

THE
JOURNAL
OF
THE ASIATIC SOCIETY
OF
BENGAL.



EDITED BY
JAMES PRINSEP, F. R. S.

SECRETARY OF THE AS. SOC., AND HON. MEM. OF THE AS. SOC. OF PARIS. COR.
MEM. OF THE ZOOLOGICAL SOC. OF LONDON AND OF THE ROYAL SOC.
OF MARSEILLES.

VOL. IV. ⁴
1835

JANUARY TO DECEMBER,
1835.

"It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science, in different parts of *Asia*, will commit their observations to writing, and send them to the Asiatic Society at Calcutta; it will languish, if such communications shall be long intermitted; and will die away, if they shall entirely cease."

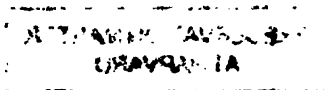
SIR WM. JONES.

Calcutta:

PRINTED AT THE BAPTIST MISSION PRESS, CIRCULAR ROAD.

SOLD BY THE EDITOR, AT THE SOCIETY'S OFFICE.

1835.



can now be inferred only, from the loose dark nature of the soil, and a few small fragments of glass and copper, scattered here and there, so common a circumstance in most of the ancient towns on the Arabian coast.

A walk of about 12 miles brought us on to *Nakhul Mayuk*, a very small date grove, at the foot of the lofty range of mountains a little to the eastward of *Wady Shulkhowi*. Here we began to ascend, and having attained an elevation of about 1500 feet, we came to a spacious cave, in a part of which we found the adjoining characters, written exactly in the same manner with red paint as those at *Hamman*. Immediately underneath is said to have been a well, more probably a small reservoir for water, from its position and the dryness of the soil. It is now filled up with loose stones and rubbish. The surrounding country, with the exception of one or two very small date groves, pressing out from some obscure corner of a valley, is one unvaried scene of barrenness and desolation. We were told, however, that after a fall of rain, the scanty herbage which springs up was a sufficient inducement for the Bedouins to bring their flocks up to the hills, and during which time, they inhabited this and any other caves which they found convenient.

Having slept here for the night, under the protection of a few Bedouins of the Menahil tribe, we started early the following morning, to return by the same dreary path which conducted us on our pilgrimage.

II.—*Account of Súngie Ujong, one of the States in the interior of Malacca. By Ensign T. J. NEWBOLD, 23rd Regt. Madras Light Infantry.*

[Read at the Meeting of the 5th August.]

[The following information, touching the population, customs, amount of produce, boundaries, &c. of the states described, has been principally and necessarily derived from the natives themselves. It is therefore offered with diffidence; but, at the same time, it is to observe here, that fully alive to the disadvantages of such sources, no labor has been spared by me to check and render by collation and patient investigation, such information now submitted, as correct and near the truth as possible.]

The states in the interior, formerly under general sway of the princes deputed from Menangkabowe, are under the immediate government of their respective *Panghúlás* and *Súkús*. As each state has its peculiar features, it would seem advisable to give them a separate notice. By Malays, the precedence is ascribed to Súngie Ujong; the *Panghúlú* of which territory is addressed, by his brethren, by the

appellation of *Abang*, elder brother; the second place is given to Rumbowe, and the third to Johole. Srimenánti, whose claims still remain unsettled, aspires to the fourth place.

Boundaries.—*Súngie Ujong* is situated towards the source of the right branch of the Lingie river. It is bounded to the north by Jellabú; to the south, by part of Rumbowe and the Lingie river; to the east, by Srimenánti, and to the west, by Salangore. Its boundaries with Jellabú are said to be Búkit Tángoh and Dhúlúkáru bander Barangan; with Rumbowe, Búkit A'ngin, part of the right branch of the Lingie river, and Parentian Tingih; with Srimenánti, part of Teráchi and the Páro stream: and with Salangore or Calang, by the river Lángkat, Kobak Kámbang, and Tongal Sejága.

Population.—The population in 1832, was estimated at 3,200 Malays, principally Menangkabowes; and 400 Chinese employed in the mines. Many of the latter have since fled to Malacca, in consequence of the disturbances in 1833. The principal villages are Lingie, (the residence of the *Dattu Múda*, KÁTAS;) Pantei, (the residence of the *Panghúlú*;) Jíboi, Sála, Linsom, Durian, Tanjong, Rassah, Kopaiyong, Rantou, Siliou, and Jirrah. The Teráchi territory, a portion of which appertained to *Súngie Ujong*, now claims independence.

Trade.—The trade of *Súngie Ujong* is principally in tin, which is got at Sála, Sa Máraboh, Battu Lobong, Kaya Arra, and Timiong. Thence it is brought down to Lingie, and landed at Pankálange, Cúndang, Durian, and Mangis. It is here deposited in ware-houses, and generally bartered for rice, opium, salt, tobacco, cloths, oil, and shells for making lime, brought up by boats, from $\frac{1}{2}$ to $1\frac{1}{2}$ coyans burthen, which cannot easily ascend higher than this part of the river.

