, king of Makassar, attacked Malakka with a fleet of 200 vessels, but the Lacsamana, or Admiral, met him with such courage that he retreated and betook himself to Pasi, which he attacked and sacked. Subsequently Sainalabdin, the king of Pasi, being driven out by his two younger brothers, took refuge with the king of Malakka, who reinstated him on the throne of Pasi. Thus affairs continued amid wars and bloodshed until 1447, when Mantsouer Shah came to die, and was succeeded by his son, Sultan Alawod-din.

He was the 11th king of the Malays, the 6th of Malakka, and the 5th since the introduction of Mahommeddanism. He reigned 30 years, and nothing remarkable occurred during his reign, except that Malakka seems to have fallen under the yoke of Siam, although it did not remain so long. He died in 1477, and was succeeded by Sultan Mahhmud Shah, the last of the Malakka kings. He reigned over the Malays 30 years, 29 in Malakka, and 7 in Johor, and during the former period the yoke of Siam was cast off. It was during the reign of this king that Malakka was first visited by the Portugese, who soon afterwards conquered the city, a course of events which we shall fully relate in the ensuing chapter.

A BOAT VOYAGE FROM SINGAPORE TO PINANG.

THE voyage of which some rough notes are here given, was undertaken principally with the intention of ascending the Salangor, or one of the adjacent rivers, and thence travelling through the Menangkabau states and down the Moar, so as to ascertain as correctly as possible the geography of the interior and the limits and numbers of the Binua tribes. If the wind proved favorable I intended to run on to Pinang before ascending the Salangor. I did go on to Pinang, and as the wind continued to be southerly, I was induced to change my plans and turn my attention to the aboriginal tribes of the north. For this purpose I visited Kidah and the river Krian. In Pinang itself I found some valuable ethnographical data, which I had not been able to obtain at Singapore, and I considered the opportunity of observing the physical peculiarities of the Burmese and Siamese, which have not been well discriminated, as a sufficient recompense for the abandonment for the present of the proposed journey in the south. The following notes are of little value in themselves, but will prove useful, when other materials have been obtained, in determining the positions and relative size of the mountains, and the boundaries of the river basins, of the Peninsula. The notes made in Pinang and Kidah will be sent afterwards.

J. R. LOGAN.

Pinang, 30th September, 1850.

Wednesday, 28th August, 1850. Left Singapore at 2 P. M. in a prau sanggulong with a crew of 13 Malacca Malays. By the evening we had only reached Pulo Dammar, but a favorable breeze sprung up in the night, and about 12 o'clock, on looking out, I found we were driving through Silat Kubob under a strong southerly wind. When day broke we were between Pulo Pisang and Gunong Pulai, with the wind against us. We made considerable progress with the oars and tide. The scene when it became fully visible was very fine. The Pisangs are a group of low hills completely covered with jungle. The level of the mainland is broken by only two isolated mountains, Pulai and to the N. E. Blumat, which was only known to the crew as Gunung Binut. On the north G. Banang was dimly seen, small flocks of the burong rawa continued for some time to fly from Pisang to the Peninsula.

We made a bad day's work, the wind being light, and on the morning of the 30th after a squally night, we found ourselves only off Tanjong Moar. Gunong Tundo was visible, but Ledang was hidden by a cloud. To the south of Moar there are several low mountains, each being apparently isolated. One which is rounded

and conspicuous, is called Gunong Sial. These mountains appear to be spread over most of the land between the valley of the Moar and that of the Batu Pahat (Rio Formosa). At mid-day we anchored in Malacca roads, and at 3 P. M. proceeded on our voyage. At night we anchored at Teloh Panchur, the Malays being afraid to pass Tanjong Tuan (Cape Rachado) at night.

