### **JOURNAL**

of the

# Straits Branch

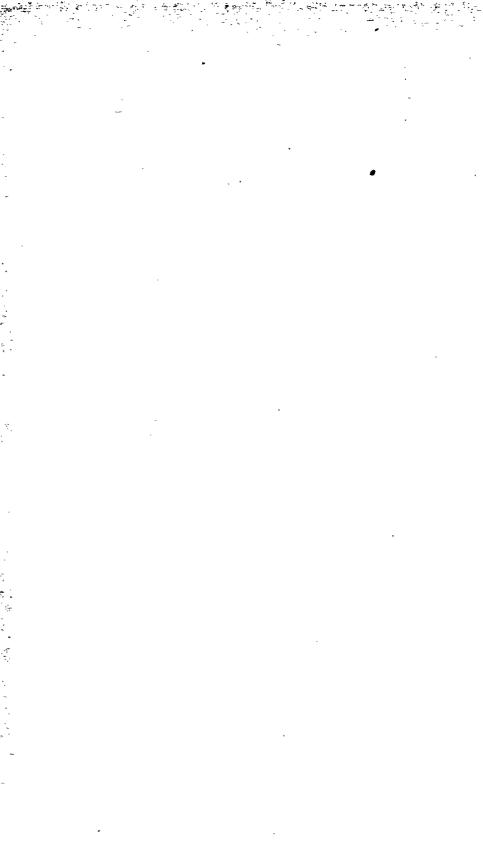
of the

# Royal Asiatic Society

DECEMBER 1906.

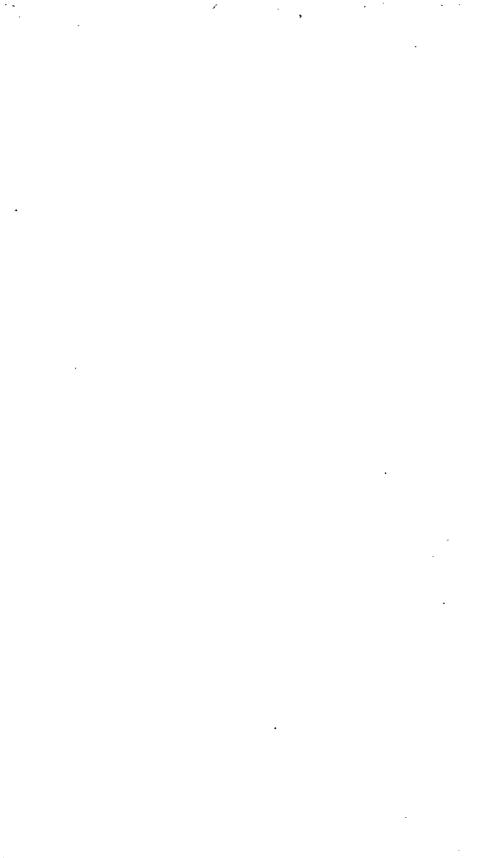
SINGAPORE:

PRINTED AT THE METHODIST PUBLISHING HOUSE 1906.



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### A few notes on the "Anyam Gila" Basket Making at Tanjong Kling, Malacca.

By Mrs. Bland

Once upon a time there was a goblin named Sang Kelembai. He lived long ago and it was in his time that men-folk began to appear in the world. When he saw how they caught the beasts both wild and tame, and made them do all sorts of work, and how they even made the wind drive their boats on the sea, he began to get alarmed lest he, too, should be caught. So one day he went down to the sea-shore and assembled all manner of beasts—the jungle people, and spoke to them "O, all living things, come away with me over the sea to the sky's edge. This is no place for us. See how mankind is catching all the beasts and making them work." But, said the Beasts, "Why should we go so far? What will we do over there?" Said the Buffalo: "if the men catch me, I will kill them with my horns." Said the Horse: "if the men catch me, I will slay them with my heels and teeth." So spoke all the Beasts, each boasting of his own weapons, for indeed they had no wish to go so far as the sky's edge. replies troubled the mind of Sang Kelembai so he took all his possessions, his fishing nets and his rombong baskets, and having burnt them to ashes, he departed alone to the sky's edge. Soon after the human folk came down to the sea heach and there they found the ashes and the remains of the They carefully examined the meshes nets and rombongs. of the nets and the weaving of the basket work and tried to copy them. One of the women went home to her daughters and said "Let us get some pandan leaves, and split them and then dry them." They did this and in the night came the rain and soaked the leaves, and next day the sun shone and

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bleached them. Then they tried to weave them like the goblin's baskets, but their efforts were in vain. Day after day they tried but could not succeed. At last a fairy in the guise of a woman came by. She saw the women sitting distracted in the house and said to them.

"Oh ye who sit within the house distracted,"

"Striving to learn the craft of Sang Kelembai,"

"Come ye while I the daughter of the fairies,"

"Teach you to weave the web of the distracted."

"So the Fairy taught them to find the long mengkuang leaves, to split them, to dry them, to supple them, to bleach them." Everything she taught them, and when the baskets were finished with their ornaments, she said "Now you understand the Distracted Weaving, and why it is called so. You work at it till your eyes are dim and your brain reels, till the back aches, and the hands grow weary, but still it does not come right."

This ancient industry exists to the present day amongst the Malay women at Tanjong Kling in Malacca. The baskets are woven of mengkuang, which grows there in great quantities. This mengkuang is a screw-pine or Pandanus (Pandanus fascicularis) and there are many other species also used by the Malays for weaving mats and coarse baskets and known by them as Pandan, but the particular screw-pine used at Tanjong Kling is called mengkuang. It is very supple and therefore suited to the special weaving done at Tanjong Kling. The latter is of a very distinctive and uncommon character and is called the "Anyam Gila," or mad weaving. It is very intricate to learn and quite calculated to drive a beginner mad. The mengkuang requires a good deal of preparation before it is fit for use, and the old women are generally employed in this work. They cut the long prickly leaves down with a native knife, or parang, (plate 4. fig A) and carry it home in large bundles on their heads. Then they dry or "layor" it slightly over a fire of sticks, and cut off the thorns which grow down the spine of the leaf. This divides the leaf into two wide strips and for this purpose they use a smaller knife

(pisau) than the parang (Pl. 4, fig B). Next they "jangka" or divide, the half leaves into strips by means of a rude implement called a "jangka" (Pl. 4. fig C). The "jangka" is a flat piece of wood with brass spikes fixed into one end at regular intervals, the intervals being decided by the width of strand required (the widths vary from one inch to one eighth of an In this process the thorny edges of the leaves are disposed of, and many are the scratches and wounds inflicted The thorns of the mengkuarg point upon the workers. wards on the edges of the leaves and downwards on the spine so one can easily imagine they are difficult to avoid in handling the leaves. Now the green strands are ready as far as size goes, but they leave yet to be made supple and smooth or 'lurut." The implement for this process is the "Pulurut" or a piece of hollowed bamboo, which is pulled over the leaf many times by the left hand with a sort of curling movement (Pl. 4. fig. D). The leaves are now folded into compact bundles and soaked in a bowl of cold water (pasoh rendam) for three nights, changing the water twice a day. After this they are laid in the sun and bleached for a day, and woe betide the mengkuang if it gets a drenching by mistake: It would then all go black instead of the pretty greeny grey white, which is desired. The mengkuang is now ready for use. The construction of the baskets or "rombongs" is complicated, and much more tedious than many people imagine. It starts from a star of six strands called by the Malays "Pusat Belanak" or the navel of the "Belanak" fish, a species of mullet. This produces twelve strands, for the weaving is done with both ends of every strand used. It is this that makes the describing of the work so very difficult. The whole basket is built up by the continual interweaving and crossing of the inner and outer strands, and there is no foundation of warps round which to weave, as in English baskets. It is built up continuously round and round by weaving as in knitting a stocking. The strand in a round is called by the Malay the " mati." basket is begun in the centre by a star of six strands. is next added six more strands, then round these are woven in twelve more, then twelve more and soon till the size required R. A. Soc., No. 46, 1906.

is achieved (plate 1). A six-sided shape is thus produced. The added strands are woven in always two at each corner, "buku" or "susoh" as Malays term it, and the full "mata gila" or mad stitch is achieved after the second found. The strands that go from left to right from the weaving strand or "daun anyam." The weaving strands over and under which the other strands are pulled and folded are also used for determining the size of the basket. How many "matas" or stitches? the Malays will say when you order a basket. The "daun selang" or crossing strand, and the "daun betul" or warp strand are the only other names possible to mark the distinctive action in the "Anyam Gila." When the size is determined on and woven, a piece of split rattan is inserted and the sides of the basket next made, and in the weaving the rattan is completely hidden. The strands of the mengkuang are glossy on one side only, so the Malays by carefully turning their work, arrange that the basket should be glossy both inside and out. The sides are woven round without any adding and it is a relief to the weary worker when this stage is achieved. The Malays, of course, work sitting on the floor (plate 2) and complain of the fatigue they endure—pains in the back and nape of the neck. I can testify to all this inconvenience for when learning I tried every position to obtain ease but in vain. The height achieved, another rattan is inserted. rattan is covered with a strip of mengkuang, which process is called "bubor" or "Susop" mengkuang. In plate 2, a basket ready for this second rattan is shown by the side of the worker. It resembles a cutlet frill at this stage. Then the strands are all worked back again, the glossy sides being now towards the worker. This is a tedious process and called by the Malays to "sesep" or insert. They use an implement of wood and brass called the "penysep" or inserter which resembles very much the prickers used by the American Indians in their basketry (pl. 4 fig E). It is often strengthened and ornamented by European treasures, such as a brass thimble an empty cartridge case and in the very coarse work I have seen used a clumsy "penysep" made entirely of wood. The strands are slipped over their respective duplicates till the bottom centre of the basket is reached when they cross each other for strength and are cut off invisibly. On the way the pretty designs are made by twisting the strands between thumb and forefinger. This produces a raised ornamental twist which is very attractive. The ornamentation is done by twisting the strands, and starts from a single stitches called "Bras Goring," or rice grains, and a star of six such stitches called Bunga Tanjong" flower of Mimusops lengi and a hexagon built round the "Bunga Tanjong" called the "Bunga Kuntum," or flower bud. These simple patterns are worked into large and small triangles and diamonds called "puchok rebong" or bamboo shoots, or "potong baji" or wedges. Combinations of triangles are called "puchok rebong berantai" or festoons of triangles are called "puchok rebong berantai" or festoons of bamboo shoots, and "bunga tiga bersegi berantai" or festoons of 3 sided ornaments. The edging round all the baskets is called "bunga pending," or belt (Pl. 5). The lids are made in a similar manner of the same number of strands as the bottoms only woven slightly more loosely. The women make and sell their baskets in nests or "susun" of five baskets, each basket fitting into another very nearly (Pl. 3). There should only be the difference of two strands between each size. The baskets are made in various shapes and forms-square, long, oval, triangular, and diamond-shaped (Pl. 3 and 5). All are built up in the same way, starting with a six sided basket but with added strands to bring to any other required shape. This is an art by itself and many who can make hexagonal baskets cannot make other shapes, therefore the hexagonal are the cheapest; 50 cents extra being asked for the fancy shapes. The long and the square are the most difficult. They also make a basket of tiers, one on top of another, the lid of the lower basket making also the bottom of the next, and so on. This they call a "tengkat" and it is now almost a lost art. Another fancy shape is the "tudong gelok" (a pointed-shaped They also make very coarse, large ornamented baskets which are much bought by Europeans for carrying clothes (plate 3). The women who make these live at Tanjong Kling, but all in a separate quarter of the kampong from the finer It takes them a month to make a nest of very R. A. Soc., No. 46, 1906

ordinary weaving, while a fine nest takes from three to four months to complete and this means daily steady work. For the ordinary hexagonal nests they earn from \$2.50 to \$3.00. and for a fine one from \$4.00 to \$5.00. When this is calculated out it cannot be said that the industry is overpaid, yet there are many who think that it is, and that, in spite of the increased cost of living. There are now about forty or fifty experienced basket workers living at Tanjong Kling besides many beginners. Formerly only ten women made The demand has greatly increased, for people have begun to order the baskets in great quantities for home bazaars. where they are much appreciated. The industry in a way is suffering as the women are making more carelessly and rapidly to meet the demand. Five old women come into the town every second day in order to sell the work of the village, they are old and more or less blind and now unable to weave themselves. They walk fourteen miles to sell the work of their younger sisters. The chief distinctive feature in the Tanjong Kling weaving is that they use no dyes and also always ornament their "mata gila" with raised designs (Pl.3). Province Wellesley the same weaving exists, but in a smaller degree, and there few ornamental designs are made and no rattans are inserted. I believe along the Malacca Coast the 'Anyam Gila" may be found at Tanjong Bidara and also Kuala Linggi. I have also seen baskets and tobacco-pouches of this weaving obtained from Sumatra, Kelantan, Perak, Kedda, and Siamese territory in the Malay Peninsula. Some of the specimens were extremely fine, finer than any Malacca work now obtainable—and ornamented with dyed strands, sequins, and gold filagree work.

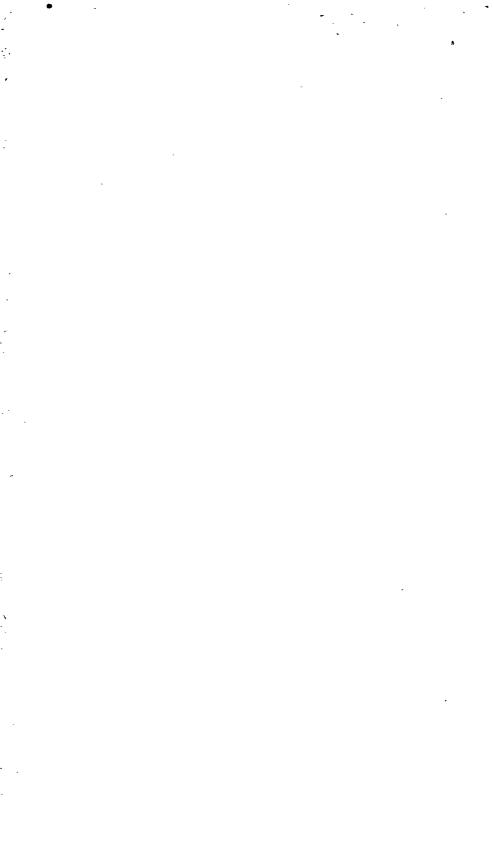
I have confined myself in this paper solely to this one style of weaving the mad stitch, but hope later to send further notes on other and more simple forms of basket weaving practised in Malacca. It is very curious that the ornamented "Anyam Gila" should be confined to Tanjong Kling only in Malacca, and any light that can be thrown on its origin and history would be very interesting. The female prisoners in the Singapore Gaol are made to learn "Anyam Gila" and a better

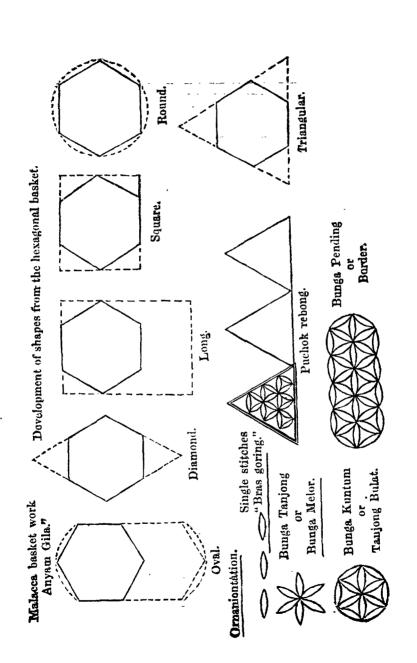
punishment could hardly be devised. It has reduced many to tears. It was started under the auspices of the late Mr. O'Sullivan who happened to have amongst his prisoners a Province Wellesley basket-maker. With the help of Mrs. Hansen, the Matron, the industry has been firmly established there, and it is owing to her assistance also that I have been enabled to master the details of the industry and to make a basket myself. Native teachers are hopelessly poor and Mrs. Hansen deserves great credit for the way in which she has excelled in this difficult art. She has evolved a very pretty fan at Mr. Bland's suggestion in the "Anyam Gila" which is sold for the ridiculous sum of 75 cents at the gaol (Pl. 3). She has introduced many new designs for ornamenting the fans but the small and constantly changing number of prisoners renders the supply very limited and uncertain.

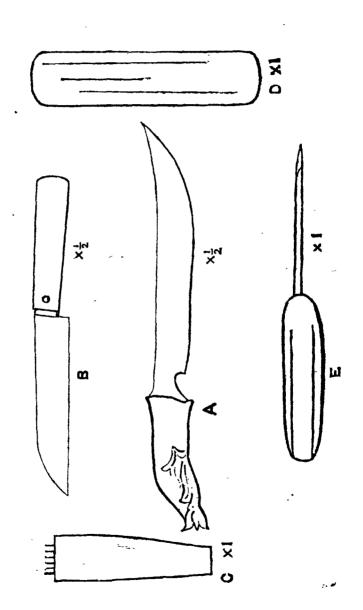
### EXPLANATION OF PLATES.

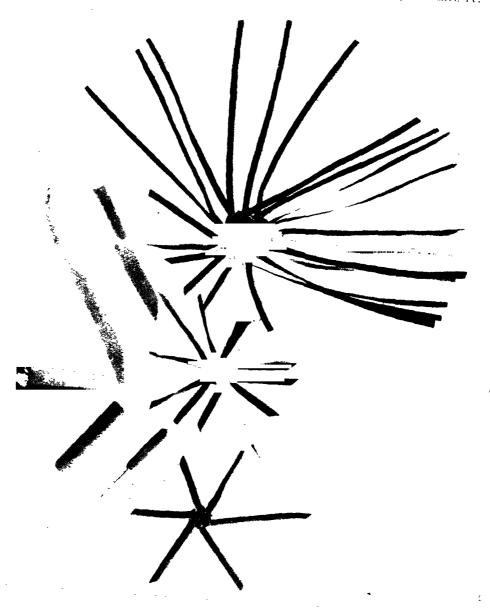
- Plate 1. Specimens illustrating the commencement of the "Anyam\_Gila" plait. (See text.)
- Plate 2. Malay basket maker.
- Plate 3. Specimens of Malacca baskets. In left hand lower corner is shown a "Susun," or set of 5 baskets; next to this is a basket made in Sarawak with coloured strands in it; next on the right is a "tengkat," or a basket in tiers; next to this is a fancy-shaped basket called "tudong gĕlok;" and on the extreme right is a large coarsely woven basket used by Europeans for holding clothes. In the top left hand corner is shown part of a fan made by the prisoners in Singapore Gaol. Next to this is a representation in "Anyam Gila" of a pineapple. The other baskets depicted show the various shapes that are made.
- Plate 4. The instruments used by basket makers a. parang, b. pisau, c. jangka, d. pulurut, e. penysep. (a to b. x  $\frac{1}{4}$  c to e x  $\frac{1}{2}$ ).
- Plate 5. Diagrams illustrating development of shapes from the hexagonal basket, and ornamentation.

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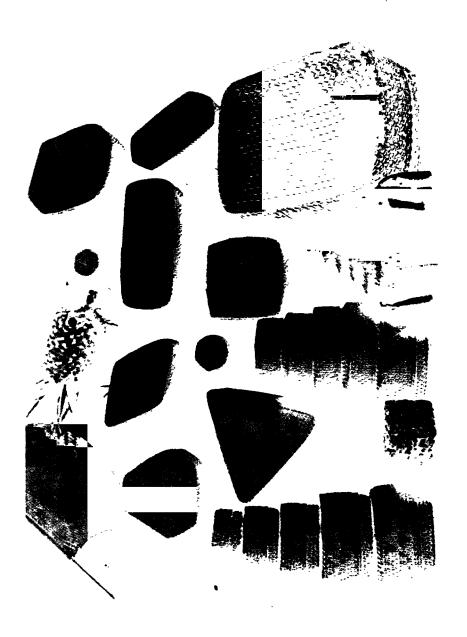
### STRAITS BRANCH, ROYAL ASIATIC SOCIETY.

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# STRAITS BRANCH, ROYAL ASIATIC SOCIETY.

JOURNAL 46. PLATE VI.



# The Election and Installation of Tungku Muhammad, C.M.G.

### Bin Tungku Antah, as the Yang Di Per Tuan Besar, Negri Sembilan

#### By E. W. BIRCH

I have been induced to publish the story of how the ancient constitution of the Negri Sembilan was restored. It will be conceded that it is easier to overthrow than re-establish the constitution of a country. The event I am about to describe being one of very deep importance to the Chief and people of the beautiful State that lies between Malacca and Selangor. A brief reference to the history of the Nine States and to the establishment of the dynasty, represented by Tungku Muhammad, is first necessary.

No dates have been handed down to define the time at which the descent of a great number of Sakai from the hills peopled the countries of (1) Klang (now Selangor), (2) Naning (now a portion of Malacca), (3) Jelai (now a district of Pahang), (4) Segamat, and (5) Pasir Besar (now included in the State and Territory of Johor), (6) Johol, (7) Sungei Ujong, (8) Rembau, and (9) Jelebu.

Four Batin, or Sakai Chiefs, were the leaders of this colonisation: one, a woman, remained with her following in Johol: the other three, with their adherents, occupied Klang, Sungei Ujong and Jelebu.

These four Lawgivers (undang yang ampat) are repeatedly referred to hereafter, but it should here be stated that the state of Rembau has succeeded to the position formerly held by Klang.

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As time rolled on other people were attracted to these countries and there was free immigration from Menangkabau. The new arrivals brought their tribal customs with them, and, as the terms "Waris" and "Lembaga" will recur, it will be well to point out that there is only one Sakai, or Waris, tribe—viz., the "Suku Beduanda"—while there are several Menangkabau tribes, the elected head of each being known as the Lembaga or manager of the tribal system.

The Sakai and the people from Menangkabau maintained the most friendly relations, but it became evident that over the Nine States there must be some Suzerain to whom inter-state disputes could be submitted for adjudication: and, through the good offices of the Ruler of Johor, a deputation to Menangkabau was arranged and a Prince of that royal family was induced to come over.

In the year 1773, or thereabout, Raja Mělêwar was installed by the four Lawgivers as Yang di per Tuan Besar, and he took the title, by which he and all his successors have been known, of Yam Tuan Besar, Sri Menanti. That beautiful valley which it is impossible to traverse without halting repeatedly to feast one's eyes on the scenery of hills, green or golden padi, and feathery bamboos had already been occupied by Menangkabau settlers, and they had so named it because, on their arrival, they found padi in the ear, ripe, awaiting them. There the Astana was built and the site then selected has become the ancestral home of the Raja.

Meanwhile other districts had been opened by settlers. The gaps, caused by the defection or alienation of five of the original Nine States, were filled by Ulu Muar, Terâchi, Jempol, Gunong Pasir, and Inas. Subsequently Tampin and Gemencheh, settlements from Rembau and Johol, were added.

Gradually the constitution was built up and strengthened, but, about thirty years ago, dissensions, inevitable in all histories, arose, and Rembau, Jelebu and Sungei Ujong were estranged.

Then the healing interference of Great Britain commenced: by degrees Sungei Ujong (April, 1874), Rembau (March, 1884),

Jelebu (September, 1886), and Sri Menanti (June, 1887), were brought under British Protection.

Finally, by the agreement of August, 1895, the Confederation of all the States, with one British Resident as Adviser to the Chiefs, was arranged.

Such was the condition of affairs when I assumed my duties as British Resident early in 1897. Apparently everything was in order, but enquiry proved that in matters relating to the constitution and Malay customs the greatest disorder prevailed. The Yam Tuan of Sri Menanti had not been installed: he had merely been declared to be Yam Tuan by British authority in June, 1887: there had been no formal creation of a Yam Tuan since the installation of Tungku Antah his father, and even then the Rembau and Jelebu Chiefs had not attended: of the four Lawgivers, Johol alone admitted allegiance to the Yam Tuan: the other three declared that they were absolutely independent and that their independence had been recognised by the wording of the agreement of August, 1895.

The secret of success with Malays consists, to a great extent, in the recognition of the fact that the mainspring of their life, political and social, is built upon the word "adat." Their customs are their inheritance: they regard them as their birthright and they are an absolutely conservative people. I hope that it is not unfair to say that some English adminstrators, who have been very popular with Malays, have fallen into the error of pandering to the Malay veneration for custom. They have put off reforms forgetting as it were that many Malays possess that true conservatism which while tenacious of the constitution, is ready to accept useful measures of reform.

My experience had taught me that the Malay is a very reasonable person, and the Malays of Malacca and of the Negri Sembilan at all events have in a comparatively short space of time consented to the demolition of their ancient but obsolete land customs. It was not without a considerable show of opposition that their consent to that demolition was

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obtained but knowing that they will generally yield to the arguments of them whom they trust I was hopeful that though at the sacrifice of their self-importance, they would agree to re-establish their ancient constitution.

The opportunity arose in this wise:—When the Hari Raya, or festival which succeeds the month of fasting, was approaching, the Yam Tuan invited the four Lawgivers to Sri Menanti to witness the ceremony of obeisance which is annually performed by the subjects of a Malay Raja.

They (Johol excepted) declined the invitation and made all manner of excuses, their only reasonable plea being that it was customary to receive the homage of their own subjects on the Hari Raya.

The Yam Tuan then arranged to invite them immediately after the festival of the Hari Raya Haji, and I asked them to attend. They urged that there was no reason why they should go, and expressed fears that their attendance might be construed to be a waiver of the freedom from interference which they then enjoyed in the internal affairs of their respective States.

I invited them to a meeting at the Residency and explained that they were placing a strained construction upon the words of the agreement, that the British Government had never intended that they were to repudiate the Raja who was the representative of the dynasty their own ancestors had set up, that they were trying to override ancient custom by arguing on customs of thirty years' growth and that the machinery of the Negri Sembilan Government could not work until its component parts were replaced in their constituted places.

They replied that ancient custom required that they should instal the Yam Tuan, that Tungku Muhammad had not been invested with the powers and position of Yang di per Tuan Besar by them, and that they would be stultifying themselves if they went to Sri Menanti.

After a hasty meeting with the Yam Tuan, who at once agreed to be formally proclaimed, I suggested to the three

malcontent Lawgivers that they should draft an agreement in Malay setting forth their allegiance but providing for freedom from interference in internal affairs and for permission to celebrate the Hari Raya in their own States.

That agreement, when drafted, was submitted to and approved of by the Yam Tuan.

Translated it reads as follows:-

#### AGREEMENT BETWEEN THE YANG DI PER TUAN BESAR, SRI MENANTI, AND THE FOUR LAWGIVERS.

Now in all truth We, the Yang di per Tuan Muhammad, C. M. G., the son of the late Yang di per Tuan, Antah, have made an Agreement with the Four Lawgivers.

- The Dato' Klana Petra and the Dato' Bandar of Sungei Ujong.
- II. The Dato' Mendika Mentri Akhir Zaman Sutan of Jelebu:
- III. The Dato' Johan Pahlawan Lela Perkasa Setiawan of Johol:
- IV. The Dato' Sedia Raja of Rembau.
- 1. Whereas We and the Four Lawgivers and the British Resident have bound together the constitution and customs of the country and the heritage of Our ancestors of old time, as is related hereunder.
- 2. Now the Four Lawgivers return to elect Us to be Raja of the Negri Sembilan in accordance with our ancient constitution.
- 3. Now that We have been installed as Raja of the Negri Sembilan, We, according to the old constitution, cannot interfere in the customs of the country or in Muhammadan Law: and every matter that arises in each State is to be settled in consultation with the British Resident of the Negri Sembilan and is not to be subject to Our commands.
- 4. If any difference of opinion arises between one Lawgiver and another as to the boundaries of their States, and if B. A. Soc., No. 46, 1906.

either Lawgiver appeals to Us by presenting himself before Us, then We are bound to interfere and to settle the matter with justice, but if the officers of the Four Lawgivers or their subjects come to present themselves before Us to make complaint or petition Us in writing, We shall not in future entertain their complaints.

- 5. When the festivals of Hari Raya and Hari Raya Haji are celebrated according to ancient custom, the Four Lawgivers will not come to present themselves before Us at Our Astana, at Sri Menanti, but will each celebrate his own festivals, according to ancient custom, in his own State. Always provided that, on great occasions such as ceremonies of Marriage or Circumcision, if We invite the Four Lawgivers they shall carry out Our wishes in their entirety.
- 6. In the event of the death of the Yang diper Tuan, the Four Lawgivers shall bring, as an offering, gold in such amount as is befitting, such offering being provided by the Government of the Negri Sembilan.
- 7. Moreover the Four Lawgivers, in conjunction with each other and with their hereditary officers, shall elect one of the royal princes and instal him as Yang di per Tuan in the same manner and in accordance with the customs and constitution under which the former Yang di per Tuan was installed.

#### BE IT SO.

Written on the 29th day of April, 1898, that is on the 8th day of Zil-haijah, 1315.

The date fixed for the ceremony was Saturday, the 7th of May, 1898. The procedure to be followed in summoning the four Lawgivers to Sri Menanti was adopted as closely as time permitted.

We had to take it for granted that the Tungku Besar had sent for the Dato' Ulu Muar, Dato' Terâchi, Dato' Jempol and Dato' Gunong Pasir, and had announced to them that a Yam Tuan was about to be placed upon the throne.

We assumed the consent of the Dato' Ulu Muar and despatched his four chief Lembaga to convey the news to the four Lawgivers and call upon them to attend at Sri Menanti.

The To' Paduka Besar (Lembaga, Ulu Muar) went to the Raja di Muda (Lembaga, Terâchi) and with him proceeded to Pantai and Rasah to wait upon the Dato' Klana Petra and Dato' Bandar of Sungei Ujong, respectively. Those two Chiefs, with all their following, returned with the two heralds to Terâchi, which, according to ancient customs, is there restingplace.

The To' Sri Maharaja (Lembaga, Ulu Muar) went to the To' Andika (a retainer of Johol) at Cheriau and with him proceeded to wait upon the Dato' Johol Johan Pahlawan Lela Perkasa Setiawan. The aged Dato', who much wished to attend and who had requisitioned the District Officer for a pony and trap in order to do so, was ill and therefore sent the Dato' Baginda Tan Amas, who is his representative in the Council of State. He and his following, which included the Dato' Inas and all his Lembaga, instead of returning with the two heralds to Cheriau, their appointed resting place, came straight on to Kuala Pilah and proceeded the next day to Sri Menanti.

The To' Senara Muda (Lembaga, Ulu Muar) went to the To' Paduka Sri Maharaja (Lembaga, Gunong Pasir) and proceeded with him to the house of Sinda Maharaja (Lembaga, Rembau). After being informed of their business the Sinda Maharaja conducted them to the Dato' Rembau Sedia Raja. He, with all his following, was escorted by the two heralds to Gunong Pasir, which is set apart on State occasions as his resting place.

The To' Orang Kaya Bongsu (Lembaga, Ulu Muar) went to To' Lela Raja (Lembaga, Jempol) and requested him to summon the Dato' Jelebu according to ancient custom. Having given this message the Orang Kaya Bongsu proceeded to Sri Menanti and remained in attendance upon the Dato' Ulu Muar. The To' Lela Raja (Lembaga, Jempol) instructed Si Alang Puteh of Jempol to summon the Dato' Jelebu. He

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with all his following, should have returned with the herald to Kampong Bukit, his recognised resting place, but proceeded instead viâ Seremban to Terâchi, where he joined the procession of the Sungei Ujong Chiefs.

To all other Raja, Waris Chiefs, Lembaga, Penghulu and Malays of good position throughout the States news of the approaching ceremony was duly sent.

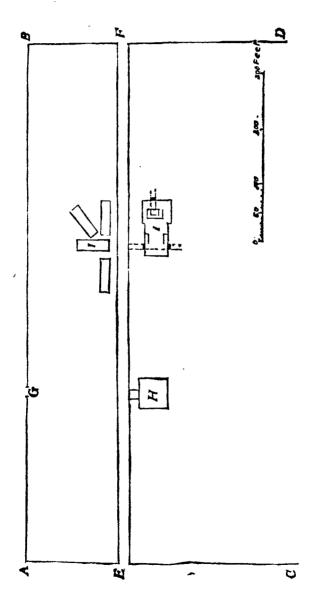
I arrived at the Astana with Mr. Chevallier, the District Officer, Kuala Pilah, at about 10.30 a.m. on Thursday, the 5th of May, and found everything in a state of preparedness that spoke volumes for the trouble taken by the Yam Tuan and his household and by Mr. Chevallier. Mr. Bathurst, Mr. Parr and Mr. Hatchell arrived on Thursday evening. I selected these four gentlemen to look after the four Lawgivers and their people, and to see that their comfort was attended to. A great measure of the success of the whole pageant is due to the assistance they gave me: and the Yam Tuan expressly thanked them.

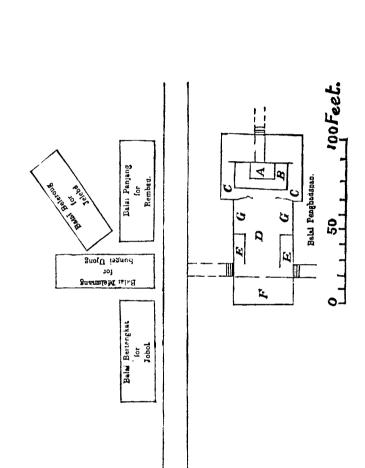
I was told that the Dato' Rembau and the Dato' Johol had already taken up their quarters at Sri Menanti with large followings. We wrote letters to the other three Dato', who were at Terâchi, advising them to stop the night there and come on next day.

It was decided to procure more rice from Seremban, as all the Kuala Pilah shops had been emptied, and we sent for more drapery for the reception-halls of the four Lawgivers, and for four and twenty large Malacca mats to cover the bamboo flooring of those halls.

It may be well to describe the Astana grounds, and the subjoined plans will assist the description:

An examination of the first plan will show that the distance from one entrance gate (E) to the other (F) was about 300 yards. These entrances (pintu gerbang) were covered with thatch and on each side there was an earthen platform on which cannon were mounted. The road from one gate to the other was broad and was lined on both sides





with bamboo poles with cross poles, say ten feet from the ground: along the whole length of the road a broad strip of yellow cloth was hung overhead and the entrance paths to the Astana (H) and royal balai (I) were similarly decorated. At the balai the royal yellow standard was flying from an orthodox flagstaff and the general mixture of yellow with the bright green of the grass and foliage was pleasing to the eye.

The second plan sufficiently explains itself.

Friday, the 6th of May, was, unfortunately, appallingly wet; but the rain did not check the constant stream of people that flowed in from every part of the Kuala Pilah district.

About mid-day the Chiefs of Sungei Ujong and Jelebu arrived at Sri Menanti and took up their abode in the houses set apart for them.

The processions of people attending upon the minor Chiefs paraded the Astana grounds, during the brief intervals of sunshine, and helped to make the scene imposing. The party that came with the Dato' Gunong Pasir was strikingly picturesque: his procession was headed by some two hundred women who wore cloths of every conceivable colour, and immediately behind them came his personal attendants carrying spears decorated with the peacock feathers of Gunong Pasir. The Dato' himself walked next, dressed in a suit of striped silk, the preponderating colour being yellow: behind him followed one hundred men, and two hundred children of all ages brought up the rear of the procession.

At various places, outside the Astana grounds, the usual forms of amusement that are concomitant with every Malay gathering of importance were provided: I was specially struck with the many skilful exhibitions of boxing (silat), which never failed to draw large crowds and provoke much merriment.

On two afternoons football matches, Europeans and Malays against the Police, were played: on a third athletic sports were held and, though the afternoon was wet, were much enjoyed.

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Most of the time on Friday was occupied on determining several nice points of procedure to be adopted in the ceremony of the morrow. The Sri Menanti people were, of course, in favour of introducing many forms which the older men, who had witnessed a previous installation, deemed to be essential. The members of the Yam Tuan's family were anxious to use every form of expression which would proclaim the dominance of his position, and, had it not been for the extreme good sense of His Highness, it would probably have taken three or four days to arrange the procedure.

I had many consultations with the Dato' Bandar of Sungei Ujong, whose attitude throughout was firm but friendly, and I explained to the Yam Tuan that the Chiefs had made considerable concessions, that their patience ought not to be taxed in any way, and that the ceremony should be performed punctually and with as much expedition as possible. His Highness at once replied that his desire was to yield every point of minor importance. These discussions did not end till nearly midnight on Friday, but it was satisfactory to feel assured that every possible danger to the success of the very important event about to be celebrated had been removed.

On Saturday morning, crowds of people began to collect from every quarter: with the exception of an early shower, the weather was propitious. The placing of the royal umbrellas in front of the "balai penghadapan" (the royal hall in which the installation took place) was the signal for an enormous concourse of people to collect at that spot.

At a quarter to eleven, a guard of honour of the Sikh Police was drawn up near the reception halls of the four Lawgivers: the first to arrive was the Dato' Rembau: I received him at the entrance to the "balai panjang" and, after the guard had presented arms to him, we placed his followers in his reception hall and Mr. Parr conducted the Dato' to the Astana to put his signature and chop to the agreement with the Yam Tuan. Almost immediately afterwards, the Dato' Klana and the Dato' Bandar of Sungei Ujong arrived: the guard presented arms to them at the entrance to the "balai

melintang" and after their followers had entered the balai, Mr. Bathurst conducted them to the Astana: meanwhile Dato' Baginda Tan Amas of Johol, followed by all the Datos and minor Chiefs of the Negri Sembilan (old), had arrived: the guard presented arms to the Dato' Baginda at the entrance to the "balai bertengkat" and, after his following had entered the balai Mr. Chevallier conducted him to the Astana: a long wait occurred before the arrival of the Dato' Jelebu: he was received by the guard at the entrance to the "balai belêrong. When his followers had entered it, Mr. Hatchell conducted him to the Astana. The affixing of the signature and chops of the Lawgivers to seven copies of the agreement being completed, I signed and placed the State seal upon and they were then taken upstairs Yam Tuan who added his signature and chop. The four Officers named above then conducted the Lawgivers to their reception halls where they awaited their summons to the installation hall: in the meantime the Tungku Prempuan had taken her seat upon the dais to the left of the throne (Singgasana) and several ladies of high degree had been accommodated with seats in the places set apart for them: the yellow cushion, gold boxes; and other insignia of royalty were brought in and placed on the dais: Tungku Muda Chik, Tungku Ngah of Tampin, Rajah Kadir of Lukut, my four officers and I next took our seats in the body of the hall, and everything being ready the heralds announced that the Yam Tuan was coming to the hall: His Highness was preceded by the "orang ampat Astana" and his "orang anam" carring the weapons of State: immediately behind him were the young Tungku Besar (his brother) and the still younger Tungku Laksamana (his brother-in-law), while a score or so of Rajas completed the procession.

On arrival at the hall, His Highness was received by a guard of honour: he entered the hall and took his seat upon the "Singgasana," the "orang ampat Astana" and the "orang anam" stood upon the right and left below the dais and the Tungku Besar and Tungku Laksamana sat on the right and left of His Highness below the throne. The heralds sum-B. A. Soc., No. 46, 1906.

moned the Lawgivers and the hereditary Chiefs, who were each conducted from their respective balai to the entrance to theand

on conducted from their respect	are balar to one one aree to
e hall by their Officers of State	: they entered the hall alone
d took their seats in the following	ng order:—
(1) The Dato' Klana \ Sungei	(7) The Dato' Ulu Muar
(2) The Dato' Bandar ) Ujong	(8) The Dato' Terâchi
(3) The Dato' J. Jehn	(9) The Data' Jembal

(4) Dato' Baginda of Johol (5) The Dato Rembau (6) The Tungku Besar of Tampin

(10) The Dato' Gunong Pasir (11) The Dato' Inas (12) The Dato' Gemencheh (13) The Dato' Muda Linggi

The two heralds (Bentara Kanan and Bentara Kiri) took up their positions on the right and left of the Yam Tuan.

When all were in readiness the young Dato' Klana, rising, said, "Oh, Bentary, proclaim to everyone that we the four Lawgivers have assembled here to place the Yang di per Tuan Tungku Muhammad upon the throne of Negri Sembilan.'

The Bentara Kanan thereupon, standing on one leg, with the sole of his right foot resting on his left knee, holding his right ear open with his right hand and shading his eves with his left hand, made proclamation as follows :--

"Oh, gentlemen all, illustrious and humble, great and small, old and young, by order of the four Lawgivers, Tungku Muhammad, the son of the late Yam Tuan Tungku Antah, is proclaimed as Yang di per Tuan of the Negri Sembilan."

The people signified their homage by shouting three times, "Dôlat Tuanku."

I then addressed the Yam Tuan as follows:-

"I am very pleased that the Lawgivers and Lembaga and Officers and all the people from all parts of the Negri Senbilan have unanimously installed Your Highness as Yang di per Tuan and have re-established their ancient constitution, and that Your Highness has assented to their action. I will convey their wishes to the Resident-General."

The Bentara Kanan proceeded to call, by means of the following formula, upon each of the Lawgivers and on the

Hereditary Chiefs of Tampin, Muar, Terachi Jempol, and Gunong Pasir, to make obeisance:—

"Hè Dato' Klana Petra, who rules over the territory of Sungei Ujong, titah memanggil (His Highness summons vou)."

Each Chief in turn replied, "Dôlat Tuanku:" and one by one they emerged from the enclosure (ujong balai) in which they were seated, and squatting on the ground each proceeded along the floor (hadapan mejelis) making obeisance seven times until the dais was reached: there the Yam Tuan gave his right hand to the Chief, who, receiving it in both of his, reverently kissed it thrice and then retired, making obeisance five times as he receded.

Each Chief rose and resumed his seat, with the exception of the Dato' Jelebu, who left the hall after he had done homage.

The Dato' Inas, the Dato' Gemencheh and the Dato' Muda Linggi made their obeisance together and all the chief Lembaga and Waris of the various districts entered and did likewise.

The Lawgivers then left the hall and retired to their reception halls and their places were taken by all those who were of Raja blood: they numbered about twenty five: they were almost all dressed in yellow, several with black head-cloths, and, as they all moved up the hall, and, sitting below the dais, made obeisance three times in regular time, I was more impressed by the scene than by anything I have ever previously witnessed at any gathering of Malays. The Rajas were not commanded to come forward: it was an entirely voluntary act, but every one of them joined in it and it was a fine finishing touch to an imposing pageant.

Tungku Dris, Kathi of Tampin, the assistant Kathi of Kuala Pilah and some priests came in and offered up prayers for the Yam Tuan while the people stood with palms uplifted.

All being now over, the Yam Tuan rose and, after shaking hands with me, passed out of the hall and proceeded to the Astana, followed by all the Rajas.

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The ceremony, which had lasted two and a half hours,

ended at 3. p.m. and the crowd quickly melted away.

On Sunday, at noon, he gave a breakfast to the Undang and made an interesting speech in which he pointed out that the constitution of the Negri Sembilan was now complete; there were now—

#### THE YANG DI PER TUAN;

THE FOUR UNDANG (from Sungei Ujong, Jelebu, Johol, and Rembau); and

THE FOUR SERAMBI UNDANG (from Ulu Muar, Jempol. Terâchi and unong Pasir who, in the absence of the Undang, would represent them and would always do so by attending to make obeisance annually at the festival of Hari Raya).

On Sunday afternoon the various Chiefs left Sri Menanti to return to their homes, and early on Monday I went back to Seremban.

The above is a brief description of a ceremony that restored good feeling to a number of Chiefs who, for a generation, had been absurdly jealous of each other. Every person taking part in the ceremony recognised its importance and the calm and dignified reserve so characteristic of the well-born Malay was strikingly exemplified.

The concourse of people must have numbered from three to four thousand persons, and good humour reigned everywhere.

## An Account of the Creation of the Dog.

BY W. G. MAXWELL.