The tin is conveyed by Malay coolies, by land, from the mines, as far as Jíbohí; a village estimated at 30 miles from Lingie; and thence to Lingie, by small boats, down the river.

From the following extracts from treaties made by the Dutch, it would appear that they did not neglect to avail themselves of this source to increase the revenue of Malacca.

Article I. of a treaty concluded by the Dutch Governor W. BOBLAN in Council, with the chiefs of Rumbowe and Calang, dated Malacca, 24th January, 1760.

“The tin being the produce of Lingie, Rumbowe, and Calang, without any exception, will be delivered to the Company at 38 drs. a bhar of 3 piculs; and this price will always continue, without its ever being enhanced; it will be in the power of the Company to seize and confiscate, and to appropriate for their use, all tin which might be

discovered to have been fraudulently exported from the places above-mentioned."

A profit equal to about 18,000 Spanish dollars is supposed to have accrued to the Dutch annually from this monopoly; which so rigid were they in enforcing, that we find it stipulated in the same treaty, "that no boats or vessels, to whomsoever they may belong, shall be allowed to pass the Company's settlement at Lingie without touching, in order that a search may be made in such boats or vessels for tin; any person attempting to evade these rules, will be liable to have their boats, and the tin which may be found in them, confiscated and sold, and the proceeds appropriated for the use of the Company and the said chiefs." Also, that "no boats or vessels of any description whatever be permitted to proceed from the north to south, or passing from the latter to the former part, or passing the straits of Malacca, without being provided with a pass, on pain of being seized."

During the British Government at Malacca, from 1795 to 1818, the trade fell into the hands of private individuals, principally Dutch and Chinese merchants residing at Malacca. In 1819, the Dutch resumed the monopoly, as we find from the 7th article of a treaty, dated Naning, the 5th day of June, 1819, between the Supreme Government of Netherlands India and Raja ALI, the *Panghúli* and *Ampát Súkú* of Rumbowe, which runs thus: "Raja ALÍ, the *Panghúli* and *Ampát Súkú* of Rumbowe, must give up to Government all the tin from Lingie, Súngie Ujong, Rumbowe, and any place under their authority, without reservation. The Government binds itself to pay 40 Spanish dollars per bhar of 300 catties, or 370 lbs., &c."

On the resumption of Malacca by the English, in 1825, the tin trade relapsed into the hands of the private merchants.

Miners.—In 1828, the number of Chinese miners amounted to nearly 1000 men, who were regularly divided into nine *Kongsis* or companies, each under its respective *Tao-kae*. They were chiefly of that singular fraternity, the *Tian Tay Huay*, or Triad Society, whose mysterious oaths and secret laws appear to be not very dissimilar from those which bound the Carbonari of Modern Europe. Jealousy of their fast increasing power and numbers, or some alleged offence, but more probably the treasure amassed by this brotherhood, (whose property was in common,) led in 1828, to their massacre by the Malays.

In 1830, the mines were again worked by about 400 Chinese, who went up, at the inducement of some Malacca merchants, and continued there until the late disturbances in 1833, when many of them returned to Malacca. The mines at present are but partially worked, and very

little of the tin passes down the river, in consequence of the feud existing between the Rumbowé chiefs and those of Súngie Ujong and Lingie.

The Malays and Chinese employed in the mines were liberally paid. The rate of their wages will shew the difference of value set upon the services of the two classes;—a Chinese being paid at the rate of 5 to 8 dollars per mensem; and a Malay from 3 to 5 only.

From day-break to 7 A. M., they are employed in clearing the mines from the water which accumulates during the night. From 7 to 8, they rest and breakfast. At 8, the process of digging out the earth and ore is commenced. At 11, they go to dinner, and return to work again about 1 P. M.

At 5, their labours cease for the day. No work is done at the periods of new and full moon.

Like their Cornish brethren, the Malay miners are very superstitious. They believe in the existence of a spirit (*Kumrang*), who watches over the mines, and whose wrath they are particularly careful not to provoke by work or deed. They have "wise men," or *Pwóds*, who pretend to be able to ascertain the most favorable spots for sinking a mine, by various spells and charms; these may be compared with the charlatanic wielders of the *virgula divinatoria* in our own "enlightened country."

Previous to a description of the mines, a short outline of the principal geological features of the peninsula, as far as present imperfect information extends, may not wholly be out of place.

The southern part of the Malayan peninsula and Banca assimilate in geological formation. Dr. HORSFIELD, in his observations on the mineralogical constitution of Banca, observes, that "the direction of the island being from north-west to south-west, it follows not only the direction of Sumatra and the Malayan peninsula, but the large chain of Asiatic mountains, one of the many branches of which terminates in Ceylon, while another traversing Arracan, Pegu, the Malayan peninsula, and probably Sumatra, sends off an inferior range through Banca and Billiton, where it may be considered to disappear."

This chain of mountains may be considered as the termination of one of those beams or pillars of lofty hills, spoken of by M. DE GUIGNES, in his work on the Huns, as supporting the stupendous edifice, to which he compares the elevated regions of Tartary, comprehending the lofty ranges of *Imáüs* and *Caucasus*; and the dome of which is represented as one prodigious mountain, to which the Chinese give the epithet of *celestial*, down the steep slopes of which numerous broad and rapid rivers pour their waters.