31st August. 6 A. M. a little S. of Kwalla Linggi. A continuous range of mountains is seen between the valley of the Linggi and Tanjong Tuan, extending from N. E. by E. or a little N. of Rambau mountain, to N. by E. The outline presents mamillary summits generally. The most southerly and advanced mass is called Gunong Pasir (N. E. by E.) the country of Srimananti is said to lie behind it. A peaked mountain is seen to N. N. E. The coast from the Linggi to Tanjong Tuan consists of low hill ranges, all covered with jungle. The beach is of red sand with mangrove here and there. I examined and described the rocks from Malacca to Pulo Kang Arang some years ago, so that it is unnecessary to say any thing about them here. As we approached Tanjong Tuan the men became silent, and before we reached it, suddenly lay upon their oars. I was about to ask the cause of this proceeding, when my Malay jurutulis began to recite an Arabic prayer with great energy and solemnity, the crew responding by a deep *Amin*. When he finished he addressed them in a cheerful and encouraging tone, and told them to take to their oars and pull long and strong. There was little wind and the commotion caused by the meeting of the currents was not much more than it is near P. Sambo in Singapore Strait, but when the sea is high, the passage of the Point must be dangerous to boats. At one time it is seemed as if we were about to be swept out by the current, but a vigorous effort carried us beyond the place. In the afternoon we passed Kwalla Lukut. It has a different appearance from any of the rivers we have yet seen. Behind a deep bay lined with mangroves, runs a bold hill range, the southern end of which is partly covered with lalang. Behind this again is a low mountain range at no great distance, and beyond its southern extremity the inland ranges are seen, here very low.—Due N. W. Jigra (Parcelar hill) is seen as a low peak. As we advance, the Kwalla assumes a still finer character. The mountains of Simujong open out and seem to occupy the south of the bay, while the nearer hills and mountains range along the north. The Lukut hills seem to terminate one of the advancing systems of elevated ranges, for they sink abruptly on the north into a flat country, which extends to Parcelar Point. A few slight risings are seen. B. Jigra is entirely isolated in the level land, and must anciently have been an island.

Lukut is at present the chief tin producing basin in the south of the Peninsula. It has a large population of Chinese, Malays and Binua, and its importance has induced the king of Salangor for

some time to reside there. From Lukut, good Malay paths lead to the Langat on the one side, and Simujong on the other.

All the afternoon clouds continued to move amongst the mountains—varying in their forms—now enveloping one and now another of the ranges and peaks—and occasionally pouring down rain.

Beyond the Kwalla several ranges can be discriminated.—1. E. a low range, and then between it and 2 a higher range, which appears to be Rambau. 2. E. N. E. a bold range with several peaks. 3. N. E. by E. a range higher and more massive. 4. N. E. The basin of the Muar must run up behind all these ranges.

1st September. 5. A. M. enter Slat Lumut—5 fms. at entrance. 1st Reach N. E. $4\frac{1}{2}$ fms. near end. Mangroves on both sides. 2nd R. S. E. by E. Jigra seen over the top, at the extremity forest trees seen on the right bank behind a fringe of nipa and nibong. 3rd R. N. E. short. 4 R. N. N. W. 5 R. E. a channel is seen on each side in front, that on the right is Kwalla Langat. 6th R. N. N. E. very long. Met a small boat with 3 men and 2 women proceeding from the Klang to the Langat. According to them it is one tide up the Klang to the kampong of the To Kayo, and four days to the foot of the mountains. 7th R. N. E. by N. the mountains of Klang are seen over the extremity. 8th R. N. N. E. at the end there is a bend with a channel on the right. 9th R. W. 10th R. N. N. W. the open sea at the end, a distant line of coast on the land side and a strait on the other. When a little N. of Slat Lumut, Bukit Jigra was seen to the E. S. E., a table topped hill to the N. E., Bukit Jiram close to the beach N. $\frac{1}{2}$ E., a low domed hill N. E. by N. a distant mountain range to the N., Salangor hill appearing like an island at some distance from the coast, N. by W., the outermost of three islets called Pulo Kukor N. N. W., and two islets called Pulo Angsa W. N. W. As we proceeded, mountain outlines were dimly visible, a haze resting on the interior of the land. To the N. N. E. a bold range. I landed on one of the Kukors, and found it to be composed of hard sandstone, in some places crystallised, and hard bluish clay, in strata running W. by S. and dipping about 45° to N.