I heard this story from Pa' Senik, an old Kelantan Malay now resident near Batu Gajah in Perak. He was giving an account of the creation of the first man according to the Muhammadan tradition, which may be found in Sale's Notes to his translation of the Koran and in D'Herbelot's article "Adam" in his Bibliothèque Orientale; and the account of the creation of the dog was a mere parenthesis in his story—It is new to me, and appears to be a Malay accretion to the Arabic myth.

When Azrael had torn out the heart of the Earth and had fashioned it into the form of man, he left the moulded figure, which was still without life, on Bukit Zabaniah.

It lay there face upwards exposed to all the elements. Iblis passed that way and saw it, and, from malice, voided his excrement on its chest.

When Azrael returned he flung the excrement away, and it immediately took the form of a dog.

The creation of the dog in this manner has had effect in two ways. In the first place, the dog, though an unclean animal may be bought and sold by Muhammadans, whereas the purchase money of all other unclean animals carries the taint of the unclean. In the second place, the Dog, however badly treated and however often thrashed, will always return to man.



## Kun and Payah Kun.

By W. G. MAXWELL.

Every student of pawang-lore is familiar with the terms kun and payah kun, which most frequently occur in such expressions as "kun kata Allah, payah kun kata Muhammad" (kun saith Allah, payah kun saith Muhammad), but no one has yet, so far as I am aware, discovered their meaning.

Kun presented no difficulty; it is obviously the Arabic "let it be." But the antithetical term payah kun remained without a solution. My father suggested that it was a corruption of the Malay word سفاي supaia—meaning" in order that," and in this he is followed by Skeat,\* but the sense thus derived from the sentence does not appear to be altogether satisfactory. Another suggestion was that the word was the Arabic بماء ألماء ألما

For the solution of the puzzle I am indebted to Mr. J. C. Sugars, of the F. M. S. Civil Service. 'Payah kun is merely a corruption of the Arabic fa yakun 'meaning" and it is. " The correct reading therefore is "kun kata Allah, fa yakun kata Muhammad."

"Let it be" saith Allah: "and it is" saith Muhammad.)

<sup>\*</sup> Skeat, Malay Magic. p. 4. Footnote.

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The words occur in the 110th verse of the second chapter of the Koran.

Idha qadha amran fa innima yaqulu lahu kun fa yakun. (When He decreeth a matter, He doth but say unto it 'Be;' and it is.)

Again in the 83rd verse of the 36th chapter we have مَا اللَّهُ عَلَى اللَّهُ عَلَّهُ عَلَى اللَّهُ عَلَى اللَّهُ عَلَى اللَّهُ عَلَى اللَّهُ عَلَّى اللَّهُ عَلَى اللَّهُ عَلَّى اللَّهُ عَلَى اللَّهُ عَلَّى اللَّهُ عَلَى اللَّهُ عَلَى اللَّهُ عَلَّ عَلَى اللَّهُ عَلَ

(His bidding is only, when He desireth anything, to say to 'Be; and it is.)

The expression is thus identical with that which appears throughout the first book of Genesis in such verses as the following:—

And God said, Let there be light: and there was light. And God said, Let the waters under the heaven be gathered together unto one place. and let the dry land appear: and it was so.

It is probable that the sentence as we now have it was first coined by pawangs as part of a mantra at a period when the Malays had not long been converted to Muhammadanism. The addition of the words "saith Muhammad," though doubtless partly due to ignorance of the meaning of the foreign words and partly to the national love of an antithesis, appears also to be partly due to the zeal of a convert. And, it is interesting to note, not only is the addition of the two words wholly unnecessary, but the expression "and it is, saith Muhammad" would appear to a strict Muhammadan to be of very doubtful orthodoxy.

## The Story of Kherudin.

BY G. M. LAIDLAW.

Penghulu Mat Nordin learnt this story of Kherudin many years ago from Mohamed Unus bin Mohamed Arip who, so far as is known, was of pure Perak descent.

The tale is told that once in the olden time there was a merchant called Mansur who had seven sons. Now he was very rich. But one day, owing to the will of God, he fell ill with many and very grievous sicknesses. Many doctors and medicine men tried to physic him but could not restore him to health. So one day he called his seven sons and at that time he declared his will to his eldest son, Zainal Abidin, his second son, Kamarudin, his third son, Shamsudin, his sixth son, Bahakudin, and to his youngest son, Kherudin, saying to "Hai, Zainal Abidin, on this day have I made my will. As regards your younger brother Kherudin you must take very great care of him, for it seems to me that he is the one who will be most fortunate, indeed all of you will be able to obtain your living through him. Now on no account whatever are you to transgress this my will. If you do, I shall certainly curse you both in this life and hereafter and you will not obtain peace."

His son named Zainal Abidin made reply and said, "It is good, my father."

Two or three days later Merchant Mansur returned to the mercy of God. After that Zainal Abidin called all the priests and preachers, hajis and lebais, to pray for his father. He also got ready the siraja diraja, that is to say the bier on which the body is carrried to the grave. This was adorned with all sorts of most precious things. He gave away in alms many tens of thousands of dollars to all those of the faith who were there on the day that his father was laid in the earth. After he had completed the feast of the third day and

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of the seventh day and of the twice seven days and of the forty days and of the hundred days after all this work of the feasts had been settled, Zainal Abidin carefully followed out to the letter the will of his father as regards the upbringing of his youngest brother.

After a very long time when Kherudin had grown up, the eldest brother made a plan with his younger ones to go on a trading voyage. They all replied that it was a most excellent plan. So after this meeting they ordered the second son of Kamarudin to get ready a very big ship and to load all sorts of trading things therein. After voyaging for some days they came to a country and the six brothers with Zainudin went to lay before the king of the country all sorts of offerings in homage, but the youngest brother was left to watch the ship. Now Kherudin had been given a hundred dollars by his eldest brother in order that he might buy anything that he fancied. This had been ordered in his father's will. While he was watching the ship, a certain man in the country who had been keeping a mangy dog began to think on this wise. "What is the good of taking care of this mangy dog? The food that I give it is only a loss." So that day he made up his mind to destroy it by setting it adrift in the sea. But when the man reached the shore leading the dog with him and Kherudin saw that he meant to throw it into the sea, he said. "What are you going to do with the dog?"

The owner replied. "I am going to set it adrift, because it is mangy and I cannot afford to feed it any longer."

Kherudin said, "Will you sell the dog?"
The man said, "If you want to have it, take it."

Kherudin said, "If you give it to me, I do not want it, but if you will sell it for thirty dollars I will buy."

When the dog's owner heard that he replied gladly, "Take it." So Kherudin paid over thirty dollars, and the man took it and went away back to his own house. A little later his elder brothers came back from the palace, and found Kherudin busy bathing his dog. They said to him. "Where did you get the dog?"

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Kherudin answered. "I bought it just now for thirty dollars."

The five brothers said. "The fellow is cracked, a ninny to throw his money about like that for no use."

"Don't be angry with him. It is not your money that he has given away."

Some days later the elder brothers again went on shore to buy all sorts of merchandise to bring back to their own country and again Kherudin was left to take care of the ship. While he was on watch a man brought a mangy cat which he intended to throw adrift into the sea. Kherudin said, "What are you doing with that cat?"

The man with the cat answered, "I am going to set it adrift in the sea."

Kherudin said, "Will you sell it?"

The owner of the cat answered. "If you would like to have it, take it."

Kherudin said, "If you merely give it, I do not want it, but if you will sell it for thirty dollars I will buy it."

So the owner of the cat said, "Very good then." And Kherudin paid him the thirty dollars. The man went back to his house rejoicing. A short while after the six elder brothers came back from the shore and found Kherudin busy bathing the mangy cat. The five said to him, "Where did you get this cat from next?"

He answered, "I have just bought it for thirty dollars."

They said to him, "Are you a human being? Have you no brains? You are just like a beast, and when a man is like a beast, it is a very great curse indeed."

The eldest brother said, "What is the use of being angry with him? It is not your money with which he bought it. I gave him that money. Let him buy whatever he likes. I don't mind."

So Kherudin lavished all his care on the dog and on the mangy cat and paid no attention to the trading voyage. He gave his whole energy to looking after the dog and the cat.

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About two days after this his brothers again went on shore to look for all sorts of things to trade and left him again in the ship. Then another man came along dragging a snake by a noose which he had fastened round its neck. He also wanted to kill it by throwing it into the sea.

When Kherudin saw the man dragging the snake he said, "What are you going to do with that snake?"

The man said, "I am going to kill it and throw it into the sea."

Kherudin said, "Will you sell it?"

The man said, "If you want it take it."

Kherudin said, "If you give it to me, I do not want it: but if you will sell it for thirty dollars I will buy it."

The man said all right. After that Kherudin paid the thirty dollars. When he had bought the snake Kherudin looked after it so well that his brothers never knew about it.

Now it seemed that this snake was the king of all snakes, so in the middle of that night, all his ministers and all his subjects came before him. The ministers made obeisance saying, "Your majesty, why do you live here? Why have you abandoned your throne? What is the fault of your servants? Have we not all obeyed your august commands? As far as we can remember never have your servants even on one occasion rebelled against your august commands."

Kherudin heard all that they said. The king snake replied, "It was no fault of yours. Only it happened that one day as I went along by myself intending to look at the sports of mankind, while on the way I became thirsty so I went to look for water. While doing this I met with one of these folk, who struck me and intended to kill me and cast me into the sea. But then we met this man who redeemed me for thirty dollars, and that is how it happened that I did not die."

Then all the ministers proceeded to present themselves before Kherudin and made obeisance saying, "Your majesty, this snake which you have redeemed is the king of all the

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snakes. If there is any pity any mercy in your majesty, your slaves trust to be allowed to return you this money."

Kherudin answered, "Even if he is the king of all the snakes, yet we cannot give him back for we are fond of him."

So all the ministers besought him saying, "If your majesty will not allow us to give you money, then there is a certain fairy ring which we can present to you. Whatever your intention or whatever your wish may be, it will bring them all to pass."

When Kherudin heard that, he said, "If that is true, you can take the king snake."

So all the ministers rejoiced greatly and besought permission to retire, which was graciously given them. The king snake was borne away on his ryots heads, back to his own country.

The next day the eldest brother, Zainudin, said, "To-morrow we will sail home."

Kherudin heard what he said and saw that he had only ten dollars left. So he went on shore to buy all the fish scales and broken pots at the fish sellers' place. He bought every fish scale and broken sherd from those people who lived there for ten dollars. They were all very glad. Then he carried them all off and stored them in the ship. His eldest brother just noticed him, but the five others kept on grumbling and were angry with Kherudin for his mad conduct.

After that on the next morning they set sail, and Kherudin was still more devoted to his mangy dog and to his mangy cat. After voyaging for seven days and seven nights they reached their own country. As soon as ever they arrived, the six brothers each took a present to offer as homage to the king.

The king said, "The six of you have each given me a present but your youngest brother seems to think that he need present no homage to me."

The eldest brother replied, "It is because this youngling, Kherudin has brought nothing whatever back with him."

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After that they all craved permission to return to their own house.

When they got there the five brothers said, "This fellow is of no value in the king's eyes. The rest of us all took a present. He alone took none. And so we were put to shame, for of course people will not say that we are rich, and of course people will not say that Merchant Mansur was our father."

But Kherudin was silent and made no reply.

The next day he went to his mother, Siti Rasimah, and said, "Mother, mother, please go and bespeak the king's daughter in marriage."

His mother answered, "Why, what resource have we? Certainly such poor people as we are will not be received by the king."

Her son said, "Please go, mother. You can but try."

So his mother went before the king and lifted her ten fingers in obeisance and made homage, saying, "Pardon my lord, a thousand be the pardons vouchsafed to your most humble slave, who humbly craves for pardon. My child, my youngling, Kherudin has preferred a request. He desires to become your august majesty's slave, and to repair the broken flooring and the torn partitions in your palace."

The king quite understood what Siti Rasimah meant, so he said, "I would like to give my child a husband, but Kherudin must first accomplish what I want and then, please God, I would accept him."

Siti Rasimah made obeisance, "Pardon, your majesty, your slave wishes to hear a little of the royal commands, what is your intention, what is your desire towards her in the dust at your feet?"

The king said, "First of all, he must make me a royal palace whose pillars are of mingled gold and silver and whose walls are of pure gold, and with a diamond cupola. Then secondly he must make a landing of gold from the palace right down to the sea. Then thirdly he must make a gold road between his house and my palace."

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When he had finished speaking Siti Rasimah became very sad and after she had obtained leave to depart she returned home weeping looking for her son, and saying, "This time mother and child are indeed separated."

Kherudin saw her weeping and became very frightened. He said, "Why are you weeping, mother? What has the king said?"

So his mother told him all that the king wanted. Kherudin said, "If that is all that the king wants, do not be frightened, mother; go and tell the king that whenever he wants it done, I am ready to do it."

So the next day Siti Rasimah again went before the king and made obeisance.

"Pardon your majesty a thousand pardons, when does your majesty desire to have this thing done?"

The king said, "I want it done in three days time from now. When it is quite finished I will marry my daughter to him at once."

After that Siti Rasimah was given leave to return. She told her son all that the king wanted and Kherudin replied, "Very good." So that evening he ordered his mother to make limes and cosmetics ready and also told her to sleep at another house for that night, so that he was left alone. In the evening when alone by himself he bathed and perfumed himself. At midnight he called out aloud, "Oh! fairy ring that was given me by the king snake, if you really are a fairy ring, I ask you to make me a royal palace whose pillars are of mingled gold and silver and whose walls are of pure gold, and a landing place of pure gold from the palace to the sea side, and a pathway of gold from the palace to this house of mine."

At that very instant with a noise like thunder came all the jins and the king snake and all his ministers before Kherudin.

The king snake said, "Why is my beloved troubled of heart?"

So Kherudin answered, "I have asked for the hand of the daughter of the king of this country, and he has asked me R. A. Soc., No. 46, 1906.

to make a royal palace and a landing place and a pathway of pure gold, and also that the palace should have a diamond cupola."

The king snake said, "When does my beloved want this done?"

Kherudin answered, "I want it done to-night."

So that very night after the king snake had concentrated all his will on fulfilling Kherudin's request, everything came The glamour of the palace into being perfectly complete. burst all over the whole country side, and all the retainers and all the great men were terrified and went before the king. The king too was greatly astonished, but in a little while he recollected the request that he had made of Kherudin. Then he became very glad and told all his retainers; each of whom afterwards went back to his own house. The king was very pleased indeed to see what Kherudin had done. As soon as ever it was day, the whole population came together to see the king's palace. They were all astonished. When each one was satisfied with gazing on this most wonderful sight they all went back to their own homes.

Later on Kherudin went to his mother and said, "Mother, go and ask the king when he is going to marry me to his daughter."

Siti Rasimah at once went before the king. When she reached the royal presence she made obeisance, lifting her ten fingers in homage, and said, "Pardon your majesty, a thousand thousand pardons, your slave trusts peradventure to be pardoned for preferring her request, since she has for such a long time obeyed the royal behest. Your slave has been asked by her youngling Kherudin to enquire from your majesty what is to be done about your former promise."

When the king heard Siti Rasimah's request he pondered thus in his heart: "Of a certainty I spring from a race of kings who have come down from father to son from the olden days, and this Kherudin is the son of a merchant. If I marry my daughter to him I shall be put to shame when the kings in the other countries come to hear of it. But if I break my word he

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may raise the country in revolt, and perhaps he might subdue it, for he is clearly a man endowed with many charms and magic powers."

So in thinking thus the king spake as follows: "Very well, the marriage will take place in seven days time."

When Siti Rasimah heard the king's words she went home and told her son all that the king had said. Kherudin was very glad. On the next day the king told one of his friends to call all his retainers together. And on that day all his ministers were gathered together. The king was seated on the royal throne of state and spake on this wise: "Hai! one and all, retainers of mine, we have called you together to make preparations for the wedding of our daughter Princess Shamsiah with the merchant's son named Kherudin."

All the retainers made obeisance, saying, "Pardon your majesty, a thousand thousand pardons, we are all willing to bow our heads beneath your majesty's commands."

When the king had made an end of speaking and the retainers had finished their homage, the retainers all lifted their ten fingers, and obtained leave to return each to his house. The very next day the ministers all began to obey the king's behest: the days were like nights and the nights were like days, the whole country was in an uproar and all the inhabitants were gathered together. The blind were led in and the lame came on crutches.

When the seven days and the seven nights were completed Kherudin was brought in procession to the king's house with all sorts of finery. Still more was lavished on the Princess Shamsiah. When Kherudin reached the royal audience hall it was crammed full with all the ministers, eunuchs, heralds, all the penghulus, the whole army of the common folk were in the royal hall. The king himself was present seated in state on his royal throne and he had called the kathi and had empowered him to marry his daughter to Kherudin. When the kathi arrived he came on bended knee lifting his ten fingers in homage, and when the king had fully confirmed the power bestowed and he had again lifted his hands in obeisance,

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he went back to find Kherudin. When he got near Kherudin he ordered him to sit down on one knee. The kathi then read the marriage service, after that he spoke to Kherudin, and when he had made an end of that and he had prayed in all sorts of ways for the safety of the king's children, husband and wife, and for their parents and for all the people in the realm, when he had made an end of all that, they bore Kherudin into the palace and seated him next to Princess Shamsiah. All the men and all the women who saw the sight were very greatly pleased, for it was for all the world just like the moon encircled by stars. Next they brought the marriage cake of rice, which was ornamented in many ways. Both husband and wife When they had finished eating they were next partook of it. led by the eunuchs and female attendants into the royal bedchamber, and the golden state curtain was lowered. Many were the terms of endearment that Kherudin lavished on his wife, but she bore herself most humbly. When Kherudin saw that, a great pity arose in his heart and he embraced her and fondled her with many sweet and kind words to soothe his wife's heart. So Kherudin came to love his wife.

Some days after, Kherudin went out hunting. His wife made ready all sorts of provisions. He left behind his magic ring with his wife and set off with an army of retainers and with elephants and horses. While her husband was away hunting the Princess Shamsiah noticed that the setting of the ring was old and worn. So she ordered one of her attendants to call the most skilful Chinaman in the country. He quickly came to her presence and she ordered him to reset the ring in a more beautiful way. The jeweller said "Very well." He obtained permission to return to his house. When he got there he had a good look at the jewel in the ring. Never had he seen so fair a gem. So that very night he ran away with it.

After two days time Kherudin came back from hunting with all sorts of things that he had taken in the chase. When he reached his wife he asked for the ring. She replied that she had given it to a Chinaman to put it in a better setting. The princess ordered one of her servants to go and call the jeweller. When the servant reached his house she

learnt that he had run away. So she ran back to the princess and informed her. As soon as Kherudin heard what the servant said he sweoned without saying a word. The princess was greatly distressed for her husband. An uproar arose in the palace and the king her father came to see why his son-in-law had fainted.

While this was going on the mangy cat got to know what had happened to his master and he took counsel with the mangy dog.

"What will be the end of this thing? Our master has been in a swoon for several days because he has lost the fairy ring given to him by the king snake. I think that it is only right that we should go and look for this ring for that Chinaman has run off with it to some other country. If we cannot find it, the care spent on us by our master is quite useless."

The mangy dog replied, "Go and get it, for I cannot look for it."

The mangy cat said, "It is not that you are not able merely. You have no strength for it, for you have no love for your master."

The mangy dog said, "It is not that I have no love for my master. I am very fond of him. But I do not know where on earth that ring has been taken by that Chinaman."

The cat said, "If you do not know how to look for it, let me be the head and you can follow. But whatever I say you must do."

The mangy dog said, "If it be arranged like that, let us go."

After they had made this plan the dog and the cat set off, into forests, out of forests, up mountains and down mountains, into plains and across plains. At last they came to a village.

The dog said, "I cannot walk any farther, for I am tremendously hungry."

The cat replied, "I am hungry too. Since that is so, I had better go and look for some food. But let us make R. A. Soc., No. 46, 1906

our plans first. I will go into the houses. If I find any food in the kitchen and if I can knock it down to the ground, you must at once snatch it up in your mouth and run off to the jungle."

The dog agreed, so the cat set off. He went into one house where he saw a cooking pot in the middle of the kitchen. So he went in and kicked it down to the ground. The dog snatched it up and ran off to the jungle and the cat followed him. When they got into the jungle they ate until they were satisfied and then being once more strong they went on their way. The mangy cat went into the towns to listen to the people talking but heard nothing. So they went on once more until they came to the sea side. There they saw an island.

The cat said, "Perhaps that Chinaman is there, we must go across to the island."

The dog said, "If you are able to, come along."

So they set off swimming in the sea. They swam for a day and a night. At length both of them reached the island and climbed on shore. They walked about on the beach.

The dog said, "Hai, I can't walk any longer for I am very hungry."

The cat said, "Let us look on the shore, perhaps we can find some fish which we can eat."

In a little while they found a big fish. The cat said, "That is the very fish we want, come and let us eat it." So the cat and the dog finished the fish. After that both of them went on. Every night they listened of news of the Chinaman to see if he was in the island. But he was not.

The cat said, "What resource have we left now?"

The dog said, "I don't know, whatever you think I will agree to."

The cat said, "We had better go to some other country perhaps we will find that Chinaman there."

So they both swam away to another country. After a long long time they arrived and climbed on shore. The dog said, "Hai, cat, I can walk no longer for I am faint with hunger."

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The cat answered, "Wait here then, while I go to look for some food."

So he set off. At last he met with a man who was busy smoking some fish. The cat hid in the grass close by and while the man went away to eat his dinner, he took five or six fish and went off with them to the dog. They both ate and when they were satisfied they went on together. When night fell they went to the house of a goldsmith, a Chinaman. The cat thought that this was perhaps the house of the man who had stolen their master's ring.

The dog said, "How are you going to manage to get that ring if the ring is in the house.?"

The cat answered, "I have a plan. It seems that this towkay is really the fellow who has stolen the ring."

The cat said to the dog, "You wait on this side of the door and I will wait on that. If you see a white rat, catch it, but don't kill it."

The dog said, "Very well." They each lay in wait on their side of the door. At last about midnight, a white rat came out on the cat's side and the cat caught it.

The white rat said, "Don't eat me."

The cat said, "Yes, I am going to eat you."

Now the white rat was the king of all the rats in that country. When this occurred all the great men of the king rat came.

One of his retainers said, "Do not, oh, Grandfather Cat, devour our king! Whatever you may want we will help you."

The cat said, "Very good, there is a fairy ring in the inside of seven boxes belonging to this towkay. If you get that ring to-night, I will let your king go; if not, I certainly will eat him."

The retainer replied, "Very well, if it is there, we will get it to-night."

So they pressed all the rats in that country and ordered them to bore into that Chinaman's box. So all the rats gnawed through one box after another, until the seventh.

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When they had pierced the seventh, one of the army of rats went in and searched about inside. There was only a small bundle of cloth but the rat felt that there really was a ring inside it. So he brought it outside and gave it to the cat. When the cat saw that it really was his master's ring he let the king rat go. So the king rat went off with his army of followers. The cat was very glad indeed and went to find the dog.

The cat said, "Hai, mangy dog, I have got our master's ring. Come along home."

The cat carried the ring in its mouth. When daylight came the cat and the dog set off to swim across a very wide sea. The cat was not in the least tired owing to the power of the ring. But the dog got very tired and spent, so he said to the cat,

"Hai, let me carry the ring for a little, for I see that you are quite fresh."

But the cat said, "You can't carry the ring now; perhaps you will let it fall."

The dog said, "It won't fall."

So the cat gave it to the dog who put it in his mouth. The dog at once became a little stronger. But after a time the ring fell into the sea.

The dog said, "Hai, our master's ring has fallen into the sea."

The cat said, "I told you before that if you carried it, you would let it fall, but you said it would not. Now you have dropped it. And how are we to get it back again?"

So they went on swimming till they got to an island at which they rested.

The cat said, "We had better walk about on the shore."

The cat noticed a large fish rolling over and over on the shore. He thought, "What a fat fish that is. I am hungry; I had better eat it."

So he said to the dog, "Come along and eat this dead fish for I am very hungry."

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The dog rushed off and began to eat. The cat also came and ate. The dog guzzled right into the fish's maw. When he broke it open he saw that there was a ring inside. The dog said. "I have found a ring in the maw of this fish."

The cat said, "Here! let me have a look."

So the dog gave it to the cat, and it actually was the ring that had fallen. The cat took it and put it in his mouth, and said "Come along and let us swim back."

So they both swam away. At last after a very long time they reached land. They travelled on day and night, night and day. until at last they reached their master's country. When they got below the house. Kherudin was still in a swoon. tried to reach his master but was not allowed to get near. So at midnight when they were all asleep, the cat crept up into the house and went to his master and laid the ring on his breast. Then Kherudin sneezed and at once recovered consciousness and went away to his own bedroom. Nobody had noticed anything, so the people who were on guard at the place where Kherudin had swooned were very frightened the next morning when they saw that Kherudin had disappeared. So an uproar arose in the palace. Some one told the king that his illustrious son had disappeared from the place in which he had swoon-The king was very grieved to hear this. the day, at the time when the ploughman can glance round without being dazzled by the sun, that is to say at the time that you can lift your eyebrows, (about 9 a. m.) the princess Shamsiah came out from her bedroom and heard that there was an uproar in the palace because her husband had disappeared. So the princess ordered one of her servants to go and tell her father that Kherudin had recovered from his swoon and was in his own bedroom. So the maid servant ran off in a hurry to go before the king and said,

"Pardon, your majesty, a thousand thousand pardons, this your slave has come before your gracious majesty on the command of your daughter. The princess commands me to say that Kherudin has recovered from his swoon and is now in his bedroom."

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When the king heard this report his grief at once disappeared. While the maid was away seeing the king, Kherudin arose from his sleep. Both husband and wife then proceeded to bathe. When the bathing was over, they had breakfast. They lived together very happily.

After a very long time the king abdicated in favour of Kherudin. As long as Kherudin was king the country increased in peace and became more and more populous. Kherudin was styled Sultan Kherudin Shah because he was so very wise and clever, and because he took such great care of all the natives of the land and because he so fostered all the strangers. His dignity increased and his name became more and more famous in the neighbouring lands.

One day he summoned all the great men of the country and all his brothers. When they were all assembled and he was seated on his throne of state, he made his eldest brother the chief minister of state and the other five brothers the keeper of his buffaloes, of his cattle, of his goats, of his sheep, and of his fowls, each with his separate work. And his kingdom became more and more firm. He may be reigning still, Heaven alone knoweth.

## The Story of Kherudin.

Alkësah maka ada-lah pada masa dahulu kala maka ada-lah sa'orang saudagar nama Saudagar Mansur, maka ada-lah anaknya laki-laki tujoh orang. Maka sangat-lah kaya-nya. Maka pada satu hari dengan takdir Allah sakit-lah ia dengan berberapa kasakitan amat sangat, maka ber-berapa tabib dan berberapa bomor akan mengubati ini saudagar tiada juga mahu baik. Maka pada satu hari di-panggil-nya-lah anak-nya katujohnya dan pada waktu itu ber-wasiat-lah ia kapada anak-nya yang tua nama Zainal Abidin dan yang tengah-nya nama Kamarudin dan yang alang-nya nama Shamsudin dan yang udanya nama Bahakudin dan yang bongsu-nya nama Kherudin. Maka kata bapa-nya "Hai Zainal Abidin pada hari ini telah aku ber-wasiat-lah kapada kamu. Fasal adek kamu Kherudin ini

handak-lah kamu pelihara-kan baik-baik kerana ia pada pandangan aku dan rasa hati-ku ia-lah yang sangat bertuah dan sěklian kamu boleh měnumpang kapada-nya. Maka jangan-lah sĕkali-kali kamu lalui akan wasiat aku ini, jika kamu lalui juga tentu-lah kamu aku sumpah dunia dan akhirat tiada-lah dapat Maka jawab anak-nya yang nama Zainal Abidin "Baik ayah." Kemdian selang antara tiga hari maka ini Saudagar Mansur pun kembali karahmat Allah. Setelah demikian dipanggil oleh Zainudin segala imam khatib, haji dan leba akan sembahyang-kan bapa-nya itu dan diperbuat-nya seraja diraja, yaani përusongan mëngangkat mayat ka-kubur dëngan pëlabagei përhiasan yang tërlalu amat ëndah-ëndah-nya dan bër-bërapa puloh ribu ringgit disĕdĕkah-kan-nya kapada sĕklian orang islam yang ada hadir pada hari turun tanah bapa-nya. Maka sětělah disěmpěrna-kan-nya-lah khanduri měniga hari, dan tujoh hari, dan dua kali tujoh hari dan ampat puloh hari dan saratus hari-nya, shahadan tĕlah sĕlĕsei-lah dĕripada pĕkerjaan khanduri itu, maka ini adek-nya yang bongsu-nya itu dipeliharanya ikut sabagimana wasiat bapa-nya itu juga.

Kemdian lama dengan kalamaan-nya maka ini Kherudin pun besar-lah sudah. Maka pada satuhari-nya bermeshuarat-lah abang-nya yang tua kapada segala adek-adek-nya ia hendak belayar berniaga maka jawab segala adek-adek-nya, "Itu elok sangat-lah abang." Maka setelah habis meshuarat itu, maka disuroh-kan-nya adek-nya yang tengah nama Kamarudin akan siap-siap satu kapal yang sangat besar-nya memuat pelabagai jenis perniagaan, kemdian antara berberapa hari didalam pelayaran-nya itu tiba ia kapada sabuah negri dan naik-lah ini saudagar Zainudin anam beradek pergi mengadap raja didalam negri dengan membawa pelabagai jenis persembahan kapada raja dan adek-nya yang bongsu-nya tinggal menunggu kapal. Maka ini Kherudin ada diberi oleh abang-nya yang tua itu saratus ringgit akan membeli apa-apa yang disuka'i-nya akan

hëndak mëlihat-kan sëpërti wasiat bapa-nya.

Kemdian didalam ia menunggu kapal itu ada-lah satu orang didalam negri itu ada pelihara sa'ekor anjing kurap, fikir-nya, "Apa guna aku pelihara ini anjing kurap, buat rugi, aku beri makan-nya sahaja." Kemdian itu hari juga ia hendak bunoh buangkan kalaut. Kemdian serta sampai ia katepi laut membawa

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itu anjing maka dilihat oleh Kherudin ini orang hendak membuang-kan anjing itu, maka kata-nya, "Hendak dibawa kamana itu anjing?" Maka jawab tuan anjing itu, "Sahaya hendak buangkan kalaut, kerana ia sudah kena penyakit kurap tiada-lah lalu lagi beri makan sahaja." Maka kata Kherudin "Dijual-kah itu anjing?" Maka jawab tuan anjing "Jika tuan hendak ambillah sahaja." Maka kata Kherudin "Jika diberi-kan sehaja sahaya tiada mahu, jika dijual tiga puloh ringgit sahaya běli." tuan anjing menengar yang demikian itu, suka-lah, jawab-nya, "Ambil-lah," serta dibayar oleh Kherudin herga-nya \$30sudah diterima-nya herga anjing itu ia balik karumah-nya. Kemdian sabuntar lagi turun abang-abang-nya itu deripada mengadap raja. Maka dilihat oleh abang-nya ini Kherudin těngah měmandi-kan anjing-nya, maka kata abang-abang-nya itu, "Dimana kamu dapat ini anjing?" Maka jawab Kherudin "Sahaya beli tadi dengan tiga puloh ringgit." Maka kata abangnya yang lima orang itu "Ini-lah orang yang gila dan bodoh membuang-kan duit dengan tiada faidah." Maka jawab abangnya yang tua, "Jangan kamu marah kapada-nya. Bukan-nya kamu vang memberi duit itu."

Kemdian antara dua tiga hari abang-abang-nya berjalan naik kadarat akan membeli pelabagai jenis perniagaan hendak dibawa ka-negri-nya, tinggal Kherudin juga menunggu kapal. Maka didalam ia menunggu itu ada satu orang membawa sa'ekor kuching kurap hendak membuang-kan kalaut, maka kata Kherudin "Hendak kamana dibawa kuching itu?" Maka jawab tuan kuching itu, "Sahaya hendak hanyut-kan kalaut." Maka kata Kherudin "Dijual-kah itu kuching?" Maka jawab tuan kuching itu "Jika tuan mahu ambil-lah sahaja." Maka kata Kherudin "Diběri-kan sahaja, tiada sahaya mahu, jika dijual tiga puloh ringgit sahaya beli "Maka kata tuan kuching itu "baik lah." Maka diberi oleh Kherudin herga-nya \$30-suka-lah hati tuan kuching itu maka ia balik karumah-nya. Kemdian antara sabuntar lagi turun-lah abang-nya anam beradek dari darat, maka dilihat-nya ini Kherudin tengah memandi-kan kuching kurap. Maka kata abang-nya yang lima orang itu, "Dimana pula kamu dapat kuching kurap?" Maka jawab-nya "Sahaya běli tadi tiga puloh ringgit ini." Maka kata abang-abang-nya itu, "Ini-lah manusia yang tiada berakal seperti binatang dan apabila manusia seperti binatang chelaka yang amat besar." Maka kata abang-nya yang tua "Apa guna kamu marah-kan dia? Bukan-nya duit kamu yang dibelikan-nya. Itu duit aku memberi-kan-nya. Maka apa-apa yang disuka'i rada hati-nya boleh ia beli. Aku tidak fehduli-kan." Maka ini Kherudin pun ia pelebara-lah anjing dan kuching kurap itu dengan sahabishabis akhtiar-nya, maka tiada-lah ia fehduli-kan alkesah perniagaan. Semata-mata ia memelihara anjing dan kuching itu sahaja.

Kěmdian antara dua hari pula naik pula abang-abang-nya kadarat akan měnchari pělabagai jěnis dagangan, maka ia tinggal juga dikapal, kěmdian datang satu orang měnarek anak ular dijěrat-nya děngan tali pada leher anak ular itu ia hěndak bunoh buangkan kalaut. Maka těrlihat oleh Kherudin itu orang měnarek anak ular itu, maka kata-nya "Hěndak kamana dibawa anak ular itu?" Maka jawab orang itu "Sahaya hěndak bunoh buangkan kalaut." Maka kata Kherudin "Dijual-kah itu anak ular?" Maka jawab tuan ular itu, "Jika tuan hěndak ambillah sahaja." Maka kata Kherudin "Jika diběri-kan sahaja tiada sahaya mahu, jika dijual děngan hěrga-nya \$30 boleh sahaya běli." Maka jawab tuan ular itu "baik." Habis itu ia bayar-lah tiga puloh ringgit, maka apabila sudah diběli-nya ini ular maka Khěrudin pun pělihara-lah děngan sachukop-nya tiada ditahu oleh abang-abang-nya. Maka ini anak ular rupa-nya raja sěkalian ular.

Kěmdian ada-lah waktu těngah malam itu juga, maka datang-lah sěgala měntri dan sěgala rayat-rayat raja ular ini, měndapat-kan raja-nya. Maka sěmbah sěgala měntri-měntri-nya, "Tuanku měngapa dudok pula disini měninggal-kan těmpat karajaan? Apa-kah salah patek sěkalian? Tiada-kah patek sěkalian měnjunjong titah kabawah duli? Pada ingatan patek bělum pěrnah satu kali pun patek sěkalian měmpěrbuat děrhaka kapada kabawah duli." Maka diděngar oleh Kherudin sěgala pěrkataan sěgala měntri ular ini. Maka jawab raja ular itu "Bukan-nya kěrana apa-apa, hanya-lah ada satu hari aku pěrgi běrjalan sa'orang diri, sahaya hěndak mělihat-kan těrmasa sěgala manusia, maka pada waktu itu těrasa pula hěndak minum, jadi pěrgi pula aku měnchari ayer, maka didalam aku běrjalan ini běrjumpa děngan sa'orang manusia lalu dipukol-nya aku, hěndak dibunoh buangkan kalaut. Kěmdian běrjumpa pula

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děngan tuan ini lalu ditěbus-nya tiga puloh ringgit, ini-lah sěbabnya tiada aku mati." Kemdian berhadap-lah segala mentrimentri ini mengadap Kherudin maka sembah mentri kapada Kherudin, "Tuanku ada pun anak ular yang tuanku tebus tiga puloh ringgit itu, ini-lah raja sekalian ular, jika tuanku ada bělas kasihan akan patek harap akan boleh patěk sěmbah-kan kembali duit tuanku itu." Maka jawab Kherudin "Jikalau bětul ini anak raja ular tiada-lah kami běri balik kěrana kami pun kaseh pula kapada-nya." Maka dipohonkan juga oleh mentri-mentri itu kapada Kherudin kata-nya "Jika tuanku tiada beri bayar dengan duit boleh patek persembah-kan sabentok chinchin kasaktian. Jika apa maksud dan hajat-tuanku semuanya sampai." Maka tělah diděngar oleh Kherudin yang děmkian itu kata-nya "Jika betul bagitu bawa-lah anak raja ular ini." Maka segala mentri-mentri itu pun terlalu-lah suka-nya serta bermohon-lah berjalan kapada Kherudin, maka jawab-nya " Baik-lah." Maka anak raja ular pun dijunjong-lah oleh segala rayat-rayat-nya diatas kepala-nya bawa balik kanegri-nya.

Kemdian satu hari berkata-lah abang-nya yang tua nama Zainudin kata-nya "Esok hari kita berlayar balik," Maka didengar oleh Kherudin perkataan abang-nya itu dan ada-lah tinggal duit pada-nya \$10-këmdian itu naik kadarat përgi mëmbëli segala sisik ikan dan tembikar pechah-pechah katempat orangorang berjual ikan, maka dibeli-nya-lah segala sisik ikan dan těmbikar pěchah-pěchah itu kapada orang-orang yang dudok disitu dengan harga \$10. Maka suka-lah hati orang disitu, maka ia angkat sekalian-nya dimuat-nya kadalam kapal itu, maka abang-nya yang tua itu melihat-kan sahaja dan abang-abangnya yang lima orang itu merungut-rungut sahaja marah kan Kherudin ini seperti kalakuan orang gila. Habis itu maka pagi esok-nya berlayar-lah kapal itu dan Kherudin maseh ia bela anjing kurap dan kuching kurap sahaja, maka antara tujoh hari tujoh malam sampai-lah kanegri-nya dan manakala sudah sampai, maka abang-abang-nya yang anam beradek masing-masing membawa persembahan kapada raja-nya itu. Maka kata raja, "Kamu yang anam beradek ada-lah masing-masing membawa përsëmbahan kapada beta dan adek kamu yang këchil itu tiada ia mahu membawa persembahan kapada beta." Maka jawab abang-nya yang tua, "Ada pun didik Kherudin itu tiada suatu

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apa pun yang ada dibawa-nya." Habis itu ia pun bermohonlah balik karumah-nya. Maka serta sampai abang-abang-nya lima orang lain itu, "Ini-lah orang yang tiada berharga kapada raja-raja. Orang-orang lain-lain semua-nya ada membawa persembahan hanya-lah kamu sa'orang yang tiada membawa persembahan menjadi malu-lah kapada raja-raja kerana kita entahkan kaya dan entahkan Saudagar Mansur juga disebut orang."

Maka ini Kherudin pun diam tiada suatu perkataan.

Maka esok hari-nya pergi-lah ia mendapat-kan mak nama Siti Rasimah, kata-nya, "Mak-mak pergi-lah mak pinang-kan sahaya kapada anak raja itu." Maka jawab mak "Apa-lah upaya kita, kërana kita ini orang miskin tëntu tiada ditërima oleh raja itu. Maka kata anak-nya "Pergi juga mak, boleh pandu dahulu." Maka mak-nya pun pergi-lah mengadap raja serta mengangkat kadam jari sapuloh, sembah-nya. "Ampun tuan-ku beribu-ribu ampun harap-kan diampuni sembah patek yang teramat hina harap-kan diampuni ada-nya; ada pun seperti anak didik 2 Kherudin itu ia hĕndak bĕrmohon pĕrsĕmbah-kan diri-nya kabawah duli akan jadi membaiki lantai yang patah dan dinding yang koyak." 3

Mengangkat kadam jari sapuloh.

The proper way of making this obeisance is on bended knee. hands are placed together open with the fingers touching each other. The thumbs also touch but are drawn well back. The hands are then carried up in front of the face and down again. If addressing the sultan the thumbs should be brought up above the end of the nose close to the eyes. If addressing the raja muda the thumbs should be carried to just below the end of the nose. When addressing others who are entitled to this salam the thumbs should not be carried higher than the chin.

This is the correct word to use when referring to one's own offspring in addressing royalty.

Lantai yang patah dan dinding yang koyak.

The subject matrimony has to be broached most delicately. One must thread oneself in, menjarum jarum. The initial process is known as the kesalahan sirih sabekas or jabat salam or chelapai mulut. One version which was given me uses this phrase:

Sahaya ini ada di suroh orang kapada mika.

Apa maksud orang disuroh?

Sahaya ini disuroh orang datang kapada mika 'nak berhambakan diri, 'nak berbaik lantei yang patah, dinding yang pesok, atap yang tiris.
Seperti maksud mika yang di suroh orang itu, teman dengar, kemdian seperti yang mika kata itu, adalah pada diri teman, tetapi sa-benarlah hal

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Maka raja itu pun herti-lah akan maksud Siti Rasimah itu. maka titah raja itu, "Aku pun suka juga hendak memberi anak-ku bërsuami tëtapi jika lalu Kherudin itu mënyampai-kan sëpërti hajat-ku, insha-allah, aku terima." Maka sembah Siti Rasimah. "Ampun tuanku harap patěk hěndak měnděngar sědikit titah. apa-apa hajat dan maksud kabawah duli itu." Maka titah raja itu, "Yang pertama buat-kan aku sabuah mahligai tiang-nya deripada suasa dan dinding-nya deripada amas sapuloh mutu dan berkemunchak dengan intan. Kadua aku mintak buat-kan jambatan deripada amas juga dari mahligai hingga sampai ka-tepi laut. Dan yang katiga-nya aku mintak buat-kan pelantaran dari mahligai hingga sampai ka-rumah Kherudin sendiri deripada amas juga." Maka apabila habis titah raja itu maka Siti Rasimah pun tërsangat-lah duka chita mënëngar titah raja itu, maka ia bërmohon-lah balik serta menangis-lah ia mendapatkan anak-nya itu, kata-nya. "Sakali ini bercherai-lah kita anak beranak." Maka dilihat oleh Kherudin ma'-nya mnangis itu. Maka tërkë jut-lah ia serta kata-nya, "Apa yang ma' tangis-kan itu dan apa titah raia?" Maka dikhabar-kan oleh ma'-nya seperti maksud raja itu. Maka kata Kherudin "Jika sabanyak itu sahaja ka-hendak raja itu, jangan-lah ibu-ku susah hati lagi. Pergi-lah ma' sembah-kan pada raja bila-kah ia mahu itu barang boleh sahaya perbuat." Kemdian esok hari-nya pergi pula Siti Rasimah mengadap raja. Maka sembah-nya, "Ampun tuanku beribu-ribu ampun. kah tuanku berkahendak-kan perkara itu?" Maka titah raja. " Aku mahu didalam tiga hari ini juga. Apabila sudah hadir tělah aku nikah-kan-lah děngan běr-běrapa sěgěra-nya." Habis itu Siti Rasimah bermohon pulang. Maka dikhabar-kan-nya-lah sĕgala kahĕndak raja itu, maka jawab Kherudin, "Baik-lah."