The Malayan range, as far as has been hitherto explored, is of primitive formation; principally grey stanniferous granite.

In the gold countries of Tringánu, Pahang, Gominchi, and Mount Ophir, rocks and crystals of quartz are met with. At the southern extremity, and in some parts of Salangore, porphyry occurs.

The islands in the neighbourhood of Malacca, and those off the eastern extremity of the Salangore coast, consist principally of granite and laterite with sienite.

According to Dr. WARD, "The small hills in the neighbourhood of Malacca are formed of a conglomerate, the base of which is clay iron stone, containing imbedded portions of felspar, in a state of decomposition (having all the properties of yellow ochre), and small grains of quartz and iron glance, scattered through its substance.

"The specific gravity of the rock is 2.536; when recently dug, it is soft, can be easily cut, and readily stains the fingers; but after exposure to the air for some time, it acquires such a degree of hardness as to be broken with difficulty; and its durability is shewn by the present state of the ancient buildings, which have stood unimpaired for nearly 300 years.

"In its dry state, it is porous, from the destruction of the ochreous particles by moisture and exposure to the air, resembling old lava in its external appearance.

"In all its properties, it agrees exactly with the rock common on the Malabar Coast, and described by Dr. BUCHANAN under the name of laterite."

The mountains at Penang are also "composed of fine grey granite, and all the smaller eminences are of the same material." "Some of the small hills near the coast are partly formed of the laterite already described when speaking of Malacca; and Saddle island, at the south-western angle of Penang, is apparently entirely composed of the same ingredient."

At the Carimons, hornstone is found. Mr. MARTIN states, the aspect of the Island of Singapore, (situate on the southern extremity of the peninsula, in Lat. $1^{\circ} 17' 22''$ north, and Long. $103^{\circ} 51' 5''$ east,) to be "low and level, with an extensive chain of saline and fresh water marshes; in several parts covered with lofty timber and luxuriant vegetation, here and there low rounded sand-hills interspersed with spots of level ground, formed of a ferruginous clay, with a sandy substratum. The principal rock is red sandstone, which changes in some parts to a breccia or conglomerate, containing large fragments and crystals of quartz. The whole contiguous group of isles, about thirty in number, as well as Singapore, are apparently of a submarine

origin, and their evulsion probably is of no very distant date." It may be added, that bouldered pieces of primitive trap are found on the shores of Singapore, though none has hitherto been seen in *situ*.

The range of mountains on the peninsula, as it approaches the equator, diminishes in height. The highest of the Rumbowé and Johor ranges, (with the exception of Mount Ophir,) not exceeding, probably, 3000 feet; while many of those to the north of Kedah are said to be upwards of 6000.

Mount Ophir, a detached mountain, between 30 and 40 miles to the eastward of Malacca, I calculated roughly (by means of the thermometer and boiling water) to be 5693 feet above the level of the sea; its summit is granite. Gold dust and crystals of quartz are found in considerable quantities around its base*.

From information hitherto collected, and inquiries made among the natives, it would not appear that any volcanoes exist in the interior; though the circumstance of numerous hot-springs, scattered over the face of the country, and other indications, sufficiently testify the presence of subterraneous fires. Severe shocks of earthquakes have been felt from time to time, but whether caused by violent eruptions from any of the volcanoes on the opposite coast of Sumatra, or by under-ground explosions there, or in the peninsula itself, is uncertain.

There are hot-springs in the vicinity of Malacca; at Ayerpánnas, and also near Sabáng, and at Lúndi in the Naning territory. I have visited the two former places, and found the temperature of the water at noon of the springs at Ayerpánnas, to be 120° Fahrenheit, and at 6 A. M., 113½°.

The temperature of the hot-springs at Sabáng was found at 6 A. M. to be 110° Fahrenheit. The variation in the former instance is accounted for by the different temperatures of atmosphere at the time of taking the heat. The heat of the springs in both cases, I found to exceed that of the atmosphere by an average of 35° Fahrenheit, in several comparative trials.

At the wells near Sabáng, when the bulb of the thermometer was pushed into the soft vegetable mould at the bottom of the spring, the mercury rose to 130°.

The springs at both places are situated in swampy flats, environed by small hills. They average from 1 to 2½ feet in depth, and are discernible from a distance by the steam and odour that escapes. The water is of a pale bluish green tinge; from the bottom bubbles of air (probably sulphuretted hydrogen) ever and anon find their way to the surface, where they burst.

* See J. A. S. vol. ii. page 497.

Dr. WARD analysed a portion of the water from the springs at Ayerpánnas, and found, that on slow evaporation in a sand-bath, 1000 grains of the water left a residuum of eight grains of saline matter, principally muriate of soda, with a slightly bitter taste, indicating the presence of sulphate of magnesia.

The surface of the peninsula is covered generally by alluvial deposits, rich in ore of tin, and not unfrequently mixed with gold; over this lies a layer of vegetable mould, in which stones or pebbles are seldom found.