On leaving the islet to return to the prau, which was standing up towards Salangor, the opposite coast of Jiram looked so inviting that I pulled across to it. No inhabited tract had been passed since we left the coast of Malacca, and I was surprised to see a long fringe of coconuts stretching along the beach, with houses scattered amongst them. The light shining through, shewed that there was a considerable belt of paddy land between the coconuts and the dark mass of jungle behind. The jungle is partly hilly. On the left B. Jiram near the beach appears to mark the limit of the vilage. Its south side is covered with lalang, a few trees still rising above its ridge. The haze had now cleared up and a long and beautiful mountain range filled the back ground. Its principal

mass is very imposing. Jiram reminded me of Malacca, but the range has, I think, a still finer effect than Gunong Ledang. On approaching the coast we found that we were separated from the sandy beach by a broad mud bank, and after dragging the sampan for some time through it, the attempt to reach the land was given up, as the men sank to the waist in their efforts to pull and push the boat. From some Jiram men who were lying in a fishing boat I learned that the mountains were called Grisi Ambur. They said the Rawa were now attacking the Binua in the interior of Salangor, and that the chief of Ulu Salangor had gone to Lukut to receive the orders of the Raja on the subject. They said their forays had now extended to the interior of the Birnam. The rivers above Lukut are all very thinly inhabited save near the mouths. The Salangor is larger than the Klang, and cannot be ascended under less than 10 days. The inhabitants of Jiram are mostly fishermen, but they also cultivate paddy and collect forest produce, and their trading voyages extend as far south as Malacca. To the north they do not go beyond Salangor. They were originally Malacca people.

Jiram is deserving of some remark. With the exception of Padang, a little south of the Muar, it is the only peopled coast between Singapore and Pinang. There is no physical reason why the rest of the coast should not be cultivated and inhabited like the parts that are so. There is nothing to distinguish Jiram and Padang, or Malacca and Province Wellesley, from the other clayey and sandy plains of alluvium that stretch along the coast. The great plain N of Salangor for instance, might have large and productive coconut plantations along the sandy beach, and paddy fields for many miles inland. The capricious and exacting character of Malay governments cannot explain their absence, because the same cause would have prevented the formation of large inland communities, like that which occupied the plain of Kidah before it was harried by the Siamese. The true cause is the weakness of these governments, and their want of military and police organization.

The Malays are nomadic, adventurous and improvident, and single families or small companies frequently form settlements in uninhabited tracts, both in the interior and along the coast. But they receive no protection from their chiefs. The coasts are left entirely unguarded. They are constantly open to the attacks of pirates, and before the British authorities took the police of the Straits of Malacca into their hands, it was impossible for any village to exist on the coast, unless it was large enough to offer resistance, or too small and poor to invite attack. The creeks, straits and islets between Malacca and Salangor, were constantly infested by piratical praus, to which they offered peculiar facilities for concealment. Many of the names of places still remind us of the time when this coast was in the possession of pirates, such as Labuan

Perompa, a favourite anchorage, and Pulo Penjudi, a little south of Tanjong Tuan, where in returning many of them frequently lost in gambling with their comrades-what they had plundered in the north. At present the coast is comparatively safe, but it is still visited by pirates, and a near relative, I think a son of the king, was recently wounded in resisting an attack upon his prau. The only effective measure is to organize a general police, the English and Malay governments maintaining swift pulling and sailing boats to watch and guard the coasts, and communicate information of the movements of pirates. Piracy will not be entirely put down till the whole Archipelago is effectively governed by European powers, or the character of the natives is much advanced, but there can be no difficulty whatever in reducing it to the level of ordinary robbery by land, or at least of making it so infrequent and petty that it would no longer prove an obstacle to the formation of villages on the coasts. Until this can be done, the facility of concealment afforded by long tracts of unoccupied and jungly coasts, full of creeks, will always be a temptation to piratical excursions.