Kěmdian pada waktu pětang itu juga disuroh-nya ma'-nya měmbuat limau bědak sěrta ia suroh pěrgi pada lain rumah yang ia satu orang sahaja, pada pětang itu juga ia berlimau bedak děngan sa'orang diri-nya. Kěmdian pada waktu těngah malam ia pun běriangiang-lah kata-nya, "Hai chinchin kasaktian yang

The matter is decided at this second meeting, the kesalahan besar.

yang itu teman punya milek-nya, tetapi banyak waris ada sa-blah menyablah. Jikalau bagitu teman minta tempoh didalam dua tiga hari ini, teman 'nak berjumpa dengan we-waris teman dan sagala ipar duai teman. Apa bila sampei tiga hari, balaiklah mika jumpa dengan teman.

diberi oleh raja ular, jika angkau sunggoh kasaktian mintak buat sabuah mahligai tiang-nya deripada suasa dan lain-nya děri-pada amas sapuloh mutu dan suatu jambatan amas juga děri mahlagai hingga sampai ka-těpi dan sata pelantaran deri mahligai hingga sampai mah aku ini." Maka dengan sakatika itu juga bergemuroh bunyi datang segala jin dan anak raja ular dan segala mentrimentri-nya mengadap Kherudin. Maka kata anak raja ular "Apakah yang ka-kasih susah hati?" Maka jawab Kherudin "Adalah kami meminang anak raja didalam negri ini. Maka ia mintak buat-kan sabuah mahligai dan satu jambatan dan satu pélantaran dari pada amas sapulah mutu dan mahligai berke nunchak intan." Maka kata anak raja ular "Bila-kah ka-kasih-ku berkahendak?" Maka jawab Kherudin "Ini malam-lah kami mintak buat-kan." Maka pada malam itu tělah dichita pula oleh anak raja ular seperti maksud Kherudin itu, maka malam itu juga semua-nya menjadi dan siap. Maka menderang-lah chahaya mahligai itn sĕluroh nĕgri itu, Maka gĕmpar-lah sĕgala wazir-wazir dan sĕgala orang bĕsar-bĕsar raja didalam nĕgri itu. Maka masingmasing masok menadap raja, Maka raja itu pun terlalu heiran pula. Maka sajurus sajenang panjang teringat-lah raja akan permintaan-nya kapada Kherudin, maka baharu-lah ia suka hati-nya serta ia khabar-kan pada segala wazir-wazir-nya kemdian masing-masing balik ka-rumah-nya. Maka sangat-lah suka hati raja itu melihat kan hal perbuatan Kherudin. Maka apabila siang-lah hari bërhimpun-lah sëkalian orang isi nëgri itu mëlihat-kan mahligai anak raja itu, Maka masing-masing heiran-Maka sangat-lah puas masing-masing memandang perbuatan yang terlalu ajaib itu maka lalu sekalian mereka balik ka-rumah-nya.

Kemdian Kherudin pun pergi-lah ia mengadap ma'nya, lalu berkata-lah ia "Pergi-lah mak pereksa raja itu bila-kah ia hendak kahwin-kan sahaya dengan anak-nya itu." Hata maka dengan sabentar itu-lah Siti Rasimah pergi mengadap raja. Maka serta sampai ia lalu menyembah mengangkat kadam jari sapuloh, kata-nya, "Ampun tuanku beribu-ribu ampun, Harapkan diampuni kira-nya sembah patek hamba, sedia lama menjunjong titah, Ada pun patek ini disuroh-kan oleh didik Kherudin akan memereksa prihal perjanjian kabawah duli da-

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Maka serta menengar sembah Siti Rasimah demkian, maka termenong-lah raja itu akan fikir didalam hati-nya, "Ada pun aku ini dan anak-ku tertentu dari pada bangsa raja zaman dahulu kala turun témurun, dan Kherudin itu bangsa saudagar. Malu-lah aku menikah-kan dia, jika didengar oleh raja-raja yang lain-lain. Kemdian, jika aku mungkir-kan seperti janji, itu takot aku barang-kali dilanggar-nya negri aku ini dengan sabuntar barang-kali boleh ia alah-kan kerana ia orang yang sangat banyak elmu hikmat dengan kasaktian-nya." didalam itu bertitah-lah raja itu titah-nya, "Baik didalam hari ini kita kahawin-kan-lah." Hata setelah Siti Rasimah menengar titah raja demkian itu maka ia pun balik mendapat-kan anak-nya serta ia khabar-kan seperti titah raja itu. maka suka-lah hati Kherudin. Kemdian esok hari-nya maka raja menyuroh-kan sa'orang kawan-nya memanggil segala wazir-wazir-nya. Maka pada hari itu-lah berhimpun segala perdana mentri-mentri-nya maka dudok-lah raja diatas singga sana takhta karajaan-nya serta mengluar-kan titah. Maka katanya. "Hai segala wazir-wazir-ku sekalian ada pun kami sekarang hëndak dudok kerja hëndak më-kahwin-kan anak kami yang bërnama Pétri Shamsiah dengan anak saudagar nama Kherudin itu." Maka sembah se ala wazir-wazir itu "Ampun tuanku beriburibu ampun ada pun seperti titah kabawah duli itu sedia terjunjong-lah diatas batu kepala patek sekalian," maka setelah habislah titah raja dan sembah segala wazir-wazir, maka sekalian wazir-wazir ini pun menyembah mengangkat kadam jari sepuloh lalu bermohon pulang masing-masing karumah-nya, Maka ka-esokan hari-nya maka tělah dimulai oleh sěkalian pěrdana mentri měmbuat pěkerjaan raja itu siang sěrupa malam dan malam sěrupa siang, gegak gempita-lah didalam negri itu dan berh impun-lah sěkalian isi něgri. Yang buta datang běrpimpin dan yang chapek datang bertongkat.

Hata tělah gěnap-lah tujoh hari tujoh malam, maka diarak orang-lah Kherudin itu, karumah raja děngan pělabagai jěnis pěrhiasan. Tambahan pula tuan pětri Shamsiah itu. Dan sěrta sampai-lah Kherudin ka-balei pěngadapan maka penoh sěsak sěgala pěrdana měntri sida-sida běntara pěnghulu nai.

<sup>\*</sup> nai pemanisan chakap sahaja seperti pekan pesara, but it seems to operate as a collective.

hulubalang rayat belantara hina-dina sekalian dibalei rong pengadapan itu dan raja pun telah hadzir dudok bersemaiam diatas singgasana takhta karajaan-nya serta memanggil tuan kadi ia berwakil minta nikah-kan anak-nya dengan Kherudin. Maka telah datang-lah dengan bertelot mengangkat kadam jari sapuloh maka tělah dikabul oleh tuan kadi itu měněrima wakil raja itu kěmdian měngangkat tangan pula ia hěndak kěmbali balik měndapat-kan Kherudin itu. Maka serta sampai-lah dekat Kherudin maka disuroh oleh kadi, dudok bertinggol. Kendian maka tuan kadi pun membacha khatabah nikah. Habis itu lalu tuan kadi ijab kabult dengan Kherudin itu kemdian selesai, maka tělah mendoa-lah tuan kadi pělabagai don mintak-kan sělamat anak raja dua laki istri dan kapada ayahonda dan bonda-nya, dan sěkalian rayat-bala isi něgri sěmua nya, maka tělah sělěsailah doa itu dan diangkat dan dipimpin orang-lah Kherudin masok ka lalam istana serta disanding-kan orang-lah Kherudin dengan tuan petri Shamsiah itu. Maka sangat-lah berkenan segala lakilaki dan perempuan, mana-mana yang memandang-nya sa'olah sa'umpama bulan dipagar oleh bintang. Kemdian diangkat oranglah nasi tinggi adap-adapan dengan pelabagai perhiasan-nya dan bersuap-suapan-lah laki istri-nya Maka apabila sudah selesai dari pada bërsuap-suapan këmdian dibawa oleh sida-sida bëntara yang perempuan masok kadalam pelaminan lalu dijatoh-kan orang-lah tirai tiwangga, yang ka-amasan maka telah berbagailah pujok chumbuan Kherudin akan istri-nya dan istri-nya itu melaku-kan diri-nya itu sa-umpama-nya yang amat hina maka tělah di-pandang oleh Kherudin istri-nya děmkian itu těrsangat-

†Rukun nikah itu, lima:—pertama wali, kadua dua orang saksi,

katiga laki-laki, ka ampat perempuan, ka lima ijab kabul.

When these fundamentals are thoroughly grasped a binding marriage is an easy affair in Mohamedan law. But where they are not clearly understood the officiating party cannot perform a valid marriage. The formula of bestowal in marriage is the ijab, and it must be instantly replied to by the formula of acceptance, the kabul.

Inilah laffath ijab :-

Abdullah, aku nikahkan dikau akan Si Patimah anak Mohamed yang berwakil ia (or if the father is not present substitute wali-nya) akandaku, serta isi kahwin-nya anam puloh tengah tiga ringgit.

Kabulnya,

Aku terimalah nikah Si Patimah binti Mohamed serta isi kahwin anam puloh tengah tiga ringgit.

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lah bělas didalam hati Kherudin sérta dipelok dipangku-nya děngan pelabagai pujok chumbuan pěrkataan yang halus-halus manis akan mělipar-kan hati istri-nya. maka tělah sélésai dari pada hal yang děmkian, maka běrkaseh-kaseh-lah Kherudin

ini dĕngan istri-nya.

Maka antara berapa lama-nya ada-lah kapada satu hari maka ini Kherudin hendak pergi berburu maka disiap-kan oleh istri-nya děngan pělabagai pěrběkalan. Maka pada waktu itu ditinggal-kan-nya chinchin kasaktian itu kapada istri-nya dengan měmbawa lashkar gajah kuda. Kěmdian sěpěninggal suami-nya përgi bërburu itu maka dilihat oleh tuan pëtri Shamsiah itu chinchin burok pengikat-nya, maka disuroh-nya sa'orang daiangdaiang-nya pergi memanggil sa'orang tukang china yang number satu didalam negri itu, maka sabuntar datang-lah tukang itu mengadap tuan pětri, maka diběri-kan oleh tuan pětri chinchin itu ia mintak ganti pěngikat-nya yang těrlebeh elok lagi daripada Maka kata tukang itu "Baik-lah," maka ia pun bermohon balik serta ia sampai karumah-nya ditatap oleh tukang itu pěrmata chinchin itu, maka belum pěrnah-pěrnah dilihat-nya dĕngan bıgitu chantek-nya. Hata pada malam itu juga ini tukang ia lari membawa itu chinchin.

Kemdian ada-lah sélang antara dua hari balik-lah Kherudin daripada bérburu itu déngan sébarapa banyak dapat perburuannya sérta tiba kapada istri-nya ditanya-kan-nya itu chinchin. Maka jawab istri-nya ia sudah mintak ikat kapada tukang china yang térlébéh elok ikatan-nya. Maka disuroh oleh tuan pétri sa'orang daiang-daiang-nya panggil tukang itu. Maka daiang pun pérgi-lah sérta sampai karumah tukang itu ia dapat khabar sudah lari. Kémdian ini daiang pun bérlari-lah ia méndapat-kan tuan pétri sérta ia sémbah-kan itu tukang sudah lari. Maka didéngar oleh Kherudin akan perkataan daiang-daiang itu maka ia péngsan tiada khabar-kan diri-nya. Maka tuan pétri dukachitalah hati-nya akan suami-nya itu, maka gadoh-lah orang didalam istana itu dan berhimpun-lah ayahanda baginda mélihat-kan

měnantu-nya pěngsan itu.

Maka dengan hal yang demkian dikatahawi oleh kuching kurap hal tuan-nya itu maka meshuarat-lah ia dengan anjing kurap kata-nya, "Apa-lah sudah-nya tuan kita sudah pengsan beberapa hari sebab hilang chinchin kasaktian yang diberi oleh

anak raja ular itu? Fikir aku patut sangat kita pergi menchari itu chinchin kerana sudah dibawa oleh tukang china lari kapada lain negri. Jika kita tiada lalu menchari-kan sia-sia-lah kita tuan kita membela pelihara kapada kita." Maka jawab anjing kurap, "Pěrgi-lah kamu aku tiada lalu pěrgi měnchari-nya." Maka kata kuching kurap " Kamu itu bukan-nya tiada lalu sahaja tiada kuasa kerana kamu tiada kaseh akan tuan kamu." Maka jawab anjing kurap "Bukan-nya aku tiada kaseh akan tuan kita itu, kaseh sangat juga, tetapi entah-kan kamana-mana di-bawa oleh china itu pergi-nya." Maka kata kuching, "Jika kamu tiada tahu menchari, biar-lah aku kepala-nya kamu ikut sahaja aku. Apa-apa kata aku mesti kamu buat." Maka jawab anjing kurap, "Jikalau bagıtu moh-lah kita pergi." Habis meshuaratnya itu kuching dan anjing pun lalu berjalan masok hutan keluar hutan naik gunong turun gunong masok padang keluar padang, lama-lama berjumpa-lah dengan sabuah kampong. Maka kata anjing "Aku tiada lalu bërjumpa lagi, kërana përut aku tërlalu lapar-nya." Maka sahut kuching "Aku pun lapar juga. Jikalau bagitu biar aku pérgi měnchari nasi tětapi běrpakat-lah kita, aku sekarang naik karumah-rumah. Jika ada nasi orang didapur apa bila aku tërajang-kan katanah sëkarang kamu gunggong bawa lari masok hutan." Maka jawab anjing "Baik-lah." Maka berjalan kuching kurap naik karumah orang maka ditengok-nya ada sebiji periok tengah didapur pergi ia kadapur itu diterajangnya itu periok jatoh katanah. Maka datang-lah anjing kurap gunggong bawa masok hutan, maka di-ikut oleh kuching. Tibatiba kadalam hutan makan-lah ia berdua sudah kennyang perut masing-masing kuat-lah masing-masing berjalan itu.

Maka kuching kurap pergi-lah ia masok negri itu pereksa akan hal orang berchakap tiada ia dengar apa-apa hal itu, jadi berjalan-lah pulak ia berdua-dua maka trus lalu katepi laut maka dilihat-nya satu pulau. Maka kata kuching kurap, "Barang kali ada china disitu. Patut kita pergi menyemberang kapulau itu." Maka kata anjing kurap, "Jikalau kamu lalu, moh lah kita." Maka masing-masing bernang-lah ia kadua didalam laut itu siang malam, lama dengan kalama'an sampai-lah ia kadua-kadua-nya kapulau itu, lalu naik kadarat berjalan-lah kuching kurap dengan anjing kurap ditepi pantei itu. Maka kata anjing, "Hai kuching kurap, aku ini tiada lalu berjalan lagi

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kĕrana pĕrut aku sangat lapar-nya." Maka jawab kuching, "Kita chari-lah ditĕpi laut ini, barang kali ada ikan ditĕpi pantei ini boleh kita makan." Kĕmdian sebuntar lagi bĕrjalan jumpalah ia dĕngan sa'ekor ikan bĕsar, maka kata kuching, "Ini-lah dia ikan boleh kita makan." Maka dimakan-lah oleh anjing dan kuching itu ikan. Habis itu lalu ia kadua bĕrjalan tiap-tiap malam mĕnĕngar-kan hal china itu barang kali ada didalam pulau itu, maka tiada juga. Maka kata kuching, "Apa akhtiar kita lagi?" Maka jawab anjing, "Aku tidak tahu lagi, apa fikiran kamu aku mĕngikut sahaja." Maka kata kuching, "Baik kita pĕrgi kapada lain nĕgri, barang kali ada china disitu." Maka

bërnang-lah pulak ia kadua përgi kapada lain nëgri.

Maka lama dengan kalama'an sampai-lah ia kapada satu negri lalu naik kadarat. Maka kata anjing, "Hai kuching, aku tiada lalu lagi berjalan kerana aku sangat lapar." Maka kata kuch ng, "Nanti-lah kamudisini biar aku menchari makan." Kemdian berjalan-lah ia lama-lama berjumpa-lah ia dengan orang těngah měnyalai ikan maka dudok-lah na běrlindong di dalam rumput-rumput. Maka sapěninggal tuan salai pěrgi makan nasi makan di-ambil-nya ikan lima anam ikor lalu dibawa-nya kapada anjing, lalu ia makan sama-sama dengan anjing itu, maka masing-masing pun sudah kennyang ber-jalan-lah ia kadua-nya. Maka hari pun malam pergi-lah ia karumah tukang amas, orang china, maka fikir kuching, "Barangkali ini-lah rumah china yang menchuri chin-chin tuan kita itu." Maka kata anjing "Apa-akhtiar kamu hendak mengambil chinchin itu, jikalau ada chinchin itu di-dalam rumah ini."- Maka jawab kuching, "Ada-lah akhtiar aku, maka rupa nya betul sunggoh-lah towkeh di-dalam rumah itu mengambil chinchin itu." kata kuching. "Baik kamu nanti di-sabelah pintu ini dan aku nanti di-sabelah pintu darat, maka jikalau kamu jumpa tikus puteh boleh kamu tangkap, tetapi jangan di-bunoh." Maka jawab anjing, "Baik-lah;" maka masing menunggu pintu, satu sa'orang.

Kemdian lama-lama kira-kira sa-tengah malam lalu sa'ekor tikus puteh pada pehak kuching, maka di-tangkap oleh kuching ini tikus puteh. Maka kata tikus puteh, "Jangan-lah aku dimakan." Maka jawab kuching, "Aku hendak makan juga." Maka ini tikus raja segala tikus di-dalam negri itu, maka antara dem-

kian datang-lah segala orang besar-besar raja tikus itu maka kata sa'orang wazir raja tikus, "Jangan-lah toh kuching, dimakan raja kami itu. Sabarang ka-hendak boleh kami tolong." Maka kata kuching, "Baik : ada satu chinchin kasaktian di-dalam pěti towkeh rumah ini tujoh lapis, boleh kamu ambil itu chinchin ini malam juga. Jikalau dapat itu chinchin aku lepas-kan raja kamu ini, jika tidak tentu aku makan juga." Maka jawab wazir tikus itu "Baik-lah jika ada tentu dapat juga ini malam." Maka bër-kërah-lah wazir tikus itu sëkalian rayat-nya di-suroh-nya korek pěti china itu. Maka di-korek-lah oleh tikus yang banyak itu tembus satu-satu pula, tembus satu pula hingga katujoh lapis-nya, maka apabila sudah tembus peti yang tujoh-nya itu, maka ada sa'orang hulubalang tikus itu masok-lah ia ka-dalam pěti itu di-chari-chari-nya di-dalam pěti itu ada satu bungkus kain kĕchil sahaja di-rasa'i tikus itu bĕtul ada chinchin di-dalam-nya. Maka ia bawa keluar lalu di-béri-kan-nya kapada kuching itu. Maka di-tengok oleh kuching itu chinchin betul chinchin tuannya, maka di-lepas-kan oleh kuching raja tikus itu maka raja tikus pun ber-jalan lah ia dengan sekalian rayat belantara-nya dan pun suka-lah hati-nya pergi mendapat-kan anjing kurap. Maka kata kuching, "Hai, anjing kurap, chinchin tuan kita sudah aku dapat. Mari-lah kita ber-jalan balik." Dan chinchin itu kuching membawa-nya di-dalam mulut di-taroh-nya.

Kěmdian apabila siang-lah hari běrnang-lah kuching děngan anjing mělalui laut yang amat běsar itu maka kuching itu tiada-lah berasa penat dan lelah oleh berkat tuah chinchin itu dan anjing berasa-lah ia penat dan lelah badan-nya. kata anjing, "Hai kuching biar-lah aku membawa itu chinchin pula kerana aku tengok kamu segar sahaja." Maka kata kuching, "Kamu tiada boleh bawa ini chinchin. Barang kali jatoh pula sekarang." Maka kata anjing, "Tidak jatoh." Maka kata kuching, "Baik-lah," maka diberi-lah kuching itu chinchin kapada anjing, maka di-ambil oleh anjing lalu di-masok-kan-nya kapada mulut-nya. Maka ia pun kuatlah sedikit. Maka lama dĕngan kalama'an-nya jatoh pula ini chinchin kadalam laut. Maka kata anjing "Hai kuching, chinchin tuan kita sudah jatoh ka-dalam laut." Maka kata kuching "Tadi aku sudah kata, jikalau kamu bawa jatoh ini chinchin, maka kata kamu tidak. Sěkarang sudah jatoh. Apa-lah hal kita hěndak

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mengambil-nya?" Maka masing-masing bernang-lah lalu sampai ka-pulau singgah-lah kuching dan anjing di-pulau itu.

"Baik ber-jalan di-tepi pantai laut itu. maka dilihat oleh kuching ada sa'ikor ikan terguling ditepi pantai itu, maka fikir kuching, "Ini-lah ikan besar perut, aku pun lapar boleh-lah aku makan ini ikan." Maka kata kuching, "Hai, anjing, mari-lah kita makan ini. Ada ikan mati boleh kita makan dahulu, kerana perut pun sangat lapar-nya." Maka ter-lari-lari-lah anjing itu, tiba-tiba lalu ia makan sahaja dan kuching pun makan pula. Maka anjing itu makan pada perut ikan itu, maka tembus kadalam-nya maka dilihat oleh anjing ada-lah sabentok chinchin. Maka kata anjing, "Aku jumpa sabentok chinchin didalam perut ikan ini." Maka kata kuching "Mari aku tengok." Maka diberi kan oleh anjing rupa-nya betul pulak chinchin yang jatoh itu, lalu diambil oleh kuching dimasok-kan-nya ka-dalam mulutnya. Maka kata kuching "Mari kita bernang balik." Maka

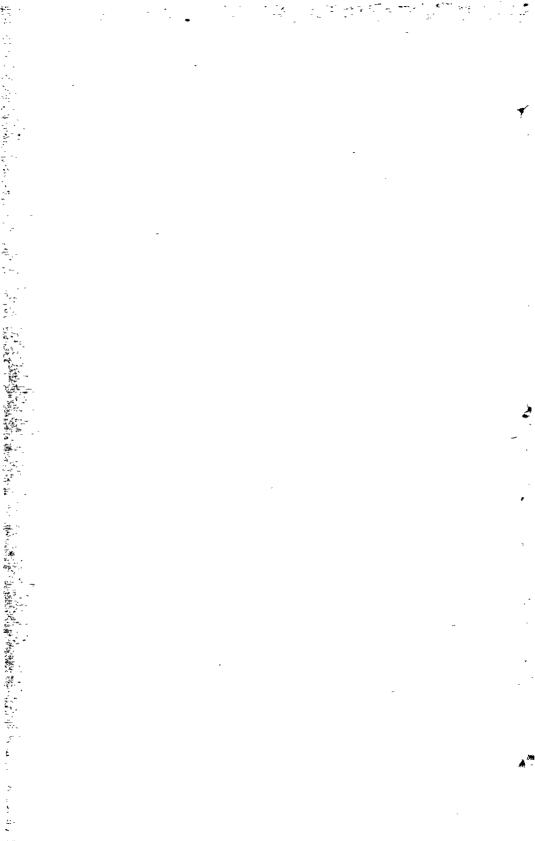
kadua-nya pun bernang-lah.

Kemdian lama dengan kalama'an-nya sampai-lah kaduanva kapada satu negri ber-jalan-lah kadua-nya siang sarupa malam dan malam sarupa siang, lama dengan kalama'an-nya sampai-lah ia kadua kapada negri tuan-nya, lalu ia masok dibawah rumah tuan-nya dan Kherudin itu maseh lagi didalam pĕngsan-nya. Maka ini kuching hĕndak dĕkat tiada-lah dibĕri orang. Maka pada waktu tengah malam orang pun semua-nya tidor naik kuching ini děkat tuan-nya lalu di-lětak-kan-nya chinchinitu di-atas dada tuan-nya itu. Kemdian bersin-lah Kherudin ini lalu ia sĕdar daripada pĕngsan-nya dan masok-lah ia kadalam përaduan-nya laki istri-nya dan sëmua-sëmua-nya orang tidak sedar terkejut pagi-pagi hari dilihat oleh orang ber-tunggu sudah tiada lagi Kherudin pada tempat-nya pengsan itu jadi gadoh-lah orang didalam istana. Maka di-sembah-kan orang-lah kapada raja mengata-kan "Sri paduka anakinda Kherudin sudah tiada ia pada tempat pengsan-nya itu." raja itu pun duka chita-lah hati-nya menengar-kan hal yang demkian itu. Kemdian didalam antara itu matahari pun tuleh těnggala ia itu angkat kěning, maka tuan pětri Shamsiah pun kěluar-lah děri dalam pěraduan-nya maka dikětahui-nya-lah orang gadoh didalam istana-nya kahilangan suami-nya. Maka kata tuan petri pada sa'orang daiang "Pergi-lah kamu daiangdaiang sembah-kan kapada ayah itu Kherudin ia sudah siuman daripada pengsan-nya. Ada ia didalam peraduan-nya itu." Maka daiang-daiang itu pun dengan segera-lah ber-lari-lari měngadap raja sěmbah-nya, "Ampun tuanku běribu-ribu ampun ada pun patek ini datang mengadap kabawah duli di-titah kan oleh sri paduka anakinda tuan pětri titah-nya ada pun sěpěrti anakinda Kherudin ada ia sudah siuman daripada pengsan-nya ada ia didalam peraduan anakinda itu." Maka serta raja menengar-kan sembah daiang-daiang itu maka raja hilang-lah sa-pěninggal daiang-daiang pěrgi duka-chita-nya. Maka měngadap raja itu Kherudin pun bangkit-lah daripada běradu itu lalu ber-siram kadua-laki istri-nya setelah sudah ber-siram lalu santap kadua laki istri-nya. Maka ber-kaseh-kaseh kadua laki istri-nva.

Maka lama děngan kalama-an-nya tělah di-ganti-kan oleh raja itu akan Kherudin-lah měnjadi raja didalam něgri itu dan salama ia měnjadi raja itu běr-tambah aman dan ma'mor didalam něgri itu sěrta di-gělar akan dia Sultan Kherudin Shah oleh ia sangat pandai bijak laksana pada běla pělihara di-atas rayat bala isi něgri-nya dan měngaseh anak dagang sěnětri dan běr-tambah-tambah-lah gah mashur nama yang ka-puji-an

semerata negri-negri.

Maka ada-lah pada satu hari di-panggil-nya-lah segala orang besar-besar dan sekalian saudara-nya. Maka dudok-lah Sultan Kherudin di-atas takhta karaja-an-nya dan berhimpun-lah sekalian orang, Maka pada waktu itu telah di-letak-nya abang-nya yang tua sekali akan menjadi wazir yang besar sekali didalam negri itu, dan saudara-nya yang lima orang itu di-jadi-kan-nya gombala kerbau dan lembu dan kambing dan biri-biri dan ayam masing-masing dengan jawatan-nya. Maka kekal-lah ia dudok di-atas takhta karaja'an-nya salama-lama-nya. Wallahu alam.



## Pa Senik and his Son-in-law Awang.

BY G. M. LAIDLAW.

A story by Mat Nordin of Kota Stia. No information can be had as to its source beyond the fact he learnt it when he

was a boy.—G. M. L.]

There is a story that once in the olden time there lived a man who was called Pa Senik. He had a daughter named Senik and they lived in one house together. Now their occupation was the cultivation of a garden of bananas, and in this garden of theirs they had ever so many kinds. There also lived at this time a man called Awang. This Awang got a friend to go and betroth Pe Senik's daughter. Pa Senik said,

"If this Awang can give me on account of the expenses of the marriage of my daughter two hundred and fifty banana

stems, I will take him as my son-in-law."

So the envoy returned to Awang and told him what Pa Senik had said. Awang replied, "I can bring as many stems as that."

So the envoy returned once more to Pa Senik and said, "Awang can bring you the sum that you wish."

Then Pa Senik said, "I accept him. The marriage can

take place in three days."

So the man returned to Awang and told him, and Awang said, "Very well." Three days after Pa Senik married his daughter to Awang. But the marriage feast consisted of nothing but all sorts of bananas.

Awang lived happily with his wife. He made a garden of bananas in order that he might be able to pay his marriage

expenses.

One day Awang went out fishing. He got a few. He ordered his wife to make a curry, which she did. Then he invited his father-in-law. So his father-in-law came to dinner. Now it seems that Pa Senik was a little deaf. Awang noticed

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that his father-in-law sometimes poured the gravy of his curry on his rice and that sometimes he sucked it up. So he said, "The more gravy the more he sups it up. Yet he is not strong enough to set a fish trap for himself."

His father-in-law said, "What did you say, Awang?"

"I was just thinking that you are most fortunate and that you are indeed skilled in searching for a livelihood. You have no need to pay court to religion."

"What you say is very true indeed."

Now the real reason that Awang had invited his father-in-law to dinner was that as long as ever he had lived there next his father-in-law, his father-in-law had never given him a single banana. And yet though he wanted to ask for one, he was ashamed to do so.

Some time later Awang one day went again into the jungle to look for some fish and he found a certain pond which was very deep. By the edge of the pond there was a very big tree. Awang began fishing. He caught quite a lot of fish. At last he had caught as many as he could carry. Then he came home. His father-in-law saw him come nome so heavily laden and asked him where he had got the fish. Awang answered, "I went into the jungle and found a pond which I fished."

"What bait did you use?"

"A golden banana which was quite ripe."

"I would like to go and fish to-morrow for I have never yet fished in all my life."

"Very well: but you had better wait a bit till I have cleared the road a bit and it will be easier walking for you."

The next day Awang made a very crooked trail but his own was quite straight. After that his father-in-law set off to go fishing and took with him two whole combs of golden bananas. Awang carefully counted the number of the bananas.

After this his father-in-law set off. Awang pointed out the very crooked road but he himself set off on the straight one and reached the pond first. He got into the pond and waited for his father-in-law to arrive. In a little while he turned up. He uncoiled his line and baited it with a golden banana. But Awang snatched his father-in-law's line and

took the bait off and ate it. Then his father-in-law lowered the line again and Awang eat the bait once more. And so it went on till there was only about one banana left. Then Awang snatched hold of the line and his father-in-law fell sprawling into the pond. Awang seized him and kept on ducking him under the water and saying,

"Pa Senik, why don't you give Awang some bananas? If

you don't give him some I will really kill you."

"Let me go. And when I get back to the house I will

give A wang ever so many bananas."

So Awang let his father-in-law get out and climb up on to the bank and go home. But he (Awang) went home direct and got home first. He sat down at the door of his house and waited for his father-in-law.

"Well, did you get many fish?"
"You have cheated me, Awang."

" How have I cheated you?"

"There is a very big evil spirit in that pond. I never got a single fish. But I kept on lowering my bait till it was nearly finished. And then just when I had got to the very last piece, my line was dragged and I fell into the water, and then I was ducked down under the water again and again while he said to me, 'Why don't you give Awang some bananas?' Then I promised to give you some."

Then Awang said, "Had you not better give me them quickly as you have vowed? Otherwise perhaps to-morrow or the day after you may fall ill. You will feel rather stupid

later when you are pitied by your children."

Then his father-in-law took all sorts of bananas and gave them to Awang. Then he ate them very vulgarly, saying, "Ahum, ahum, now I've got some one else's bananas." His father-in-law said, "What are you saying, Awang?"

"Nothing, Sir. I was only saying that you had made a

vow and that Heaven had mercifully spared you."

" Pray for me Awang, pray for me."

Then he added, "Do you want any more bananas, Awang? Eat until you have had quite enough."

And Awang answered, "To-morrow I would like some more, sir."

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### Pa Senik.

Alkisah maka ada-lah pada masa zaman dahulu kala, maka ada-lah satu orang nama Pa' Senik, dan ada anak-nya nama Senik përëmpuan dudok ini orang anak bëranak didalam satu rumah, ada-lah usaha-nya siang dan malam berkebun pisang, maka berbagai-lah bangsa pisang ada kapada-nya. Kemdian ada sa'orang laki-laki nama Awang. Kemdian di suroh oleh Si Awang kapada satu orang pula akan meminang anak Pa'Senik Maka kata Pa'Sĕnik, "Jikalau lalu Si Awang itu mĕmbawa-kan belanja anak sahaya itu dengan dua ratus lima puloh përdu pisang bolëh sahaya tërima." Këmdian ini orang pun khabar-kan pada Si Awang seperti perkata'an Pa'Senik itu. Maka kata Si Awang, "Lalu-lah sahaya membawa-kan sabanyak itu." Kemdian ini orang balik pula pada Pa'Senik, maka kata orang itu "Lalu-lah itu Si Awang membawa belanja sabanyak maksud Pa'Senik." Maka kata Pa'Senik "Sahaya tĕrima-lah, didalam tiga hari ini sahaya bolĕh nikah-kan." Kemdian balik-lah ini orang khabar-kan kapada Si Awang. Maka kata Awang "Baik-lah." Maka didalam tiga hari tu Pa'Senik pun menikah-kan anak-nya dengan Si Awang dan ber-khanduri-lah dengan pelabagai jenis pisang sahaja. dudok-lah Si Awang bersuka suka-an dengan perempuan-nya sěrta ia měmbuat kěbun pisang akan měmbayar blanja pěrěmpuan-nya. Kemdian ada satu hari pergi-lah ini Si Awang měnchari ikan dapat-lah kadar sědikit-sědikit, maka disuroh oleh Si Awang gulai itu ikan kapada perempuan-nya, maka digulai-lah oleh perempuan-nya. Maka diajak oleh Si Awang mentua-nya makan ber-sama-sama. Maka makan-lah mentuanya itu ber-sama-sama Si Awang. Maka ada-lah mentua-nya pěkak-pěkak bahasa sědikit, maka di-dalam těngah makan itu dilihat oleh Si Awang ini mentua-nya terkadang dituang-nya kuah gulai kadalam nasi-nya dan terkadang dihirup-nya. Maka kata Si Awang, "Tuan ini lagi berkuah lagi berhirup, měnahan bubu tidak kuasa." Maka kata měntua-nya itu, "Apa kata kamu Awang?" Maka jawab Si Awang "Sahaya terkënang-kan tuan itu lagi bërtuah lagi pandai bërhidup mënuntut almu tidak kuasa." Maka kata mentua-nya "Benar sekali-lah kata anak-ku itu." Maka ada-lah sebab diajak oleh Si Awang

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mentua-nya itu makan ber-sama-sama kerana beberapa lama sudah ini Si Awang dudok ber-sama-sama di situ belum pernah ini mentua-nya itu memberi sabiji pisang kapada Si Awang ini dan Si Awang hendak mintak kapada mentua-nya itu ia malu. Kemdian ada-lah satu hari yang lain pergi pula menchari ikan masok ia kadalam hutan maka berjumpa-lah ia dengan sabuah kolam sangat dalam-nya dan ditěpi kolam itu ada sapoko' kayu Maka mengail-lah itu Si Awang didalam kolam itu. Maka banyak-lah Si Awang dapat ikan hingga sarat ia membawa ikan itu. Kemdian ia pun balik, maka dilihat oleh mentua Si Awang itu Si Awang sarat membawa ikan, maka kata-nya "Dimana kamu dapat ikan itu Awang?" Maka jawab Si Awang "Sahaya masok ka-dalam hutan berjumpa sabuah kolam di situlah sahaya mengail. Maka kata mentua-nya" Apa kamu umpankan Awang?" Maka kata Si Awang," Pisang amas yang masakmasak." Maka kata méntua Si Awang, "Esok aku hendak měrasa měngail kěrana sa'omar hidop aku ini bělum pěrnah aku měngail." Maka jawab Si Awang, "Baik tětapi nanti dahulu sahaya terangkan jalan baik supaya senang tuan berjalan." Kemdian esok hari-nya Si Awang buat-lah satu jalan yang sangat bengkok-nya dan ia punya jalan elok betul. Habis itu ini mentua-nya pun hendak pergi měngail itu bawa-nya pisang amas dua sikat. Maka ini pisang dibilang Si Awang banyak sĕdikit-nya. Habis itu mĕntua-nya pun berjalan ditunjok-kan-nya pada jalan yang bengkok-bengkok itu dan dia ikut jalan yang betul. Maka dahulu-lah sampai Si Awang pada kolam itu. Maka terjun-lah Si Awang masok kadalam kolam itu menanti mentua-nya. Sabuntar lagi tiba-lah mentua-nya itu serta mengulor kail-nya dan diumpankan-nya dengan pisang amas. Maka ditangkap oleh Si Awang kail mentua-nya itu di-ambil-nya umpan-nya itu lalu di-makannya. Kemdian di-hulor juga oleh mentua-nya dan di-makannya juga demkian selalu bagitu juga. Ada-lah kira-kira tinggal satu biji pisang, maka di-hulur juga oleh mentua-nya maka di-tangkap oleh Si Awang kail mentua-nya serta ditarek-kannya kail itu ka-dalam ayer. Maka tersungkur-lah mentua-nya masok ka-dalam kolam itu lalu di-těkan těkan-nya měntua-nya di-dalam ayer itu serta kata, "Mengapa kamu. Pa'Senik, tidak bagi Si Awang makan pisang? Jikalau tidak kamu bagi Si R. A. Soc. No. 46, 1906.

Awang makan pisang tentu kamu aku bunoh." Maka jawab mentua-nya "Lepas-kan-lah aku; tiba aku ka-rumah boleh aku bagi Si Awang makan pisang banyak-banyak." Maka sudah itu di-lepas-kan-nya-lah mentua-nya lalu ia naik kadarat langsong ia balik ka-rumah-nya. Dan Si Awang pun balik ia dahulu dudok ia di-muka pintu dan mentua-nya tiba kemdian. Maka kata Si Awang "Banyak-kah tuan dapat ikan?" Maka jawab mentua-nya "Kamu tipu aku rupa-nya Awang." Maka kata Awang "Apa sahaya tipu kapada tuan?" Maka kata mentua-nya, "Itu kolam sangat besar hantu-nya, sa'ekor ikan pun tidak aku dapat, di-hulur-hulur habis umpan-nya, maka pada umpan yang pengabis ditarek-nya kail aku dan aku pun těr-jatoh ka-dalam ayer lalu ditěkan těkan-nya aku sérta katanya, 'Mengapa tidak kamu bagi Si Awang makan pisang? Maka jikalau tidak dibagi, kamu aku bunoh.' Maka aku pun mengaku-lah memberi kamu makan pisang." Maka kata Si Awang "Tuan baik segera-kan seperti nazar tuan itu esok lusa ĕntah-kan tuan sakit pula jadi sĕsal bĕbal pulak anak." mentua-nya mengambil pisang macham-macham jenis diberi-kannya kapada Si Awang, maka Si Awang pun makan-lah serta ber-sedawa kata-nya "Aham-ham paku; pisang orang, pisang Maka kata mentua-nya itu, "Apa kata kamu Awang?" "Tidak apa, tuan: kata sahaja tuan bernazar sama sahaya dilĕpas-kan Allah mentua sahaya." Maka kata mentua-nya "Doa-kan-lah Awang kapada aku." Serta kata-nya " Hendakkah lagi pisang, Awang? Makan-lah puas-puasam." jawab Awang "Esok-esok pula tuan."

### ERRATA.

The MSS of the two articles entitled the Baboon Pak Si Bagok and the Girl," and "A Pelandok Tale" having been given madvertently to the printers before being finally edited, the following alterations should be noted, viz:—

For Pa Si Bagok read Pak Si Bagok throughout.

For Tok Allang tree read toalang tree throughout

For roe deer read barking deer throughout.

For deer read sambhur deer throughout. p. 79, l. 11 for hands read hams

p. 75, 1. 11 for nothin read nothing.

p. 75, l. 12. for thee read the.

p. 75, l. 27 for shout read snout.

Omit the foot note on p. 65 and observe that many words on pp. 68 to 71 that begin with capital letters should be in ordinary type merely



# The Baboon Pa Si Bagok and the Girl.

BY G. M. LAIDLAW.

An earlier story by Penghulu Mat Nordin refers to this big baboon. But this is the only other story of Pa Si Bagok that I can find. No further information or additional stories can be had. Nor can the story teller give any history of the tale. It has nothing to do with Hanuman ("Handoman.")

Once upon a time there was a certain poor man and his wife who lived in a clearing in the jungle. Now these two had a daughter. Every day the husband and his wife went off to their clearing and left their daughter alone in the house. One day while they were away a big baboon found this girl. When she saw him she was very frightened and all her joints and bones shivered because of her fear of the baboon. But she disguised her feelings by talking. The baboon on his part fell deeply in love with the girl and wished to make her his wife. The girl said, "How are you so wet, Pa Si Bagok?"

"I have just been fishing with a casting net."

"If you have been fishing, where is your casting net?"

- "I left in a terap tree. If I left it there nobody will know."
  - "But if you have been fishing, where are the fish?"
  - "I left them in the river, so that nobody should know."

"Why is your head so flat?"

"Because I wear an Arab cap every day."

"Where is your cap?"

- "I left it in the house."
  "Why are your fingers so bent?"
- "Because I hold a pen every day."

<sup>[</sup> NOTE.—A great many common nouns in the Malay are improperly typed with a capital].

"If you use a pen every day where is it?"

"I left it in my box. If I left it in the box no one will know."
"Why do you sit like that, Pa Si Bagok?"

"Because I am used to sitting on a mat every day."

"If you do so, where is the mat?"

"The mat is in a princess' house where nobody knows."

After that the baboon carried her away to the top of a Tok Allang tree. The girl cried. After the girl had been carried away by the baboon her father and mother came back from their clearing and found that their daughter had disappeared. They too wept.

Alas my daughter, where can you have gone to? Who can have carried you off? What evil spirit, what jin, can have

had the heart to carry you away?"

Both her father and her mother were very very sorry

that their daughter had disappeared.

The baboon made a small hut on the top of the Tok Allang tree for his wife. Every day he went to find food and water for her and also to find clothes. After a time the girl became pregnant and bore a son. The child was half man and half baboon. Two months after this the girl thought of a plan by which she could escape back to her father and mother. So she ordered Pa Si Bagok to look for a joint of the betong bamboo.

He said, "What are you going to use it for?"

"I want to bathe our child. Just think for what a long

time it has never been bathed."

Pa Si Bagok thought that this was all right so he went to look for a betong bamboo and in a short time he found one. So he came back with a joint. Then his wife took it gently and made a hole in the bottom. Then she said.

"Pa Si Bagok, go and fill the bamboo full of water.

is not quite full it won't do."

So Pa Si Bagok took the bamboo and went to a place where the water was beautiful and clear, and filled the bamboo there. Then he went away for a moment. When he came back he saw that it was no longer full. Then he filled it to the brim and went away again. But the water leaked again. And so it went on all day till evening. While Pa Si Bagok was away getting the water his wife took her child's cradle which was made of terap bark and lengthened it till it reached to the ground. Then she climbed down to the ground and ran away with her child to the villages. At last she reached a house by the edge of a clearing and asked where the house of her parents was. She ran off again as soon as she was told for she was afraid that Pa Si Bagok was behind her. little while she reached her home. Her parents were extremely glad to see their daughter with her child, half monkey, half they thought, "What are we to do? For man. Then she is sure to be followed by this baboon. We had better make some magic." So they made a very deep hole and placed some banana stems at the bottom.

He said, "If that baboon comes now, I will tell him that his wife and child have died and that this is their grave."

At last when Pa Si Bagok was tired out and had not been able to fill the bamboo, and it was nearly nightfall, he thought, "I had better go back and ask my wife what she means." So he returned to the Tok Allang tree. But when he got there he found that his wife and child had disappeared. He was very grieved, but as it was night he could do nothing. He got no sleep all that night. At daybreak he started off in a great hurry. He met a man and asked him about his wife and child. "Hai sir, have you noticed a woman carrying a child pass this way?" The man replied that he had not.

To every person that he met he put the same question. At last he reached her parents' house. There he asked her father, "Has your daughter come back bringing her child with her?"

"She did: but they have both died."

"What has happened that both of them have died?"

"She travelled too fast. For she was afraid of you. She thought that if you found her you would kill her. So she was quite worn out and both of them have died."

"If they are dead where is the grave?"

"Come and let us go and see it."

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Now the girl's father had made an arrangement with three or four men when he made the grave that if they got the baboon in it, it was to be filled in again from the top.