In the interior, the land is mountainous, but undulating towards its coasts, shaded by primæval forests, and stored with treasures to the botanist and naturalist; it is almost devoid of plains. The strips of low ground lying in the hollows of the undulations are almost invariably swampy, and are converted into *Sawaks*, or wet rice-grounds, by the natives.

At various places along its western coast are low cliffs, if they may so be termed, of a reddish steatite.

The banks of the most considerable rivers are generally low, swampy, and covered with mangrove, *Nipah*, *Nibong*, and other trees of the same nature.

The bottom is for the most part of mud, except at short distances from the estuaries, where sand banks and coral reefs are often met with.

The tin of the peninsula, and the eastern islands, (particularly those of Junk Ceylon, Lingga, and Banca, which may be styled the eastern Cassiterides,) is diffused over a great geographical extent.

Mr. CRAWFORD observes, that "tin, wherever found, has a limited geographical distribution; but where it does exist, it is always in great abundance. The tin of the Indian Islands has, however, a much wider range of distribution than that of any other country, being found in considerable quantity from the 98° to the 107° of east longitude, and from the 8° north to 3° south latitude."

It has, however, been since stated by Mr. ANDERSON, that tin has been found in considerable quantities much farther north, viz. in the interior of Tavoy, in latitude 12° 40' north; the mines are situated at a place called Sakána, about four days' journey from the city of Tavoy.

It has been affirmed, that tin exists so high as 14° north, in Siam.

The peninsula of the present day, although auriferous, appears not to deserve its appellation of "The Golden Chersonesus," so much as its neighbour, the Island of Sumatra, to which, by the way, there is a tradition, mentioned by the early Portuguese historians, that it was formerly united. Sumatra, by some, has been supposed to be the

Taprobána of the ancient geographers; this Mr. MARSDEN denies, ascribing rather the name to Ceylon, the *Serendib* of Muhammedan writers, and the *Langka* of the Hindus; and affirms, that Sumatra was unknown to them, denouncing the descriptions given by STRABO, POMPONIUS, MELA, PLINY, and PTOLEMY, as obscure and contradictory.

Admitting the tradition to be based on truth, it might be conjectured, that the Peninsula and Sumatra, thus united, formed that tract of country known to the Greeks and Romans by the title of "*Aurea Chersonesus*." This might serve in some measure to explain why so extensive an island, and one so rich in gold and spices, the two great desiderata of ancient, and I may venture to surmise, modern days, should have escaped the notice of ancient geographers.

The quantity of gold dust exported annually from the south-west coast of Sumatra and Achin alone, according to MARS DEN and HAMILTON, amounts to 26,400 oz. The former states, that there are no fewer than twelve hundred gold mines in the dominions of Menangkabow alone; a considerable portion of the produce of which (perhaps one-half) never comes into the hands of Europeans.

The gold of the peninsula, on a rough estimate, amounts to 19,800 oz. annually. It is chiefly got at Ulú Pahang, Tringánu, Calántan, Johole, Gominchi, and Jeleye; Reccan, Battang, Moring, and other places at the foot of Mount Ophir.

A small quantity of iron is found in the interior of Quedah, in the peninsula, and also in Sumatra. Siam and Billiton produce this metal in tolerable abundance.

I do not find that silver is produced in any part of the peninsula; although Perak, from its name, which signifies silver, and which is conjectured by MARS DEN to have been the *Αργυρα* of PTOLEMY, might have been supposed to have derived its appellation from the presence of this metal.

The tin produced annually in the peninsula, including the adjacent Island of Junk Ceylon, is estimated at 34,600 peculs.

According to CRAWFURD, the tin of Banca, produce of 1817, amounted to 35,000 peculs, or 2,083½ tons.

Tin Mines.—The mines are generally excavated on the swampy flats at the base of hills of primitive formation. They average from six to twenty feet in depth, following the streams of ore (*Húlár bñt*), which will sometimes run in a horizontal direction to the distance of three miles, according to the nature of the ground. These excavations are termed *Lombongan*. The streams vary in diameter from six inches to eighteen and twenty, and consist of a quantity of small heavy granulated portions of a dark hue, and shining with a metallic

lustre, intermixed with a glittering white sand. The excavations made by the Malays, are more superficial than those dug by the Chinese, as they are too lazy to work the streams, which lie deep.

The strata under which the ore is found are commonly, 1st, a black vegetable mould; 2nd, red clay; 3rd, white clay, with white pebbles, apparently decomposed quartz, and 4th, a bed of shining white sand, called *Passir bijí*. Under the ore lies a stratum of steatite, called *Nápal*, or a hard bed of decomposed rock. The native term for the tin ore is *Bjí títah*, literally seeds of tin; when melted, it has the name of *Títah masak*. Crystals of quartz and fragments of micaceous schist are sometimes found among the alluvial earth thrown out.

The soil is carried out by the miners in baskets, suspended at the extremities of a stout elastic bambú or *penága*, which passes across the shoulders. The men are divided into two parties, which work in regular succession, one entering the shaft with emptied baskets, while the other makes its egress, with the filled ones. At Ulu Pondoí, in Naning, and at Jerram Kambing, I am informed, the mines are natural caverns in the rock. The Malays and *Jacoons* collect the ore by the light of dammer torches.