2nd September. In the night a squall from the S. W. which lasted some time, interrupted our progress. The prau could not be kept off the coast, and we were compelled to anchor, but the gale increased so much that the two anchors, and all the efforts of the men with poles, could not prevent her driving over the mud bank. The wind fortunately abated, and in the morning we found ourselves stuck fast close to the mangroves, and with a broad bank of mud between us and the sea. About mid-day the tide enabled us to get off and proceed north. We soon reached Tanjong Karang, a low sandy point with stunted linnngadei jungle. The mountain range in view is very long. The principal mass bears E. by N. A prominent peak E., Salangor S. E. by E. More distant mountains, probably Grisi Ambur, E. S. E.

A small Salangor boat, which had been fishing all the morning, came to us on being hailed when the tide rose, and afforded us an ample supply of fresh fish. The men told us that the right (ascending) or main branch of the Salangor, has a southerly direction, approaching the head of the Klang, while the left or smaller branch comes from the E. The feeders are all from this side of Grisi Ambur, the water of the other side draining into the Pahang river. All the information I have obtained tends to confirm the conclusion I drew from the statements of my Mintira visitors, that there is a mountain knot, in the vallies of which rise the Pahang, Salangor, Klang, Langat and Muar. This must be the next mountain system north of the smaller one of Blumut in Johore, the basin of the Sigamet, a feeder of the Muar from the east, embracing its S. E. extremity, and the most southerly vallies sending their waters to the Batu Pahat.

The next point, Tanjong Pasier Panjang, bears N. N. W. from

T. Karang. We passed this at $\frac{1}{2}$ past 2 P. M. and at 6 the Sambilans were seen N. W. The farthest mountain to the south was a peak bearing E. S. E. the centre of a large mountain mass E. by N. and that of another N. E. $\frac{1}{2}$ E.

3rd September. All the coast yesterday was low and sandy with linggadei jungle. The night came on before we could reach the mouth of the Birnam, and at 10 o'clock the Panglima with 3 men went in the sampan to search for it, as we anticipated another squall. He had not been long gone when the squall came on, but it proved less violent than that of last night, and the anchors held. The sampan did not return till next morning, the men having been obliged from the heavy waves on the bank to take refuge in a jirmal (fishing stake.) This morning Kwalla Birnam is seen close to us bearing N. E. It is a large and deep opening. The whole country is perfectly flat as far as the mountains, not a single hill being seen. The principal range begins behind the N. end of the Kwalla, and extends to S. E. towards the most southerly point now visible. The northern portion behind the Kwalla (N. N. E. $\frac{1}{2}$ E. to N. E.) has a partially serrated outline. The middle portion is higher, more massive and rounded, but the larger curves are rough with small rounded bosses and denticulations. The highest part, which has a rounded summit, bears N. E. by E. The southern part of the chain has also a jagged outline. It terminates about E. by N. The gap between it and the next chain is filled by some low peaks. A prominent peaked mountain in Pera, Gunong Bubo, is nearly N. The next point to the north bears N. W. by N. Over the point to the N. N. W. a short and low hill range is seen, and nearly N. W. one of the Sambilans. At 10 A. M. we passed Sungi Rungkup, the boundary between Salangor and Perak.

When opposite the south point of Kwalla Pera, the northern mountain chain Bubo has become much bolder, and the southern less so. Between it and Bubo there is a small isolated range. Bubo is lofty, and like Jerai and Pinang, isolated:—

S. point of Kwalla Pera.....	E.
Bubo.....	N. by E,
N. point of chain.....	N. E. by N.
Highest point.....	E. N. E.
Large Sambilan.....	W.
S. Sambilan.....	W. S. W. $\frac{1}{2}$ W.
Hills beyond Pankor.....	N. $\frac{1}{2}$ W.
Pankor Laut (seaward point).....	N. W. by N.
(landward point).....	N. N. W.

The next point is a group of hills. Pulo Jara is only known to the crew as Pulo Tambora.