When Pa Si Bagok reached the grave he began to dig it up. Now these other men were waiting on the top, and when Pa Si Bagok was right down into the hole they filled in again from the top. And so Pa Si Bagok died.

### THE END.

Maka ada-lah suatu zaman dahulu kala satu kelamin Orang miskin dudok-lah ia Laki Bini-nya pada satu tempat perbuat Ladang dengan satu buah Rumah kechil, Maka ada-lah ia sa-Orang anak-nya Pěrémpuan, Maka pada tiap-tiap hari ini miskin pergi-lah ia Laki Bini-nya ber-kerja Ladang dan tinggallah anak-nya di-Rumah satu Orang diri-nya. Maka pada suatu hari sapeninggal Mak Bapa-nya pergi ka-Ladang, Maka datanglah sa-Ekor Běrok Jantan měndapat-kan Budak Pěrěmpuan, Maka sérta ter-pandang-nya itu Berok sangat-lah gementar sendi tulang-nya oleh sangat katakutan melihat Berok itu serta di-samar-nya dengan ber-kata-kata. Dan Berok sangatingin dan berahi di-dulam hati-nya ber-kahendak Budak ini akan jadi Pěrěmpuan-nya. Kěmdian kata Budak Pěrěmpuan itu, "Derimana Pak Se-Baguk ber-basah ini?" Jawab-nya "Aku datang deri-menjala." Maka kata Budak ini "Jikalau Pak Se-Baguk datang deri-ménjala mana jala-nya?" Maka jawab-nya "Jala tinggal di-Pokok Terap Jikalau Jala tinggal di-Pokok Terap siapa tiada tahu." "Dan jekalau Pak Se-Baguk menjala mana Ikan-nya?" Jawab-nya "Ikan ada tinggal di-dalam Sunger Siapa tiada tahu." "Apa kena kepala Pak Se-Baguk pipeh?" Jawab-nya "Memakai Kupiah Arab sa-hari-hari." "Jikalau Memakai Kupiah sa-hari-hari, Mana Kupiah-nya?" "Kupiah tinggal di-Rumah." "Apa kena jari Pak Se-Baguk serong?" Jawab-nya " Memegang Kalam sa-hari-hari." "Jikalau Memegang Kalam sa-hari-hari mana Kalam-nya?" "Kalam tinggal di-dalam peti. Jikalau Kalam tinggal di-dalam peti siapa tiada tahu." "Apa kena punggong Pak Se-Baguk merah serta belulang?" Jawab-nya "Dudok di-atas Chiau sa-hari-hari." "Jikalau dudok di-atas Chiau sa-hari-hari mana Chiau-nya?" "Chiau ada tinggal di-Rumah Tuan Peteri Siapa tiada tahu."

Kemdian lalu di-bawa oleh itu, Ini budak bawak naik ka-atas Pokok Tok Alang, Maka menangis Budak Perempuan itu. Maka sapeninggalan Budak ini di-bawa oleh Berok balek Mak Bapak-nya deri Ladang di lihat-nva anak-nya sudah tiada lalulah menangis, "Wahai-anak-aku kamana-lah garangan-nya siapa-lah yang membawa-nya? Hantu mana Jin mana-lah yang sampei Hati membawa anak-aku itu." Maka sangat-lah duka chita Mak Bapak-nya itu oleh kuhilangan anak-nya itu.

Shahadan maka ini Bërok pun di perbuat-nya-lah pondokpondok di-atas Pokok Tok Alang itu akan tempat Perempuannya itu Maka ini Berok sa-hari-hari pergi ia menchari makan dan membawa ayer akan Perempuan-nya itu dan menchari-kan kahin perempuan-nya itu, Maka lama dengan ka-lama-an-nya ini Budak pun Bunting-lah ia kira-kira sampei-lah waktu hendak Maka ber-anak-lah Budak Perempuan itu sa-kerat Manusia dan se-kërat sëpërti Bërok juga di-atas Pokok Tok Alang itu. Maka ada-lah antara dua Bulan kemdian deri-pada sudah ber-anak itu, Maka ini Perempuan pun datang-lah pikirannya membuat suatu masa-Elah ia hendak balik pada Ibu Bapaknya, Maka suatu hari di-suroh-nya chari satu ruas Buloh Bĕtong pada Pak Se-Baguk, Maka kata Pak Se-Baguk "Apa guna itu Jawab Perempuan-nya "Sahaya hendak memandikan anak kita ini kerana ber-apa lama-nya sudah tiada pernah mandi." Maka benar-lah pada pikiran Pak Se-Baguk itu, Maka ia pun përgi-lah mënchari Buloh Bëtong itu tiada-lah bër-apa lama-nya Pak Se-Baguk pun balek membawa Buloh Betong itu satu ruas, Kĕmdian di-ambil oleh Pĕrĕmpuan itu Buloh plan-plan lalu di-tĕbok-nya Buloh itu dĕri bawah, Maka kata-nya "Pak Se-Baguk përgi-lah ambil ayer biar pënoh Buloh ini jika tiada pěnoh těntu-lah tiada chukup sěkarang." Maka Pak Se-Baguk ambil Buloh itu lalu ia përgi pada tëmpat ayer yang Elok jërnehnya, Maka ia Isi-lah Buloh itu dengan ayer, Maka ber-jalan sabuntar di-lihat-nya ayer di-dalam Buloh itu sudah luak, Maka balek pula mengisi ayer měměnoh-kan Buloh itu Kěmdian běrjalan pula sa-buntar di-lihat luak juga ay∈r itu bagitu-lah sahari-hari itu hingga petang hari, Kemdian sapeninggalan Pak Se-Baguk itu mengambil ayer, Maka ini Perempuan di-ambil terap Buaian anak-nya di-Ubong-Ubong hingga sampai katanah, Maka ia pun lalu turun membawa anak-nya ikut tali

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Těrap itu sěrta sampai ka-tanah ia běr-kějar-kějar-lah sěhaja menuju Kampong Orang, Maka lama dengan ka-lama-an-nya samper-lah ia pada Rumah Orang di-tepi Ladang, Maka bertanyalah ia akan Rumah Mak Bapak-nya, Maka di-khabar-kan Orang-lah, Maka ia ber-kejar juga takut di-turut Pak Se-Baguk deri belakang sabuntar lagi sampei-lah ia ka-Rumah Mak Bapak-nya, Maka sangat-lah suka-chita Mak Bapak-nya akan melihat-kan anak-nya datang itu dengan membawa sa-Orang anak manusia sakerat Berok, Kemdian pikiran, "Apa-lah hal ini anak-kau tentu datang turut Berok Jantan itu kapada anak-nya jikalau bagitu baik aku buat satu hikmat," Maka ia korek satu lobang yang sangat dalam, Maka di-tanam-kan-nya batang Pisang. Jikalau Berok itu datang aku kata-kan Perempuan-nya dan anak-nya sudah mati inilah kubur-nya. Kemdian ini Pak Se-Baguk penat sudah ia ber-Ulang-Ulang tiada juga dapat penoh ayer di-dalam Buloh Betong itu dan hari pun hampir-lah Malam pikir dia, Baik-lah aku balek dahulu ber-tanya-kan akhtivar pada Peremt puan aku, Maka ia pun baleh ka-Pokok Tok Alang itu tiba-tiba di-lehat Perempuan-nya dan anak-nya sudah tiada dan sangatlah duka chita ia dan hari pun malam tiada-lah ia tidor samalam itu. Maka pada Waktu dinihari itu ia pun ber-jalan-lah dengan gopoh gamah-nya dan tiba ia pada Orang ber tanya ia akan Perempuan-nya dan anak-nya kata-nya, "Hai Inhee ada-kah tampak sa-Orang Pěrémpuan měndukong anak lalu děri sini? Maka jawab orang itu. "Tiada."—Dan berjalan pula tiap tiap ber-jumpa dengan Orang bagitu-lah ia ber-tanya-kan Perempuan-nya dan anak-nya selalu. Maka tiada-lah ber-apa lama lagi tiba-lah ia ka-Rumah Mak Bapak-Perempuan itu, Maka ber-tanya-lah, Kata-nya Bapak, "Ada-kah anak Bapak datang kemari membawa anak-nya?" Maka jawab Bapak Perempuan itu. "Ada; tetapi sudah mat ikadua-nya." Maka kata Pak Se-Baguk, "Apa kena-nya dan apa sebab-nya ia mati kadua-nya?" Maka jawab Pak-nya, "Kerana ia ber-jalan itu dengan kej r sahaja takut akan Pak Se-Baguk. Jikalau berjumpa dengan Pak Se-Baguk barang-kali Pak Se-Baguk bunoh akan dia, Maka dengan sebab ter-lalu penat itu lalu-lah ia mati kadua-nya." Maka kata Pak Se-Baguk, "Jikalau ia sudah mati di mana Kubor-nya?" Maka jawab Bapak-nya, "Mari-lah kita pergi liha

Kubor-nya ber-sama-sama." Maka ini Bapak Perempuan pakat tiga ampat Orang, apa-bila ia mengorek Kubor itu jikalau sudah dalam ia pakat tambus deri-atas, Kemdian tiba-lah Pak Se-Baguk ka-Kubor itu lalu-lah ia mengurek Kubor itu, Maka ini Orang tiga ampat Orang menanti di-atas, Maka apa-bila sudah dalam lobang itu lalu di tambus-nya deri-atas, Maka Pak Se-Baguk pun langsong Mati Tamat.



### A Pelandok Tale.

BY G. M. LAIDLAW.

[From the penghulu of Pulau Tiga, Lower Perak, Haji Mahomed Ali bin Haji Mahomed Perak. No details of the source can be obtained. The teller is so for as his ancestry can be traced for several generations of pure Perak extraction].

This is the tale of the pelandok, this is a four footed animal that lives in the woods and is very small, just about the size of a cat. Now in the olden days this animal was very much eleverer than all the others. Also in those days animals could talk.

We must farther explain that in those days, the king of all the animals was King Solomon. His form was the form of a man, but his appearance and dress was that of one of the wild men of the woods, the Sakai. His chief warrior (Hulubalang) was the tiger and his chief counsellor (Penghulu) was the pelandok.

Once upon a day, they say, the pelandok was walking along looking for his food, when he met with a doe. The pelandok said, "Hai, Sang Rusa, what is the name of the tree you are eating?"

The deer replied, "I am eating the young shoots of the

The deer then said to the pelandok, "Where have you come from, Toh Sang Dirimba?"

The pelandok said, "I have come from my house and am also looking for my food."

Now when the pelandok saw that the deer was very fat indeed, the thought came into his heart and he desired to eat her. So he went off to the tiger. When he reached him the tiger said, "Where have you come from, Toh Sang Dirimba?"

The pelandok answered, "I have come from Sang Rusa over there, and have come straight to find you, Hulubalang, for I want to eat that doe."

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The tiger said, "How ever are you going to eat her?" The pelandok replied, "That is why I have come to find you, in order that we may lay our plans together."

The tiger said, "What are your plans?"

The pelandok said, "You, hulubalang, must pretend to be dead, and lie down with your mouth wide open and your body covered with flies. When you are ready, I will call together the deer and the elephant and the rhinoceros and the roe deer and the pig. As soon as we have got them all together, I will give them each their work. But you are to do nothing but listen to whatever I say in my mourning. You are to do nothing when we give you your funeral bath or when we are on the road. But when I call out, "Yam yam" that is the time when you are to catch Sang Rusa."

The tiger answered, "Very well then."

The story about the tiger goes on to say that after he had made this plot with the pelandok, he pretended to be dead lying down with open mouth covered with flies. Also he did not breathe through his nostrils but only through his mouth. After he was ready the pelandok went away to get the elephant, the rhinoceros, the deer, the pig, and the roe deer. This was how he called them,

"Hai, Sang Elephant, Sang Rhinoceros, Sang Deer, Sang

Hai, Sang Elephant, Sang Rhinoceros, Sang Deer, Sang Pig, Sang Roe-deer, King Solomon has ordered you all to be summoned together in order that you may bury his Huluba-

lang Dirimba, who died last night. Come at once."

So all these animals followed behind the pelandok who led them to the place where the tiger was. When they had all got there, the pelandok ordered Sang Pig to dig a hole and the elephant to bring water, and the deer to hold the tiger's head on her lap, and also the upper part of the body, and the roe deer was told to hold the body from the waist to the tail, and the rhinoceros was told to make a smooth road. When the preparations were all finished the pelandok told them to bear the body to the hole. He ordered the deer to lift up the head and the elephant to support the body. But the roe deer and the pig began to bicker. The roe deer said,

" Let me carry the tail."

The pig said, "Let me go first and show the way. Because from the colour of his fur, it looks as if he were alive."

The roe deer said, "I also am not very easy in my mind."

The pelandok then said, "Don't talk too much there."
So three of them, the deer and the elephant and the rhinoceros bore the body along. The pelandok then got on the top of an ant heap and began to lament for the tiger in

this wise.

"Ho Toh Hulubalang, who achievest the desires of my heart, yam yam."

The roe deer said, "Listen Sang Babi, what a shrill cry

Sang Dirimba is making. What is he saying?"

While the roe deer was in the act of saying this to the pig, the tiger seized hold of the deer by the back of her neck, and dragged her down. The elephant rushed off trumpeting as he went. The rhinoceros darted off screaming. The roe deer darted off like a bullet springing three fathoms at a time. The pig followed. When the pelandok heard the uproar in the forest and all the animals running away, he said, "Spring, Sang Roedeer. Sang Deer's case is decided."

After he had said that the pig drove his snoutwith a bang against the projecting buttress of a merbau stem. The pelandok heard it and also the scream that the pig gave in its pain.

The pelandok said,

'Mind the buttress, Sang Pig. Sang Deer's case is over."

The pig replied,

"Let your own father mind the gbuttress Sang Dirimba. I am sore all over and you do nothin but laugh."

And that is why the pig's shoutis flat to this day. Then

all the animals ran right away.

The story of the deer that was taken by the tiger goes on to say that after they had finished their plot they divided the deer into two: one half for the tiger and one half for the pelandok. They then carried the meat off to a place where some men had been making a clearing. The wood had nearly all been felled. They took wood and made a place on which they could smoke the meat. They also took some more fire wood. When it was all ready and the meat had been placed in R. A. Soc. No. 46, 1906.

position they lit the fire. By that time it was night. About midnight when one side of the meat had been cooked they turned it over to the other side. When this had been done the pelandok said,

"Hai, hulubalang, let me go to sleep now and then when

I wake up you can have a nap."

The tiger said, "Very good." "But," added the pelandok, "Don't you interfere with my eye teeth for fear that you should be hurt by their poison."

"All right."

"Then again," said the pelandok, "whenever my eyes are closed I am not asleep, but if my eyes wink and if I snore at the same time, then I am asleep."

After this the pelandok went to sleep. The tiger put more wood on the fire. After about an hour's sleep the pelandok began to wink his eyes and to snore. The tiger began to think about the pelandok's eye teeth.

'Are they really poisonous or are they not?"

So the tiger began to touch them.

'They are not so very sharp," he said.

After gazing closely at them for a little while he lay down. Now the pelandok had seen him touching them. After that the pelandok, thinking that smoking was now properly done,

got up from his sleep.

When the pelandok got up the tiger went to sleep and began to snore too. When the pelandok saw that the tiger was fast asleep he took the tiger's share and ate it up. Then he took a piece of the bark of the gentong tree, which was of the same shape and put it where the tiger's meat had been. This was now near day-break. When the sun rose the pelandok called the tiger who rose from his sleep with a start. When he had got up the pelandok said,

"Hai, hulubalang, come along to this clearing and find a

stick on which we can carry this cooked meat."

So they both set off together. When they were about

half way there, the pelandok said,

"Hai, hulubalang, you look for the root (with which to tie it on), while I look for the stick on which to carry it."

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While the tiger was looking for the root, the pelandok took the stem of a Satamban tahi which had been felled by the men in the clearing. Now the thorns of this are quite long, about an inch long each. Those thorns that were near the foot of the stem he did not remove, but those that were near the top he did. After that the pelandok and the tiger each took up their share. The tiger put his share in front of himself and the pelandok put his share in front of himself. Then they set off towards the river. As they walked on each began to eat. While they were walking along the tiger said, "Oh dear. I am very sore, this stick is pricking my back. Also my meat is very bitter."

The pelandok answered and said,

"That, hulubalang, is what I told you last night. warned you not to interfere with my eye teeth. Now your meat has become bitter."

The tiger said, "Hai, Sang Dirimba, give me a little of your meat, just to taste. Because I am very tired, everything seems difficult for me."

When the pelandok heard that, he took pity on the tiger and gave him a little. This tasted extremely delicious to the tiger, who stopped in the middle of the road. The pelandok "What is the matter? Why are you stopping? We are certainly near a big river now. And if we are late in arriving and we meet with his highness King Solomon he is sure to take away this meat from us. Moreover he will be angry with us and punish us because we have devoured this deer without letting him know."

When the tiger heard that he took up his stick again. A little fatrher on, just about as far as you can hear a cry in the woods, they reached the bank of the river. There they stopped and each devoured his meat. The share of the pelandok was quite finished because he four times gave the tiger a piece. After that they each had a drink, but the tiger's share was left unfinished on the bank.

They tried to get across the river. The tiger and the pelandok set off together down stream, skirting the edge. They found a raft made of banana stems which had got stranded

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on a big trunk that had fallen down by the edge of the river. They both got on board the raft and shoved it off across. It was the tiger that did the shoving, the pelandok did nothing. When they got near to the bank, the pelandok sprang on shore and left the tiger on the raft drifting down stream. The pelandok said, "Hai hulubalang, you will die now when you are caught by the crocodiles. I finished that smoked meat of yours last night, and put some gentong bark in its place."

The tiger became angry and said, "Just you wait, Sang Dirimba, and I'll eat you." He then sprang on to the bank began looking for the pelandok. But the pelandok had and walked on. In a short while the pelandok came across a hornets' nest in some lalang and sat down near it. When it was nearly evening the tiger met him there and said to him, "Now I have found you, I will eat you. You cheated medid you?"

The pelandok said, "Dont eat me, for I have been ordered by King Solomon to look after his gong, Don't you see it?"

"Where is it?"

"This: listen to it humming."

" May I strike it?"

"Don't. Are n't you afraid of King Solomon?"

"Let me strike it: just a little."

"Wait then till I go and lay your request before King Solomon?"

After that the pelandok ran away from the place where the nest was as far as his voice could be heard. Then he shouted out, "Hit it, hulubalang."

When the tiger heard that he lifted his paw and struck it. Then the hornets swarmed out over the tiger, who ran away roaring and with his body and his face all swollen.

When the pelandok heard the tiger roaring like that he ran away for a long distance. When night fell he stopped by a large tree trunk and nestled in between the buttresses round the stem. He was quite frightened of the tiger since he had been guilty of cheating him so many times. He got no sleep that night for he wanted to find some other stratagem by which he could again punish the tiger. All that night he pondered.

The next day he set off again and travelled till about midday. then he came across a big python which was fast asleep snoring. It lay sleeping with its body in three coils but its head was some way off in the middle of the main road. When the pelandok saw that the snake was obviously fast asleep, he sat down near the coil, because he thought that if the tiger were to come he could once more quibble with him and say that he was watching King Solomon's waist belt. So he sat there till about the middle of the afternoon when the tiger once more met him. When the tiger saw the pelandak sitting squatted on his hands he became very angry indeed and intended to spring on the pelandok. But the pelandok saw the tiger about to spring on him and said, "Hai, hulubalang, don't spring on me, because I am watching King Solomon's belt. He has ordered me to do so because this is a valuable ancestral cloth. This is what he is going to wear in state to-morrow. For the king has given orders that we are to be summoned in a couple of days when he is going to make a proclamation."

The tiger gave up trying to catch him because he saw that the cloth was very beautiful and also that the colour was of mingled gold. He was very much surprised and very much desired to feel what it was like to put it on, so he said, "Hai,

Toh Sang Dirimba, may I put it on?"

"Wait until I go and ask King Solomon."

So the pelandok walked on until he came to an ant heap into the top of which he claimbed. Then he shouted out to the tiger, "Hai hulubalang, put it on."

When the tiger heard that he put it on. The tiger saw that the snake moved so he thought, "This thing seems to be afraid of me. I seem to have been cheeted."

afraid of me, I seem to have been cheated."

So the tiger took a stick and beat the snake. When he hit it it crawled away. The tiger was very much astonished that the pelandok should have cheated him once more and became more angry than ever. So he began to search for the pelandok again. But the pelandok had run away very far indeed, and the tiger could not find him.

The pelandok came to a large river. When he got to the bank he saw a tree called Chadong. The fruit of this tree B. A. Soc., No. 46, 1906 is about as large as a cat's eye, and when it is ripe it is sweet. Now the pelandok was very fond of eating this fruit. But he did not know how to get across the river for the current was swift and the water deep. He saw that there were a lot of crocodiles in the river. So he went to look for a cocoanut shell and when he had got one he held it in his hand and went and stood on the bank of the river and called to all the crocodiles like this, "Hai, all you Si Rangkaks, come together here for King Solomon has ordered me to make a census of you."

When the crocodiles heard that they all came to the top of the water. Then the pelandok ordered them to arrange themselves in a line right across the river. When they had put themselves in position the pelandok got on to the head of the first crocodile and then struck the head of the crocodile with the cocoanut shell saying, "One two three," (crick), "small head big head" (crack) "One two three," (crick), "small head big head" (crack).

And so on until he had got across the river. Then he got up the bank and said, "Hai, all you Si Rangkaks, I wanted to get across this river to eat this chadong fruit, so I said that King Solomon had ordered you all to float. Now I have knocked all your heads with this coconut, aren't you clever you stupids?"

When the crocodiles heard that they were very angry with him, and said, "It will be impossible for you to drink any water now, for if you drink the water of this river or of any other we will catch you."

"I can go away from the river, to the swamps and the ponds and the buffalo wallows and the puddles, what is to stop me?"

me?"
"Wherever there is water, we will be there. Don't you make any mistake about that."

"Hai, is that so? If you are clever you will catch me, but if I am clever I will not die."

Then the pelandok began to eat the chadong fruit. But the crocodiles had a council together, those from the sea and from the river and from the swamp. They all laid themselves in wait for him. The pelandok went on eating the chadong

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Then he became very thirsty and fruit until he was satiated. wanted a drink of water. So he went to the swamp and the wallows and called out like this, "Hai, Si Rangkak." And the crocodiles answered, "Yoo-ee."

So the pelandok stopped and went to the river. again he called out. This time four crocodiles answered him.

Hai," said the pelandok, "If it is this sort of thing, I

will die for I will not be able to drink."

So he went right up stream and called out once more. This time ten answered him. Then the pelandok noticed that a big bamboo, a buloh aur, had fallen down from the midst of a clump into the water. So he crept along the stem among the thickest leaves till he was able to get a drink. While he was lapping up the water, making a noise, chepak chepak, a croco lile made a snatch at him from below but only caught hold f the branch of the bamboo. The pelandok was alarmed and called out.

Adohai, adohai, not so strong, hai Si Rangkak."

"Don't talk about its being strong; you are going to die this time."

"Hai," said the pelandok while he crept slowly back

along the stem, "Don't tear me like that."

So the crocodile dragged at the bamboo till he threshed the water into big waves. But the pelandok had got safely to shore.

Then the pelandok said, "Hai, Si Rangkak, what is the use of your catching hold of that tough bamboo? I am very sorry for you, you hoped that you had caught hold of me."

When the crocodile heard that he let go of the bamboo. The pelandok went on looking for an ant heap because he wanted to sleep, for he had eaten till he was satisfied and also he was very tired. He was afraid too of the tiger that he had At last he found a small pointed one on to the top of cheated. which he climbed and went fast asleep, snoring.

All this time the tiger had been looking for the pelandok. At last he reached a river where he found a large crocodile The crocodile spoke to him, "Hai hulubalang, where

have you come from?"

'I have come from the big jungle where I have been looking for the pelandok, who has deceived me so badly that I want to kill him; first he diddled me with a hornets' nest that left me full of stings, then he gave me a very nasty moment just now with a big snake but fortunately I saw that it was

alive. So I am looking for him to eat him."

When the crocodile heard that he in his turn told how the pelandok had cheated him, and how when the pelandok wanted to eat the chadong fruit he had told them that King Solomon had ordered a census to be made and had ordered them to arrange themselves side by side right across the river, and then when they were arranged how he took a coconut and rapped them all on the head saying, "One two three" (crick) "small head, big head" (crack) until he had rapped them all on the head. And then as soon as he had got across he told them how he had cheated them. And so they too were very angry with the pelandok.

When the tiger heard the story of the crocodile he said to the crocodile, "We had better lay our plans together; you can carry me across to the other bank over there and I can hunt for him. If he runs into the water he is your meat but

if I catch him on the land he is mine."

The crocodile agreed, so the tiger got on to his head and was carried across the river and safely reached the other bank.

Now at the time that the tiger and the crocodile were making this plot the pelandok heard them from the top of the bank that was exactly opposite. The pelandok's thoughts ran thus:

"I had better kill the tiger now, because he has promised that if I run into the water I am the crocodile's meat but that if he catches me on the land I am his. Ah, I know what to do."

When the tiger got safely to land he began to look for the pelandok. Now the pelandok went and stood in the middle of a small clearing where there was very little brushwood. The tiger sprang out on the pelandok saying,

"Now this time I have got you, Sang Dirimba, and I

will eat you

"Try then, make your effort. If you are really the great warrior of the woods, you will get me now. But I think that I will turn you out."

When the tiger heard that, he sprang on the pelandok, but the pelandok ran off close to the edge of the bank. The tiger chased him. Then he sprang back inland. Now when the crocodiles heard the uproar on the bank made by the tiger chasing the pelandok, they all gathered together and watched the edge of the water. The tiger made another spring at the pelandok but did not get him, for the pelandok jumped off to the edge of the bank. The pelandok twisted and turned, bounding ten feet at a time. Now at one part of the bank there was a sandy beach. The pelandok sprang to the edge of the beach and dipped his foot in the water, and then sprang back to the land. The tiger followed him to the water's edge but overjumped himself and sprang about twelve feet into the water. Then the crocodiles seized him thinking that he was the pelandok. The tiger struggled in his pain. When the crocodiles had hold of him they tore him.

The tiger said, "Friends, don't tear me."

The crocodiles said, "We don't care; the promise that we made before was that whatever came into the water was our meat."

When the tiger heard that he burst out crying and at last died. The pelandok rejoiced and said, "Tear him Si Rangkak, eat him. He is bigger than I. What is the use of a thing like me? You would hardly be able to taste me."

This is the fealty of the crocodile. Don't have anything to do with it.

After escaping from this peril the pelandok went on his way towards the garden where King Solomon lived. He passed close to one house in a garden where he heard some men quarrelling about an axe. One man had borrowed an axe from another for a long time for over a year, and had not returned it. When the owner wanted it the man who had borrowed it said that it had been eaten by weevils. So the two men had gone to law before the king. When they got R. A. Soc., No. 46, 1906.

there the owner made his petition to the king. The king then examined the borrower who answered, "Yes, your highness. I have borrowed it but the axe head has been quite devoured by weevils. And the owner won't allow that it is lost: he wants it."

The king was puzzled for it was not right that an axe head should be eaten by weevils. So he said, "Hai there you dog, go and call Selang Dirimba, for you know where he is, the others do not know where he lives."

So the dog travelled for half a day until he met the pelandok. Then he said, "Hai, Selang Dirimba, his highness King Solomon calls you."

When the pelandok heard what the dog said he at once went to King Solomon's house. When he got there he went up into the house.

"Selang Dirimba."
"Your highness."

"I have sent for you because these men, these two, have been disputing about an axe head. One man is the owner and the other has borrowed it. The borrower says that the axe head is eaten by weevils, but the other will not allow this.

So I don't know what to think and I have asked you to decide the case."

"What you say is very true your highness, will you first allow your slave to go away and bathe?"

So the pelandok went away to bathe at the river bank. Then he went off to a patch of lalang grass that had been burnt near the king's garden, there he rolled over and over in the ashes till his body was black. Then he went back to the king's house. It had now become evening. The king saw that the pelandok's body had been blackened by the lalang ashes so he said, "What has happened Toh Selang Dirimba to make your body so black? You said that you wanted to bathe. What kind of bathing is this?"

"Pardon, your majesty is always correct. Your slave went away just now to bathe, but your slave saw that the sea near your majesty's garden was all ablaze, so your slave went to help to put it out, and when he had put it out your

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slave came back. That is why his body is black: it had been singed by the fire."

When the king heard that he was most astonished and said, "Hai, it seems to me to be most improbable that the sea should be on fire."

Both the suitors too heard this. The pelandok said, "Why does your highness not believe me?" The king leant back in astonishment and said, "Why Selang Dirimba, it is most improbable as far as my knowledge goes, for I have never heard that anything like this happened in former times."

The borrower of the axe still more strongly said that it was improbable. Then the pelandok said, "Pardon your majesty, a thousand thousand pardons, but that is just why so far as your slave's knowledge goes it seems so improbable to him that the axe head was eaten by the weevils, for he has never heard that that has happened in former times."

When the king heard what the pelandok said he at once gave his decision against the borrower and ordered him to either return the axe or to replace it, with one as good.

return the axe or to replace it with one as good.

After the case had been decided the pelandok got leave to go home again. So he set off. On his way he passed by a fruit garden where he wanted to look for some durians, but he met a tiger there. The tiger spoke to him saying, "Hai Selang Dirimba, where have you come from?"

"I have just come from the king's house where the case of two men who were quarrelling about an axe that the one had lent and the other had borrowed has just been decided. The case is over now."

After they had talked about that, the tiger said to the pelandok, "Last night I dreamt that I was eating a black he goat. What do you think, Selang Dirimba, ought I to go and look for this goat? Should I believe this or not?"

The pelandok said, "Don't go and look for the goat. Go and get King Solomon to decide the case. It will be quite easy for you, because King Solomon has just sent for that goat."

When the tiger heard what the pelandok said he set off to King Solomon's house. When he got there the king addressed him,

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"Where have you come from, great warrior of the woods?

"Your highness, your slave has come from his house because he wished to come into your most royal presence."

"For what reason?"

"Your slave wished to explain to your majesty that one night he dreamt that he was eating a black goat and he wishes to know what he ought to do."

"Hai, I have never yet eaten a black he goat and yet you

have dreamt of doing so."

So the king called his dog and told him to go and call Selang Dirimba and the dog went and looked for him till he was tired but could not find him. Now when the tiger had gone to King Solomon's house, Selang Dirimba had gone to find a black he goat that lived in a village near to the king. When he found him he said to him, "Hai, black goat, you had better take care for the tiger wants to eat you. He was pleased to tell me of a dream he had a little while ago, he said, 'I dreamt that I was eating a black goat last night, Selang Dirimba; what does my dream mean?' I answered and said, 'I do not know: you should go to King Solomon and get him to explain it.' So after that the tiger went away to the king's house. Now what do you think, are you frightened or not?"

"Hai, Toh Selang Dirimba, what do you advise me to

do?"

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"You had better at once make a torch from a coconut

leaf, for the king may call me at any moment."

When the goat heard what the pelandok said, he at once took a coconut leaf and made a torch. Then the pelandok said, "You go on in front to the king's house and lurk in the brushwood close to the house, and when I call you, come up into the house."

So the goat went and lurked in the brushwood by the king's house. When he had gone the dog came and gave Selang Dirimba an order like this, "Hai Selang Dirimba, King Solomon calls you at once."

When the pelandok heard what the dog said he went off with him to the king's house. When he reached the king's house the king called out, "I have called you Selang Dirimba because a tiger has told me that he dreamt one night that he was eating a black goat. Now what do you think this dream forebodes?"

"Pardon your majesty, a thousand thousand be thy slave's pardons, if it commends itself to your gracious majesty might it not be as well to call this goat?"

After the pelandok had said this the king ordered the dog to call the goat. Now the goat heard the king's order that he was to be called so he came out. When the dog came he saw him and called out to him, "Hai Sang Goat, his highness calls you."

So the goat went into the house and left his torch below on the ground. When he arrived the king began to examine him: "I have called you Sang Goat, because this hulubalang dreamt a night ago that he was eating you. What do you think of that?"

"Pardon your majesty, a thousand thousand pardons your most gracious majesty, your highness can better judge what ought to be done, but if the decision is left to me I do not like that dream for it seems that in it I die."

"What you say is very true, but all the same my judgment is that whenever a man dreams of eating he should eat and that whenever a man dreams of wearing anything he should put it on, and that whenever a man dreams of being married he should be wedded and so on."

Then the king stopped speaking. The pelandok lay with his eyes closed. When the king saw the pelandok lying like that as if he was asleep he called to him, "Hai Selang Dirimba."

When the pelandok heard the king call he started from his sleep and at once ordered the goat to go and get the torch. He said, "Hai Sang Goat, go and get your torch at once."

The goat went and got it. Then the pelandok said, "Light it."

The goat lit it. Then the pelandok made a disturbance and asked the goat for the torch, the king said,

"Hai Selang Dirimba what on earth do you mean by making this disturbance with this torch?"

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The pelandok, answered, Your highness, while napping here just now, I dreamt that your house was burnt down, so I want to burn it."

"Who ordered the house to be burnt down?"

"Pardon your majesty a thousand thousand pardons. I wanted to burn it because I dreamt that I did so, and you yourself decided that whenever one dreamt of eating one was to eat and that whenever one dreamt of putting a thing on one was to wear it and that whenever one dreamt of a wife one was to marry."

When the king heard what the pelandok said, he said to the tiger, "Hai, don't you eat the goat because whenever there is a dream like that don't carry it out for that would be tyrannous."

## A Pelandok Tale by the Penghulu of Pulau Tiga.

Alkesah ini hikayat chetera pelandok binatang hutan ampat kaki-nya lagi kechil itu binatang lebeh kurang besar kuching. Maka tetkala dahulunya itu binatang terlalu cherdek deripada tiap-tiap binatang yang lainnya; pada waktu masa zaman dahulukala seklian binatang terkata-kata adanya. Maka dinyatakan pula chetera raja Suleyman namanya itulah raja seklian binatang. Rupanya, rupa manusia juga, tabiatnya samacham Sakai, hulubalangnya harimau dan penghulunya pelandok adanya.

Alkesah tersebutlah kalakuan pelandok itu ada kapada suatu hari terjalan pelandok itu hendak menchari makan maka berjumpa ia dengan rusa betina. Maka kata pelandok itu "Hai Sang Rusa apa namanya kamu makan itu?" Maka di-jawab oleh rusa itu, "Aku memakan tarok ubi." Maka kata rusa itu kapada pelandok itu, "Derimana Toh Sang Di-rimba ini?" Kata pelandok itu, "Aku deri rumah aku hendak menchari makan juga." Maka berfikir pelandok itu kerana dilihatnya rusa itu gemok sangat, maka berfikir didalam hati pelandok itu berhajat hendak memakan rusa itu, maka pelandok itu pun pergi kapada harimau. Maka tiba ia pada harimau itu berkata harimau itu

"Derimana Toh Sang Di-rimba?" Kata jawab pelandok itu, "Aku ini deripada Sang Rusa di-situ maka lalu aku mendapatkan hulubalang kerana aku hendak memakan rusa betina di-situ." Maka jawab harimau itu, "Macham mana Toh Sang Di-rimba hendak memakannya?" Maka kata jawab pelandok itu, "Ini-lah aku mendapatkan hulubalang boleh kita berpakat." Maka kata harimau itu, "Macham mana pakatnya?" Kata pelandok itu, "Hulubalang boleh matikan diri dingangakan mulut boleh dihurong langau, maka sudah itu aku boleh memanggil rusa dan gajah dan badak dan kijang dan babi, maka menangkala sudah datang semuanya itu aku surohlah masing-masing dengan kerja-nya. Maka hulubalang dengar-kan sahajalah apaapa perkataan didalam tangisku itu tetapinya jangan masa tengah mandikan hulubalang itu atau tengah masa membawa berjalan itu, pada waktu aku kata nyamlah nyamlah, masa itu-lah tangkapti Sang Rusa itu." Maka kata sahut harimau itu "ialah," adanya.

Alkësah tërsëbutlah përihal harimau itu sudah habis mëshuarat itu dengan pelandok itu lalulah ia mematikan dirinya serta dingangakannya mulutnya dihurong oleh langau harimau itu pun tiada bernapas ia keluarkan napasnya deri mulutnya sahaja. Maka habis itu pělandok pun pěrgilah ia měndapatkan gajah dan badak dan rusa dan babi dan kijang. Demkian bunyinya dipanggil oleh pelandok itu "Hai Sang Gajah dan Sang Badak dan Sang Rusa dan Sang Babi dan Sang Kijang, titah tuanku raja Suleyman menyuroh memanggil kamu sekaliannya, titah ia menyuroh menanamkan hulubalang dirimba sudah mati samalam. Mari segera." Maka sekalian binatang yang tersěbut itu měngikutlah dibělakang pělandok itu běrjalan pěrgi mendapatkan harimau itu. Maka tiba semuanya disitu lalulah pělandok měnyuroh Sang Babi měngorěk liang dan gajah disurohnya mengangkut ayer dan rusa itu di-suroh-nya meriba kepala harimau itu, dan lalu kapala badannya dan Sang Kijang itu disurohnya meribakan pinggang lalu pada ekornya dan badak itu membuatkan jalannya. Maka sudah semuanya kerja-an disurohlah oleh pelandok itu membawa kapada lobangnya disuroh rusa itu mimikul kepala-nya dan gajah mengampu badannya dan kijang dengan babi itu tengah berbalah-balah. Kata kijang, "Aku biar pada ekornya," dan babi "Aku biar dahulu membawa

jalan, kerana aku lihat choraknya chorak hidop." Kata kijang "Aku tiada juga sĕdap hati-ku." Kata pĕlandok "Jangan kamu berbanyak kata." Maka demkian dibawa oleh rusa dan gajau dan badak bértiga sahaja, Maka pělandok itu pun pěrgi ia naik kaatas busut lalu ia menangis akan harimau itu demkian bunyinya. "Hai Toh Hulubalanglah, yang menyampaikan hajat hati aku nyam-lah nyam-lah," Maka kata kijang itu, "Dengar Sang Babi, bunyi teriak Sang Di-rimba itu. Macham mana kata bunyi-Maka těngah běrkata-kata kijang děngan babi itu harimau pun měnangkaplah pada těngkok rusa itu sěrta menarek rusa itu dan gajah pun marah berlentang-lentang bunyi belalei nya lari, dan badak pun berleporleper bunyi mulutnya dan kijang pun mělompat tiga ampat děpa macham pěluru pěrginya berdahulu kemdian dengan babi, maka didengar oleh pelandok itu bergemuroh bunyi hutan itu binatang lari, kata pelandok itu pada kijang "Lompatkan Sang Kijang, Sang Rusa bicharanya sudah." Maka habis kata itu babi pun tertumbok munchongnya pada banir kayu měrbau běrděntum bunyi. Maka didengar oleh pělandok itu sě: ta těrjěrit bunyi babi itu sakit. Maka běrkata pělandok itu, "Banir, Sang Babi, Sang Rusa bicharanya Kata jawab babi itu, "Banir bapa kamu Sang Di-rimba aku sakit seklian-nya, kamu suka sahaja." Menjadi berpayong munchong babi itu. Maka habis semuanya jauh adanya. Intiha.

Alkësah maka tërsëbut pula përkataan rusa yang ditangkap oleh harimau itu tělah sudah sělěsai měshuarat pělandok dengan harima itu, maka dibelah rusa itu dua, yang sabelah pada harimau dan yang sabélah pada télandok maka dibawa daging děkat děngan těbas ladang orang itu. Maka ladang orang itu hampir rebanya. Maka mengambil kayu membuat tempat salai dan kayu api salai itu maka sudah siap salai itu dan dagingnya sudah naik maka dilekat apinya maka hari pun malam. Maka hampir sudah tengah malam salai itu pun masak sudah sabělah lalu di-balek sabělah lagi maka ber-kata pělandok itu, "Hai hulubalang biar aku tidor dahulu, kemdian aku pun bangkit sekarang hulubalang pula tidor." Maka kata harimau itu "Ia-lah." "Tětapinya," kata pelandok itu, "Apa kala aku tidor sekarang, jangan hulubalang usek hujong sangir aku ini, takut kena bisanya." Kata harimau itu "la-lah." Dan lagi kata pělandok itu, " Aku tidor sěkarang manakala pějam mata aku

itu, aku bělum tidor lagi. Jikalau sudah chelek mata aku sěkarang sěrta měněngkor bunyi itu aku tidor." Maka habis itu tidorlah pělandok itu. Maka harimau itu měngapikan salainya maka lebeh kurang satu jam tidor pělandok itu lalu ia měnchělekkan matanya sěrta ia měněngkor bunyinya. Maka fikir harimau itu akan sangir pelandok itu, "Ia-kah bisa atau tidakkah?" Maka diuseknya oleh harimau itu. Maka kata harimau itu, "Tiada běrapa sangat tajam-nya." Sudah diusiknya sědikit diamlah harimau itu. Maka pělandok itu dilihatnya harimau itu měnguseknya. Maka sudah itu fikir pělandok itu masak

sudah salai itu, ia bangkitlah déri tidornya. Intiha.

Alkesah tersebut pula halan harimau pula maka pelandok sudah jaga maka tidorlah harimau itu serta menengkor bunyinya, maka sudah yakin pada fikir pelandok itu tidor harimau itu diambil oleh pělandok itu salai hariman itu dimakannya habis. Maka sudah itu di-ambil oleh pělandok itu kulit kayu yang běrnama gentong kerana sarupa dengan salai itu lalu digantinya di-tempat salai harimau itu. Maka sudah itu hari pun hampir terbit matahari maka pělandok itu pun dipanggilnya harimau itu lalu harimau itu terkejut deripada tidornya lalu ia bangkit. Maka sudah bangkit harimau berkata pelandok itu, "Hai hulubalang mari kita mengambil kayu pengandar salai kita didalam tébas orang itu." Maka pergi ia berdua dengan harimau itu, kata pělandok itu sampai ditěngah jalan, "Hai hulubalang ambil olehmu akar, biar aku mengambil kayu pengandar." Maka tinggal harimau itu mengambil akar dan pelandok itu měngambil kayu satambun tahi yang sudah ditěbang orang maka durinya panjang-panjang lebeh kurang satu inchi panjangnya. Maka yang mengala kapangkal kayu itu tiada dibuangnya akan durinya dan yang mengala kahujongnya dibuang oleh pělandok itu durinya. Maka sudah itu diambil oleh pělandok, dan harimau itu salainya masing-masing, salai harimau itu dibělah hadapan barimau dan salai pělandok itu di hadapan pělandok itu. Kemdian maka berjalanlah menuju hala pada sungei, maka mentara berjalan itu masing-masing memakan salai-nya. Maka harimau itu mentara berjalan serta berkata ia, "Adohai sakit aku ini kerana pengandar jini menikam belakangku, lagi pula salaiku ini pahit rasanya." Maka dijawab oleh pelandok itu katanya, "Itulah hulubalang, aku khabarkan samalam,

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jangan diusek hujong sangir aku, menjadi pahit salai itu." Maka kata harimau itu "Hai Sang Di-rimba berilah aku salai kamu itu sĕdekit, boleh aku rasati kĕrana pĕnat sangat aku ini sěmua vang těrok." Maka diděngar oleh pělandok itu kasihan ia akan harimau itu lalu diberinya sedikit salainya maka dirasa oleh harimau itu sedap sangat rasanya lalu harimau itu terhěnti ia běrjalan maka kata pělandok itu. "Apa kĕna hulubalang ber-henti kerana apa sebab-nya tentu jalan kita ini sudah děkat pada sungei běsar, lambat tibanya sěkarang běrjumpa kita dengan Tuanku Raja Suleyman tentu di-ambil-nya salai kita ini lagi kita dimarahnya lagi dihukomnya kerana kita memakan rusa tiada diberi tahu kapadanya." Maka harimau měněngar kata itu lalu dipikulnya pěngandar itu, lěbeh kurang sapělaung sampailah pada těpi sungei itu běr-hěnti sěrta masing memakan salai-nya. Maka habis salai pelandok itu kerana diberinya pada harimau itu pula salainya, di-dapat oleh harimau itu ampat kali makan, lalu minum kaduanya dan salai harimau tinggal pada tĕpi sungei itu adanya.