The ore is taken to a stream, conducted by artificial channels, lined with the bark of trees, to the vicinity of the mines, and stirred about with an iron rake, or a *choncole*. The water carries off the sand, small pebbles, and earth, leaving the ore and large stones at the bottom, which are afterwards separated by a riddle and the hand. The ore, thus cleared of extraneous substances, is deposited in the *koppas*, to await the process of smelting.

Smelting or Melanchúr.—The smeltings are carried on at stated periods, twice or thrice a year, according to the quantity of ore collected, and always at night, to avoid the great heat.

The ore and charcoal, (of the *Kompas*, *Kamoui*, or other hard woods,) are gradually heaped up, in alternate layers, in a rude furnace of clay, called a *Bullowe*, with an aperture below, to allow the escape of the fused metal. The fire is urged, and the whole mass brought into a glow by a sort of leathern bellows called *Hambúsan*, and sometimes by ruder ones, constructed like an air-pump, and made from the hollowed trunk of a strait tree, with a piston, headed by thick folds of paper. These are called *Kalábongs*.

The Malays for the most part content themselves with the *Tropong*, which is merely a hollow bambú converted into a sort of blow-pipe, and worked by the mouth.

As the heat increases, the melted metal is received into a hole dug in the ground, called the *Telága*, or reservoir; and thence, with the assistance of iron ladles, poured into the moulds.

The tin now assumes the shape of the ingots of commerce, of which there are two kinds common in Súngie Ujong, viz. the *Támpang* and *Kepping* or *Bangka*. The former weighs from half a catty to two catties, and the latter, from fifty to sixty catties; one catty is equal to one pound and three-quarters.

The *Támpang* is generally used by the Malays.

In the furnaces used by the Chinese, 800 lbs. of metal may be produced during the course of a night. Those of the Malays seldom produce more than one-sixth of this quantity.

From 100 parts of the ore, it is calculated, from 65 to 77 of pure metal are produced. The ore of Banca yields 58. That of Junk Ceylon, according to an assay made by Mr. BLAKE, 64½.

The water is drained from the mines, if shallow, by means of a channel, leading into a neighbouring stream; but if deep, the *Putdram Ayer* is had recourse to. This hydraulic machine is, I believe, of Chinese invention. The Rev. Mr. TOMLIN, a zealous missionary, gives the following description of it:

“The apparatus is simple, consisting of a common water wheel, a circular wooden chain about 40 feet in circumference, and a long square box, or trough, through which it runs in ascending. The wheel and chain, I think, revolve on a common axis, so that the motion of the former necessarily puts the latter into action. The chain consists of square wooden floats, a foot distant from each other, and strung as it were upon a continuous flexible axis, having a moveable joint between each pair.

“As the float-boards of the chain successively enter the lower part of the box or trough, (immersed in water,) a portion of water is constantly forced up by each, and discharged at the top. At one of the mines we were much struck with the simple but efficient mode of its application. There were three distinct planes or terraces rising above each other. On the middle one was the wheel; the lower was the pit of the mine; from the higher a stream of water fell and turned the wheel, which, putting the whole machine into motion, brought up another stream from the pit; these two streams, from above and below, uniting on the middle plane, run off in a sluice, by which the ore was washed.”

Regarding the smelting of tin, in a recent number of Dr. LARDNER'S Cabinet Cyclopædia, (No. 54, pp. 21 and 22,) are the following remarks on the advantages of pit coal over charcoal: “Authorities are not agreed as to the time when pit coal first began to be substituted in the reverberatory smelting houses (of Cornwall) for wood or charcoal, though this is generally supposed to have been about 1680.

“ In the smelting of this (tin), as of other metals, the application of this fuel has been productive of immense advantages ; and such is the perfection to which our metallurgic operations have been carried since the economical introduction of this cheap and plentiful fuel; that the regulations of our custom-house alone prevented the carrying a scheme set on foot some years ago, for the importing of the tin ore from the eastern mines, for the purpose of being smelted in this country, and afterwards re-exported.”

It would appear to have escaped the observation of the author of this article, that the enormous forests which thickly cover the whole of the Malayan peninsula, and the Island of Banca, under the very shade of which the miners may be said to work, furnish on the spot a cheaper and more economical fuel than the coal pits of Newcastle or Whitehaven do to the miners of Cornwall, at the sole expence of the labor of felling them ; setting aside the loss of time, the expence of importation and exportation, and disinclination of the natives to such a scheme. Moreover, according to Mr. CRAWFURD, the cost of producing a cwt. of Banca tin is but 22s. 8d., whereas that of Cornwall amounts to 64s. 7d. The cost of producing a cwt. of the metal in Súngie Ujong is estimated by an intelligent native at 23s. The immense natural obstacles in Cornwall, only to be surmounted by the most powerful steam engines, and the unremitting application of all the means human ingenuity can devise, together with the high price of labor, are, however, the principal causes in the enhancement of the cost of production in England.