We enter the Strait of Dinding and stop to get water. Dinding is a low densely wooded hill range, having exactly the appearance of one of the southern ranges of Pinang. The rock is

a large grained granite (spec) which like most granites, produces a soil favorable to natural jungle. The watering place is in the first cove on entering the strait. A path leads through the jungle and a little way up the hill to a cool shady spot, where after scrambling over some mossy rocks the water is seen falling in a slender cascade in a small cave. This is said by the Malays to be the place where the Dutch had their factory, and they spoke of a stone having a figure of a tiger cut on it. The strait is here landlocked on the north, but open to the south. On the land side there are two ranges of hills, the inner about as high as the Dinding range. Proceeding up the strait, a deep cove is seen on the land side, dividing the hills and exposing the distant mountains. At the extremity is the mouth of the river Dinding, in which the To Kayo of Pera has lately established himself to work tin.

4th September. Last night we anchored on the N. side of Pulo Talang. Towards the morning we got under weigh and at day-break were between the Bruas and the Trong. The mountains have now a different appearance from any we have yet seen. The Bubo range is so close to us as almost to appear to rise from the sea. It is massive and imposing, the outline of the central mass mostly angular, the summit is table shaped and a sharp denutication rises close to it on the north. It is more like Tioman than any other of the Peninsular mountains I have seen, but it is much less serrated. These inland mountains are in all respects repetitions of the larger islands, such as Tioman, Tinggi, Krimun and Pinang, so that if the theory of the elevation and forms of the latter is well ascertained, it will embrace the former. The hill group on the mainland opposite the Dindings, and forming one side of the strait, is seen from the north to be twice as high and massive as the insular group, and to be isolated. A little to the E. a low hill rises. In front and to the S. of Bubo, there are some short hill ranges.

To the N. of Bubo another mountain range rises. It is as bulky, but it is less abrupt in its outline, and the central mass is less high. Over its northern limb the mamillary summits of a distant range are visible. Beyond this again, and stretching to the N.W., extends the Kidah range, a beautiful cloud lying on it and covering the summit of Jerai. Pinang appears as a low continuation of this range. Gunong Gantang is a small mass like a bear, sitting between Bubo and the northern range. Hitherto the mountains have been single ranges, but they are at once nearer, more massive, and with the outlines of more inland ranges appearing between the higher points, and stretching beyond their extremities, so as to convey the impression that the land is wider. The great size of the embouchure of the river Pera, is another evidence that we are opposite the broadest part of the Peninsula.

In the evening we sailed up the strait between Pinang and the mainland. The scene on both sides, but particularly on the main-

land, presenting an unparalleled combination of mountain ranges and masses, dark jungly hills, coconut fringed beaches with huts and villages, gardens of spice and fruit trees on the steep faces of hills, land-locked sea, and islands. The natural features alone are far more beautiful and magnificent than any other part of the coast of the Peninsula can display.

THE GEOGRAPHICAL GROUP OF CELEBES.

CHAPTER II.

We will now mention the most remarkable facts, as well as the most recent events, which have taken place in the southern part of the South Peninsula of Celebes. It was there that the first European navigators who visited this island arrived, and it was towards this part of the Malay Archipelago that the maritime powers of the sixteenth century directed their first commercial and at the same time armed expeditions. These adventurous missions, according as they were conducted by able leaders, or that circumstances were favorable to them, assured the supremacy to the first occupant of these countries. The productions of the soil, brought into repute often exaggerated by the value attached to them, soon excited the envy of rival commercial states, and served as the principal motive for the wars in which the Europeans engaged in these parts. Different states successively wielded the power there, and preserved it as long as the chances of war were favourable to their standards. The Company of the Dutch Indies came out victorious from this bloody struggle, and the field of battle remained in its power. After having expelled the Portuguese from Amboyna, and settled itself at Makassar, it obtained possession, without any remarkable obstacle, of all the islands of the farthest east; mistress of the Moluccas, the Company obliged Portugal to content itself with the possession of a part of the island of Timor, and she turned back the commerce of England towards the continent of India. The preponderating authority which she gained in the Sunda islands, as well as the extensive possessions which she successively acquired throughout the Malay Archipelago, date from this memorable epoch.

The principal details relative to the north peninsula will occupy us in this chapter. This part of Celebes was submitted to the power of the Company, less by the force of arms, than as the result of the occupation of the islands of Tidor and Ternate, and by the rights of vassalage which she exercised over the Sultans, the successors of the Malay despots in these countries.