Alkësah tërsëbut pula pëlandok dëngan harimau itu hëndak měnyěmběrang sungei itu maka pěrgilah ka-hilir sungei pělan dok itu berdua dengan harimau itu. Maka ber-jalan-lah kaduanya menyusor sungei itu tiba-tiba berjumpa rakit batang pisang sangkot pada bangkar kayu besar tumbang dekat tepi sungei itu. Maka turun kadua-nya pelandok dengan harimau itu pada rakit itu lalu ditolaknya ka-seberang, yang menolak itu harimau dan pĕlandok itu diam. Maka sudah rapat dĕkat tĕbing itu pělandok itupun mělompatlah di-atas těbing itu dan harimau itu pun tinggal ia di-atas rakit itu lalu hanyut lagi pula. Di-kata oleh pelandok itu "Hai hulubalang matilah kamu itu ditangkap oleh buaia, dan salai kamu samalam aku makan habis, maka aku ganti dengan kulit gentong." Maka didengar oleh harimau itu ia pun marahlah, kata harimau itu, "Nantilah kamu Sang Di-rimba, aku makanti." harimau itu mělompat lalu naik ka-atas těbing itu ia hěndak měnchari pělandok itu. Maka pělandok itu pun sudah ia pěrgi berjalan, maka dijumpanya sarang tabuan didalam lalang itu maka dudoklah ia pělandok itu děkat sarang tabuan itu. sampai děkat pětang hari harimau itupun berjumpa ia děngan pelandok itu maka kata harimau itu ini, "Baharu ku jumpa Sang

Di-rimba, aku makanti, kamu tipu aku rupanya." Maka kata pělandok itu. "Jangan aku kamu makan kěrana aku ini disuroh oleh Raja Suleyman měnunggu gongnya. Tidak-kah kamu lihat." Maka kata harimau itu "Mana ia-nya." "Ini yang měngaum bunyinya ini." Maka dılihat oleh harimau itu. Maka lalu běrkata harimau itu, "Bolehkah aku pukol sědikit?" maka ja wab pelandok, "Jangan: takut di-marah oleh Raja Suleyman." Maka kata harimau itu, "Sikit pun, jadi, aku pukol." Maka kata pelandok itu, "Nanti aku pěrgi pěrsěmbahkan pada Raja Suleyman." Maka habis kata itu pělandok itupun pěrgilah běrları-lari lěbeh kurang sěpělaung děripada těmpat tabuan itu. Maka ia pun běrlaunglah děmkian bunyi-nya. "Pukol-lah hulubalang." Maka diděngar oleh harimau itu iapun angkat tangan lalu dipukolnya. Maka tabuan itu pun měnyěrbulah pada harimau itu maka harimau itu pun lari sěrta hingar bunyi mulutnya, lalu běngkak badan dan muka-nya.

Alkësah tërsëbutlah pëlandok itu maka sudah didëngarnya harimau lari serta mulutnya hingar bunyinya maka ia pun berjalan pula berlari-lari jauh. Maka hari pun sudah masok pada malam berhenti ia pada pangkal kayu besar pada chélah banirnya lalu ia běrdiam dirinya sěrta takut akan harimau itu kerana ia sudah banyak dosanya dengan sebab tipunya pada harimau itu. Maka tiadalah tidor pada malam itu kerana lagi ia hendak mencharikan elah hendak dideranya harimau itu. Maka samalam-samalam itu ia berfikir sampailah siang hari. Maka pelandok itu pun berjalanlah lebeh kurang përjalannya itu sampailah sudah sutengah hari maka berjumpa pělandok děngan ular sawa chindei. Ular itu těngah tidor měněngkor bunyi-nya, tětapi ular itu tidor běr-lěngkar tiga lengkar dan kepalanya jauh deri lengkar itu ditengah lorong jalan běsar. Maka sudah dilihat oleh pělandok ular itu nyata sudah tidornya dudok pělandok itu děkat lěngkar ular itu kerana fikir pělandok itu, jikalau datang harimau itu měnchari aku sĕkarang neschaya boleh aku bĕrdaleh aku ini měnunggu ikat pinggang Raja Suleyman. Maka sudah itu pělandok itu dudok lěbeh kurang sampei sudah mata hari asar maka ber-jumpa pula oleh harimau itu. Maka di-lihat oleh harimau itu pělandok dudok měnyarangkong. Maka harimau itu sangatlah pula marahnya fikirnya hendak diterkamnya sahaja.

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Maka dilihat pula oleh pelandok itu harimau itu hendak menerkam maka ber-kata pelandok itu, "Hai hulubalang, jangan kamu terkam aku, kerana aku menunggu ikat pinggang Raja Ia suroh aku ini, kerana ini kain chindei zaman pesaka dahulu. Maka inilah pakaian waktu Raja Suleyman tabal esok, kerana titah raja semua kita dipanggil lagi dua hari ia hendak naubat." Maka terhentilah hariman itu menangkapnya kerana dilihat oleh harimau chorak kain itu sangat lagi warunanya berchampur dengan amas menjadi heiran-lah harimau itu dan hati-nya pun ber-kahendak pula měrasa ikat pinggang itu, maka běr-kata harimau itu. "Hai Toh Sang Di-rimba bolehkah aku chuba pandu ikat akan pada pinggang aku ini?" Maka jawab pelandok itu, "Nanti biar aku pergi persembah pada Tuanku Raja Suleyman." Maka sudah habis chakap itu pělandok pun pěrgi ia běrjalan, maka dijumpa suatu busut naik ia kaatas busut itu. Maka berlauanglah ia pada harimau itu katanya, "Hai hulubalang, ikatkanlah." Maka didengar oleh harimau itu, diikatnya ular itu maka dilihat oleh harimau itu mengruit rupanya, maka berfikir harimau itu. "Ini barang takut aku ini, kena tipu sahaja." Maka diambil oleh harimau itu kayu lalu dipukolnya kera ular itu lalu ular itu berialan maka harimau itu pun heiran akan pelandok itu membuat bohong atasnya maka bertambah pula marahnya maka dicharinya pělandok itu maka pělandok itu pun lari bersangatan jauhnya, maka tiada bertemu dengan harimau itu adanya.

Alkësah tërsëbutlah kalakuan pëlandok yang lari itu maka pëlandok itu pun lalu ia mënuju sungei yang bësar. Maka di-tëpi sungei itu dilihatnya ada satu pohon kayu namanya chadong, buahnya lëbeh kurang sabësar buah mata kuching, tëtapi masaknya manis. Maka pëlandok gëmar sangat mëmakan itu buah kayu, maka apa akalnya hëndak mënyëbërang sungei itu ayernya dëras lagi dalam. Maka dilihatnya buaia banyak sangat, përgi pëlandok itu mënchari tëmpurong nyiur satu dipëgangnya pada tangannya maka sudah itu berdiri ia pada tëpi tëbing itu dipanggilnya sëkalian buaia itu dëmkian bunyinya "Hai sëkëlian Si Rangkak timbul kamu sëkëliannya. Raja Suleyman mënyuroh mëmbilang kamu sëmuanya." Maka buaia itu mënëngar bunyi kata pëlandok itu timbul ia sëkëliannya

Maka sudah ia timbul semuanya disuroh oleh pelandok itu běratur rapat-rapat sampai di-sěběrang sungei itu. Maka běrsěkělian buaia itu maka turun pělandok di-atas buaia itu, ia pun berbilanglah serta dikatoknya kĕpala dengan kepala tempurong itu akan kepala buaia itu demkian bunyi-nya, "Satu dua tiga, lekop kechil besar kepala buaia tělukop. Satu dua tiga, lekop kěchil běsar kěpala tělukop." Maka hingga sampailah pelandok itu kaseberang. Maka sudah itu naik kaatas darat berkata pelandok itu. "Hai sekelian kamu Si Rangkak, akal aku sahaja hendak menyeberang memakan buah chadong ini, aku katakan Raja Suleyman yang menyuroh kamu timbul, maka kepala kamu semua-nya itu merasa aku katok děngan těmpurong, bukan-lah kamu chěrdek, bodoh sĕmua-nya." Maka didĕngar oleh buaia itu sangatlah marahnya semua buaia itu akan pelandok itu. Maka berkata buaia itu, "Mushtahil kamu itu tiada hendak minum ayer sekarang. Jika kamu minum ayer sungei ini atau lainnya, maka kamu aku tangkap juga." Maka kata jawab pelandok itu "Pergi aku kadarat ayer paya, dan kolam, dan kubang dan lopak, mengapa salahnya?" kata relandok itu. Kata buaia itu, "Barang mana ada ayer ada aku, jangan kamu tiada tahu." "Hai," kata pelandok itu, "ia-lah jika cherdek kamu sekarang dapatlah kamu tangkap aku jika cherdek aku sekarang tidaklah aku mati." Maka habis kata itu pélandok itupun pergi ia memakan buah chadong itu dan buaia itu pun berpakatlah sekelian buaia yang deripada laut dan sungei dan paya beratur menunggu sĕmuanya.

Maka sudah habis perihal buaia itu maka balik pula derihal pelandok itu ia memakan buah chadong itu sudahlah keni nyang sangat, maka ia pun sudahlah dahaga hendak minum ayer. Maka pergi pada paya dan kubang dilaungnya demkian bunyinya, "Hai Si Rangkak" Maka menyahutia buaia, "yui," sahut buaiaitu. Maka terhenti pelandok itu pergi pula ia pada sungei di-laungnya, sakali ampat yang menyahutnya. Maka, "Hai," kata pelandok itu, "Jika samacham ini, mati pula aku ini, hendak minum tiada dapat." Maka pergi ia ka-hulu sungei itu dilaungnya pula, sakali laung sampai sapuloh yang menyahutnya. Heiran-lah ia, naka dilihat oleh pelandok itu ada buloh aur duri satu perdu satengahnya tumbang pada ayer itu. Maka ia

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ikot batang buloh aur itu didalam rambun yang tebal sangat lalu ia minum. Maka těngah pělandok itu minum běrchěpakchopak bunyinya ditangkap oleh buaia itu deri bawahnya dapat oleh buaia itu ranting buloh aur itu sahaja, maka pelandok těrkějut sěrta di-kata-nya "Aduhai-aduhai jangan-lah kuat sangat, hai Si Rangkak." Maka jawab buaia itu "Jangan kuat, Ia ini ia baharu kamu mati." "Hai," kata pelandok itu, mentara ia berjalan perlahan-lahan kapangkalnya balik, "Janganlah aku ditarik." Maka ditarik oleh buaia itu rembun buloh itu berhalon-halon ayer itu. Pada halnya pelandok itu sudah lepas kadarat, buloh itu lekat pangkalnya. Maka kata pělandok itu, "Hai. Si Rangkak, apa gunanya kamu tangkap bangkar buloh itu, boleh kamu makankah? Hai kasihan aku akan kamu, terharap sahaja hendak memakan aku." Maka měndengarkan kata itu buaia itu pun dilěpaskanlah buloh Maka pělandok itu pun běrjalan ia měnchari busut kerana ia hendak tidor prut-nya sudah kennyang sangat lagi leteh ia, takutkan harimau yang ditipunya itu. Maka sampeilah ia suatu busut jantan lalu pelandok itu naik kaatas lalu ia tidor měněngkor sahaja adanya.

Alkësah tersëbotlah pula pri-hal harimau yang hëndak měnchari pělandok itu, maka běrjalan-lah harimau itu lalu ia sampei pada tepi sungei itu. Maka berjumpa ia dengan sa-ekor buaia yang besar timbul. Maka bertanya buaia itu pada harimau itu "Hai Hulubalang derimana kamu tadi?" Maka jawab harimau itu, "Aku ini deri dalam hutan yang besar ini, kiranya aku hĕndak mĕnchari pĕlandok yang tipu akan aku dĕripada salai hingga aku hendak bunohnya, sakali dengan sarang tabuan aku berapa banyak sakit, dan ular besar chemas lagi aku mati nyempang pun aku dapat pikir kerana lagi aku lihat ia měngruit lalu ular itu běrjalan. Maka ini-lah aku hěndak měnchari ia hendak aku makanti." Maka mendengarkan chakap harimau itu demikian bunyinya buaia pun bercherita pula akan hal pělandok itu měmbuat tipu kapadanya, děngan pělandok itu hendak memakan buah chadong "Dikatakannya ia dititahkan Raja Suleman hendak membilang aku seklian-nya, Maka disurohnya aku sěkliannya běratur rapatrapat sampei sěbrang sana. Maka sudah aku beratur semuanya ia dibawanya kepala těmpurong lalu dinaik kěpala aku sěkliannya ia bilanglah

serta, dikatokkannya demikian bunyinya, Satu dua tiga lekop kechil besar kepala telekup, kata-nya, hingga habis. Maka tiba ia sebrang sana tharulah ia chakap ia tipu sahaja. Inilah aku seklian-nya sakit hati padanya." Maka harimau itu mendengarkan chetra buaia itu maka lalu harimau itu berkata kepada buaia itu. "Baik kita berpakat. Antar aku di-sebrang sana boleh aku chariti, boleh tangkap. Jikalau terjun ia ka-ayer rezeki kamu-lah, Jikalau didarat rezeki aku-lah." Maka kata buaia itu "Ya-lah." Maka turun harimau itu di-atas kepala buaia itu lalu diantarnya ka-sebrang. Maka tibalah harimau itu di-atas tebing adanya.

Alkësah tërsëbut pula chëritra pëlandok itu pada waktu masa harimau itu bërpakat dëngan buaia itu ia dëngar dëri atas tëbing bërbëtulan sëbrangnya. Maka bërpikir pëlandok itu, "Biar-lah aku bunoh juga harimau itu sekarang, kërana janji dia dëngan buaia itu, apakala tërjun ka-ayer sëkarang rezeki buaia, apakala didapatnya didarat, rëzëki harimau. Maka aku

tahu buat," kata pikiran pelandok itu ada-nya.

Alkësah tërsëbut-lah pula chëritra harimau itu yang sudah tiba ka-atas darat itu lalu-lah ia menchari pelandok itu. Maka Pělandok itu běrdiri ia ditěngah těrang tiada sěmak sangat. Maka di-terkam oleh harimau itu akan pelandok itu. Maka kata harimau itu "Ini-lah, bharu Sang Di-rimba aku jumpa-ti kamu handak aku makan-ti " Maka kata, jawab pelandok itu, "Chubalah pandu jikalau kamu sunggoh Hulabalang dirimba dapat-lah aku sekarang ada-pun yang mengluar-ti kamu itu pun aku." Maka mendengarkan kata itu harimau itu pun menerkam pada pělandok itu, Maka pělandok itu pun lari děkat těpi Maka dikejar oleh harimau itu. Maka melomat pelandok itu balek kadarat. Maka di-dengar oleh buaia itu ber-gemuroh di-atas darat itu harimau ber-terkam dengan pělandok itu běrhimpun buaia itu, ia jaga děkat těpi ayer itu. maka harimau itu pun terkam pula tiada dapat melompat pelandok itu děkat těpi těbing itu hingga sampai di-pusing-pusingkan oleh pelandok itu sapuloh kaki lompat. Maka ada satu těmpat těbing itu pantai-nya. Maka pělandok itu-pun di-lompatkannya pada těpi pantai itu těr-chichah kaki pělandok itu pada ayer itu. Maka melompat ia balekka-darat. Maka harimau itu ikut lompatnya pada těpi ayer itu, těr-lépas dua

dépa kadalam ayer itu. Maka datang Buaia tangkap, sangka-nya buaia itu pélandok. Maka mégadohlah sérta sakit-nya harimau itu. Maka buaia itu-pun masakan dapat ditangkapnya harimau itu lalu ditariknya kata harimau itu, "Téman jangan mika tangkap." Maka jawab buaia itu "Aku tiada fehduli, kérana janji kita dahulu asa-kan kadalam ayer rézeki aku." Maka harimau itu pun méndéngar-kan kata buaia démikian itu ménangis ia lalu mati. Maka pélandok itupun sukalah ia sambil ia berkata "Tarik-lah Si-Rangkak makan-ti. Kérana ia itu bésar déripada aku, aku ini apa guna-nya? Satu ekor pun tiada bérasa." Maka ini-lah sétia déngan buaia. Ini-lah jangan adanya.

Alkësah tërsibut pula chëritra pëlandok yang sudah lëpas iděrpada mara-nya itu lalulah ia běrjalan měnuju kampong Raja Suleyman itu Maka tiba ia pělandok itu děkat děngan rumah orang ada didalam kampong itu didengarnya orang itu těngah berjawab akan běliong. Maka adapun satu orang měminjam satu mata běliong kapada satu orang lamanya sudah satu tahun sudah. Maka tiada dipulangkar oleh orang yang meminjam itu, Maka ditunggu oleh orang yang ampunya. Maka kata orang yang meminjam itu tiada lagi itu mata beliong kerana sudah makan bubok. Maka hingga pergi orang dua orang itu bichara kapada Raja. Maka tiba orang itu kapada Raja lalu disĕmbah oleh orang yang ampunya bĕliong itu kapada Raja. Maka kata Raja, dipereksa di-atas orang yang meminjam beliong itu, kata jawab orang itu "Ya, dia meminjamnya akan tetapi itu mata beliong sudah habis di-makan oleh bukok, tuan-ku. Maka tuan-nya yang punya itu tiada ia mahu hilang, ia mahu ada juga." Maka Raja itu pun kelamlah pikirnya kerana tiada patut juga itu mata beliong di-makan bubok. Kata Raja itu. "Pergi panggil oleh kamu, hai anjing, Selang Dirimba, kerana kamu yang tahu akan menchari Selang Dirimba itu lain orang tiada tahu akan tempat-nya." Maka pergi-lah anjing itu hingga sampai setengah hari baharu-lah berjumpa. Maka berjumpa anjing itu dengan pelandok itu kata anjing itu "Hai Sĕlang Dirimba tuan-ku Raja Suleyman mĕmanggil kamu." Maka pelandok itu pun mendengarkan kata anjing itu lalu-lah ia pergi pada rumah Raja Suleyman itu. Maka ia pun naiklah ka-atas rumah Raja Suleyman itu lalu ditegor oleh Raja

Dirimba." "Tuan-ku," kat Suleyman itu "Hai Sĕlang Maka kata Raja itu. "Aku panggil akan Selang jawab-nya. Dirimba ini orang, dua orang, ada berbalah-balah akan pasal mata běliong, satu orang yang punya dan satu orang yang měminjam. Kata oleh orang yang meminjam ini mata beliong sudah di-makan oleh bubok. Maka kata tuan-nya ia tiada mahu ia berkahendak juga. Menjadi aku tiada tahu akan pikir-nya telah aku mintak hukum akan pada Toh Selang Dirimba-lah perkara Maka jawab oleh pělandok itu, "Tělah běnarlah tuanku akan tetapi-nya biar patek pergi mandi dahulu. "Maka pergilah pělandok itu mandi ka-těbing, lalu ia pěrgi pada lalang yang sdah terbakar oleh orang dekat dengan kampong Rajah itu. Maka berguling-guling ia pada tempat abu lalang itu lalu badan-nya itam. Maka sudah ita pelandok itu pun balek naik ka-rumah Raja itu hari pun sudah petang. Maka dilihat oleh Raja itu badan pelandok itu itam dengan abu lalang itu. Maka dipereksa oleh Raja itu "Apa kena Toh Selang Dirimba badan itam sangat ini? Katakan hendak pergi mandi. Maka mandi apa macham ayer-nya." Maka jayab pelandok itu "Ampun tuan-ku, benar juga, patek tadi hendak mandi; akan tetapi patek pun tiba ka-tĕbing itu, patek lihat laut dĕkat kampong tuan-ku ini ter-bakar. Maka ini-lah patek pergi tulong-ti. Maka sudah habis padam api itu patek pun balek kamari ini-lah sebab jadi badan patek ini itam di-senggau oleh api itu," Maka Raja itu měnděngar-kan sěmbah pělandok itu těrpěnpan-nya ia, "Hai," kata Raja itu, "sangat lah tiada patut, pada pikiran hati aku laut dimakan oleh api." Dan seklian orang yang bichara itu pun hairan-lah juga mendengar nya. Maka kata pelandok itu, "Macham mana pikiran tuan-ku tiada perchaya-kah akan hal patek ini?" Maka jawab Raja itu "Hai Sĕlang Dirimba tiadalah patut pada akal aku, dan tiada pernah aku mendengar deripada zaman dahulu-dahulu-kala pun hal-ini." Dan tambahan pula kata orang yang měminjam běliong itu pun tiada juga patut. Maka jawab oleh pělandok itu "Ampun tuan-ku běriburibu ampun děri kěrana ini-lah sěbab mata běliong itu tiada patut pada akal patek di-makan oleh bubok kerana tiada pernah mendengar deri-pada zaman dahulu kala pun." Maka mendengar oleh Raja itu akan kata pelandok itu, baharu-lah jatoh hukum pada orang yang meminjam mata beliong itu mahu-lah dipulang-

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kan atau kamu ganti dengan samacham orang itu punya juga

adanya.

Alkësah tërsëbut pula akan dëri-hal Pëlandok itu habis sudah lepas bichara itu. Pelandok itu pun memohunkan balek. Maka balek-lah ia. Maka lalulah rélandok itu pérgi bérjalan pada suatu dusun ia hĕndak mĕnchari durian. Maka tĕlah bĕrjumpa ia dĕngan suatu harimau. Maka di-tĕgor oleh harimau itu akan pělandok itu, kata harimau itu "Hai-Sĕlang Dirimba dĕri-mana kamu tadi?" Kata jawab Pĕlandok itu, " Aku ini datang deri-pada rumah Raja lepas nenjatohhukum orang, dua orang ber-balah-balah-kan pasal pinjam dan běri satu mata běliong. Maka tělah sělěsi-lah sudah ada-nya." Maka habis itu chakap, ber-kata harimau itu kapada pělandok itu děmikian, kata-nya, "Ada-lah těman ini" kata harimau itu, "tidor samalam bermimpi aku memakan kambing jantan itam. Maka apa-lah pikir Toh Selang Dirimba kěrana aku ini hěndak pěrgi měndapatkan kambing itu, pakaikah-aku ini atau tiada." Maka sahut pelandok itu. "Jangan kamu përgi pada kambing itu, përgi kamu mëndapatkan Raja Suleyman bicharakan. Neschaya Hulubalang sékarang sénang kerana kambing itu di-panggil oleh Raja itu." Maka harimau itu pun sebab mendengarkan perkata-an pelandok itu lalu ia përgi dirumah Raja Suleyman. Maka tëlah tiba pada rumah Rajaitu di-tegor oleh Raja itu, "Deri-mana Hulubalang Dirimba itu?" Maka sahut Harimau itu, "Tuanku, patek ini datang děri rumah patek kěrana hěndak měngadap duli tuanku." Maka jawab Raja Suleyman, "Apa hajat?" Maka jawab Harimau itu, "Patek ini hendak ber-maalum-kan sembah kabawah duli seperti patek tidor samalam bermimpi patek memakan kambing jantan itam. Maka apa-lah hukum-nya?" Maka jawab Raja itu, "Hai, aku pun tiada pernah lagi memakan kambing jantan itam, Toh Hulubalang sudah pula memimpinya." Maka habis itu di panggil oleh Raja Suleyman anjing disurohnya pergi memanggil Selang Dirimba. Maka anjing itu pun përgi-lah mëmanggil Sëlang Dirimba dicharinya hingga puas sudah tiada berjumpa. Maka Selang Dirimba pada masa waktu harimau itu pergi di rumah Raja Suleyman itu, ia sudah pergi mendapat kambing jantan itam yang didalam kampong berdekat dengan rumah Raja itu. Lalu ia Selang

"Hai kambing itam, Dirimba berkata kapada kambing itu. kamu jaga hendak dimakan oleh harimau kerana ia terkenangkan mimpinya pada aku tadi ia kata, 'Tidor aku samalam bermimpi aku memakan kambing itam. Maka apalah hukumnya mimpi aku ini ia Selang Dirimba.' Maka aku jawab-kan aku tiada tahu përgi kamu pada Raja ja-lah yang tahu akan mëhukumkan. Maka habis itu harimau itu pun pergi lah tadi ka-rumah Raja. Maka kapada pikiran kamu kambing macham mana, takut-kah atau tiada?" Maka jawab oleh kambing itu, katanya kapada pělandok itu. "Hai Sělang Dirimba apalah akhtiar aku ini kapada Toh Sělang Dirimba-lah?" Maka jawab oleh pělandok itu, "Hai kambing siap kamu suloh daun nyiur satu batang ber-lekaslekas kerana Raja hendak tiba panggil kapada aku ini." Maka kambing itu pun mendengarkan kata jelandok ia pun mengambil daun nyiur lalu dibuatkannya suloh. Maka sudah itu berkata pělandok itu, "Pěrgi kamu dahulu kapada Rumah Rajaitu didalam semak dekat rumah mengendap menanti aku panggil sekarang, datang naik ka-rumah Raja itu." Maka habis itu chakap kambing pun pergilah ia kapada dekat rumah Raja itu mengendap ia didalam semak itu. Maka kambing itu sudah pergi anjing itu pun sampěi-lah ia pada pělandok itu sěrta disuroh děmikian bunyi-nya "Hai, Selang Dirimba, tuanku Raja Suleyman memanggil sekarang." Maka pelandok itu nendengarkan kata anjing itu lalu ia pergi hingga sampai pada rumah Raja itu serta disuroh oleh Raja itu, "Hai Selang Dirimba aku panggil akan kamu ini suatu pasal, hariman datang kapada aku, ia berkhabarkan mimpinya samalam, ia kata didalam mimpi itu ia memakan kambing jantan itam. Maka kapada pikiran Toh Selang Dirimba macham mana mimpi harimau itu?" wab oleh pělandok itu "Ampun tuanku běr-ribu-ribu sěmbah patek kabawah duli deripada itu lebeh maalumlah kapada tuan-ku pikiran patek, lĕbeh baik kita panggil kambing itu." Maka habis chakap pělandok itu Raja pun suroh panggil képada anjing akan kambing. Maka kambing itu pun mendengar-kan hukum Raja itu ia kena panggil. Maka keluar kambing itu. Maka datang anjing itu dilihat lalulah dipanggil oleh anjing itu. "Hai, Sang Kambing tuan-ku memanggil." Maka kambing punnaik-lah ka-atas rumah itu dan sulohnya di-tinggal-kannya di-tanah. Maka tiba-tiba dudok Raja pun pereksa kapada

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"Hai, Sang Kambing, kamu aku panggil kerana kambing itu. Hulubalang mengadap kapada aku ia bermimpi samalam memakan Sang Kambing. Maka apa macham pikiran Sang Kambing?" Maka jawab oleh kambing itu "Ampun tuanku ber-ribu-ribu" ampun kabawah duli, akan hal patek ini lébeh maalum-lah kapada tuan-ku. Jikalau boleh patek memuhunkan sembah sangat-lah tiada izin kapada hati patek kerana jalan mati itu mimpi." Maka sahut Raja itu. "Hai Sang kambing itu telah benar-lah sangat, akan tétapi-nya hukum kapada aku tiap-tiap mimpi memakan mau di-makan-kan dan tiap-tiap mimpi memakai mau di-pakai-kan dan tiap-tiap mimpi ber-bini mau di-nikah-kan atau lain-nya." Maka habis chakap Raja itu sudah. Maka pelandok itu tidor ia di-pejam-kan-nya mata-nya. Maka di-lihat oleh Raja itu akan kalakuan pelandok itu tidor rupa. Maka di panggil oleh Raja itu akan pělandok itu, "Hai Sělang Dirimba?" těrjaga-lah ia pělandok itu měnděngarkan panggil Raja itu. Maka tira tiba ia-pun jaga deripada tidornya lalu disurohnya kambing itu mengambil suloh demikian bunyi-nya; "Hai Sang Kambing përgi kamu ambil suloh lekas." Maka përgi-lah kambing turun mengambil sulohnya. Maka kata pelandok itu, "Pasang api." Maka di-pasang oleh kambing itu api pada suloh, di-lihat oleh Raja itu pelandok gadoh memintak suloh kapada kambing itu ber-kata Raja itu. "Hai Sĕlang Dirimba apa nama-nya mengkin ber-gadoh dengan suloh ini?" dijawab oleh pělandok itu, "Tuan-ku patěk měngantok di sini tadi, bermimpi patek memakar rumah tuan-ku, ini-lah mëngkinnya patek hëndak bakar-ti akan rumah." "Siapa bëri hukum měmakar rumah aku?" Maka kata jawab pělandok, "Ampun tuanku ber-ribu-ribu ampun, ada pun sebab patek hendak bakar ini rumah tuan-ku, kerana patek mimpi memakar rumah tuan-ku, ini dengan hukum tuan-ku kerana tiap-tiap mimri memakan makan-kan dan tiap-tiap mimpi memakai pakaikan dan tiap-tiap ber-istri dinikahkan." Maka Raja itu mendengarkan kata pelandok itu demikian bunyi-nya, "Hai Harimau, jangan kamu makan kambing itu, kerana jikalau ada mimpi yang demikian, apa-apa mimpi jangan-lah diperbuat adanya kĕrana thalim hukum-nya." Tamat.

# A Fourth Contribution to the Knowledge of the Hymenoptera of Sarawak.\*

BY P. CAMERON.

For the opportunity of describing the following species I am indebted to Mr. John Hewitt, the present curator of the Sarawak Museum.

#### EVANHDÆ.

Pristaulacus fasciatipennis, sp. nov.

Black, the antennal scape red; the greater part of the anterior femora, their tibiæ and tarsi dark red, the apical 2 joints of the tarsi black; the 4 posterior tarsi dark rufotestaceous; wings clear hyaline, the median cellule except at the apex, the submedian cellules except the 1st narrowly at the base, a band at the stigma and of its width extending from it to the cubital nervure, covering the 1st transverse cubital nervure and one on the apex, fuscous violaceous; the nervures and stigma black.  $\circ$ 

Length to end of 1st abdominal segment 11 mm.

Kuching. September.

Thorax in front armed on either side above the collar with 2 stout teeth, the upper being more slender and sharper; base of mesonotum roundly incised, its sides broadly rounded. Collar longish, smooth and shining, its apex at the sides closely punctured. Midlobe of mesonotum raised, clearly separated, narrowed gradually towards the apex; stoutly transversely striated; the basal two striæ separated from the others by a space; its lateral slope is similarly striated; the apex of the mesonotum is coarsely reticulated. Scutellum in the middle stoutly transversely striated, the sides bordered by stout longi-

<sup>\*</sup> See also "Descriptions of New Species of Iphiaulax and Chaolta (Braconidæ) from Sarawak, Borneo," Journ. Str. Br. Roy. Asiatic Soc. XLII. pp. 23-52

tudinal striæ. Median segment coarsely reticulated; the reticulations on the lower part of the pleuræ are longish, regular and oblique; above, the striæ form shorter, more rounded reticulations. Coxæ stoutly, irregularly striated; the hind femora are finely, closely punctured, almost striated, the claws with 4 teeth besides the apical one. Transverse median nervure interstitial or almost so, it touching the hinder edge of the transverse basal.

Apart from the differences in coloration this species differs from the other Sarawak species—P. erythrocephalus Cam. in the pronotum being toothed. It belongs to Deraiodontus Bradley (which, however, appears to be identical with Pristaulacus Kieff.  $sensu\ str.$ ) except that it has 4, instead of 2 teeth on the pronotum.

### BRACONIDÆ.

#### Braconinæ.

# Iphiaulax Hewittii, sp. nov-

Luteous; the antennæ, a large mark occupying the front, except on the sides below and extending above to the hinder ocelli where it is roundly narrowed, the base of mesonotum, the centre and sides of median segment, the abdomen and the hinder legs, black; the ventral surface white, with large black marks on the sides; wings to the transverse basal and median nervures yellowish hyaline, fuscous beyond; the stigma black, obscure testaceous behind.  $\mathcal{Q}$ 

Length 8 mm.; terebra 6 mm.

Kuching. September.

Face paler, more yellowish than the rest of the head; rugosely punctured; sparsely covered with long fuscous hair. Apex of mandibles black. Palpi pale testaceous, covered with pale hair. Apex of mesonotum flat. Median segment covered with longish white pubescence. First abdominal segment broad, as long as the 2nd; smooth, its centre near the apex irregularly, stoutly striated; the lateral depressions broad, smooth. The area on the 2nd segment is large, smooth, tri-

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angular, longer than its width at the base; its apical keel short; the lateral basal areæ are clearly defined, smooth, triangular; except on the areæ and the apex the segment is irregularly, closely striated; the 3rd segment is irregularly punctured on either side of the middle, the smooth central part being triangular. Suturiform articulation deep, closely crenulated; there is a narrow obscurely crenulated furrow on the apex of the 3rd segment and an obscure indication of one on the apex of the 4th. Hypopygium black in the centre, the sides pale.

A species closely allied to *I. thepsis* Cam., with which it agrees in colouration, except that the latter has not the head and base of thorax marked with black; otherwise thepsis is easily known by the very much smaller plate on the base of the 2nd abdominal segment—*I. portius* Cam. is similarly coloured, but is much larger; the area on 2nd segment is stoutly bordered by oblique striæ, the 3rd is closely striated throughout and the yellow-hyaline extends to the recurrent nervure.

# Iphiaulax sadongensis, sp. nov.

Luteous, the antennæ, front, vertex, occiput and outer orbits, black, the wings to the lower half of the transverse basal nervure and to shortly beyond the transverse median, yellowish-hyaline, the costa and nervures reddish-luteous in the yellow basal part; the rest of the wings dark fuscous; the basal half of the stigma reddish luteous; the usual cloud in the 1st cubital cellule yellowish-hyaline. There is a small, pyriform mark on the sides of the front at the top of, and touching the eyes; the centre of the 1st abdominal segment and the 2nd and 3rd are strongly, closely longitudinally striated; the 1st with a stout keel down the middle; there is no defined area on the base of the 2nd segment, beyond the centre being more strongly striated.  $\[ \]$ 

Length 13 mm.; terebra 5 mm.

Sadong. August.

Abdomen broad, ovate, as long as the thorax and wider than it. The face and oral region are pale yellowish testace-R A. Soc., No. 46, 1996. ous; they are covered with longish pale hair; in the middle of the face is a deep furrow of uniform width; the face is smooth, flat. Median segment thickly covered with long fulvous hair. Basal abdominal furrows broad, deep, stoutly crenulated; the 1st is broad, deep; the lateral borders smooth; there are deep, smooth furrows on the apices of the 3rd, 4th and 5th segments; the oblique furrows on the base of the 2nd are deep. The sides of the segments are densely covered with fulvous pubescence. Wings very large, wide; the transverse median nervure is not quite interstitial. The hind tarsi are black except at the extreme base. There is a distinct transverse furrow at the clypeus. Palpi yellowish.

This species comes nearest to I xanthopsis Cam., from Ceylon, both having black heads; it is larger and stouter; the 2 may be separated thus:

A broad yellow line on the upper inner orbits, extending from the ocelli to the antennæ; the furrow on the top of the face not reaching to the middle ... ... ... Xanthopsis.

Only a yellow mark on the inner upper orbits; the furrow on the face reaching to the clypeus ... Sadongensis.

# Iphiaulax curvinervis, sp. nov.

Black, the antennal scape, head, thorax and 4 front legs red; the posterior coxæ, trochanters and femora black, tinged with brown; palpi pale testaceous, covered with white pubescence; wings highly iridescent, hyaline, the base slightly, but distinctly infuscated, the costa, stigma and nervures pale fuscous; the transverse median nervure sharply, obliquely sloped in a line with the transverse median; the prædiscoidal nervure roundly curved towards the cubitus, the discoidal cellule being therefore narrowed at the apex. The basal 5 abdominal segments are strongly, closely longitudinally striated; the striation on the 1st segment is sparser and more irregular; in the centre of the apical part is a stout longitudinal keel, which bifurcates at the base; the segment is of equal width throughout and is distinctly longer than the second. The area on the 2nd segment is stoutly striated, becomes gradually narrowed and extends to the apex of the segment. Suturiform articulation

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narrow, crenulated; there is a curved crenulated furrow on the base of the 4th and 5th segments, and distinct transverse ones on the apices of the 3rd, 4th and 5th; the 6th is depressed at the base and is finely closely, striated there. The 3rd segment is suffused with rufous in the middle. The hind coxe are longer than usual; these are 3 times longer than wide. The pubescence on the legs (especially the hinder) is long and dense.  $\delta$ .

Length 8 mm. Hab. Kuching.

This species is distinguished by the oblique transverse median nervure and by the præbrachial nervure being roundly curved at the prædiscoidal cellule towards the cubitus. Otherwise it is not unlike I ezerias Cam.

## Iphiaulax imaus, sp. nov.

Black, the head, pro- and mesothorax and 4 anterior legs red; the wings uniformly dark fuscous, the costa, nervures and stigma black; the basal 5 segments of the abdomen closely, uniformly longitudinally striated; the plate on the 2nd segment smooth and shining, the basal part broader than long, its apex obliquely narrowed; the apical continuation extends beyond-the middle of the segment and becomes gradually narrowed to a sharp point; the suturiform articulation is rufous in the middle. Q.

Length 9 mm.; terebra 7 mm.

Kuching. December, 18th.

Head smooth, the face sparsely covered with long white hair; the head is cubital; the temples nearly as long as the upper part of the eyes; they are straight, not narrowed, with the hinder part rounded. Frontal furrow narrow, deep, extending from the ocelli to the antennæ. Antennal scape with a projection—broad at the base, narrowed towards the apex—on the apex below and extending close to the apex of the 2nd joint. Apex of mesonotum depressed, flat in the middle; its apex is bordered by a smooth, narrow transverse keel; behind which is a crenulated one. The base of

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the metapleuræ and the metanotum in the centre at the base are red; the metanotum covered sparsely with long white hair; the metapleural furrow is wide and deep. The basal half of the central part of the 1st abdominal segment is smooth and shining, and there is a smooth line down the centre of the apical part, this line being aciculated towards the apex. Suturiform articulation deep, closely crenulated; there is no furrow on the apex of the 2nd segment, or on the 3rd; there is a narrow, distinct, crenulated furrow on the base of the 4th. Ventral segments white, with large black marks on the sides. The abdomen is as long as the head and thorax united and is wider than the latter. Palpi black, covered with white hair. Legs thickly covered with short, white pubescence; the middle coxæ are infuscated before and behind.

## Iphiaulax triornatus, sp. nov.

Rufo-testaceous, the antennæ, 3 large marks on the mesonotum, the apical 2 segments of the abdomen, and the hind legs, black; wings hyaline, the costa and stigma black, the nervures paler, the base of the stigma whitish testaceous.  $\mathcal{Q}$ .

Length 7 mm.; terebra 3 mm.

Kuching.

Abdomen broad, ovate, as long as the thorax; the area on 2nd segment small, triangular and with a smooth keel twice its length. The central area of the 1st segment is smooth in the middle, the sides reticulated; the lateral furrows wide, irregularly transversely striated in the middle. The 2nd to 4th segments are longitudinally, closely rugose; the suturiform articulation crenulated; there is a similar furrow on the base of the 4th and a narrower one on the 5th; there are narrower crenulated furrows on the apices of the 4th and 5th. Temples long, not narrowed behind, the hinder edges rounded. Face somewhat strongly but not closely punctured; there is a triangular depression over the clypeus. Malar furrow distinct, Hind legs stouter than usual; the femora on the basal half above and a ring on the base of the tibiæ testaceous: the tarsi are shorter than the tibiæ; thick, the metatarsus as long as the following two joints united. The black apical

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segment of the abdomen is narrowly edged with white at the apex.

Iphiaulax alboornatus, sp. nov.

Rufo-testaceous, the flagellum of antennæ black; the 4th and 5th segments of the abdomen broadly black; the 6th and the sides and ventral surface of the 7th white; the head paler coloured than the thorax; wings hyaline, the basal half suffused with fulvous; the basal nervures testaceous, the apical black; the parastigma and stigma black, the base of the latter testaceous.  $\mathfrak{P}$ .

Length 7 mm., terebra 4 mm.

Kuching. March.

Basal 5 segments of abdomen closely rugosely striated, the striæ becoming weaker towards the apex; area on 2nd segment smooth, triangular, not quite so long as it is wide at the base; the 1st segment is wider at the apex than it is long; the lateral furrows are transversely striated. Suturiform articulation wide, crenulated; it is the only transverse furrow. The abdomen is elongate oval and is slightly longer than the head and thorax united. Head cubital, the temples broadly rounded behind, densely covered with short pale pubescence. Face closely, finely punctured, a wide, deep, short furrow in the centre of the top. Front with a distinct furrow down the centre. Third abscissa of the radius as long as the basal two united; recurrent nervure not interstitial; there is a minute cloud below the parastigma. Parapsidal furrows shallow. The edges of the lobes of the mesonotum are paler than the centre.

#### EXOTHECINÆ.

Spinaria Westwoodi, sp. nov.

Rufo-testaceous, the back of the abdomen darker coloured, the flagellum of the antennæ black, the hinder tarsi black and thickly covered with black hair; wings fuscous, the anterior to the transverse basal nervure yellowish hyaline; the posterior with the basal half yellow-hyaline. Q

Length 8 mm. Kuching. June.

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Head, pro- and mesothorax smooth; the metanotum sparsely punctured, all the abdominal segments closely, strongly longitudinally striated. The spine on the pronotum is stout, long and curved. Near the apex of the propleure are 2 stout, curved keels; in front of them 2 short ones on the lower side; there are 3 stout keels in front of the spine on the pronotum. Scutellar depression large, with 2 keels. Base of metanotum depressed and with a keel down its centre; down the middle, extending from close of the base to the apex, is a longitudinal keel; bordering it on the apical half is, on either side, a roundly curved keel, uniting these with the central; below the middle, is an oblique curved one, from the outer edge of which runs upwards an oblique one; the sides are stoutly keeled, the keel dilated into a blunt tooth below the middle; from these teeth 2 keels run to the inner keel, forming an area, open at the lower innerside, below these are 2 longitudinal keels, forming a closed area, twice longer than wide. Pleural furrow shallow, smooth. The central keel on the apex of the 3rd abdominal segment becomes thickened into a blunt tooth; there is a similar projection on the middle of the 4th, but much larger, and it commences near the base of the segment; the sides of the 3rd segment project at the apex into a stout tooth, narrowed towards the apex; a similar, but longer and stouter tooth, is on the sides of the 4th; the last segment ends in a longish curved spine. The furrows are deep and stoutly striated; the basal slope of the 1st segment is smooth; in the middle are 2 keels, and the sides are also keeled. The median segment, breast and legs are densely covered with fulvous pubescence. The back of the abdomen may be infuscated.

Allied to S. curvispina Cam. and S. dimidiata, West. Both of these species have the abdomen for the greater part black. The species is a Spinaria as limited by Enderlein (Stett. Ent. Zeits., 1905, p. 229), Spinaria being now limited to the species with a spine on prothorax.

## SPATHIINÆ.

Habnoba petiolata, Cam.

This species (described Journ. Straits Branch Royal As.