The time perhaps is not far distant when like ingenuity and similar means will be applied to the unlocking of the hitherto partially developed resources of the East.

According to the best native information, the annual produce of the peninsula, before the late disturbances in the tin countries, was as follows :

<i>Places.</i>	<i>Peculs.</i>
Súngie Ujong,	7,000
Perak,	7,500
Quedah,	600
Junk Ceylon,	1,500
Pungah,	1,500
Salangore, Calang, and Langkat,	2,000
Lúkút,	1,600
States in the interior of Malacca,	900
Pahang,	1,000
Kemaman and Tringano,	7,000
Calantan,	3,000
Patani,	1,000
	<hr/>
	34,600

The discovery of tin in the peninsula cannot be traced, but it is assuredly of ancient date. Part of Perak is said to be the *Temála*, or land of tin, of PROLEMY, and *Cálang*, (a name signifying tin in Malay,) to be the *Malaion Colon* of the same author, and the *Malaya-Culam* of the Hindus.

The tin mines of Banca are of modern origin, being accidentally discovered, Mr. MARSDEN tells us, in 1710, by the burning of a house; the trade of the peninsula suffered considerably in consequence.

According to Mr. CRAWFORD, (as before stated,) the tin of Banca, produce of 1817, amounted to 35,000 peculs, or 208 $\frac{3}{4}$ tons, equal to half the produce of England. But under the management of the Dutch, I am informed, it now scarcely produces half that quantity.

The price of Banca tin is from 16 to 16 $\frac{1}{2}$ dollars per pecul = 133 $\frac{1}{2}$ lbs., and of Straits tin, (chiefly from the peninsula,) from 14 $\frac{1}{2}$ to 15. British block tin, in 1832, was selling at £3 12s. 6d. per cwt.

In consequence of a supposed adulteration of Straits' tin, some specimens of ingots of this metal, rejected at Canton, were sent from Singapore to be assayed at Calcutta in 1831. This was done at the Calcutta assay office, which pronounced the specimens to be of good quality, and perfectly good in a mercantile sense. "Great Britain, (according to Dr. LARDNER's work already quoted,) notwithstanding the productiveness of her own mines, imports upwards of 700 tons per annum of oriental, or, as it is more commonly called, Banca tin, from the name of one of the Malay islands, where it is chiefly obtained. The Malay countries are reckoned the richest depositories of this metal in the world; and from them, China, Hindostan, and many European markets are chiefly supplied. England exports annually about 2,000 tons of tin, including 400 or 500 tons of that received from abroad." Her produce varies from 3 to upwards of 4000 tons annually.

Revenue.—Besides the *Kapála dágang*, and other sources of revenue previously mentioned, as enjoyed in common by the *Panghúlú Delantye* of the interior states, the *Panghúlú* or *Klána* of Súngie Ujong, and the *Rája adhi Rája* have the privilege of purchasing, at every smelting, from each *bongsal*, three *bhars*, equal to nine peculs, or nine hundred cattles of tin, at six dollars per *bhar* less than the market price, and exact a duty of six dollars a month for each mine dug on their own lands.

The *Dattu Múda* of Lingie levies also a dollar per *bhar*, on tin passing down the river.

The *Kapála dágang* is a sort of poll tax on slaves imported into

* See GLEANINGS IN SCIENCE, Vol. III.

the interior, from four to six dollars per head; they are generally *Battaks* from the vicinity of Battu Bára, on the opposite coast of Sumatra, and average twenty annually. They fetch a price from 20 to 60 dollars each; according to age, condition, and sex; a higher value being set on the females.

In addition to these imposts, the chiefs of Súngie Ujong formerly enjoyed the division of a premium paid annually by the Chinese and other merchants of Malacca for the tin monopoly, amounting, it is said, to 2500 dollars; 1000 of which went to the *Dattu Múda*, and 100 each to the three elders of Lingie; 800 to the *Klána* of Súngie Ujong, and the remaining 400 to the *Rája adhi Rája*.

The deputed Menangkabowe prince, it is affirmed by the Rumbowe people, had the right of levying a duty, at Sempong, on the Lingie river, of two dollars per *bhar*, on tin passing that settlement from Súngie Ujong, which was afterwards given up as a subsistence to their *Iang de pertúan Múdas*. In consequence of the disavowal of this claim by the Súngie Ujong and Lingie chiefs, and other causes too long for detail, a war ensued in 1833, and a consequent blockade of the river by the *Iang de pertúan Múda*, SAYED SAABAN, at Sempong, still existing, and by which the trade of Súngie Ujong has suffered very materially.

Government.—Súngie Ujong was ruled, under the *Iang de pertúan Besár*, by a *Panghólú*, three *Sákús*, and a *Rája adhi Rája*. The *Panghólú*, as has been already remarked, owes his title, *Klána Putra*, to one of the kings of Johor. He now refuses to acknowledge the control of the *Iang de pertúan Besár*.