This tongue of land in the north of Celebes, known administratively under the name of the residency of Manado, comprehends all the northern extent of the island, from the bay of Palos in the west, to the cape of Taliabo in the east, and comprises the great bay or arm of the sea of Gunong-tello, which stretches in a west direction between the two peninsulas. The residency of Manado includes under its jurisdiction, the whole federative states of Minahassa; the small kingdoms of the northern coast; the very

* (Translated from Temminck's Coup. D'Œil &c. Vol. III.)

extensive districts in the west part of the peninsula, where the government exercises sway, besides the islands of Sangir and Talaut to the north, as well as the lesser islands of the west coast and the large gulf of Tomini.

The population is composed of Natives, Christians, Malays and Chinese. In 1840 there were reckoned in Minahassa :—

Natives.....	78,700
Christians.....	5,687
Malays.....	2,875
Chinese.....	510
Freed Slaves.....	500
	88,272
The districts of Gorontalo.....	50,000
Sangir and Talaut islands.....	40,000

Total 178,272

without taking into account the number of the Alfouira population of the interior, which cannot be very considerable, seeing that the elevated and woody parts of Kayeli, Toradja and Tomeiku appear to be thinly peopled.

The Minahassa confederation counts 286 villages ; the principal districts are Tondano, Langoang, Kakas, Tomehon, Sonder, Kawakkoang, Tompasse, Amurang, Belang and Kema. They are all under the direct authority of Government ; the resident and three other European civil employeés, assisted by an indeterminate number of native functionaries, administer the government. The resident is under the orders of the governor of the Moluccas, the head quarters of which is Amboyna.

Under the authority of the Company, the native chiefs bore the title of *Kapala-balok* ; at present they have the title of Major or the *Hukum Tuwa Besar* ; the subaltern chiefs, in rank equal to the *Mandors* of Java, bear the titles of *Kapla jaga* and *Hukum kechil* ; the *Tuwa besar* are elected by the people and paid by 5 per cent on the value of the coffee produced by their districts. These chiefs form part of the tribunal, presided over by the resident, assisted by two other functionaries or citizens. The council of justice at Ternate, finally decides all serious cases ; under its immediate jurisdiction are also placed the Europeans, the Chinese, and generally all the foreign inhabitants of the residency. Justice is administered in the other dependant states by the Rajahs and their councillors ; when the offence is of a grave nature, the tribunal is presided over by the civil chief, assisted by the Rajah and the nobles of the state ; the sentences of these tribunals must be submitted to the revision of the council of justice at Ternate. For the maintenance of police the resident has at his disposal the municipal guard (*schuttery*) of 300 or 400 men, of which a part is armed with muskets, and the rest with pikes : it is commanded by a Captain, a first Lieutenant and two

Sub-Lieutenants; some armed boats of the country, known under the name of *Korra-korra*, with crews of 50 men, are also under his orders. The instruction of the young, in the residency of Menado, is entrusted to five evangelical missionaries; in 1844 they had 64 schools, of which 54 were maintained by the board of missions, and 10 by the government. These missionaries reside at Menado, Tondano, Longowan, Tomehon and Amurang, and each has from 10 to 14 schools under his charge; these are located in the most considerable campongs or villages in the residency. The number of children under instruction in 1844 were 4227; the average amount of attendance was 3046. An agent of the Trading Company resides at Menado, which has been declared a free port.

The city or town of Menado, the chief place in the residency, is situated at the mouth of the river of that name; it is defended on the side next the sea by Fort Amsterdam. Many other batteries serve for the defence of principal points on the shore, where, as well as in the interior, we find beautiful villages in picturesque sites, surrounded by well cultivated ground, the varied and abundant productions of which are the sources of the well being and prosperity of the inhabitants.