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Soc. 1905, p. 107) has been sent by Mr. Hewitt from Kuching. It is probably variable as regards the colouration of the legs and thorax and as regards the amount of red they bear. The prothorax in Mr. Hewitt's example is entirely red; the middle lobe of the mesonotum is largely suffused with rufous, the fore legs, except the tarsi, are rufous testaceous, the coxæ being of a brighter tint than the rest; the middle legs at the base are brownish, the tibiæ being lighter coloured than the femora and the tarsi, except for the white basal band, are fuscous. The palpi, it may be added, are long, the maxillary reaching to the base of the metanotum; the 4 anterior femora are dilated at the apex, the fore pair more distinctly than the middle.

### DORYCTINÆ.

Neotrimerus nigrobalteatus, sp. nov.

Reddish testaceous, the sides of the basal two segments of the abdomen and the 3rd and following segments of the abdomen greyish green, the antennæ, an oblique mark on the sides of the 2rd abdominal segment at the area, a transverse one on the side of the 3rd and transverse ones across the 4th to 6th extending close to the sides, black; legs coloured like the thorax, the hinder tarsi blackish; the spines on the hinder coxæ pale yellow; wings to the transverse median nervure fulvous, suffused with fuscous, the rest dark fuscous, the stigma and nervures black.

Length 11-12; terebra 4 mm.

Kuching. November.

Head, pleuræ and metanotum densely covered with longish white pubescence; the mesonotum and scutellum smooth shining, glabrous; the legs, except the tarsi, are densely covered with long white hair; the pubescence on the tarsi is shorter and stiffer; the apices of the joints are spinose. Face rugosely punctured, its centre raised, narrowed below; the clypeus is distinctly punctured. Except on the pleuræ behind, the prothorax is strongly, closely punctured, the pronotum more strongly than the pleuræ, which, below the suture, are irregularly striated. The oblique suture, on the mesopleuræ and that over

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the sternum are crenulated. Metanotum closely reticulated, a keel down its centre; the metapleuræ punctured at the base, irregularly reticulated elsewhere. The basal 4 segments of the abdomen are closely longitudinally striated, the striæ becoming gradually weaker; the base of the 5th segment is weakly punctured; the apical two are smooth and shining. The basal tooth on the hind coxæ is long, curved; and its apex reaches to the end the coxæ; the lower one is much smaller, hardly one fourth of the length of the upper. The 2nd cubital cellule is clearly longer than wide, its apex being not much more than half its length on the posterior side; the 2nd transverse cubital nervure is about the length of the 1st abscissa of the radius; it is shorter than the 1st, the 2nd cellule being thus narrower at the apex than at the base.

There are 5 short, stout spines on the innerside of the fore tibiæ; the abdomen is broader than the thorax; it is longish oval and is as long as the head and thorax united; the ocelli are in a black spot; a keel runs down from them to the antennæ; the antennæ are filiform, much longer than the body. The longitudinal nervure in the hind wings is roundly curved.

#### AGATHINÆ.

# Disophrys tinctipennis, sp. nov.

Luteous, the flagellum and the hinder tarsi black; wings fuscous, the base to the transverse median and to the top of the transverse basal yellowish hyaline, the hinder fuscous, yellowish hyaline at the base. 5.

Length 8 mm.

Kuching. September.

Flagellum of antennæ thickly covered with black, the scape and thorax with fulvous pubescence. Face, clypeus and thorax distinctly, moderately closely punctured. The keel running from the outer ocelli to the antennæ is stout; in the centre is a narrower keel. Middle lobe of mesonotum separated; in its middle, on the basal slope, is a stout keel, which ends in 2 fine ones. Mesopleuræ furrow irregularly crenulated. Scutellar depression large, with 3 stout keels in the middle;

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the apex of scutellum bordered by a stout keel; the scutellum is more strongly punctured than the mesonotum. Post-scutellum stoutly keeled laterally, the united keels produced behind. Areola longer than it is wide at the apex, which is tranverse, the base is narrowed obliquely to a sharp point; this is bordered at the base by a triangular area, the apex being shortly beyond the middle of the areola; a keel runs from its base to the top of the apical slope which is bordered a stout keel; the areola thus formed is four-angled, the base being long and sharp-pointed; the spiracular area is large; on the apical slope is a large central with an irregular keel in its middle and a smaller square area. Below the middle of the mesopleuræ, on the apical half, is an oblique furrow, which encloses with the lower wider crenulated one a triangular area. The keel bordering the sides of the metanotum is twice roundly dilated at the base, the basal being the longer, below these at the apex is a small and a large bluntly rounded tooth. Abdomen smooth; the basal segment is more than twice longer than it is wide at the apex, it is as long as the following 2 segments united. The malar space is half the length of the eyes. Areolet narrowed in front, the nervures touching there; the outer one is obliquely sloped towards the cubitus, the lower, and much smaller part, is sloped towards the base of the cellule.

# Cremnops borneana, sp. nov.

Luteous, a broad band across the ocelli, the antennæ, apex of the hind tibiæ and the hind tarsi, black; wings fuscous; the base of the stigma and the nervure yellow; the base to the transverse median nervure and to near the lower part of the transverse basal yellowish hyaline; a hyaline cloud fills the 1st cubital cellule and extends across to the base of the anal nervure.  $\mathcal{Q}$ .

Length 7 mm.; terebra 4 mm.

Kuching. October.

Head and thorax closely covered with short white pubescence. Palpi coloured like the head. Malar space as long as the eyes. Thorax closely covered with short pale pubescence; R. A. Soc., No. 46, 1996.

mesonotum with a shallow furrow on the basal slope. Areola A-shaped, pointed to the base of the metanotum by a A-shaped furrow; it bears 3 stout, transverse keels, the basal being less distinct than the others; from it stout transverse keels run to the outer edge of the metanotum, the lower ones going beyond the spiracles. Areolet square; the recurrent nervure is dilated backwards at its junction with the cubitus; the transverse median nervure is received shortly beyond the transverse basal. The frontal depression is bordered outwardly by a stout, curved rounded keel.

#### ICHNEUMONIDÆ.

## Pimplinæ.

Epirhyssa tuberculata, sp. nov.

Black, the basal segments of the abdomen tinged with brown; the inner orbits opposite the eyes broadly, the face, clypeus, the outer orbits from near the top of the eyes broadly, a broad, oblique mark on the sides of the pronotum in front, base of tegulæ, a mark on the scutellar keels, a mark, about the same size, on the sides of the scutellum at the base, 2 large marks on the median segment, broadly dilated inwardly at the base of the metanotum, where they are separated by a narrow black line, proceeding downwards along the outerside of the spiracles and having, immediately below, on the apex of the metapleuræ, a smaller mark, longer than wide and dilated above the tubercles, a large mark immediately below these, reaching the sternum at the base and having the lower outer edge bi- if not tridentate; a minute line on the apex of the 1st abdominal segment, 2 large transverse marks near the apex of the 5th, a small, somewhat heart-shaped, mark shortly behind the middle of the 6th in the centre, a much larger mark, twice longer than wide, and slightly narrowed towards the apex, the anterior legs, except the tarsi, in front, a large, somewhat pyriform, mark on the outerside of the middle coxæ, a broad stripe down the middle of the hinder coxæ, the apex of the middle femora below; the posterior almost entirely below and the middle tibiæ behind, bright sulphur yellow. Wings fulvo-hyaline, the

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apex of the anterior (especially the radial cellule) fuscous violaceous, the nervures and stigma black. . . . . . .

Length 28 mm.

Kuching.

Face closely punctured, thickly covered with short white pubescence. Clypeus smooth, broadly depressed in the middle, broadly bilobate. Labrum bilobate, the lobes more widely separated than those of the clypeus, darker coloured and more oblique. The striation on the mesonotum is coarse; on the apex in the middle it is closer and more rugose, more reticulated. Scutellum finely, irregularly transversely striated; the rest of the thorax and the abdomen is smooth and shining. The basal abscissa of the radius is straight and oblique, the apical is broadly roundly curved towards the costa; the recurrent nervure is received beyond the transverse cubital at a slightly greater distance than the length of the latter; the transverse median nervure is received shortly beyond the latter; the transverse median nervure in the hind wings is broken near the top. Antennæ slightly serrate towards the apex; the scape is yellow The hind tibiæ are brownish above, yellowish below. Mandibles black, shortly, bluntly bidentate. Palpi yellow. Temples short, rounded. The tubercles are prominent; the lower part of the metapleuræ project into prominent tubercles, longer than wide, somewhat pyriform, dilated posteriorly above. The 1st segment of the abdomen is long, narrow, about one fourth longer than the 2nd. The disco-cubital nervure is only indistinctly broken. The occiput is almost transverse.

Taking this species as a typical Epirhyssa, the latter genus

may be separated from Rhyssa thus:

Fore wings with an areolet; the 1st abdominal segment shorter than the 2nd ... ... ... ... Rhyssa Fore wings without an areolet, the 1st abdominal segment clearly longer than the 2nd. ... Epirhyssa Cr.

The agreement with them otherwise is very close. In Epirhyssa spiloptera Cam., from Borneo, the 1st abdominal segment is hardly longer than the 2nd in the  $\mathcal{Q}$ .

Xanthopimpla lissonota, sp. nov.

Luteous, the abdomen darker coloured, the antennæ R. A. Soc, No. 46, 1906.

brownish, black above; the ocellar region, 3 marks on the mesonotum, the central irregular, broader than long, the lateral larger, conical, twice longer than broad, almost transverse at the base, rounded and narrowed at the apex, 2 marks on the 1st, 3rd, 5th, and 7th abdominal segments—the 4 middle marks larger, broader than long, the 1st and 4th smaller rounded—and the base of the hinder tibiæ narrowly, black; wings hyaline, the apex slightly, narrowly, smoky, the ovipositor clearly longer than the hinder tarsi. Q.

Length 12 mm.; terebra 4 mm.

Kuching.

Areola 4-angled, narrow; the tooth bearing area oblique. triangular, transverse, sharply pointed on the innerside; the basal lateral area narrowed on the innerside; the outer keel roundly curved outwardly. Face flat, closely punctured; the clypeus gradually, roundly narrowed to a sharp point. 4-angled, shortly but distinctly appendiculated; the recurrent nervure is received shortly beyond the middle. Basal two segment of abdomen smooth, shining, impunctate; the others closely punctured; the transverse furrows narrow, shallow, crenulated. First abdominal segment twice longer than its width at the base; the 2nd square, the others broader than long. Front, vertex and entire thorax smooth, shining, im-Face longer than broad; the clypeal fovea deep. punctate. Scutellum roundly convex.

Belongs to Krieger's Group. I. (Berich. d. Naturf. Gess. zu Leipzig, 1898, p. 92). It is allied to punctata Fab. Sec. Krieger, but, inter alia, wants the spots on metanotum.

Xanthopimpla bimaculata, sp. nov.

Luteous, the head and thorax smooth, impunctate, the mesonotum with 2 large conical spots; the front and vertex broadly in the centre, the occiput with a much broader mark a small mark, wider than long, on the sides of the metanotum, and marks on the 7 basal segments of the abdomen, black; the areola large, 6-angled, longer than wide; wings hyaline, the nervures and stigma black; the ovipositor shorter than the hind tarsi.  $\mathcal{Q}$  and  $\mathcal{D}$ 

Length 12 mm.; terebra nearly 3 mm.

Kuching. February.

Tooth-bearing area 4-angled, of equal width throughout. The black, paler below. Face slightly longer than wide, distinctly, closely punctured. Parapsidal furrows indicated only at the base. The 1st abdominal segment longer than it is wide at the apex; the middle segments are more strongly and closely punctured than the basal or apical. Areolet 4-angled; appendiculated, the recurrent nervure received in the middle.

Belongs to Krieger's Group E.  $(l.\ c.\ p.\ 81.)$  characteristic are the 2 marks on the mesonotum, instead of the usual 3. The  $\delta$  is similarly marked, but with 8 pairs of black marks on

the abdomen.

#### CRYPTINÆ.

Polyaenus spiniferus, sp. nov.

Black, face, clypeus, mandibles except the teeth, palpi the orbits narrowly, except near the top on the outerside, the line widest at the vertex, a line on the apical half of the pronotum, narrowed in front, tegulæ, scutellum, a broad linebroadest on the sides—on the sides and round the top of the metanotum, covering the spines, the spines, tubercles, a large oblique mark, twice longer than wide, near the middle of the mesopleuræ, commencing at the base and reaching to the base of the apical third, a curved mark below the hind wings, a large mark on the centre of the metapleuræ, broad and rounded at the base, gradually roundly narrowed towards the apex, a broad line, dilated backwards laterally, on the apex of the 1st abdominal segment, lines covering slightly more than the apical third of the 2nd segment, a slightly narrower one on the 3rd and the other segments, except narrowly at the base, yellow; the ventral segments are for the greater part yellow. Four front legs pale fulvous, their coxæ and trochanters yellow; the hind coxæ yellow, broadly black round the outerside and along the top of the apex, the trochanters yellow, broadly marked with black above, the femora rufo-fulvous, black at the apex; the tibiæ and tarsi yellow, the former with the base narrowly and the apex more broadly black. The antennæ

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have the 5th to the 20th joint white, spotted with black above. Wings hyaline, the nervures and stigma black. Q.

Length 11 mm.; terebra 2 mm. Kuching. December and March.

Face strongly, the clypeus more weakly punctured. Front and vertex smooth and shining; the frontal spines are stout, about twice longer than they are thick at the base. tum rugosely punctured, shining; the parapsidal furrows are shallow, crenulated. Scutellum flat, sparsely punctured, except the apex; the post-scutellum smooth, shining. metanotum behind the keel is transversely striated-punctured: the rest coarsely, closely reticulated; the spines are about twice longer than they are wide at the base; their apex is rounded. Pleuræ closely strongly punctured; the lower half of the propleuræ strongly, closely striated; the apex of the mesopleuræ is irregularly striated. Scutellum flat. Metanotum with one transverse keel, and with a closed area, longer than wide, in the middle at the base. Temples very short, almost obsolete at the top behind the eyes. Malar space distinct, half the length of the antennal scape. Transverse median nervure interstitial; the recurrent nervure is received near the apex of the areolet. Transverse median nervure in hind wings broken shortly below the middle. Tubercles small. Post-petiole widely dilated; the base of the petiole wider than the height of the sides.

The  $\delta$  is similarly coloured, except that the marks on the pleuræ are smaller; the antennæ are much longer than the body, the post-petiole is narrower, longer compared with its width; the antennæ are not serrate and are broadly white in the middle.

This species does not appear to differ much in generic characters from the neotropical species of Polyænus; the only differences appear to be that in the American the transverse median nervure is not interstitial, but received behind the transverse basal; that the temples are longer, and distinctly obliquely narrowed, that the scutellum is not so flat, that there is no distinct area at the base of the metanotum, and that the abdominal petiole is longer, narrower and not nearly so much widened at the apex.

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Tosquinet, it may be added, has described a species  $P.\ cingulatus$  which he referes to Polyænus from New Guinea. (cf. Mem. de la Soc. Ent. de Belg. X. 45). Polyænus may be described as a Skeatia with 2 spines placed side by side on the front and with the parapsidal furrows less distinct.

## SPHEGIDÆ.

Sphex (Isodontia) Hewitti, sp. nov.

Black, the apex of the 2nd abdominal segment narrowly, the apical half of the 3rd and the whole of the following abdominal segments, the face, clypeus, lower inner orbits, and tubercles covered with silvery pubescence; the hair on the head long, dense, fuscous, it is longer on the vertex and on the outer orbits below, than else where; the hair on the mesonotum is short, dense and fuscous; it is sparser and shorter on the scutellum and as dense and longer on the median segment. Basal segments of abdomen bare, the apical densely covered with bright fulvous pubescence. Wings almost hyaline, highly iridescent, the radial cellule and a brown band (extending to the 2nd recurrent nervure) round the apex fuscous tinged with violaceous.  $\delta$ .

Length 28 mm. Kuching. March.

Eyes slightly, but distinctly converging at the top. The posterior ocelli, on the outer side, are united to the anterior by a narrow furrow, from the anterior a narrow one runs down to the antennæ. The vertex and upper part of the front one finely, but not closely, punctured. Clypeus broadly, roundly, uniformly, convex; its apex almost transverse; there is a minute depression at the apex, shallow and hid by the pubescence. Mandibles bidentate, the teeth large, diverging, the lower longer and sharper than the upper. Pronotum placed below the level of the mesonotum and clearly separated from it; its apex broadly depressed, obliquely depressed towards the mesonotum. Mesonotum somewhat strongly, but not deeply punctured; the scutellum is a strongly punctured and has a narrow smooth line down the middle. Post-scutel-

lum rounded, clearly separated, not furrowed or tuberculate in the middle. Metanotum closely, distinctly and deeply punctured, the punctures appearing to form reticulations in places; there is an oval fovea in the centre near the end of the upper part; the apical slope in the centre above projects, the projection being broader than long; the part below it is slightly depressed; the spiracles are bordered behind by a deep, curved furrow; the sides of the apex of the metanotum are bordered by a deep, curved, crenulated furrow. Abdominal petiole nearly twice the length of the hinder coxe, curved, irregularly punctured above, on either side of a shallow longitudinal furrow. The 3rd joint of the antennæ is slightly longer than the basal two-joints united; the 4th is about one fourth shorter than it; the latter is shorter than the 5th. The 1st and 2nd transverse cubital nervures are obliquely sloped, parallel; the 2nd cubital cellule is clearly longer than wide; the 3rd cubital cellule is much narrowed in front, being there not much longer than the space bounded by the 2nd transverse cubital and the 2nd recurrent nervures; the 1st recurrent nervure is received about half the length of the third abscissa of the radius from the 2nd transverse cubital, the 2nd about its length from it. verse median nervure is not quite interstitial; the neuration being very similar to that of S. umbrosus, cf. Kohl, Ann. K.K. Natur. Hofmus. V. Taf. VIII. f. 10. Claws bidentate, the basal slightly longer and thinner than the apical. The labrum is The 3rd to 5th broadly rounded, neither toothed nor keeled. ventral segments are roundly incised, the incision on the 5th being deeper than on the others; the last ends in a sharp point and is covered with long fulvous hair. The abdominal petiole is shorter distinctly than the hinder tibiæ, being almost of the length of the hinder metatarsus.

Should be readily recognized by the red apical segments of the abdomen from the known Indian and Malay species. In this respect it agrees with S. confrater Kohl from New Britain with which it cannot well be confounded. Sphex Franzi Cam. Ann. Mag. Nat. Hist., April 1902, 246 from Borneo has the abdomen ferruginous, except the petiole and the wings are fuscous violaceous.

# POMPILIDÆ.

Salius Ridleyi, sp. nov.

Claws with 1 tooth. Black, the abdomen with purple reflections; the 2nd and following joints of the hind tarsi, except at the apex, testaceous; wings blackish; fuscous-hyaline, slightly tinged with yellow, between the transverse median and the transverse basal and the 2nd transverse cubital and the 2nd recurrent nervures; the hind wings blackish at the base, the rest fuscous hyaline, tinged with yellow.  $\delta$ .

Length 21 mm.

Matang.

Front and vertex sparsely, the outer orbits densely covered with long black hair; the lower two-thirds of the inner orbits lined with obscure testaceous. Clypeus minutely shagreened, and with some scattered punctures; bare, the apex broadly rounded. Labrum large, shagreened; its apex rounded. black, bare, the apical joints covered with a pale pile. Thorax velvety, the prothorax and the median segment covered with long black hair; the sides of pronotum broadly rounded, not projecting. Post-scutellum prominent, clearly separated, tuberculate, the base with a straight oblique slope; its apical slope is shorter and steeper. The striation on the metanotum is coarse; the lateral tubercles are very prominent. pleuræ finely, closely, obliquely striated. Tibiæ sparsely, the tarsi more thickly spinose; the spines short; the long spur of the hind tibiæ is thickly covered with black hair at the base; it is about one third of the length of the metatarsus—as long as the 2nd joint. The 2nd transverse median nervure is dilated in the middle, where the recurrent leaves it, the latter being also dilated (but not so strongly) at the base; in the hind wings the transverse anal nervure is received beyond the cubital.

Comes near to S. fulgidipennis Sans. and S. iridipennis Smith. The colour of the middle joints of the hind tarsi may be clear yellow, as it is on the 2nd joint of one leg, i.e. the testaceous colour of the other joints may be owing to discolouration. The coloured tarsal joints and the testaceous (yellow?) line on the inner orbits are probably characteristic.

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#### VESPIDÆ.

## Vespa annulata, Smith.

This form has been taken by Mr. Hewitt at Santabong Matang (December) and Kuching (January). In the recently published Monograph of the genus *Vespa* by the Viscount du Buysson (Ann. Soc. Ent. de France, LXX, III, (1904) p. 542), annulata is considered to be a variety of bellicosa Smith. I am not sure but that when the 5 has been discovered, it will be proved to be a good species.

If not a distinct species it certainly forms a well-marked race of bellicosa.

Vespa bellicosa (type) has been taken by Mr. Hewitt at Pulo Burong.

# Ischnogaster clypealis, sp. nov.

Black; the clypeus, except for a black, broad line, of equal width, transverse at the apex, about twice wider than long, on the upper two-thirds, a line on the base of the pronotum, one round its apex, a somewhat semicircular mark on eitherside of the base of the scutellum, 2 longer, almost united marks on the post-scutellum, the apex of the metanotum, the mark divided by the central furrow, the sides largely, roundly dilated, backwards and forwards; a large conical mark (the narrowed end below) on the top of the mesopleuræ, its apex bordered by the furrow, a large curved mark, roundly narrowed above, straight and oblique below, an irregular conical mark on the metapleuræ the upper part dilated at the base, a line, 4 times longer than wide, on the sides of the node of the petiole, a mark narrowed to a sharp pointed on the sides of the 2nd segment at the base, a large, transverse conical mark on the sides, the ends rounded, the narrow end on the innerside, a longish curved mark, narrowed at the base on the sides of the 2nd ventral segment and a shorter, broader one, on the sides of the 3rd yellow; the yellow on the abdomen being paler than it is on the head and thorax. Four front legs vellow, largely marked with brown above, the middle more largely than the anterior, their tarsi are for the greater part brown; the hind legs fuscous, suffused with yellow, their coxæ

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yellow above. Wings hyaline, the nervures and stigma black; the 4th abscissa of the radius distinctly longer than the 3rd  $\circ$ .

Length 13 mm.

Bidi, December. Kuching, October (Shelford).

Flagellum of antennæ fuscous below. Pubescence on the front and eye incision pale golden. Apex of mesonotum finely closely, longitudinally striated; the basal half of metanotum, on eitherside of the furrow, more strongly, obliquely striated. Pleural furrows weakly crenulated. Abdominal petiole as in *I. nigrifrons*. The 2nd and 3rd transverse cubital nervures are straight and parallel.

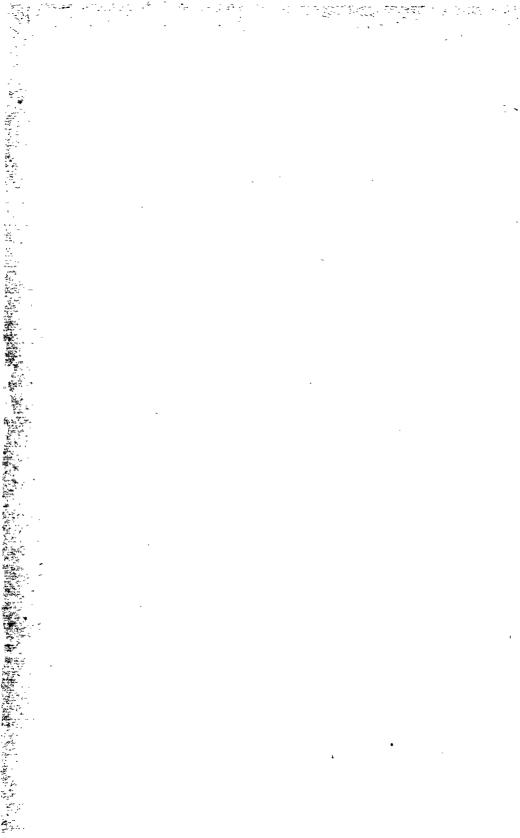
Allied to I. nigrifrons and I. nigricans. These 3 species

may be separated thus:—

a. Clypeus yellow, with a broad black mark on the top, the yellow marks on the pleurae large ... Clypeulis.
b. Clypeus black, the marks on the pleurae small.

b. Clypeus black, the marks on the pleurae small. Pleurae black, mesonotum and abdomen immaculate, metanotum longitudinally striated ... Nigricans, Cam. Pleurae for the greater part rufous, mesonotum and

abdomen maculate with yellow, metanotum transversely striated ... ... ... ... ... ... Nigrifrons, Sm.



# Dyak Ceremonies in Pregnancy and Childbirth.

BY REV. WILLIAM HOWELL,

As soon as a woman is enceinte, restrictions come into These restrictions are binding on the husband as well as the wife. It is forbidden them to cut off creepers that hang over the water or over the road, lest the mother would suffer from haemorrhage after delivery. It is forbidden to dam a stream, to plait the rattan for fixing the adze, to make the broad plaiting for the hilt of a parang, to set up a dam for the fish-trap (bubu) and to drive a nail into a board lest the woman should have difficulty in the delivery. It is forbidden to pour out oil, lest the child should suffer from (tuli) inflammation of the ears; to fix the parang in its hilt lest the child be deaf: to break an egg, lest the child be blind; to plant a banana plant lest the head of the child be large; to burn the wood of the ficus to warm oneself, lest the child be dumb; to kill any animal lest the child be deformed and the nose bleed; to scrape smooth the shell of a coconut, lest the child's hair should not grow; to bring a fresh-water turtle into the room, lest the child should not be born; to dye anything black, lest the child be black.

As for the woman, if she goes anywhere she must return by the same way that she went so that the child should not know how it is to be delivered. It is further forbidden to eat anything in a mosquito curtain, lest the child should be still-born; to carry stones lest the child should be paralysed; to conceal anything, lest the delivery be difficult; to cast stones into the water, lest the child be not delivered and the mother die; to bend into a circle any piece of wood, else the child will not prosper; to hang a scar lest the child should cry the whole day and night.

There are several other restrictions of a minor character which are not worth mentioning. But it is interesting to Jour. S. B. R. A. Soc., No. 48, 1908.

notice that in the case of nearly all these restrictions there are ways in which the above limitations may be circumvented and no evil effects follow. For example, though a man may not kill an animal yet if he does kill anything and runs away immediately then returns a few minutes afterwards and make some remarks aloud of this nature, "I wonder who killed this animal?" he has nothing to fear. A nail may not be driven into a board, but if a man drives a nail in gently a little way and then pulls it out again, he may drive the nail in all the way, and no law is broken.

The whole period of a woman's pregnancy is passed in the deepest anxiety and fear lest the antus (spirits) may assault her and her innocent babe. An ill dream or a small accident such as a fall is considered a portent signifying imminent danger to the child or perhaps it may be a portent signifying coming danger during her delivery, and therefore a sacrifice of a fowl must invariably be made to propitiate the spirits. It is not unusual to hear of a woman talking about another and telling how many fowls have been killed to save her during her pregnancy.

It is considered to be a fineable offence if the husband should wilfully violate any restrictions. The wife's relations would immediately bring him to justice.

When the time of delivery is come and while she is in travail, two or three midwives are called to her assistance to accelerate the birth of the child. Nature is not allowed to pursue its own course but force is applied.

As soon as the child makes its appearance into the world, a signal is given by beating a bamboo receptacle with a stick, or a brass gong is struck, or maybe a gun is fired to announce that a child is born in the house. Immediately follows a religious ceremony a fowl being waved over the heads of all present, including the infant and its mother. The fowl is then killed and the blood is smeared on the foreheads of those present.

After the mother and the child are washed and dressed, the afterbirth is deposited in a plaited bag and hung on a tree either in their cemetery or in their tembawai the site of their former house. The infant is sprinkled with a compound of

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pinang (betelnut) and lawang (zedoary) is bandaged and made to lie on the spathe of an areca palm, a cloth is put round it, and a Dyak sheet hung over it. One of the women who assisted at the birth washes the child and cuts the umbilical cord. She is afterwards rewarded with a parang, an entadu plate, and a long piece of the black tina (black split rotan worn round the waist). The mother is seated with her back against a blazing fire, she drinks freely of ginger-tea to facilitate her discharge.

As soon as the umbilical cord has dropped off, the infant, for the first time, is taken to the bathing-place. The man who carries the child takes a fowl with him. As soon as they come to the bathing-place the fowl is killed and a wing is cut off. If it be a male child this wing is tied on with a piece of red thread to a spear, and if the child be of the other sex this wing is tied on to an implement used by Dyak women in weaving (leletan). On the fourth day the spear or the leletan, as the case may be, is taken back to the house.

When the child is able to look about, to laugh, to turn on its side, to roll over, to crawl, to go on all-fours, to sit up, to walk holding on to something, to walk by itself, the restrictions with regard to the killing of animals or snakes are still binding, the child has not cut its teeth. As soon as this has taken place there is an end to all restrictions. If the child dies before it cuts its teeth the parents do not observe the mourning customs.

The Dyaks of old, it appears, did not know how to assist a woman when she was in travail, consequently many brutal practices were adopted.

The knowledge was first came to be possessed by a certain man named Kelili Badak Resa, whose wife was Teburi. When his wife was enceinte he went out into the jungle with a blowpipe. There he saw the maias (orang-utan) assisting the female at the birth of its young and he saw that they used lia (ginger) and also bandages. Afterwards his wife gave birth to a child and Kelili Badak Resa was able to assist a woman when she was in travail in the same way as the maias did. After his child was born he called him Maling, and gave him the title of Panting Bunga Mengala.

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It must not be omitted that after a woman has given birth to a child and before she is bandaged, ground ginger is placed on the abdomen and is changed once or twice a day. This process continues for a month or perhaps less, as the case may be, while the woman is still drinking the ginger-tea.

The husband or whoever takes away the afterbirth to bury or hang on a tree is solemnly warned by the mother not to look to the right or to the left as he leaves the room, lest

the child might squint.

As the mother sits with her back to the fire in the room holding in her hands the handle of a native adze (bliong) she presses it to her stomach to assist the course of nature. For twenty-four hours she is not allowed to drink water, but if she does, it must be very little and first warmed lest fever should set in. Her food is light and simple. The husband goes out to get certain kinds of fish which is first smoked before it is eaten.

The mother is not allowed to sleep for twenty-four hours after giving birth to a child, nor is she even allowed to lie down. One would think that after such a fatiguing time, a rest was most essential and to be deprived of it would be detrimental to health. Strange to say it is not so.

The period of a Dyak woman's confinement is doubtful. It depends entirely on the strength of the woman. I have known several cases of women going out three days after their

confinement to the paddy fields.

The person who takes away the afterbirth brings back with him a young shoot of a kind of fern (*Kreniong*) for his spear, a leaf of a kind of fern (*Kalindu*) for his shield, and a kind of grass (*Kejejuru*) for his plume on the head. These things are stuck up in the room.

It is interesting to know of other restrictions which come into force after a woman has given birth to a child. It is forbidden to eat prawns lest the child beats a retreat when he is on the war-path; to eat eggs lest the child should have sores on the head; to eat the fern called paku, lest the child be exhausted on the war-path. Pork can only be eaten when the child begins to bite or suck its toe. It is forbidden to

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thresh cotton in the house or village, lest the mother should feel stiff; to prepare a kind of lily for thread, lest the mother should feel a crazy sensation; to lie down on a bemban mat, lest the mother should have rheumatism; to give suck to the child lying down, lest the child should be deaf; to give suck to the child in the water lest the child should have bad teeth; to eat sugar-cane, lest the mother should give birth frequently.

It is very often the case that the mother has no milk for the child for perhaps two or three days or a week after it is born, and the child has to live on masticated cooked rice. It is believed by Dyaks that a kind of land crab (grama) when

cooked and eaten by the mother will produce milk.

Enough has not been said about the ceremony of taking the child to the watering place to bathe for the first time. It is not necessary to repeat what has already been written but it is a very solemn ceremony. Every family has its own peculiarities of ceremony, which are more or less attached to religious rites. With some families the village or house is tabooed when a child is born. The doors are marked with sign to denote non-admittance to strangers until the umbilical cord of the child has dropped off. Anybody trespassing in the house or village is not allowed to leave until the umbilical cord has dropped off, which may be five or seven days. Should any one leave the house before that time he is liable to a heavy fine of a full-grown pig. Unless this custom is carried out, the child might suffer from blindness.

Once on my usual tour round my mission at a place called Pua-ai, one of my followers entered into a large village when it was too dark to discern anything, to buy some rice for our consumption. He was detained in the house. Three of the people in the village came to see me and brought the rice which he bought and explained matters to me. This was unfortunate as I could not stay there more than two nights, so I had to redeem my friend by paying for a large pig.

After the umbilical cord has dropped off the village or house is no longer tabooed and the marks or signs are taken

off. Some families have not got such customs.

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I must mention one case in which I was the innocent victim. It happened in a Christian family whom I had converted and baptized. To my great surprise and indignation when the wife was confined, the house was pronounced tabooed, but I entered it. I was told that I had incurred upon myself a heavy fine. The wife explained that she had lost an eye. It was because some one had entered the house when she was born. With much difficulty and persuasion I answerd her that every Christian was to give up all such superstitions for we had One to protect us against such calamities. I also assured them that if the child was to be so ill-fated I would be responsible for it. She has since had six children none the worse for it.

The ceremony of first taking a child to bathe is called by the Dyaks nganjong mandi which means to take to bathe. The mother calls a maiden and asks her to catch a fowl. husband or anybody waves the fowl over the child and then kills it. The maiden who is asked to catch the fowl is honoured by being asked to carry the child to the bathing-After the fowl is killed, a wing is deposited in an areca spathe with some ashes. The maiden carries the child in a gaudy home-made blanket, wears a gaudy sun-hat, holds in one hand ignited lukai, which is the bark of the lukai tree. marches down to the bathing-place gracefully, and the mother follows with a little boy armed with a spear and the spathe of the areca, containing the ashes and the wing of the fowl. When the bathing-place is reached, the wing of the fowl with the ashes in the spathe of the areca, is pierced with the spear and placed standing alongside the bathing place. The maiden then walks gently down into the water to give the child its ablutions, or rather to introduce the child to the general They return to the house and the spear is bathing-place. left behind. When the house is reached, beads are threaded and tied round the legs, to act as eyes to prevent the child from slipping. Beads are also tied round the hands in order not to make a miss when throwing a spear. The lips of the child are slightly besmeared with bugs in order that when it chews the lips might appear red. It is made to suck the tail

of a Kli fish to prevent it from having thrush too soon. Sparrows' eggs are dashed on its head to enable it to endure the rain when its mother takes it to the farm.



# The Menagerie at the Botanic Gardens.

#### BY H. N. RIDLEY.

The collection of living animals in the Botanic Gardens in Singapore dates from the days when the gardens were the property of the Agri-Horticultural Society. This society was founded in 1859, but not finding sufficient support from the general public to develop and maintain the grounds adequately, eventually made over its property to the Government in 1874, and in 1875 Mr. J. Murton was appointed Superintendent. Zoological part of the garden seems however to have been at first under the control of Mr. Krohn, who publishes in 1876 a report on the Zoological collections. That year Mr. Cheang Hong Sin presented a monkey house to the gardens, which still exists, and a list of the animals in the gardens was published. It included a rhinoceros, sloth-bear, kangaroos, and other animals, and a number of birds. In 1878 it was decided to dispose of the larger animals and most were sent to the Calcutta Zoological Gardens. Birds, monkeys and small animals were however kept. From 1888 the aviaries and enclosures were increased, and till 1902 the collection became very representative of the fauna of the Malay peninsula and islands. No funds were granted by the Government for its up-keep after 1881, but its expenses were paid out of what could be spared from the Gardens Vote. Many of the animals and birds were presented by various donors, so that the expenses were merely feeding, and housing. The cost being from about £100 to £150 per year when the collection was at In 1902, an admirer of Zoological Gardens urged that the collection was worthy of a better class of houses than could be afforded from the Gardens Vote, and an estimate for improved and more ornamental houses was prepared, but it was considered too expensive by the Government, and an

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order was received to abolish the menagerie in 1903, which had to be gradually carried into effect.

Perhaps there are few places in the world more suited for a Zoological Garden than Singapore. The climate is well suited for all the tropical animals, the cost of keeping them is much lower than in most parts of the world, for firing, an important and expensive item in many gardens, is unnecessary; forage for the deer and other herbivorous animals, costs little or nothing, and fish for the piscivorous birds is readily procured. Animals of great interest can be procured for a small cost, and indeed a great number have been presented and offered to the gardens. The neighbouring islands and mainlands produce many animals which cannot be kept in any of the European or American Menageries, but which thrive well in Singapore, and even breed in captivity. Notable successes in this way in the Singapore Gardens are the successful breeding of the Jackal, the Kijang, (cervulus muntjac) the Napu (Tragulus Napu) and the hybrid monkeys and the green viper none of which, as far as I know, have previously bred in captivity elsewhere.

To the large number of passengers who visit Singapore on their way eastwards or westwards a Zoological collection is very attractive, and the menagerie in its best days was known all over the world, and was the first thing asked for by the visitor. There seems also something eminently suitable in having a menagerie in the colony founded by Sir Stamford Raffles who was also one of the founders of the finest Zoological Gardens in the world,—that of London.

Animals in captivity. There are a certain number of people in the world who assume that an animal must be very unhappy in captivity, and especially if their ideas of what any given animal should enjoy do not concur with those of the animal itself. I suppose all keepers of menageries have received from time to time the most ridiculous letters with suggestions as to how to treat animals, of which the writers often know not even the name still less the habits. The descendants of the man who buttered the hay for his horse are by no means extinct.

When the Gibbon (Hylobates) was proudly giving its well-known solo in its best style to an audience of globe trotter's, one mistaken individual rushed wildly into the office to say that the monkey was in great pain and making a great crying. On another occasion a lady wanted someone to be prosecuted because a fine tigress called regularly at sundown, and she thought it must be ill. Others whose idea of the shape of a living tiger was based on a badly stuffed Museum specimen think that a tiger whose body is not like a bolster must be starved, whereas a tiger is almost a greyhound among cats when in good condition.

As a matter of fact animals as a rule not only become quite accustomed to captivity in a very short time, but usually prefer it to a wild life. They get their food regularly and without having to hunt for it and can spend the rest of their day playing about or sleeping. Animals which have been in cages for quite a short time are helpless when they are turned loose or escape. People who have kept pet monkeys and on going home wish to get rid of them sometimes turn them loose in the Garden Jungle to join the other wild ones, which is as considerate as to send a child away to find and make friends with a tribe of savages. The monkeys thus released dare not go near the wild ones, do not know how to get food, otherwise than by going to the nearest house where they sometimes arrive in a starving condition. Some pelicans presented to the Gardens after remaining in an enclosure for less than a day, were put on the Garden Lake, where were plenty of fish. They got off the Lake at once and stood on one of the roads flapping their wings and opening their beaks at any carriage which came by to the alarm of the horses. Then they walked straight back to the enclosure and waited outside the door all night till the keeper returned and let them in. Some phalangers which escaped one night were very puzzled what to do. All but one sat on the top of the cage all night. The remaining one rambled aimlessly along the path where it was found next morn-Squirrels, musangs, and such small animals if they escape usually take to the woods naturally, but often remain near the cages for a long time before they disappear. If an

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animal dislikes captivity at all, it is easily seen. It mopes, or is restless, feeds only when no one is by, and is certain to pine away soon. The big civets Viverra tangalunga and Pagurus lencomystax particularly dislike a bright cage. Being nocturnal animals, only coming out after dusk, the light annoys them very much and the Viverras dislike being looked at by a crowd of people and become very nervous. To put these animals in a fine open cage that looks nice from a popular point of view is cruel. The cages should be half dark, when the animals do very well and live for many years. Curiously some animals and birds much prefer small cages to large ones. Some love birds (Loricula galgulus) were put in an ornamental canary-cage, which one would have thought they preferred to the round rattan cages in which the Malays keep them and in which their heads nearly touch the top. This did not suit them at all, and nearly all died in a few days. The remaining two were put back in the Bamboo cage and lived quite well and happy.

The only way of knowing what an animal thinks is comfortable and snug is to keep it and observe its ways. It will soon let you know what it likes, which probably does not

at all fall in with your ideas of what it ought to like.

# AN ACCOUNT OF ANIMALS KEPT.

## Quadrumana.

Simia satyrus, L. The Mias. Orangoutan.

This has often been on view. The animals are obtained from Sumatra and Borneo and are usually young, but very large adults have not seldom been brought to Singapore. Young Mias are very quiet and tame, but full grown adults are dangerous and require a very strong iron cage. The animal is very delicate and liable to a disease resembling cholera which seems almost invariably fatal. A good deal of the art of keeping one healthy consists in giving it a varied diet. Bread, boiled rice, pineapple, plantains. eggs occasionally, sugarcane, kangkong (Ipomea aquatica) or some such green stuff suits it well. When young and not

dangerous it is allowed to go out for walks by itself every day, to climb on the trees, and amuse itself. It requires a box or basket to sleep in with a rug, or bit of sacking to wrap itself with. It appreciates alchohic liquors especially if sweet, such as port but it will often take whisky or beer. One which is now in the London Zoological Gardens smoked cigarettes or cigars, lighting one from the other, knocking off the ash, and puffing the smoke through its nose.

The Mias is always a quiet slow moving beast, and being constructed for arboreal life is not in its element on the ground. It is very human in the way it uses a blanket and pillow, carefully arranging the pillow under its head, and drawing the blanket over itself, and when it has arranged this to its satisfaction and lies on its back peacefully smoking a cigarette, it looks more than ever like an indolent man. Young ones rarely make any sounds with the mouth, but when quite young if annoyed it cries like a child, stamping its feet on the ground. When older, about 4 or 5 years old the Mias does not cry, and seems to be almost dumb, occasionally grunting, and blowing with its lips when vexed. They laugh however when tickled, and often, at about seven years old quite loud. The last one kept in the Gardens, was very fond of swinging on a door, sitting on the top and pushing itself backwards and forwards like a child on a gate. When young they are very docile and obedient and very much attached to anyone who is kind to them. Many are fond of having a common monkey to pet and play with, others seem to find the small monkey a bore, and a nuisance.

When pleased with anyone they protrude their lips to kiss them, and they often kiss each other.

The youngest I have seen were a pair brought for sale, undoubtedly twins as they were exactly the same size, and age. They were very scantily provided with hair. The male was very active, moving about briskly like one of the common monkeys. This baby-activity soon goes off and as they become older they seem to become more indolent.

As they grow the hair becomes longer and denser especially apparently in the male, but later in life they often

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appear to lose the hair on the body to a considerable extent, and the female sometimes at least becomes almost nude about the breast and abdomen when she gets near the breeding age.

All evidence we have seems to show that the Mias develops at the same rate as a man, the teeth changing at the same period of life. Practically however nothing is known of the later development.

There are undoubtedly several forms of the Mias, perhaps species differing in the presence or absence of fleshy flanges to the face, size of apparently full grown animals, and color of the hair, which varies from bright orange colour to dark brown.

## Hylobates syndactylus.

The Siamang is very seldom to be procured. I only remember to have seen two in captivity. One of which a very young one was in the Gardens for some time. When happy it makes a very loud booming noise, which can be heard far away. A young one brought for sale by a Malay, lived in a cloth bag, into which it would jump and its weight pulling the strings closed the bag, in which it would sleep curled up.

# H. Agilis.

The Wawa, is one of the most popular pets, and lives well in captivity, and a number have been kept in the Gardens menagerie. There are three colour varieties; black with a white face the commonest, white, and grey the scarcest form. They are usually very gentle unless illtreated, and always give pleasure to visitors by their marvellous agility, and by their weird song or wail. They usually sing shortly after sunrise, and in captivity also often when there are a number of visitors looking at them. They have few other sounds, a kind of low plaintive wail when they are very friendly, and a kind of grunting when they are on heat, are all the noises they make. The food is boiled rice, fruit, sweet potatoes, bread, etc. They have never bred in captivity.