BANDAHÁRA SEKUDAI is supposed to be the first chief invested with this title; and regarding his origin, a long tradition was related to me by the present *Rája adhi Rája*, the abstract of which amounts to this, viz. "In ancient times, one of the princesses of Súngie Ujong having had the presumption to laugh at the naked state of a *Batin* of the Jacoons, incurred his resentment, and was forcibly compelled to follow him through thicket and brake, until moved with compassion, this *sans culotte maître de danse* broke the spell and married her.

"The offspring of this sylvan union is said to be SEKUDAI: from whom descend the *Panghólús* of Súngie Ujong."

In all popular traditions of rude nations, there is more or less of truth to be gathered; and in absence of written and other historical evidence, such testimony ought not to be entirely neglected, and set aside as valueless; though frequently ridiculous, and mingled up with matter known to be incredible and void of truth. We need not instance here the works of the early poets of Greece and Rome.

It is certain, that to this day, in Súngie Ujong, Johole, and Jompole, the twelve *Batins*, or chiefs of the savage tribes, have a considerable share in the election of the *Panghúlús* of these states, though there is not now apparent any permanent mark of connexion, either social or religious, between the Malays and these aborigines.

As *Káfirs* and infidels they are despised by the Malays, but superstitiously dreaded. Converts are made to *Islám*; but slavery, as far as my observation extends, is their lot.

A few years ago, the late *Panghúlú* of Súngie Ujong, *Kláns LEHER*, died, leaving two nephews, *KAWAL* and *BHAIR*. It is an ancient custom prevailing in the interior, and, I believe, generally throughout Malayan nations, that when a chief dies, his successor must be elected on the spot, and previous to the interment of the corpse, (which is not, unfrequently, protracted through the observance of this usage to a considerable length of time,) otherwise the election does not hold good*.

The following are the traditional lines, or *Serápa*, in which this custom has been handed down in Súngie Ujong.

سرا فا	<i>Serápa.</i>
عمون فند بق لغهن فنجج	Amar-nia pendek langkah-nia panjang
سده سيفه كهندق الله	Súdah Sampai Kahándak Allah
هندق بر قبور دتانه ميره	Hándak berqabúr ditannah mérah
سهاري هيلغ سهاري بر تانم	Sa-hári hilang, Sa-hári bertanam,
سهاري بر تمبوه سهاري فليهار	Sa-hári ber-tambah, Sa-hári palihará.
Short has been his life, though long his stride!	
When the will of God has arrived,	
The grave shall be dug in the red earth :	
In one-day lost, in one-day planted,	
In one-day sprung up, in one-day cherished.	

Now it happened that *KAWAL* was absent at the time of *Panghúlú LEHER*'s death. The three *Súkús* and one of the twelve *Batins* took advantage of *BHAIR*'s being on the spot, elected him, and buried the body of the deceased chief. Against this proceeding, the *Rája adáht Rája*, and the remainder of the elective body, the eleven *Batins*, protested; a war ensued, which terminated in 1828, pretty much as it began. *KAWAL*, however, by virtue of the suffrages of eleven out of the twelve *Batins*, and by the support of the *Rája adáht Rája*, is generally considered the legitimate chief.

* In consequence of this custom, the present Sultán of Johor's younger brother was elected during the absence of the elder brother, whose claims were subsequently acknowledged by the British.

He resides at Pantoi, a village on the left bank of the Lingie river, about 40 miles from the village of Lingie. I had an interview with him at the latter place in 1833.

His features are regular and pleasing; but their expression conveys an idea of indecision and imbecility, probably increased by the immoderate use of opium, to which he was formerly much addicted; the whole tenor of his conversation and manner evinced plainly how completely he was in the leading strings of his adviser, the wily ΚΑΛΤΑΣ, the *Dattu Múda* of Lingie, who accompanied him.

His dress manifested a disposition to finery, consisting of a gaudy red *báju*, or surcoat, flowered with yellow; a broad crimson sash thrown round his waist, suspending several weapons of Malayan fashion; a *Battik* handkerchief, with the bicornute tie, and a plaid silk *sárong*, resembling the tartan worn by the Highlanders, descending to his knees; underneath the plaid he wore short embroidered trowsers.

In the left-hand slash of his close vest of purple broad cloth, which was lined with light-green silk, and adorned with silk lace and small round buttons of gold filigree, lay a watch of an antique shape, to which were appended a gold chain and seals. He wore his hair long, and it was very palpable to two of the five senses that he, like DEMOSTHENES in the composition of his orations, had not spared the oil in the arrangement of his tresses.

Rája adhi Rája.—Next to the *Panghúlú* ranks the *Rája adhi Rája*. The jurisdiction of this officer is confined to the river, and its navigation. The office and title, as would appear from the inscription on the seal, were renewed or granted to his ancestors by MUHAMMED JALIL, Sultán of Johore, A. H. 1211. (A. D. 1796-7)

The present *Rája adhi Rája* is a young man, of an extremely prepossessing address and person.

Súkús.—There are only three *Súkús* in Súngie Ujong. The *Rája adhi Rája* may be perhaps considered as occupying the place of a fourth *Súkú* in councils.

The functions of the *Súkús* are similar to those already described, as possessed by the former *Ampat Súkú* of Naning*. Their titles are *Dattu Mantri Jumahad*, *Dattu Mendalika*, and *Dattu Maharája Inda*. The tribes, of which they are the heads, are those of Sa Melongang, Bodoanda, and Tannah Dattar.