The states of the East and South East shore, are Gorontalo, Limbotto, Bolanga, Suwawut, Bintana, Parigi and Muton. The civil chief of these districts bears the title of commandant and resides at Gorontalo; his functions specially consist in maintaining a good understanding amongst the petty princes who rule these states, watching the entry of the deliveries of gold dust, and he is besides entrusted with the presidency of council in civil and criminal matters.

The small states of the northern coast, ruled by *Rajahs* subordinate to the government, are Bolang-mogondo, Bolang-banka, Kaidipang, Bintauna, Bolang-itang, Attingola, Bwool and Tontoli. The principal mines, or washings of gold, are found in these districts. The metal exists here in grains or spangles; the quantity annually obtained in these districts is reckoned at 800 or 900 ounces. It is probable that platina also exists in the auriferous soils of these districts; but the natives of Celebes, like those of Borneo, do not know how to distinguish it; in Borneo a great quantity is lost by the careless mode of washing which they practise. The government pays 33½ francs for an ounce of gold dust; it is sold for about 60 francs; so that it yields an annual profit of about 20 to 25 thousand francs.

The other articles of exportation from Celebes consist of coffee, rice, and gumuti cordages; wild bees wax, tortoiseshell and shark's fins, which are in demand in China. The island supplies the Moluccas with rice, mats, palm sugar, and coconut oil; a great many different kinds of woods, suited for building and furniture, are used by the inhabitants; they also manufacture sarongs and

some cotton cloths. The rice is of a good quality and they cultivate several varieties, but it is difficult to preserve it for more than one year. The Alfouras cultivate much *jagong* or maize, which forms their principal food. In 1822 the cultivation of the coffee tree was introduced; this precious tree succeeded perfectly, for the soil is mountainous in many parts of Celebes and favorable to this agricultural production. In 1840, there were more than two millions of coffee trees in Minahassa, of which the produce was 10 thousand pikuls of 125 lbs.; since that time this culture has increased annually. In 1826 the cacao tree was introduced with success on private account; numerous plantations at present exist in the low and coast districts; the chocolate of Celebes is rich and of good quality; it is exported to the Philippines where it is sold at the rate of 110 to 120 francs per pikul. The principal articles of importation are manufactures of cotton and silk, arrack, iron, steel, copper utensils and the productions of China.

The islands which are placed under the administrative authority of the resident of Menado, are, the *Zuidwachter*, the *Noordwachter*, the seven islands, the small isles on the northern coast, those of the bay of Menado; the small groups of Salice and Banka; more to the north, the very extensive Archipelagoes of Sjauw, Sangir, Talaut and Meangis; in the Molucca Straits, Lembe, Makipolor and Besar; in the gulf of Tomini, the islands in the bay of Gunong-tello, the Borangs and the great archipelago of Toggian.

Sangir and the numerous islands of this group occupy a superficies of 13 square leagues, the Talaut and the Meangis islands united are 18 square leagues; these archipelagoes, formerly subject to the authority of the Sultans of Ternate, now make part of the residency of Menado.

Several extinct volcanoes, and some still in full action, are found in the Sangir group; the devastations which they commit from time to time, have often been fatal to the inhabitants. The eruption of Duwana, in 1808, completely annihilated the village of Tagalando, destroyed all the surrounding forests, and suddenly deprived the inhabitants of all means of livelihood, by the destruction of their fields. The Gunong-api causes numerous ravages in the island of Sjauw; its peak, 6000 feet above the level of the sea forms the culminating point of this group. Gunong-abu covers with its base all the northern part of Sangir-besar, this volcano has not been active since 1812, when the torrents of lava destroyed the extensive forests of coconut trees with which this part of the island was covered, and caused the death of many of the inhabitants. These islands furnish more than twenty five kinds of wood suited for building and furniture. Two harbours, sheltered from all winds, exist in the larger Sangir, one in the bay of Taruna, the other, called Midelu, on the eastern side.