The Wawa often lives a long time and specimens have died of old age in the Gardens; but there was no clue to their age. The chief disease they are liable to is pneumonia from a chill, especially during heavy rains, and on one occasion an infectious stomatitis, killed two Wawas and a Siamang, all in the same cage, very quickly.

Semnopithecus.

The long tailed monkeys known as Lotongs are not at all easily kept in confinement. Even the Malays consider them very difficult to keep. The following species have been kept for a longer or shorter period.

Semnopithecus cristatus.

A specimen of this handsome monkey only lived a short time dying rather suddenly, apparently from heat.

S. rubicundus.

A very old specimen was obtained and kept for a short time. Its bright red fur and light blue face gave it a most comic appearance, which was increased by its looks of indignation when it was laughed at.

S. maurus.

A black species was kept also for a time.

S. sp.

A quite white monkey said to have come from Sumatra, lived for a short time, but it was very old and died of old age not very long after it was obtained.

Macacus cynemolgus.

The K'ra, has always been kept on view. It is a very easy monkey to keep and breeds readily in confinement. There are a number also wild in the Gardens.

 $M.\ fasciatus.$ 

The Japanese monkey; one of these was deposited for a time in the Gardens.

M. nemestrinus.

The Berok was always kept, a monkey very easy to keep but which never breeds in confinement so far as I know. R. A. Soc., No. 46, 1906.

Hybrids between M. cynomolgus and nemestrinus however are readily bred.

M. umbrinus.

The Nicobar monkey resembles the K'ra, but is darker in colour and much larger. One presented by Dr. Abbott became pregnant by a K'ra, but both mother and child died shortly

after the birth, apparently from weakness.

The first hybrid monkey that was produced was the offspring of a male K'ra with a female Berok, in 1895. He is still alive in the Zoological Gardens, London and a very handsome powerful monkey, but became rather savage, attacking the other ones in the cage and had to be separated. He quite combines the appearances of both the parents, his long face, and habit of walking on all fours reminds the observer of the Berok, his fur is colored like that of the K'ra, the tail is much longer than that of the Berok, but much shorter than that of the K'ra, and he carries it elegantly arched, like a lion, his keeper would say. He was sent to the English Zoological Gardens in 1905, where he is at present.

The other hybrid was between a male Berok and a female of the short haired Cynopithecus niger. In the same cage was a very savage male Cynopithecus niger of the long haired form. He would not breed with the other Cynopithecus and did not seem to take any notice of her. The female became pregnant but died at parturition being unable to deliver herself of the young one, and ewing to the ferocity of the male no one could go into the cage to assist her. The young one was fully developed and had some characters of both parents. It was preserved in spirits at the museum.

# General Notes on Monkeys.

So little seems to be known as to the habits of the commonest monkeys that the following notes may be of interest. Macacus cynomolyus.

The K'ra is the commonest and most conspicuous species here. It inhabits edges of jungle and small woods but seldom goes into high jungle. The animals live in small families

presided over by a large male. There has long been a number of this monkey in the Botanical Gardens jungle, but of late they have diminished in numbers owing to the clearing away of the woods in the neighbourhood, and the failure of food supply due to this is probably the reason of their diminished numbers. There are now two families of them, one in the Upper Garden and one in the Economic Garden. Each of these families consists of two or more adult males, some younger males and a number of females. It would be perhaps incorrect to say that all these are descended from a single pair, or two pairs, but as there has not apparently been any admixture of fresh blood for very many years, they must all be very closely related. It is true that residents have on several occasions released their pet monkeys in the gardens so that they can join the wild ones, but the freed ones do not usually do so but almost invariably go to the nearest house for food and remain there till they are either caught or shot as nuisances. In a family of monkeys no stranger is admitted without a fight. a female is put with the family the females attack her. a male the males attack him. He or she generally gets badly bitten and sometimes killed. If the stranger can hold his own he may be accepted, and eventually may, if powerful enough, become head of the clan. In fighting, the top of the head and the thorax are the points generally attacked.

A Berok, Macacus emestrinus of no great size but a powerful monkey, during the absence of the keeper, broke his way into a cage of kras, and was set upon; when rescued he was found nearly insensible with the scalp torn and hanging from the top of his head and a bite through the thorax into the lungs, whence air was issuing. He completely recovered in about a week, or so, and lived for several years, when again he broke the cage and got among the enemy. Though a powerful monkey he offered practically no resistance and this time received a bite on the thigh, which would have been of no importance but it got infected with tetanus of which he died in about three days.

A great fight took place among the wild monkeys in the gardens on one occasion, between the old king monkey and a

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younger one; probably however some of the other males joined in. A couple of days afterwards the old veteran was found in the morning lying dead by a waterbutt, with his throat cut across, and some other fresh wounds, and his shoulder swollen and gangrened from injuries received in his first fight. He was sent to the museum to skeletonize when it was found that at some much earlier date three ribs had been broken and had mended again.

The leading monkey having established his position, takes his food first, and has his selection of the females first. other males he drives away should they presume to attempt to usurp his rights. In processions from one place to the other he always comes last, but if one of the younger monkeys gets into a dangerous position or is attacked he always runs to its rescue, and drives off the enemy, and the other big males often assist him if necessary. The wild monkeys always sleep in particular trees, those with bare branches and very lofty, and towards evening they may be seen slowly moving along, stopping here and there to eat, till they reach the sleeping place about sundown, they then settle down for the night, sitting usually in pairs or singly on the bare boughs. The same tree is occupied every evening for weeks at a time, and whereever they are in the evening they make for the same spot. They never sleep in a bushy tree, probably for fear of being surprised at night by snakes. Young monkeys are always born in the early hours of the morning before daylight, as almost if not all mammals are, and are born in the boughs, or if in a cage on the perch; never I believe on the ground. cases of difficult parturition at least, the other females act as accoucheuses, with sometimes disastrous results to the baby. But difficulties in births are rare even in the cage and I have only seen one or two. The K'ra breeds very easily in captivity, the females producing one at a time about once a year. voung one when born has black hair which gets lighter colored with age. The Berok Macacus nemestrinus does not breed in captivity; at least it has never done so with its own race in the gardens. But it has been successfully crossed with the K'ra, and also with Cynopithecus niger.

I have occasionally seen old monkeys which appeared to be insane, incessantly gibbering at nothing and behaving in a quite meaningless way. It might be said that it would be difficult to tell whether a monkey was mad or not, as their ordinary ways of going on are so wild, but as a matter of fact, any one who observes a sane monkey closely can see why it behaves as it does, and what it means by so doing. monkeys, Beroks especially, invent comic tricks to amuse onlookers, thus one used to pass its hindleg over its neck, and beat it on the ground and pretend it could not get it back, but these tricks are evidently games invented for fun. Out-breaks of . maniacal ferocity occur also in ordinarily quiet monkeys, and these are commonest at night and apparently in the very early hours of the morning, about 4 or 5 a.m. A male monkey ordinarily quiet thus attacked a female whom he was very fond of and inflicted severe injuries on her, destroying the sight of one eye, from which injuries she never recovered properly, but wasted away, and after producing a still born young one died.

The monkey which attacked her seemed very sad when he was found next morning, and sat by her all day trying to con-This is not the only case of this nocturnal ferocity. have seen among these monkeys, and cases of ferocious murder in human beings at about this period of the night are too common as is well known. Monkeys of course often quarrel for more or less valid reasons both in a wild state and in the cage, and bite each other spitefully. When one would bite the others it was found quite sufficient to nip off the tips of the canine teeth with a pair of strong wire snippers. not hurt the animal at all if properly done and the teeth do not decay, and when he finds he cannot bite through the skin of another monkey he gives it up. Old monkeys often have the teeth decayed, and worn away, but they never seem to suffer any pain from decayed teeth, and I have never seen any inflammation of the jaw caused by them.

The Kra is a very loquacious animal and has an extensive vocabulary in which respects it is very different from the anthropoid apes, who seldom speak at all. Some of the noises of the Kra have quite obvious meanings, thus the word

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Krra from which it takes its Malay name, is only used as an alarm note for a man or dog in sight. A quite different sound is used for a tiger or perhaps for any large animal. If a young monkey gets into a small tree and alarmed at the approach of any one utters its little squeaks of fright, and is afraid to try a long jump into the safety of a taller tree, the king monkey comes as near as he safely can do it and utters a peculiar grunt "umh" "umh" till the little one makes a wild spring and escapes from its peril. Meanwhile the old one threatens the enemy with an entirely different bark at intervals. This latter sounds much the same as the cry that two males quarrelling begin their abuse of each other. Young monkeys have also a number of plaintive cries which do not seem to

mean anything and which older monkeys do not use.

When the monkeys see a snake they get very excited and make a great chattering. On one occasion when a terrier was attacking a cobra, the monkeys came from some distance to the scene of the fight, so close I could almost touch them, and quite regardless of me and the dog, peered down to see if they could see the snake which was hidden from their sight in the thick fern. I presume they judged from the noise the dog was making what he was attacking, or they may have heard the snorting of the cobra, when they were close enough. The duration of life of these smaller monkeys seems to be about 20 years, but I cannot be certain of this. The hybrid Kra-Berok is now 11 years old and is in very fine condition showing no signs of age. The big black Cynopithecus, which was full grown, and probably 8 or 10 years old when he was obtained, lived for 10 years in the gardens and died of old age. Several other monkeys have died of old age, but they were old when they were obtained. Monkeys do not suffer from consumption here as they do in Europe. The causes of death of the monkeys in the gardens, have been, beside old age, pneumonia, not rare in the Wawas (Hylobates), stomatitis (three Hylobates apparently an infectious disease which killed all three in one cage; tetanus (one); and fatty degeneration of the Two bading monkeys died of this from over feeding. Being very greedy and always getting the first food, they got

so fat that the heart was quite enclosed in cushions of fat. One, and if I remember correctly, the other fell dead after a Chinese holiday, when crowds of people came and gave the animals so much food that the orgy proved fatal.

Cynopithecus niger.

Both forms of this monkey have been kept in the Gardens The short-haired form from Celebes and the longhaired one from Batchian. I cannot find in any books that these two apes have been separated specifically anywhere, which is rather remarkable, considering how the mammals have been divided up on very scanty characters by Zoologists. The short-haired form is the commonest, and is often brought into Singapore by the Bugis men. The long-haired one, a bigger ape, is very distinct not only in size and length of hair but it also possesses a large patch of grey hair on the buttocks. Only one of these has been on view in the gardens, a fine male. He was received when apparently full grown in 1891 and died of old age in 1905. He was a very vicious and powerful ape when he first came, and it was unsafe to go into his cage, as he flew at the throat of any one who attempted it. Later he became much quieter, but was never really safe. This monkey was the only one I ever saw who had any idea of throwing. He threw stones over-hand as a woman does, with considerable accuracy, and visitors often threw stones into his cage which he hurled back at them through the bars and on some occasions hit a visitor on the head or face. One lady indeed got a cut on the mouth from a stone she had imprudently thrown to him. When pleased with any one he would turn his back and standing erect often on one leg would grasp the back of the left thigh with the right hand. (Macacus nemestrinus often does the same thing). When he drank from a tin, it was his delight to suddenly throw the tin and the rest of the water over the keeper who was giving it to him. Though confined for some time in a cage with a female of the short-haired form he never attempted to breed with her, nor was otherwise than friendly with a male Berok who was in the same cage and bred with the female. The short-haired black ape is very good-tempered usually, but very mischievous. R. A. Soc., No. 46, 1906.

I have seen one on board ship seize the cap from one passing by and throw it overboard. Two which were put temporarily into an empty tiger's cage scon escaped by unroofing part of it, throwing the tiles down and speedily making a hole large enough to escape. When the coolie got on the roof with a sack to through over one, it suddenly pulled the sack from his hand and rushed off with it. These monkeys live a long time and suffer little from sickness. One was killed by stomatitis, and some died of old age.

They are affectionate apes, and recognize acquaintances readily. Two which were bought by a passenger and kept for a short time in the gardens were sent to the London Zoological Gardens, where I saw them about a year later, when they immediately recognized me and came down to shake hands, though the keeper advised me that they were savage! Common and easily procured here, they seem to be seldom sent to European Gardens.

Nycticebus tardigradus.

The Slow Loris. This little lemur is common and often caught by the Malays, and many have been on view in the gardens. It does not seem to be long lived and is a dull creature in captivity, remaining curled up all day and only moving about slowly at night. Its food, in a wild state, consists of fruit, insects, and small birds. It seems strange that so slow and weak a creature should be able to hold its own in a country where there are so many predacious animals, for it appears to have no means of defence. It is however not so harmless as it appears, as it can bite sharply, and its bite is poisonous. instances of injury from its bite have been described to me. ago Mr. H. Everett while his brother, one evening in Borneo saw one of these little animals in a ditch and picked it up. It bit him on the hand, and he threw it down. His brother was walking away, and though Mr. Everett could hear his footsteps now in the distance he was unable to call him. His mouth and tongue swelled up, and he was unable to walk. He attempted to crawl up the hill to his own house, but only managed to get

there next morning. When found he was unable to speak, with his tongue protruding from his mouth. His clerk who found him, cut the clothes round his neck, and managed eventually to recover him. In the second case a lady in Singapore was bitten by a Loris on the hand, and her mouth and tongue swelled up very much, but the swelling went down towards evening. No other part of the body seemed to be affected by the bites. The natives all know of the danger of the bite of the animal, but it is said that it is only dangerous when fresh caught, and after it has been in captivity for sometime it is not poisonous.

The weird appearance of the Loris with its large round eyes, and its habit of covering its face with its paws has given rise to many tales concerning it. It is supposed to have the faculty of seeing spirits, which is why it covers its face, as presumably it does not want to see them. Its use in native medicine with other superstitions about it have been published in the Journ. Roy. As. Soc. S. Br. vol. 34.

## Galeopithecus volans.

The flying lemur, is common in many of the Singapore woods, but it is not easy to get or keep in captivity. I have had young ones taken from the mother when killed twice, and endeavoured to rear them. They took milk readily but died in a few days from cold, as it seemed impossible to keep them dry. An adult captured in Singapore was kept for some days, and was being taught to live on bananas, when it managed to escape. In a wild state they live on leaves, the intestines of those killed being usually packed with nibbled up leaves, but the animals in captivity would not eat such leaves as I offered them. Their cry in the forests resembles the quacking of a duck.

#### FELIDÆ.

# Felis tigris.

Five or more tigers have been kept in the garden at different times. They are always easily procurable, but usually the funds of the garden were not large enough for the keep of so R. A. Soc., No. 46, 1906.

expensive an animal. Two cubs were kept for a short time in order to train them to eat meat previous to shipping them to Europe. They were about as big as large cats, with ridiculously large heads and paws. Remarkably tame and friendly, they would follow me about the garden for short walks, putting up their tails and rubbing their heads against my legs like In a few days they had learnt to eat meat instead of requiring milk, which was difficult to get on board ship, and Sir Charles Mitchell, then Governor, who owned them, had them sent home to the Zoological Gardens. They were great pets on board ship, where they ran loose. They had grown as big as leopards when I saw them in England some months later, but were still tame enough to stroke. I heard afterwards that they died during the time of change of teeth, always a risky time with tigers. Before they were shipped a live chicken was put in their cage, and though the little animals had never seen one before, the biggest one darted at it and gave it such a blow with its paw that the chicken was sent flying like a ball against the wall of the cage falling dead instantly.

A fine young tigress taken from a nest in Pahang was presented to the gardens by M. Wise, in 1895 and lived there till 1903, when it was sold. She passed sæfely through the ordeal of changing her teeth, though considerable care had to be taken with her at that time, and she had to be dosed with santonine put in a piece of meat. She was usually very quiet, with Europeans at least, though she disliked natives, and would charge the side of the cage and strike violently with her paws if the keeper leant with his back against the bars, but never did so when he faced her. As the cage had to be enlarged for her, she had to be temporarily transferred to a travelling cage in which she could only just turn round. was kept there for some weeks and when the large cage was ready she absolutely refused to leave the travelling cage, so that a fire of paper had to be made near the cage in the hope that the smoke might induce her to go into the large cage, but she took no notice till a piece of paper suddenly burst into flame, when she walked slowly into the cage and then made a

rush to the further end, and finding a wooden platform put for her to sit on, investigated it carefully by feeling with her paws She was fed on underneath before she would sit on it. pariah dogs, beef, or goat, and always supplied with grass which she would often take from the hand. She got tired of dogs after a time, and her diet had to be changed. Chickens she used to appreciate. First plucking all the feathers off she washed the carcase carefully in her water before eating it. She was also partial to rats, holding them in her paws and biting off the head and gradually eating them. Occasionally a tiger requires liquid blood, as otherwise it gets constipated, and this was always difficult to get, as she would not touch it if coagulated. A rhinoceros having died in the gardens she thoroughly enjoyed its flesh, and also drank the blood greedily. She very much delighted in rolling on her back in a shallow tank of water provided for her, especially on hot days. When she became full grown she took to roaring at sundown, and occasionally later, especially on moonlight nights, and her cry Ah-oum could be heard at a great distance. Like most of the local tigers she was very light coloured the fur being quite Another very fine tiger kept for some time in the gardens before being sent to Cairo, was of a rich chestnut It had been caught in Sumatra. The food of a tiger costs about fifty dollars a month. Other examples were offered by H. H. the Sultan of Johore and other people, but the expense of keeping these big cats was too great for the limited funds of the gardens. A wild tiger inhabited the Garden Jungle for some months in 1893, having probably wandered there from Bukit Timah.

Felis pardus.

The Leopard though easily procurable, could not be kept on account of its cost in food. However in 1876 a spotted leopard presented by the King of Siam, was on view for some time, and a couple of cubs of the black panther were deposited in the gardens for a short time. The latter were very vicious, though quite small. They snarled and fought whenever any one came near them.

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Felis tristis.

A full grown female of this large cat was sent to the gardens in a stick cage one night, and was put temporarily in part of the monkey cage. It however managed to escape from its travelling cage, and as it could not be recaptured with any safety it had to be shot. The carcase was sent to the museum.

## F. Temmincki.

A golden cat was sent from Pahang in 1893, and lived for some time, when it suddenly died. It was a very quiet and handsome animal with its marbled orange tabby fur. It was one of the most placid cats I ever saw. As there was some difficulty in getting its travelling cage into the large cage, endeavours were made to get it to walk into its new home, but nothing would induce it to move. When squirted at with water it sat still and lapped up the water; when a smoke of brown paper was made it folded its paws and went to sleep. Finally the travelling cage was got into the large cage and broken to pieces, till at last the cat remained sitting calmly on the last bit of the box.

# F. bengalensis.

The Leopard cat is the kind most commonly brought in for sale. It is a beautiful little animal, hardly as big as a good sized English cat, yellow with round black spots. When caught full grown it is usually extremely vicious. Two kept in one cage always watched carefully at feeding time for the keeper, to try and strike him with their paws when he opened the small side door to put the food in. Being nocturnal they are generally very quiet, hardly moving all day, and frequently only feeding at night. When caught as kittens they can sometimes be made as tame as an English cat. One kept for a long time by Mr. Hervey in Malacca was presented by him to the gardens where it lived many years, and was quite tame and would play like a kitten with anyone. Formerly it was kept loose in the house in Malacca but it got so very sportive and smashed so much glass and china that it had to be shut up.

On one occasion it got out of its cage in the gardens into a gallery at the back of the cages and no one could catch it. When I cornered it and stooped down to pick it up it sprang over my head, but it did not attempt to bite or scratch. It must have been 12 or 13 years old when it died, and I believe then it was killed by a cobra or other poisonous snake. Another kitten of the same species which was being trained to eat cooked meat, which is popularly supposed to induce tameness, died in the same way. The animals perfectly well on the previous night, were found with the head enormously swollen next day and died very shortly.

On one or two occasions there was an outbreak of a veryinfectious disease among the cats, a form of diarrhœa and weakness, the cats dying always with their mouths full of the grass of their bedding. At first the disease lasted two or three days before the fatal termination, but later became more rapid, and the last of the cats attacked died in a few hours after it first showed signs of illness. Cats were not rarely sent down from the Peninsula or neighbouring Islands in small cages with a putrid fowl in the cage for them to eat. When they arrived they were found to have a violent diarrhea which soon killed Being usually very wild it was difficult to give them any medicine, as they could not be handled. They were dosed by dipping a stick wrapped in cloth into the medicine and presenting it to the cat which bit it furiously so that the medicine ran down its throat.

# F. planiceps.

The stump-tailed cat is a small grey and red cat with a thick blunt tail. It was formerly considered very rare, but at one time was one of the commonest cats sent to the gardens. It is usually a quiet cat, but I never saw one that was really tame. On one occasion a gentleman sent one which he said refused to eat and had eaten nothing for some days. I offered it fish and all kinds of tempting things, for it did not occur to me that the owner had never tried it with raw meat, but this proved to be the case, and when some raw beef was offered, it ate two pounds up as fast as it could. It is useless to try R. A. Soc., No. 46, 1906.

to feed wild cats or any carnivora with cooked meat, they will never touch it, until they have been gradually trained to it, nor will any of them drink milk, though they may be trained to do so, especially if quite young. It is perhaps as well to point out that all these cats, including tigers, require grass and should be supplied with it.

#### VIVERRIDAE.

Viverra zibetha, and V. tangalunga.

The two big grey civets are often brought in by Malays. They are very handsome beasts, but do not stand captivity well, as they are usually very nervous and dislike being looked at. They live best in darkened cages as they cannot stand a bright light. During the day they are generally very quiet, and are active only at night. They are never vicious though seldom tame. Their food consists of fruit and meat, but like all these animals should be fed chiefly on bananas, papayas and such fruit, with only a little meat. One of the Tangalungas escaped from captivity on one occasion and lived wild in the gardens for a long time. It usually concealed itself during the day, but was often seen by the watchmen at night wandering about. I came across it during the day on one occasion, when the dogs pursued it but were easily beaten off. Wild ones have also been seen in the gardens.

Paradoxurus hermaphroditus.

The Musang. This is a very common animal, abundant in a wild state all over Singapore, and often inhabiting the roofs of houses. It is very easily kept in confinement and becomes very docile, especially when taken young, and can be trained to perform tricks, or to follow its owner about. It eats almost anything but lives chiefly on fruit. It does not appear to be a long lived animal, but it seldom suffers from any disease. Specimens brought by Malays however are very often injured in catching them. I have had one brought with its mouth sewn up with string, to prevent it biting. The string was quickly removed and the poor animal soon recoverits injuries. The common local form varies somewhat in

coloring, but comparatively small in size. The Javanese form, of which a specimen was presented to the Gardens in 1904, is a very different looking animal, much larger, with three distinct black stripes down its creamy white back.

#### P. agurus leucomystax.

The white-whiskered Paradoxure. This is a rare beast of a light brown colour with orange eyes. Three were taken in Singapore one year, and two of these were brought to the gardens, one was injured by a dog bite in catching it, and eventually had to be killed. The other lived for over ten years. A very quiet animal sleeping nearly all day, and occasionally moving about slowly. It is not vicious but is less docile than the musang. It eats fruit, chiefly bananas, and seems to be a long lived animal. It requires a darkened cage, as it dislikes a bright light.

## Arctogale leucotis.

This pretty brown civet has been kept in the gardens for some time. It is very tame and is very fond of being stroked by visitors. One was sent to the London gardens in 1905.

# Arctictis binturong.

The bear-cat has often been on view in the gardens. It is easily tamed and very long lived. One remarkably fine one was kept for 16 years. Its food consists of bananas and pineapple. It will also eat meat, birds, dried fish, etc. It was also sent to the Zoological Gardens in London in 1905.

# Herpestes mungo.

A common Indian mungoose lived for many years in the garden, and was believed to have been intentionally poisoned eventually by a native who had one to sell. It is often brought to Singapore by natives of India. The one kept was very tame and amusing and spent much of the day playing with the dogs, as it was allowed to run about. It was an excellent ratter, and a great snake-killer.

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### H. aureopunctatus.

The small Indian mungoose, is also often imported into Singapore, and two were kept for a long time. They were very tame and playful.

#### H. brachyurus.

The water mungoose. Two of these have been kept for many years. One was presented by Dr. Johnstone who got it in Tringanu. The habits of this animal are very different from those of the two previous ones. It is never really tame nor is it at all playful. When annoyed it erects the bristles on its back whence probably the Malays call it Musang Babi. Its food is fish, but it is also partial to snakes.

## Cyon rutilans.

The Malay wild dog. Two pairs of pups were kept for some time in the gardens, but one of the pair died soon after arrival, having been injured in catching, and the others were at different times poisoned out of spite by natives. This dog is a very handsome red animal with a beautifully plumed tail which when pleased it arches gracefully, but never wags it. does not bark but makes a yapping noise. One used to spend much of its time rushing up the wooden partition of its cage for about 12 feet and dropping again to the ground. bringing a terrier slut to the outside of its cage and stroking her the wild dog who evidently much admired her became tame enough to let me stroke it, and it was getting quite tame and very handsome when the native miscreant poisoned it. It is said that there are two kinds of wild dog in the Peninsula, one large and the other small, and this seems possible as one pair of pups were nearly as big as the last mnetioned dog, though evidently very much younger.

#### C. aureus.

The Indian Jackal. A pair of these was presented to the Gardens in 1895, and after a short time bred producing five pups. Of these one when very small crept through a small drain-hole into the tiger's cage next to its own cage and was

seen no more. Sometime later one escaped and lived for a short time in low scrub off Holland Road, but at length disappeared. The others grew well for a year or two, but then all were attacked by distemper. All attempts to pull them through failed except in the case of one of the young ones which completely recovered and lived for many years till it was sold. I do not know if there is any other record of the Jackal having bred in captivity. In the Handbook of Animals kept in captivity in Calcutta Gardens it is stated that it has never been successfully bred there.

These Jackals are not rarely brought to Singapore from India by natives, and another was brought to the Gardens by an Indian on another occasion, but it was so much injured that I shot it at once. The natives say that Jackals never live long in Singapore as they always die of distemper here.

# C. Dingo.

The Dingo. A very handsome and tame Dingo of large size was presented to the menagerie in 1893. Though tame enough to be taken out for walks on the chain every day, it was unmanageable in sight of goats or chickens. it was being brought to Singapore it used to run loose on the deck of the ship and play with the passengers but when two sheep escaped from the butcher's pen, Dingo immediately dashed at them, and tore them to bits. During a spell of extremely hot weather he shed his thick coat and looked a very different animal. As he appeared to suffer much from the heat he was moved up to the stables as being cooler, but one night broke his rope and came upstairs into my house and lay down under the table whence nothing would induce him to move, and it was with great difficulty that he was taken back to his quarters. He did not attempt to bite or did he lose his temper but simply planted his feet on the floor and held on. The hot weather however was too much for him and he died a few days later.

A white Dingo was also sent to the gardens from Perth, as a great rarity, but had to be sent back to Australia, as at the time of its arrival there was a hydrophobia panic in the

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Straits, and though the animal had never been outside a cage in its life, having been born in captivity, after due consideration the Government officials decided that a Dingo was a Dog and as a Dog could not be admitted to the colony. It was a curious looking animal of a rather dirty white colour, and quite young.

## C. vulpes.

Two foxes were kept in the Gardens at different times. One was brought from China and appeared somewhat different in colour from an ordinary English fox. It was very active, playing about like a kitten all day. It was allowed a romp on the chain every day for about half an hour which it much enjoyed, but on three occasions when it was allowed this treat after a day or two's intermission it became so excited that it had a fit, and on the third occasion it died in spite of all that could be done. The fox appears to be very liable to fits when young, as similar occurrences are recorded in the account of the animals in the Calcutta Gardens.

The other fox was larger and came from Russia. It lived a long time and was eventually sold. During the hot weather it shed great masses of matted hair, as the Dingo did. At one time it became of a curious grey colour for a short time, as if it was going to put on a white winter coat. Though tame enough to allow the keeper to enter its cage, it would not allow any one to handle it, but tried to bite. It became very friendly with the jackal and used to slip through the bars between the two cages to play with it.

#### LUTRIDÆ.

#### Lutra cinerea.

The clawless otter lived for some time in the gardens. It was very tame, but like all others used to squeak incessantly for food. It ate fish and meat in great quantities, and eventually died suddenly from overfeeding. When its skin was taken off for stuffing at the museum it was found to be extremely fat, the fat on its tail being nearly an inch thick.

#### L. Sumatrana.

The Malay otter. One full grown specimen of this otter caught in Singapore was bought for a dollar. It however died in a day or two, having doubtless been injured in capture. Another specimen much younger was on deposit for a time, it was quite tame and allowed itself to be handled. Like *L. cinerca* it squeaked and squealed all day if it saw anyone it thought might have something for it to eat.

#### URSIDÆ.

#### Ursus Malayanus.

The Honey bear has often been kept in the gardens. The finest was one known as "Jelebu" which was presented by Sir Cecil Clementi Smith. He was very good-natured and would play with anybody, allowing people to wrestle with him, ride on his back or put their hands into his mouth, and never putting forth his great strength so as to hurt. When he had a female given him as a companion, his games with her were much rougher. The two bears would seize each other's skin in their mouths and pull so violently that one would not have thought any skin would stand such rough treatment. He had the greatest aversion to bullocks and especially when he first came used to be perfectly rabid at the sight of one. Horses he took no notice of. On several occasions he broke the chain or collar by which he was attached and escaped at night, but he was easily recaptured, though he had wandered to the further end of the garden. A watchman whom he did not like turned the light of his lantern on him and Jelebu rushed at him. ran towards the cage and gradually the bear was got up to the cage and put back again. But on later occasions when he got out of his cage he never went far but merely rambled round the other cages, climbed up a tree where he broke off some branches and made a nest which he sat in for a minute or two, and then came down again and was easily induced to return to his cage with the offer of some bread, which he was very fond of. When given anything liquid or juicy he always lay on his back to swallow it so that the juice of sugarcane for instance ran down his throat. On one occasion some sailors gave him

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a bottle of beer which as he found it contained liquid, he lay on his back to drink, after which he played with the bottle for some time, balancing it on his hind feet and tossing it about, and then suddenly jumping up and holding it in both paws returned it to the sailors to be filled up again, which created much amusement. He was very powerful and on one occasion broke an iron bar an inch through with ease, and could bite up an inch-plank as easily as a man could bite a piece of soft I have seen trees in the forest with the trunks torn to splinters by wild bears in search of honey. This bear died of pneumonia during a season of influenza when several other animals succumbed. A large female formerly belonging to a resident was presented and given him as a companion. As is often the case in private houses this bear had been so teased by the Chinese servants that its temper was quite spoilt and it took a long time to get her tame again. It was hoped to breed from the pair, but the female suffered from an uterine disease for which nothing could be done, and which proved fatal. A small bear was put in the same cage with Jelebu, and the two were quite friendly for some time but a quarrel took place and the small bear was killed.

The Borneo variety was frequently also on view. It is rather smaller than the Malayan form. In its wild state the bear inhabits low swampy parts of the forests, where I have occasionally come across them, or heard them scurry off. It gives a kind of barking snort when annoyed, and when pleased or sucking its paws it makes a low humming noise. I have also heard near the caves at Kuala Lumpur a peculiar loud humming grunt often repeated which was said to be the cry of a bear which was fully three quarters of a mile away.

Melursus ursinus.

A sloth bear was kept for some time in 1875.

#### RODENTIA.

Ratufa bicolor.

Several color forms of this handsome squirrel have been kept. It lives well in captivity and becomes very tame. The

scarcer brown form R. affinis was obtained for the price of a dollar from a Malay at Jurong. It was in very poor condition and died soon after.

Sciurus Finlaysoni Horsf.

A very small creamy white squirrel shaded with grey on the back was purchased many years ago from Siam, and lived here till 1905 when it was sold. It probably belonged to this species, but several naturalists who have seen it are doubtful as to what species it belonged to.

Sc. tenuis.

The little Malay squirrel, very common in a wild state in the gardens, does not bear captivity well and soon dies.

Sc. Prevosti.

Raffles squirrel; makes a very nice pet, becoming quite tame and living long and happily in confinement. Many of these beautiful animals are brought to Singapore where they are sold at from a dollar or a dollar and a half upwards.

Sc. notatus.

The brown Malay squirrel with a red belly is very common in the gardens. It bears captivity very well and soon becomes very tame. Specimens caught in the gardens were kept for many years.

Sc. sp.

A little grey three-striped squirrel said to have been brought from India, of which four or five were purchased, but not very long after all managed to escape through a hole. Some of them were seen some years afterwards roaming about the gardens, but seem now to have disappeared.

Squirrels can be fed on ground nuts, Indian corn, etc. The chief danger to their life is due to intestinal worms, which often kills them. A betelnut put into the cage now and then prevents this as the squirrels will nibble it themselves and so get rid of the parasites. None have bred in confinement. Most of the kinds

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live very happily together in one cage, so that they have a box nest for each one to sleep in. These squirrels make large nests of bastfibre, palmfibre etc., in the trees and are often troublesome in pulling off the cocoanut husk used in fixing orchids on the trees and throwing the orchid down on the ground! These nests are usually placed in the boughs of a tree or among the leaves of a pandanus, or sometimes low down among the thorny leaves of a Bromelia. One nest was made on the leaves beneath the office, and attention was to it, by the cries of the young squirrels been attacked by an army of ants and had fallen from the nest. One had died, the other was put into a cigarbox up in a tree, where the mother squirrel had been heard calling. She quickly came and got into the box, but went away again. When however every one was gone from the building and all was quiet she returned and carried off the young one.

## Rhizomys sumatrensis.

The Bamboo rat has often been kept, and lives well, but as it can bite its way through most things requires an iron cage. Two lived for a long time in a wooden box lined with tin but eventually bit their way through the bottom, and nearly through the wooden floor before they were found out. One or two escaped and lived in clumps of bamboo for some time. They eat rice, nuts and such food, and also are fond of bamboo shoots to gnaw. The bamboo rat has a curious way of sleeping on its back which gives it the appearance of being dead.

# Hystrix longicauda.

The Porcupine, is still common in Singapore, and is very easily kept as a pet, eating sweet potatoes, tapioca etc., and some I have seen had a great liking for bones which they nibbled up. It is readily tamed and lives well in captivity. An albino, quite white with pink eyes was purchased some years ago, with it was a young one, normally colored. The young one was still sucking the mother though quite a large

sized animal, and finally took to nibbling off its mother's quills so that it had to be separated. The white one was sent home in 1905 but died on the way.

The animal occurs occasionally still in a wild state in the gardens.

## Atherura macrura.

The Brush tailed porcupine has been on view in the menagerie twice, one was a very young one and soon contrived to escape. The other was an adult. I obtained it on the Siak river in Sumatra, and during the voyage down the river at night it contrived to escape from its cage and ran up and down the boat. It was easily detected in its attempt to hide, from the powerful muskey scent it exhaled which lasted for some time wherever it had run. It was soon recaptured and lived for some time in the gardens. I have several times come across the animal or its tracks in limestone caves but it also occurs in open country.

# Mus decumanus varalbus.

White rats were kept on view for some time, and bred easily. They gradually however died out.

# Cavia porcella.

Guinea pigs, were also kept, but suffer much during the wet season.

#### UNGULATES.

The elephant has never been kept in the menagerie on account of expense.

# Rhinoceros sumatrensis.

Three of these were kept temporarily before shipping to the Vienna Zoological Gardens in 1901 and there was one in the gardens as early as 1875. An account of one has been already published in the Journal.

# Tapirus indicus.

The Malay tapir. A young tapir, the property of the Director lived for many years in the gardens. When bought it had the R. A. Soc., No. 46, 1906.

black and yellow spotting of the young stage, but after some years put on the black and white coloring of the adult. most active in the early morning and late evening. Most of its time it lived in the office or in the Director's house. office was opened at 6 o'clock, it would go out and browse along the road side and returning when the sun got hot would be in the office under the table most of the day. Its food consisted of boiled rice with salt, grass, bushes, sweet potatoes and fruit, and it would frequently seek for the abandoned bones which the dogs had left and bit them up. On Saturdays it came up to the Director's house for Sunday, as the office was closed on that day, and went back on Monday morning. was no need to lead or drive it. When pushed out of the office it galloped of its own accord across the garden, choosing the direction where were the fewest paths as its feet were too soft for the gravel, and jumping all the paths it came to, returning on Monday in the same way. Like the rhinoceros it always dropped its excreta in the same spot each day, so there was no trouble about keeping it in the house.

The cryptic characters of this animal were well shown both in its young and old pelage. When in the former coloring on one occasion it went to sleep in a bush of palms, and when I went to fetch it in on opening the bush and looking down I could not see it. I seemed to be looking on the dark brown ground flecked with spots of sunlight through the leaves. little animal lay in such a position that the yellow spots were exactly where the vertical sun rays would fall, the yellow streaks resembling the slanting streaks of light from the side. It was for a few minutes quite invisible, though I was looking down on it. The fur at this age is closer and more velvety than in the adult stage. The change is very rapid only taking a few days for the yellow spots to disappear the fur getting scantier and black and the greyish white coloring of the rump develop-It is not less well protected by its coloring when adult In the dusk I have seen her sitting on the grass and at rest. plot, the black fore parts invisible, the greyish white rump exactly resembling a rounded granite boulder, both in shape and colour: seeing it sitting like this with its rump towards me I

could not make out at first what it was as I knew there was

no granite boulder on the grass plot.

This tapir was very docile and amusing and was a great attraction, very few people even the Malays ever having seen one before. It was easily trained to draw a small cart, but its feet were too soft for hard roads, and it could only walk comfortably on grass. When very happy it would canter and curvet on the grass neighing like a pony, but its ordinary cry especially if vexed was a whistle which it gave with its trunk. This whistle is the alarm cry which one hears when one comes across them in the forest. It had considerable climbing powers and often walked upstairs. When left alone in a room it sometimes got on a chair and then climbed on to a table. On one occasion when it did this the table which bore on it a pot of white paint, some gum, and ink, collapsed with the weight of the animal who was found standing in a pool of the mixed liquids and covered all over with paint, gum and ink. It was very fond of bathing and used to go down to the lake and remain under water for a considerable time digging in the mud with its paws.

As it got bigger it was found necessary to keep it in an enclosure as there were complaints that it alarmed horses when it was feeding along the road. When shut up, or kept in a stable the tapir here is very liable to pthisis, and this one did not escape. Except that one or two occasions it was heard to give a little cough, and that it got very lazy and also slightly thinner, it showed no signs of illness. But one day it was taken to have its swim in the lake which it much enjoyed and was unwilling to relinquish, and after it came out of the water it went to lie down under a tree as usual, and half an hour later was found to be dead. At the post-mortem the lungs were found to be badly diseased with pthisis, a considerable portion being destroyed. Two other full sized tapirs were temporarily deposited in the gardens, before shipping to Europe, and both died very suddenly with evident signs of severe colic. which was opened was found to have the stomach full of some bitten up sweet stuff which was almost certainly pineapple, and there was little doubt that some one had given these animals a quantity of pineapples which had proved fatal.

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Anoa depressicornis.

An example of this interesting animal occasionally brought by Bugis boats from Celebes, was deposited in the gardens by the curator of the museum who had bought it to stuff. It was extremely tame, though occasionally it butted at the keeper when he went into its cage. It lived chiefly on bushes, and throve very well till it was killed for stuffing. Recently I saw a young one in one of the animal shops which was remarkable for being covered with red wool, instead of the smooth black brown hair of the adult.

#### Cervulus Muntjac.

The Kijang. This pretty animal lived and bred very readily in confinement. A pair was procured from Sumatra and they produced eight young all males. It was very remarkable to see how quickly the newborn Kijang developed. The births took place a little before daylight and the little one very soon was staggering about on its legs; by nine o'clock it could stand and walk about quite easily. Indeed on one occasion before seven a.m. a new born one succeeded in getting between the bars of the cage and running away to a wood near by, where it disappeared and was said to have been killed by a pariah dog. The Kijang is a very tame and quiet animal though the males occasionally tried to fight and had to be separated.

Two or three died during my absence in England from what cause I do not know. The others were sold. I believe this animal has never been successfully carried to England as it does not stand a sea-voyage well. Its food is bushes, boughs of waringin, and other trees, sweet potatoes and tapioca roots.

In my account of the Mammals of the Malay peninsula, I stated that it did not occur in Singapore. Since that time however I have seen one female caught at Jurong and heard of others in Bukit Timah and elsewhere.

#### Cervus unicolor.

The Rusa or Sambur. These were constantly kept and bred regularly in confinement but chiefly produced bucks.

Indeed females are not so common in captivity as males. This may perhaps be due to the fact that the female is much more difficult to move about than the male, as it fights violently when attempts are made to catch it and often gets injured or dies of shock. It is curious that the deer which stands injuries from gunshot wounds etc. very easily is very apt to be injured fatally in catching and transhipping. A deer to be conveyed from place to place must never have its feet tied, as if this is done the animal will almost certainly die.

The Sambur buck when adult is often extremely dangerous, and will attack people in a ferocious manner when quite unprovoked. A very fine one which had been brought up from a fawn, on one occasion attacked a cooly from behind who was filling its watertank and threw him to the top of the fence whence he scrambled down, inflicting a number of stabs on his legs and thighs. On another occasion by breaking a bar it got into an enclosure with a black buck which it attacked and lifted and carried about on its antlers. The black buck was rescued and the deer driven back into the enclosure, but taking advantage of the tub of water between the two enclosures being removed, he managed by lying down and wriggling through the small space to get again into the black buck's enclosure and killed it by one stab through the liver.

Deer in the tropics require a mudbath like a buffalo, and delight to wallow in it and cover themselves with mud. I have disturbed them at this refreshment in the forest in Singapore. They also require a dark house or stable to live in or otherwise they are pestered with flies. All attempts to stop this nuisance failed till the idea of making a perfectly dark stable in the enclosure occurred and this was found to be quite effective. The deer were quite free from the flies in the dark, and remained there most of the day. Even wild deer seem to be pestered in this manner. Once in Selangor I saw at a Sakai encampment, a pet doe, which lived loose in the woods and came out only when the Sakais called it and when they did so I observed that a number of these flies (one of the Muscas) came with it. A friend who was with me was anxious

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to buy this deer, but the Sakai woman would not hear of it as she had brought it up from Java on her own milk and it was one of the family. The deer eat cut grass, bushes, and paddy. The doe produces one young one at a time, which has a couple of white spots on the sides near the rump, which very soon disappear. A number of bucks were bred, and eventually the whole lot were disposed of. Deer suffer occasionally from wounds caused by their cutting their legs in the fences, or by fighting, and these wounds are not very easy to heal, and are liable to get flyblown if care is not taken. A disease resembling foot and mouth, killed several on one occasion and a large doe died after producing a fawn apparently of anæmia, for it was observed when her skin was taken off that she was almost bloodless.

# C. hippelaphus.

The Sumatran deer, a smaller beast with a golden coloring on the back and a habit of marching about with its head erect, has several times been on view. It is apt to be vicious and constantly tries to butt. It will not breed with the tambur, and has not been bred in the gardens menagerie. One, apparently an old beast, after several years went blind in both eyes with cataract and was eventually killed.

# $C. \mathrm{sp}.$

Philippine deer; one or more species of Philippines deer have been kept in captivity for some years at different dates, but those which have been kept within the last few years were too young to identify specifically.

## C. axis.

The spotted deer. Formerly often kept in the Straits by Chinese and others, seems to live well. The only one presented to the gardens of late years expired shortly after arrival owing to its legs having been tied.

# Antilope cervicapra.

The Black buck. This Indian animal has twice been kept, specimens having been presented by various regiments coming

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from India. They live well in the Straits, eating grass, paddy etc.

One belonging to one of the regiments proved a nuisance by suddenly charging the men from behind, and when it had damaged eight in this manner, it was sent to the gardens. It was otherwise very quiet and tame. I it was killed by a sambur deer as described previously.