Lingie.—The village of Lingie proper, in contradistinction to the settlement of Qualla Lingie, which is within the Company's territory, at the mouth of the river, is a dependency of Súngie Ujong.

It is situated high up the right branch of the river, and consisted,

* See page 298 of the present volume.—Ed.

in 1832, when I visited the place, of a straggling collection of upwards of 100 houses. The *Pankálangs* of Pemátang, Passir, Cúndang, Dúrian, and Mángis, may be styled the wharfs of this little entrepôt, for the produce of the Súngie Ujong mines, and the articles brought up for barter. Many of the houses have been pillaged and burnt in the subsequent disturbances.

The establishment of Lingie is of recent date. Between 50 and 60 years ago, six individuals, subjects of Rumbowe, (but originally from Rhio,) removed from Rumbowe to a place on the Malacca coast, between Tanjong Kling and Qualla Lingie, called Kubu Achi, (the fort of Achin;) where, according to local tradition, the Achinese erected a work during one of their expeditions against the Sultán of Malacca. Be that as it may, they had commenced the clearing of the jungle, when one of their number was crushed on the spot by the fall of a tree.

This his companions regarded as a supernatural prohibition to settling there, and quitting the place, passed up the river to the present spot; where, with the permission of the Súngie Ujong chief, they finally established themselves. Their names were HAMAN, MAHMUD, JAHIUDDIN, LUBBYE, JUMAN, and KÁDIR ALI.

HAMAN was appointed head of the little colony, by the title of *Dattú Múda*, and his four companions, as elders. Of these only one now survives MAHMUD, who is a hale old man of 70.

HAMAN was succeeded by his son-in-law the present *Dattu Múda* MAHOMED AÁTAS, more commonly called KAÁTAS; and the three deceased elders, by HÁJÍ CÁSIM, HÁJÍ MUHAMMED, and INCHI SALI-HUDDIN. This last chief was killed in the disturbances at the close of 1833.

KAÁTAS, the leading character in Súngie Ujong, is a bony, muscular personage in the prime of life; tall in stature for a Malay, and of erect carriage.

His features are harsh and decided; his dress plain and simple. In character, he is selfish, crafty, persevering, and gifted with some foresight; a quality by no means common among Malays.

He possesses unbounded influence over the weak and sensual *Klána*; and it is said that his ambition extends to the undivided sway of Súngie Ujong, and the monopoly of the duties on tin. The opposition of the Rumbowe chiefs, with whom he is at present at deadly feud, and the Malay popular antipathy to innovation and deviation from ancient usage, or as they term it, the "*Addat Zeman Dhúlú*," the "*Addat Dattu Nenek*," &c. will prove considerable obstacles in the attainment of his wishes.

ΚΑΑΤΑΣ has, on various occasions, evinced an inimical disposition to the English government.

The following are copies of the inscriptions on the seals of the present Panghúli and Rája adhi Rája of Súngie Ujong, and of the Dattu Múda of Lingie.

سنه ۱۲۳۹	سلطان	سلطان
محمد عظامس	محمد جليل منور نكن	محمد جليل منور نكن
انچي بندر	كيسران تر جليغ كغد نلان	كيسران تر جليغ كغد نلان
	مهر اج درج د سونغي اوجغ	فتراك كرى سونغي اوجغ
	سنه ۱۲۱۱	سنه ۱۲۱۱

Seal of ΚΑΑΤΑΣ.

Of the Rája adhi Rája.

Of the Panghúli.

From the dates and inscriptions on these seals, it would appear that the two first were originally granted, or more probably, renewed to their possessors, by Sultán MUHAMMED JALIL of Johor, in 1211 A. H.

The last is of still more modern date (1239), and merely bears the date, name, and assumed title (*Inchi Bander*) of ΚΑΑΤΑΣ.

III.—*Journal of an attempted Ascent of the river Min, to visit the Tea Plantations of the Fuh-kin Province of China.* By G. J. GORDON, Esq. Secretary Tea Committee.

May 6th.—Anchored in the evening in the Min river, a short way below a narrow passage, guarded on each side by a fort, and hence named by Europeans, the Bogue, as resembling the entrance to the inner river of Canton. We immediately hoisted out our boat, and prepared every thing for setting out, as soon as the return of the flood, which we expected would be about midnight, would enable us to do so. We determined on trying the western branch of the Min, as laid down in DU HALDE'S Map of the province of Fuh-kin. We took with us one copy of a petition, for permission to import rice, on the same footing of exemption from charges as is granted at Canton, and grounded upon the unusual drought of the regular season for planting rice. Another duplicate we left with Captain MCKAY of the "Governor Findlay," to be presented by him to any Mandarin who might come on board to urge the departure of the vessel from the river. As the subject of the petition would require reference to Peking, we calculated, that sufficient time would thus be gained to enable us to accomplish our object. The copy in our own possession would be resorted to only in case of our being intercepted. The delay in its delivery might be attributed to the altered appearance of