The Sangir islands are divided into six states or kingdoms,

governed by six Rajahs or chiefs, the election of whom is left to the inhabitants ; but they must be approved of by the government, which also reserves to itself the power of depriving them of their functions and of deporting them from the country. Traditions attribute to these Rajahs the exercise of power in the Talaut islands lying more to the north. The states of Sangir, are Tagalanda, Chiaaw, Manganito, Tawena, Khandar and Tabukan ; this last, the most powerful and the most populous, occupies the whole of Sangir-besar. The aborigines are poor, and much addicted to enervate themselves with *sagunveer* or palm wine. The government at present does not drive any profit from this population ; in the time of the Company the inhabitants furnished a great quantity of coconut oil, these islands being abundantly provided with forests of coconut trees. The inhabitants trade in this oil as well as in edible birds nests, which they exchange for Chinese cloths, and crockery. The population of the Sangir and Talaut islands, according to the tables of 1840, amounts to 40,000.

The information regarding the Talaut and Meangis islands is very imperfect. The inhabitants are said to live in a state of perpetual discord amongst themselves, and they are far behind the Alfouras of Celebes in civilization. The islands of Salibabo, Tolur and Kabruang are the largest of this group. Since 1776, when the English navigator Forrest touched at these islands, no other voyager has made mention of them.

According to Mr Pietermaat, formerly resident at Menado, it appears certain that Christianity had made great progress in former times in the Sangir islands ; at least we understand that with the exception of the small island of Khandar, the inhabitants of which are Mahomedans, all the others are Christians ; but it is to be presumed, says he, that they are more so in name than in fact : the Christian population of these islands is however reckoned at 26,000.

WHALE FISHING OF THE SOLORESE.*

Solor is an island lying to the east of Flores and to the north of Timor, under which residency it is placed. The inhabitants of the coast of this island are Mahomedans in name, but they are nevertheless hard arrack drinkers, and gain their livelihood by fishing, the produce of which they exchange with the mountaineers for maize, the production of the ground, which the population cultivate for their subsistence, the soil there being of too volcanic a nature to grow rice.

These inhabitants of the shore are hardy mariners and fishers, and think nothing of approaching the whale with their little boats eight feet long, to attack the unwieldy monster and tow him to the shore. The way in which they capture him is as follows. Each morning all the boats put to sea to search for their prize. When a whale is observed, they make a signal to each other, and immediately every one is prepared for the attack. This takes place in small boats, in which 6 or 8 men with small paddles row sitting. A harpooner stands in front with his harpoon, not of the best kind, which is fastened to the boat with a rattan rope of 15 or 20 fathoms. On approaching the whale the harpooner springs on its back, and drives the harpoon, which is fastened to the boat, with all his force into the animal. The whale on feeling the harpoon, immediately darts away and dives to the bottom, and of course takes the boat with him. The crew remain swimming, until they are taken up by the other boats. The whale is soon obliged to come up, and the boat generally appears with it; the surrounding boats approach it and make a second, third and fourth boat fast to the first, in order to impede the whale by the heavy drag. Being thus hindered from making rapid progress, other boats are enabled to run alongside the sea monster and to disable him entirely. The beast is still far from dead when they already crowd upon his huge carcass cutting and chopping; when the animal is really dead, he is towed in triumph to the shore, drawn up, and cut to pieces. Every one is ready, women and children assist, and it is a real holiday for them to dispose of such a sea monster. Every one, small and great, runs with the blubber, which they speedily carry to the mountains, to barter it for maize; while they all give themselves up to unusual enjoyment.

The oil is not boiled out, but the blubber is hung up in the sun, to allow it to drop; the train oil running out of it is then caught in vessels, it is of a nauseous odour, but it is nevertheless made use of by the inhabitants. They find much ambergris floating in the sea; they also kill many sharks, dry the fins and gather birds nests, all which productions are sold to the Bugis traders for the

* Translated from the Tijdschrift Voor Nederlandsch Indie 1849. p. 66.

Chinese market. The payment is made in arrack, copper work, parangs and iron. The last article is wrought by them for the construction of their prahus, which they call "Kora-kora."

The village which most applies itself to the whale fishery is Lamakera on the north east part of the island of Solor, and lying within the Strait. It is the largest, most prosperous and most populous. The four other Mahomedan villages are Layayong, Andanara, Lamahala and Trong, which three last are situated on the island Andanara.