Tragulus napu.

The large mouse deer often trapped by Malays has been constantly kept in enclosures. These animals had a habit of sitting almost motionless in a corner of their enclosure so that after a time large bonycalli appeared on the legs at the joints. This was stopped by giving them a large soft ground enclosure, where there being several together they exercised themselves and lived and bred. Many that are brought in by the Malays are injured by having the sharp canine teeth broken off so as to prevent their biting and from that and other rough handling the poor animals frequently succumb. They eat spinach, sweet potatoes etc. In making their enclosure it is necessary to sink the palings in the ground for some depth as these animals can dig their way out beneath if it is not deep enough. On one occasion I purchased three Napus at Changi, one old and two young ones, which a Malay had had a long time, and brought them down in the same box they had always lived in but while waiting for about half an hour till an enclosure was got ready for them, unexpectedly the old female attacked the voung ones and bit off their noses and ears, killing them, what provoked this maniacal attack I could not guess.

# T. javanicus.

The Kanchil, resembles the Napu but is smaller and browner. It is about as common but less frequently brought into captivity, probably being more delicate and easily injured.

# T. stauleyanus.

Is a Pelandok, as big as the Napu but of a bright foxy red. Its locality is said to be Rhio, but the species is only known R. A. Soc. No. 46, 1996.

from specimens imported into Singapore by natives. Its habits in confinement are those of the Napu. It has several times been on view.

Sus cristatus.

The wild boar. Does not live at all well in captivity young ones have been brought several times to the gardens but soon died. The only one that I ever saw kept well as a pet was at a house in Selangor where it ran about the garden loose. I have seen Chinese pigs which had been allowed to cross with wild pigs in the forest the young of which did as well as ordinary pigs. There seems to be some doubt as to whether this species is identical with the Indian pig. It is still abundant in Singapore and some years ago a large wild boar invaded the gardens, and remained in the garden jungle for some days. A hunt was organized for it but it had got away before.

## EDENTATA.

Manis javanica.

The scaly anteater is common in Singapore and has occasionally been caught in the gardens. It lives under ground all day coming out of its burrows at night, when it is caught. It has often been on view for a few days in the garden's menagerie, but is impossible to keep. Its great strength and powers of digging make it difficult to retain in ordinary enclosures and it refuses to eat anything but termites, chopped meat and eggs which others of the order eat readily it will not touch. Adults and young ones of both sexes have been kept for a few days only. The young ones are very curious being pink, and climbing about their mother in an odd way.

#### MARSUPIALIA.

A number of Australian marsupials have been on view at different times, but the records and identifications of many have not been preserved. Kangaroos were kept as early as 1875 and among the species on view later were Macropus giganteus

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and M. rufus, and? ualabatus, and several smaller species were also kept. Kangaroos do not thrive in this country on account of the damp which appears to cause diarrhea. Two very fine black Wallabies were sent by Mr. Le Souef from the Perth Gardens in Australia. They arrived in the wet season, and though most carefully housed and fed on dry food, both died in a few days from diarrhea. The smaller Kangaroo rats lived much longer. One however a charming little animal the day after it came in hopping about the cage at night must have overlooked the wire fencing and struck its head against it. It was found partly paralyzed next morning and though it lived for some time all pains taken with it produced no improvements and it eventually died. Three common Dasyures (Dasyurus Geoffroyi) lived for some time, but the climate did not seem to suit them A fine Cuscus, Phalangista ursinus was presented to the gardens some years ago, but owing to the long voyage it suffered from diarrhœa and it succumbed shortly. Australian opossum, Trichosurus vulpecula proved the easiest marsupial to keep. A pair presented in 1898 which had long lived in captivity and were quite old lived long in the gardens and bred regularly. They were only lively at night, sleeping most of the day. Though the old pair were very friendly to each other, they occasionally got up little squabbles about places on a perch or food, and after swearing at each other would curl up together and go to sleep. Nearly all suffered sooner or later from ulceration of the tip of the tail, which was treated with idoform, and usually healed readily, though the tip often died off.

## BIRDS.

The record of the large number of birds of different kinds kept in the aviaries is very incomplete, as owing to difficulties in identifying them in the early days, they were often simply recorded by simple names, such as parrots, pigeons, etc. No attempt was made to keep insectivorous birds as there was no means of properly feeding them, and the expense of keeping a cooly to catch insects for them would have been too great. The gardens themselves abound in birds of all kinds which B. A. Soc., No. 46, 1906.

find there a refuge from the shooter and trapper, and some account of those observed was published by the author in Natural Science.

The following is as complete a list of what have been kept in the aviaries as can be procured.

## ORIOLIDÆ.

Oriolus xanthonotus Horsf.

Malay Oriole, presented by the Duke of Newcastle, lived for some time.

#### EULABIDÆ.

Eulabes intermedia Hav.

The Tiong. Common in a wild state and occasionally nesting in the gardens.

Acridotheres sp.

Javanese Mynah, a very tame little bird, which readily talks. It lived for many years, and was eventually killed by a rat.

#### ALCEDINIDÆ.

Halcyon smyrnensis.

A bird of what I think was this species was brought alive having been caught in a spider's web. It was very restless and found impossible to keep alive.

#### Passerini.

Padda oryzivora.

Java sparrow. Was introduced to the gardens many years ago under the impression that it was insectivorous and established itself there. This graminivorous bird was distributed to various parts of the peninsula where it has settled down but never goes far from where it was first turned out.

# BUCEROTIDÆ.

Buceros Rhinoceros.

The Rhinoceros Hornbill. One or two were kept at different times.

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Authracoceras malabaricus.

Craniorrhinus corrugatus.

Anorrhinus galeritus.

These Hornbills live on fruit, bread and small birds. They were very fond of mice. One was very clever at catching sparrows when they flew through its cage. It would play with its victim for a time and then swallow it. They are apt to die very suddenly from no distinct cause.

## PSITTACI.

Lorius domicella.

 $L.\ flavopalliatus.$ 

L. garrulus.

• A number of these gay coloured birds are brought by the Bugis men for sale.

Cacatua galerita.

The Sulphur crested Cockatoo was frequently kept.

C. moluccensis.

Large Cockatoo. One specimen lived for upwards of twenty years and is still alive.

C. sulphurea.

Lesser sulphur crest kept in 1880.

C. rosacea.

Rosy Cockatoo, has been kept for some time.

Palæornis longicanda.

The common parrakeet, does not live well in captivity. It is common wild in the gardens.

Calopsitta novæ hollandiæ.

Lived well for some time.

Eclectus viridis, E. pectoralis and E. linnaei.

The Eclecti are often brought by Bugis men.

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Eos fuscata.

Psittinus incertus Shaw.

The Pialing, is rather a dull stolid bird, sitting perched on the top of a stick the whole day.

Trichoglossus cyanogramma.

Loriculus galgulus.

The Serindit lives best in a small cage of rattan. It is a quiet little bird, chiefly attractive for its curious way of sleeping suspended by its claws to the top of the cage with its head hanging down like a bat.

## GALLINÆ.

Pavo muticus.

The Malay pea-fowl, has several times been kept. Young birds are very difficult to keep, but full grown birds live well. One or two used to wander loose in the gardens, but disappeared either killed by musangs or stolen by natives. One very fine peacock was found dead in its cage one morning, with a punctured wound near the eye. This it was surmised was caused by a blow from the beak of pheasant which lived in the next cage.

Argasianus argus.

The argus pheasant and the Borneo-Argus have both been kept. The argus pheasants do not live well in captivity.

Polyplectron bicalcaratum.

Peacock pheasant, was in the aviary as early as 1875 but of late years none were obtained.

Numida meleagris.

The Guinea fowl lived for a number of years, and one at least must from its appearance have been very old when it died.

Gallus varius.

Javanese wildfowl. Cock birds lived well and long, hens seemed more delicate.

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## G. atroviolaceus.

This beautiful chicken was described by Lieut. Kelsall from specimens brought to Singapore from an unknown locality. Another pair was seen brought in for sale in one of the animal shops, but it has not been seen since. It lived for some time in the gardens. Its habitat is not known.

## G. bankiva vars.

Japanese fowl have been on view, and also several monstrous chickens with three or four legs. One cock had an extra half pelvis and complete leg, and a hen had two legs projecting out straight behind it. Another curious monstrosity was a cock which walked so erect that its tail touched the ground between the legs. These monstrosities, by no means rare in the east, are very attractive to natives, quite a large number were brought to the earlier agricultural shows in Penang.

## Phasianus Reevesi.

Reeves Bartail pheasant.

Euplocamus Veilloti.

Often obtained; a handsome long lived bird.

E. Horsfielde.

E. nycthemerus.

The silver pheasant. Lived well for some years.

E. proelatus.

Siamese pheasant. This beautiful bird did not live long as it was killed by a rat not long after it was obtained.

E. nobilis.

Borneo Fireback (1880).

Thaumalia picta.

Golden pheasant.

Acomus erythropthalmus.

Rufous tailed pheasant. This handsome bird lives easily and long.

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Rollulus roul-roul.

The green partridge lives tolerably well, but is very shy concealing itself in its box at the sight of visitors. They are liable to the attacks of a bird louse which crowd round the head and neck and seem always if neglected to prove fatal. The same parasite attacks and kills calaenus nicobarica.

Caccabis chukar.

The Indian partridge presented lived for a year or two.

Rhizothera longirostris.

The large partridge lives long and well. On one occasion a couple which had been kept in cages apart for a long time by a resident was presented to the gardens, as they were of different sexes and always calling to each other, it was assumed that they would live happily together but shortly after having been put into the same enclosure, on the absence of the keeper, the cock bird attacked the female and so pecked its head that it died.

Coturnix sp.

The button quail is brought in large numbers from India for food, but did not thrive when put into an open enclosure, as they seemed to suffer from damp.

Coturnix communis.

Common quail was in the aviaries in 1880.

RALLIDÆ.

Erythra phoenicurus.

The common water rail is frequently caught as it not rarely flies into houses at night attracted by the light, most so caught lived but a short time but some presented by Mr. Down lived long, and some are still living. It is common in a wild state in the garden where it often nests.

Porphyrio Edwardsi.

The purple coot, lived a very long time in captivity. The feet of these birds are apt to get swollen if the floor of the cage is of stone or cement.

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## P. sp.

From China. A dull blackish coot often kept as a pet by Chinese. Three birds have been presented, but two were killed and swallowed by a Python which found its way into the cage. I failed to identify this species.

#### CHARADRIDÆ.

Numenius phoeopus.

The Whimbrel. A specimen sent from Egypt lived but a short time.

## PELECANIDÆ.

Pelecanus Philippinensis.

The grey pelican, has lived long in captivity. One specimen was caught in the harbour.

## P. roseus.

A single bird was sent from the museum, which had been brought in by a Chinaman who had wounded it with a full charge of shot in the back. Of this injury, it recovered completely in a few weeks and became a very fine bird. It was eventually sent to the museum again.

# P. sp.

Two of these birds were found being carried about in a rickshaw by a Chinaman, who had missed the owner. The police sent them to the aviary where they remained for a long time, and were never claimed.

# FREGATIDÆ.

# Attagen minor.

This rather rare frigate bird lived long in captivity, but was finally killed by an adjutant who shared its cage and with whom it was on good terms. Some quarrel arose between the birds when no one was by and the adjutant broke the skull of the frigate bird with a blow of its beak.

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## A. sp.

A specimen bought for five dollars from a Malay in 1904 is still alive. These birds are the easiest of the sea birds to keep in captivity.

## SULIDÆ.

## Sula fiber.

The brown booby lived a long time in captivity. It was found that after a time in its enclosure its feet became stiff and it could not walk. This was cured easily by allowing it at intervals to swim in the lake with a string attached to it, which it much enjoyed.

# Leptoptilus Argala.

The Indian adjutant. One example of this bird was kept for some time.

# L. javanica.

The common adjutant. This bird is very long-lived and one has been in captivity for over 20 years, as no one seems to know when it came. Most of the birds brought in have been wounded by shot and the old one had its wing broken and never repaired. One which was sent to the gardens appeared to be in excellent condition but refused to eat, and died in a couple of days. It was found to have received a complete charge of shot in the abdomen. The adjutants eat meat, fish, rats and any vermin.

## Anatidæ.

## Cycnus alor.

White swans were kept for many years on the lake but both of the two last disappeared and were supposed to have been stolen.

## C. atratus.

The Australian black swan has always been kept on the lake and not rarely bred, making a large nest of rotten leaves fished up from the bottom of the lake by the cock bird which

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threw them to the hen who arranged them by stamping on them with her feet. The young birds however were often destroyed by eagles and hawks. When a pair of swans occupied the lake they would not allow a new comer there but chased it off. They often left the lake to crop the grass on the grass plots, and one while crossing the road was run over by a carriage and its leg nearly cut off. The leg had to be removed, and the swan recovered and lived for many years, and though it could no longer walk as before, it used to wriggle along on its belly on the grass plots and so get the grass it liked.

Two were killed and eaten by a large python, on two successive months. On the occasion of the second disappearence of the swan a hunt was organised and the python 18 feet long was found on the Island in the lake and shot with the swan still inside it. The head of the swan had been crushed by the jaws of the snake, but the body was entire, giving the snake a remarkable appearance reminding one of a *Plesiosaurus*.

# Dendrocygna javanica

The whistling teal, was constantly kept on the lake and used to nest, and rear young which however were often destroyed by eagles and kites. At one time when there was a crocodile in the lake, the teal used to roost each night on the leaves of the *Victoria Regia* water lily, and frequently laid eggs there. Though the wings of these ducks were cut at first so that they could not fly they used commonly to take long flights when the feathers grew again, and they could not be recaptured, and either flew far away or fell victims to would-be sportsmen.

# Nettopus coromandelianus.

The goose teal, used for many years to frequent the lake in the spring, but would only remain a few weeks on passage.

# Aix sponsa.

Mandarin Duck a pair was presented to the gardens but did not live long.

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Anas boschas var.

Three Bali ducks were for a long time on the lake having been presented by Mr. Balfour Lees. The peculiarity of this bird consists of its curious erect habit when walking. It stands as erect as a penguin, whence it is often known as the penguin duck. A number of ducks of different kinds were sent on one occasion from Egypt, of these only two arrived alive, a widgeon (Mareca penelope) and a tufted duck, Fuliqula cristata both were put on the lake, but remained there but a short time, and then disappeared.

## STRIGES.

Ketupa javanensis Lam.

The Fishing owl. These are very long-lived owls and those in the gardens have been there 16 or more years.

Bubo orientalis.

Was on view several times.

Ninox scutulata.

The little Hawk owl lives but a short time in captivity.

Scops bakkamaenus.

This and one or two other small owls were kept for a short time.

Asio accipitrinus.

The short-eared owl. One caught in Singapore (the only one recorded from the peninsula) lived for some time in the gardens.

## ACCIPITRES.

Hieratus pennatus.

A pair of these were found fighting in the gardens and a cooly caught one under his coat. It was transferred apparently none the worse to a cage in which was a large Sea-eagle. On being fed, the little eagle left its own piece of meat and tried to rob the Sea-eagle, who resisted and caught the small bird by the wings. It was quickly rescued, and transferred to another cage where it rearranged its plumage, erected its crest

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and seemed quite happy. Next morning after being fed it fell dead. At the post mortem examination it was found that the liver and other viscera had been cut through in several places during the first fight. Though it had showed no signs of any injury till its sudden death.

# Lophiotriorchis Kieneri.

This beautiful bird was caught attacking the pigeons of a resident who sent it to the aviary, but not long afterwards owing to the carelessness of a cooly it escaped.

# Spizaetus Horsfieldi.

Horsfield's Eagle is common in Singapore. This fine black Eagle has often been caught but never seems to get tame, constantly dashing against the wires of its cage.

# Haliætus leucoryphus.

Mace's Sea Eagle. A specimen was kept for very many years, how long was not known. It showed signs of great age, and in trying to bathe in too small a tank injured its wing. The wound refused to heal and the bird had to be killed.

# H. leucogaster.

The common Sea-Eagle, has been caught several times in the gardens and by residents and kept in the aviaries for a long period. It lives very well in captivity.

#### Haliastur indus.

Brahminy Kite. Often caught young, and has lived for many years.

# Spilornis bacha.

A common hawk has often been presented to the gardens and lived fairly long.

# Accipiter virgatus.

The common Sparrow-hawk, has been often caught and kept. It has been captured close to the aviary pouncing on a grass lizard. It is very restless in captivity dashing against the bars of the cage and seldom lives long.

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## COLUMBÆ.

Osmotreron vernans.

The green pigeon can never be kept long in confinement as it refuses to feed.

Carpophaga oenea.

The Pergam, lives well and long.

C. insularis.

This pretty pigeon from the Nicobars lives easily but is seldom procurable.

C. whartoni.

The Christians Island pigeon is difficult to keep as trefuses most kinds of food.

C. sylvatica.

Indian fruit Pigeon kept in 1880.

Myristicivora bicolor.

The Rawei. This beautiful black and white pigeon well in captivity.

Calaenas nicobarica

A pretty bird easily kept. It is a very quiet bird hardly moving about. At night, it seems to be more lively and some kept at the Director's house always made a kind of cooing noise at about 9 o'clock at night. It is often brought by natives to Singapore. It feeds chiefly on paddy.

Chalcophaps indica.

A number of these pretty pigeons were put in a cage in the aviary, but owing to the fall of a bit of board all escaped. They however settled down in the gardens where they may be often seen.

Columbia livia.

Rock-pigeon kept in 1880.

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Butreron capelli.

Five of these birds were sent from Johore in 1905, but refused to feed.

Goura coronata.

The Victoria crowned pigeon, lives very well in captivity. Some obtained about 1875 lived for about 16 years. Of two presented later one died of some disease resembling gapes which at that time was very prevalent among domestic fowls.

Turtur tigrina and Geopelia striata are both very common in the Gardens in a wild state.

Macropygia assimilis.

Two examples of this brown pigeon were kept in 1880.

#### LARIDÆ.

A large gull, perhaps the glaucous gull Larus was received with other birds from Egypt and lived for some years. Although it ate fish, it chiefly lived towards the end of its life on banannas, which it evidently much preferred.

## PHOENICOPTERI.

Phoenicopterus roseus.

The flamingo. Several of these birds were received from Egypt, and were put in an enclosure on the lake but they were attacked by the large water turtles, (*Trionyx*) with which the lake was infested and some being killed, the others were removed to an enclosure in the aviary, but they did not thrive and all died.

#### IBIDÆ.

Ibis melanocephalus.

The black-headed Ibis, was presented in 1903, it was in young plumage but shortly developed its white feathers and dusky head. It is still alive.

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## ARDEIDÆ.

Ardea sumatrana.

The large blue heron two of these birds have lived for a very long time in the Gardens, one about 20 years. The second about 15. This latter was caught young at Changi and brought up by Malays. It used to go to fish along the sea-coast every day and return to the house at night. This heron makes a strange booming noise constantly, holding its head erect and dilating its throat. The female has laid eggs several times in the aviaries but the rats have usually destroyed them.

Bubulons coromandus.

The Cattle egret lives well and long in captivity. One has been kept since 1892, another was obtained later. I have seen them kept as pets by the Akits a race of Sumatrans who live on rafts in the Siak river, and catch fish. This bird produces its beautiful egret feathers once a year in spring and they can be easily removed when ready to shed without injury to the bird. The two birds were at one time put into the same cage but fought viciously, one receiving some damage to its head.

## CICONIDÆ.

Dissemurus episcopus.

This handsome stork was represented by two young birds sent from Pahang which lived and grew very well in confinement till they attained their full coloring. They were both killed by a curious accident. A swarm of bees took up its abode in the bushes close to the aviary, and as they were troublesome, the coolies attempted to destroy the comb. The bees flew about the aviary in swarms but none of the birds took any notice of them except the storks which snapped at them, and some of the bees getting into their mouths stung them in the throat and both died the following day.

Nycterinia Jabiru.

· 美大五 · 漢一家 を明日からいこと

The Jabiru two of these fine birds were presented in 1899 and lived for some years when one died. The other is still living.

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Two white Indian storks were presented in 1901, one of which had its beak so bent by some accident that it could not feed itself, and had to be fed by hand. A temporarily employed keeper unaware of this did not do so and the bird eventually died. The other is still living.

#### RATITÆ.

Dromaeus Novæ-Hollandiæ.

The Emu. These birds were kept from 1875 onwards. One pair in the Gardens bred in 1892 and the female laid one egg, unfortunately broken by accident by the male. Not long afterwards the male accidentally got his neck caught in the woodwork of his cage and though released quickly died in a few minutes perhaps from shock. The female was sold some years later.

Casuarius uniappendiculatus.

A female of this rare Ceram Cassowary was presented in 1891, and died in 1905 apparently of old age. It lived on bread, sweet-potatoe and the cobs of maize after the squirrels had eaten the grains off them.

C. sp.

Five young birds from New Guinea were purchased some years ago, and kept in an enclosure, but had to be separated as they fought. They were eventually sold.

## REPTILES.

Trionyx cartilagineus.

The water turtle, caught in the lake lived many years. It is not only carnivarous, living on fish and frogs, but eats also paddy and boiled rice made up into balls. They evidently breed in the lake, as they became abundant at one time and killed the flamingos by biting their legs. They were caught by a large wire trap with a falling door baited with dead birds.

Testudo emys.

The large Malay land tortoise. One was caught by myself in Johor, another in the Dindings and a third was presented **B** A. Soc., No. 46, 1906.

to the Gardens. They are kang kong (*Ipomea aguatica*). They lived long and were eventually sold.

Testudo amboinensis.

The common box-tortoise, chiefly specimen, caught in Singapore, lived well eating kang-kong. These animals used not rarely to lay eggs, 2 at a time, very large for the size of the animal, oblong white with very hard thick shells. They deposited them in a corner of the enclosure and partly covered them with sand. None were ever hatched.

Daimonia subtrijuga.

The Siamese tortoise presented by Capt. Flower, lived but a short time and would not feed. It was discovered later that it are exclusively a blue mussel, unprocurable in Singapore.

Geomyda spinosa Gray.

The red jungle tortoise, common on Bukit Timah, lived easily in captivity. It eats leaves of kang kong etc. I have found it eating agaries in the forests.

Cyclemys platynota Gray.

The flatbacked tortoise, caught in Singapore, is a dull dirty looking tortoise which spends almost all its time under the water.

Chelone imbricata.

The Hawk's bill turtle. A number of small ones were presented to the gardens, but lived a short time only, as apparently the fresh water was not suitable for them and their feet became diseased. A larger one was obtained later, which its former owner said refused food of all kinds. It was found that it could not eat whole fish but if they were cut into bits it ate them. It lived for some months only, swimming very briskly about its tank but it appears these animals require sea water.

Crocodilus porosus.

The common crocodile, is easily procured and easily kept. One brought to the gardens and left tied up for a short time managed to escape into the lake where it grew to a length of 6 or 7 feet, and became troublesome, destroying the waterfowl and eventually commenced trying to seize the coolies drawing All kinds of methods were resorted to destroy it. It was twice wounded with shot, and both arsenic and strychnine were administered to it in chickens. Attempts were made to net it, and to catch it with hooks and bamboo spikes fastened to chickens and also to destroy it with dynamite. All proved unsuccessful, and finally the lake was drained nearly dry and attempts made to find and shoot or spear it, but it concealed itself in the mud, and during the night escaped from the lake and was never seen or heard of again. Another was kept in a tank for a considerable time, and became tame enough to come to the side whenever it was called, but was always vicious when the keeper entered the enclosure. On one occasion a visitor thrust a stick into its mouth which broke and a portion lodged transversely across its throat. This was with some difficulty extracted, but caused an abscess behind the base of the ramus of the jaw which penetrated through causing a large hole from the outside into its throat. The animal refused food for a few days, and the wound commenced to heal and in a surprizingly short time the damage was quite repaired. The crocodile lived till it was sold in 1904.

# $Hydrosaurus\ salvator.$

The Biawak or Monitor has often been kept. It is common in Singapore, and one was actually caught in a godown in the town, having apparently come up a drain from the river. It was in a very poor starved condition. This lizard attains a very large size and is destructive to poultry. A large one living near the lake killed some Siamese teal and a black swan in 1888 before it was destroyed. One of no great size which had escaped from a cage nearly caused the death of the cooly who recaptured it. It had climbed up a tree, and he ascended the tree and noosed it with a string noose on a stick, but when he

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jerked it from its hold it fell and as it did so struck him with its sharp claws on the ankle, cutting an artery from which he nearly bled to death. The Biawak eats meat, fish, frogs, rats, etc., when given a rat it shakes it violently like a dog, and then crushes the body from head to tail in its jaws till all the bones are broken when it swallows it whole, head first, when defending itself it slashes about with its long wiry tail, inflicting sharp blows. In captivit, the animal constantly pushes its nose against the wire netting so that after being in confinement for some time most of them have the skin of the nose rubbed away. It much enjoys lying in a water tank, though it does very well without one. This animal lays its eggs in holes of no great depth in sandy places. I have seen quite a number so engaged.

#### OPHIDIL

Though many kinds of the smaller snakes are abundant in Singapore and often caught in or near the gardens, few have been kept for any length of time in the aviaries, on account of the absence of a proper house for them. Glass boxes such as are used in most menageries are very hot, unless put in a properly cool house, and feeding these small snakes requires a supply of frogs and mice which would entail an extra cooly to eatch them. Some of them have been kept for a short time after capture and later sent to the Museum or given away to collectors.

The following were on view from time to time.

Dipsadomorphus dendrophilus.

D. Cynodon.

Chrysopelaea ornata.

Dryophis prasina.

Bungarus fasciatus.

This poisonous snake was kept for some time. It is very handsome with its black and yellow rings, but very vicious readily striking at any one. It has a habit of rapidly beating

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its tail on the ground when annoyed, making a rattling sound, apparently as a warning. *Callophis gracilis*. Also a poisonous snake does the same. The specimen exhibited came from Pahang.

Naia tripudians.

The black cobra a common snake in the gardens has often been exhabited, but seldom lives long in captivity. Many possibly were injured in capture. It does not feed very readily in captivity, but will eat mice and small birds, and frogs. Its habit of spitting its venom into the eyes of people approaching too near it makes it a dangerous animal to keep in a close wire cage, and it seemed to suffer from heat in a glass box.

# N. bungarus.

The Hamadryad. Small specimens caught in the gardens were exhibited on several occasions. One was caught eating a small python, and transferred to a cage but it refused to continue its meal, and others obtained refused to feed though snakes, eggs, mice, frogs and other food was offered.

This snake is now apparently rare in Singapore, none have been brought in for a long time. The last I saw was a moderately large one brought in a box by two little Malay boys who had caught it near the Barracks. They had no idea it was a dangerous snake.

# Lachesis Wagleri.

The green viper. This has often been exhibited being a common and handsome snake, beautifully marked with black, yellow, green and prussian blue. It lives well in captivity and also breeds, producing 5 to 9 young at a time. As of course is well known to most people, the young are born free and not deposited in the form of eggs. The green viper eats rats of quite large size, birds, lizards and frogs. There is always a little difficulty in rearing young ones, as they require very small lizards for their food which are difficult to catch but some have been brought up. It is a quiet snake lying quite still on a branch for hours together. On two occasions coolies

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in the gardens have been bitten by young green vipers which had fallen from a tree and been stepped on. The bite is not fatal but gives a good deal of pain for a few hours, the inflammation being about as bad as that of a scorpion sting. A native who possessed a large pariah dog, allowed a very large freshcaught green viper to bite the dog on the thigh. A dog uttered a shriek and ran away, returning quite well in about two hours and none the worse. A sparrow was put into the cage of a green viper and flew about taking no notice of the snake. till the viper suddenly struck it on the thigh, and the blood immediately flowed. The bird flew away to the end of the cage but did not seen at all affected by the poison. The snake followed it up and struck at it again seizing its head in its mouth and crushing it at once. As had the bird been free it could easily have flown out of the snakes reach before the snake caught it again, the action of the poison does not appear to be of much value to the reptile.

# Python curtus.

The little red python, a short thick red and grey snake formerly considered very rare is not at all uncommon in the forests of Bukit Timah, and has often been exhibited. It is a sluggish snake unless it means to strike which it does with lighting like rapidity. It feeds on rats and mice and will take milk occasionally. It only requires feeding once a month as a rule.

# Python reticulatus.

The Python is one of the commonest snakes in Singapore. And specimens of every size up to 26 feet long have been constantly exhibited in the aviaries. Very large ones have also been seen and killed also in a wild state in the gardens, and small one have occasionally found their way into the aviary cages and devoured some of the birds, and being afterwards unable to escape by the small hole by which they entered were captured on the following morning. Like many snakes the python is nocturnal remaining quiet all day and going out in search of food at night. Young pythons eat rats and birds, and small to middle sized pythons are common visitors

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to fowl houses where they often kill more fowls than they eat. One of about 12 or 15 feet brought to the gardens for sale was said to contain no less than 12 ducks. Large pythons in the forest live on deer, pigs and other game of that kind. Small sized pythons usually feed once a month. The large ones over 20 feet long, usually once in from six to nine months. One which was about 22 feet long, not long after it was brought in passed the remains of a deer. It fed again some time later on three chickens, and remained without food for six months when it passed the remains of the fowls and then ate a good sized pariah dog, which lasted it for 9 months. There is very little difficulty in inducing the python to live on dead food, though naturally they kill their own prey. however they not rarely refuse a dead chicken or rat. animals such as fowls if put into a cage with a python are never alarmed at it, at least until it moves about; the fowls perch on the snake and clean their feathers, the rats burrow down among the coils of the snake and seem quite contented. The mythical fascination of the reptile does not exist except in poetical imagination. If the python is hungry—he usually stretches himself, looks fixedly at his prey which take no notice whatever of them. There is a rapid motion of the head and fore part of the snake, so rapid that it is impossible to see what happens, and the prey is encircled by a coil and a half of the snake's neck with its head firmly held and crushed in its mouth. The stroke is one of the most rapid things I have seen, and it is impossible for the prey to be killed quicker in any way.

If the food is dead he examines it carefully all over and taking it in his coils pushes it head first into his mouth. All snakes I believe swallow the prey head first, and I found once in a wood in Selangor a curious frog so marked that its tail end looked like the head. So that if a snake came and attempted to seize the frog by what was apparently its head, the frog at one spring would be out of the way. The python, especially large ones, only feed at night, and they shew signs of hunger by restlessly moving about the cage. They much object to being looked at or annoyed during their slow swallowing of the prey, and if disturbed will reject the food even if partially swallowed

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and will not feed again. Almost any snakes of any size will eat smaller ones. I have seen *Doliophis trivirgatus* eating a small brown snake, and the python will also occasionally do the same.

On one occasion there were five fair sized pythons put into one large cage. The biggest, a very thick snake, was about 25 feet long, the next in size seventeen feet, the others 12 to 15 feet. But during the first two nights the big snake ate the three smaller snakes, and had a try at the other who beat it off though it was slightly wounded. After this the two snakes lived at opposite ends of the cage. The large one was particularly vicious and it was unsafe for the keeper to go into its cage.

The python requires to be supplied with some arrangement for bathing, as it is very fond of water and suffers much if kept in too hot and dry a place, especially when it is changing its skin a dangerous time for any snake.

As a rule in spite of their great strength and weight these big snakes are easy to handle as in a struggle they soon get tired. One day one 21 feet long escaped from its cage and took refuge in a wood. As a little rain had fallen it was easily tracked by the broad bar across the road which it had made when passing. It was noosed by a running noose by one of the coolies and of course lashed out and fought furiously for a few minutes, but the other coolies about 20 in number seized it by the tail and body in a row and it was carried along, in spite of its struggles. It showed great ingenuity in getting a kink of its body against a tree and pulling on that, but eventually became quieter and was quite exhausted by the time it was brought to its cage. However it soon recovered, and lived for some time being finally killed by one of those pests to a menagerie, the man who cannot see an animal in a cage however tame without jobbing it with a stick. The man was arrested and fined, but the snake never recovered from the comparatively slight wounds it received. In noosing a snake the captor must wait till it raises its head, which it will generally do when threatened, and he must not miss slipping the noose over its head at the right moment or the snake will understand and dodge

the noose afterwards every time. When noosed and the snake begins to fight, care must be taken not to get the noose too tight, but play the snake like a fish if it fights much, as it soon gives up. A python can bite severely and its strong recurved teeth make a very bad wound, especially as it will not let go. Two Malays were carrying one through the streets and the one behind who was carrying the head end dropped it, it swung downwards and seized the calf of the leg of the Malay in front, lacerating it severely. I believe the snake's head had to be cut off before the Malay could be released.

Many years ago a python in the cage at the gardens, attacked its keeper. He was an European and went into the cage in a state of intoxication to show off the snake. The snake about 15 feet long, was annoyed and seized him, getting a coil or two round him. Assistance was procured and the snake was got off, but the man was marked all over the body with bruises as if he had been beaten with a thick stick. Had the snake been really intending to crush him, doubtless he would have had some ribs broken at least.

The python has never bread in captivity in the gardens, but one new caught one laid a large number of eggs on one occasion, now of which however hatched.

The flesh of the python is eaten by Chinese, and oil from the fat is in much request by Malays as a medicine for rheumatism.

REPTILES OCCURRING IN A WILD STATE IN THE GARDEN.

The following reptiles have been seen in the gardens in a wild state from time to time.

TORTOISES.

Trionyx cartilaginens. In the lakes.

Cyclemys platynota. In the lakes once.

Testudo ambomensis. Swamp economic garden.

LIZARDS.

Aelurbscalabotus felinus.

Rare, in the economic gardens.

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Gehyra mutilata.

Common in houses.

Gecko monarchus.

Common in aviaries.

Draco volans.

At certain times the flying lizards came to the gardens in numbers, and may be seen flying from tree to tree in the hot part of the day. They seem to have regular routes across the gardens, and a few days after their appearance they disappear again, and none are to be seen for some months.

Calotes cristatellus.

The chamoeleon lizard is very common.

Varanus salvator.

Not seen of late years, though still common in Singapore.

Mabuia multifasciata.

The common scinc, abundant.

SNAKES.

Typhlops braminus.

The Burrowing snake not rare.

Puthon reticulatus.

Common.

Cylindrophus rufus.

Common.

Chersydrus granulatus.

A dirty looking aquatic snake, found entering the garden (1898) after a spell of very hot weather apparently seeking water.

Tropidonotus piscator.

Occasionally in wet spots.

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Macropisthodon rhodomelus.

A little red snake very common in the grass.

Coluber melanurus.

Not rare.

Coluber oxycephalus.

Occasionally.

Dendrolaplus caudolineatus.

Very common.

Simotes octolineatus.

Common.

S. signatus.

Under tiles near the office 1898.

Homalopsis buccata.

In mud. Economic gardens.

Dryophis prasinus.

Very common tree snake.

Chryopelea arnata.

Common.

Naia tripudians.

Common.

N. bungarus.

Now rare.

Callophis gracilis.

Not very common.

Doliophis bivirgatus.

Rare.

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## BOTANIC GARDENS MENAGERI E.

# Lachesis Wagleri.

194

Common.

## BATRACHIANS.

## Rana macrodon.

Formerly common but much sought for food by the Klings.

R. erythroea.

Common in the ponds.

R. labialis.

do.

Common R. leucomystax.

Common depositing its spawn in the waterbutts

R. limnocharis.

In the ponds.

Callula pulchra.

The Bullfrog, very common.

Bufo melanostictus.

The common Toad very abundant.

# AN INDEX

In Romanised Hokkien and Cantonese

Compiled by Mr. Tan Kee Soon, of the Chinese Protectorate,
and

Revised by Messrs. A. W. Bailey and F. M. Baddeley,

# "The Chinese Names of Streets and Places in Singapore."

Published by Mr. H. W. Firmstone in Journal No. 42

Note. In this Index 'ô' has approximately the sound of 'o' in 'go,' 'o' that of 'aw' in 'law.'

## Hokkien.

A-bit-no hang Samban Street A-phien kong-si Cecil Street Ang kiô Thomson Road Bridge Ang-kiô thau Thomson Road Ang-mo hue-hng Botanical Gardens Ang-mo thiong Kampong Java Road Ang-teng lo-thau Collyer Quay Au-be-chhia lo Victoria Street Au-be-chhia lo Chiong-kun ia kiong Johore Road

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Au-kang Serangoon Road Ban-Heng bi-kau Beach Road Ban-hin koi Malacca Street Be-chhia koi Upper Circular Road Be-chhia lo-bue Bukit Timah Bih-lang koi Lorong Teluk Bo moan-iu koi Albert Street Bu-khô kang Serimbun

Serimbi But-lok Bedoh

## 196 CHINESE NAMES OF STREETS IN SINGAPORE.

## Hokkien .- Continued.

Chan-chu kang Selitar Chap-peh keng Boat Quay Chap-peh-keng au Circular Road Chap-sa" hang Boat Quay Chap-sa" hang au Circular Road Chhai-hng lai Lavender Street Chhai-tng au Bencoolen Street Chhat-bok koi South Bridge Road Chhau-chhi New Market Road Park Road Chhiang thai koi Upper Hokkien Street Chhiang thai koi e chat Hokkien Street Chiang-gi Changi Chin-chu sua" Pearl's Hill Road Chin Heng toa chhu North Boat Quay Chin Seng chhu-pin Coleman Street Chin Seng suan khau Enggor Street Krian Street

Chin sui koi

Chin Swee Road

Chioh-sua" Pulau Obin Chiu-long lai Cornwall Street Beng Hoon Road Havelock Road Chiu-long pin Cheang Wan Seng Rd. Cho-su-kiong khau Trass Street Gopeng Street Chua-chu kang Chua Chu Kang Chui-bo lai Alexandra Road Chui-chhu bue Boat Quav Chui-lan teng Club-Street Ann Siang Hill Chui-sien mng North Bridge Road Chui-sien-mng be-liau hanga lai Bain Court Chui-tham thau Thomson Road Reservoir. Ga-lan kuan Land Office Gi-hin kong-si China Street Gi-hok koi Carpenter Street Gi-hok kong-si au Clarke Street Gi-lap Siglap

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#### Hokkien.—Continued.

Gi-oh khau Amoy Street Gia-kang ma-ti Blakang Mati Go-cho bue Crawford Road Go-cho lut Rochor Road Go-cho lut bô-bue hang Bernard Street Carine Street Farquhar Street Go-cho ma-ta chhu Rochor Police Station Go-cho pa-sat Crawford Road Go-cho toa kong-si Lavender Street Go-cho toa-peh-kong Balestier Road Go-tai thien-kiong Church Street Gu-chhia-chui New Bridge Road Gu-chhia-chui hi-hng au Almeida Street Gu-chhia-chui hi-hng koi Smith Street Gu-chhia-chui hi-hng koi cheng koi Sago Street

Gu-chhia-chui huen-koi

Gu-chhia-chui kia

Craig Road

Neil Road

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Duxton Road

Tringganu Street

Gu-chhia-chui mata chhu Kreta Ayer Police Station Gu-chhia-chui toa be-chhia lo South Bridge Road Gu-kak hang Cheng Cheok Street Gu-long lai Blanco Court Guan Sun koi Teluk Ayer Street Hai-kin ang-mo toa-oh pin Bras Basah Road Hai-ki" thih tiau-kiô Cavenagh Bridge Hai-kuan Marine Office Hai-kuan ma-ta chhu Marine Police Station Hai-lam hue-kuan au Hylam Street Hai-lam hue-kuan hang Malabar Street Hai-lam hue-kuan pi\* Middle Road Hai-lam koi Hylam Street Hai-lam suan Thomson Boad Hai-san koi Upper Cross Street Hai-san koi ang-mo oh au Mosque Street Heng-Liong koi Robinson Road Hi-kuan koi Carpenter Street

# 198 CHINESE NAMES OF STREETS IN SINGAPORE

## Hokkien .- Continued.

Hiap Hoat koi D'Almeida Street Hick-Ni sin chhu au Coleman Street Ho Ban Nin au koi Sago Lane Ho-lan-se le-pai-tng pi Bras Basah Road Hok-im-kuan au-hue<sup>n</sup>-hang Cashin Street Hok-im-kuan au-koi Bain Street Hok Lam koi Hock Lam Street Hong Hin lo Kim Seng Road Hong Lim pa-sat Havelock Road. Hu-liau lai Kampong Martin Huan-a kam-kong lai Haji Lane Huan-a thiong-cheng be-liau Jalan Kubor Huan-a thiong-cheng thautiau Jalan Pisang Huan-a thiong-cheng tiong tiau Jalan Kledek Hue-chhia thau Singapore Railway Station Hue-hng au

Holland Road

Commercial Square

Hue-hng kak

Hue-long koi Sambawa Road Hue-sian Kallang Road I-sion koi Pekin Street It-ho ma-ta chhu Central Police Station Ji-chap keng Beach Road Jalan Sultan Ji-ong ge-mng Colonial Secretary's Office Ji-ong sua"-kha Niven Road Ji-ong sua<sup>n</sup>-kha ti tek-kha khi Wilkie Road Sophia Road Jiau-a koi Arab Street Jiau-a koi kam-kong lai Haji Lane Jiau-a phah-thang koi Little Cross Street Jit-pun koi Malay Street Ka-lan-ji Kranji Ka-lang kiô Kallang Road Kallang Bridge Ka-lang lut Kallang Road Ka-lek lut Craig Road

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## CHINESE NAMES OF STREETS IN SINGAPORE

# Hokkien .- Continued.

Ka-seng koi Cashin Street Ka-tong Tanjong Katong

Kam-kong ka-la-bu phau-bepo hang

Buffalo Road Kam-kong ka-poh Dickson Road

> Weld Road Clive Street

Kam-kong ka-poh hue" toa) koi

Dunlop Street

Kam-kong ka-poh thai-tu long

Jalan Besar

Kam-kong ma-lak-kah buetiau koi

Solomon Street

Kam-kong ma-lak-kah chhachun thau

Hong Lim Quay Kam-kong ma-lak-kah haikin

Hong Lim Quay Kam-Kong ma-lak-kah Heng Chhun hi hng tui-bin koi Angus Street

Kam-kong ma-lak-kah hi hng koi

Cumming Street Kam-kong ma-lak-kah kanga ki<sup>a</sup>

Canal Read Kam-kong ma-lak-kah kiô Read Bridge

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Kam-kong ma-lak-kah punsô chhia tui bin koi Kerr Street

Kam-kong ma-lak-kah sam-

pa-yang teng au

Keng Cheow Street Kam-kong ma-lak-kah sampa-vang teng hang

Omar Road

Kam-kong ma-lak-kah pasat koi

New Market Road

Kam-kong ma-lak-kah Tan Seng-ong au

Fisher Street

Kam-kong sai-kong ang-mo phah thih

Merbau Road

Kam-kong sai-kong khoi-ki" Tampinis Road

Kam-kong sai-kong phahthih au

Tampinis Road

Kang-kia<sup>n</sup>

Chua Chu Kang

Kang-po-kek

Municipal Office

Kat-ti-li hang-a lai

Guthrie Lane

Kau-a ki<sup>n</sup>

North Canal Road

Kek-sng cheng

North Boat Quay

Keng-chiau koi

Keng Cheow Street

Kha-khu keng

Gaol

# 200 CHINESE NAMES OF STREETS IN SINGAPORE.

#### Hokkien .- Continued.

than

Lau-chi hang

Lau-chi kha

Khe-ki Boat Quay Khoi-kin huen-koi-a Canton Street Kiau-keng khau China Street Kim-lan biô Narcis Street Kit-ling-a le pai au Pagoda Street Kit-ling-a le-pai-tng cheng Muar Road Kit-ling biô au Pagoda Street - Kit-ling biô pin Mosque Street Kit-ling le-pai-tng cheng Chiang-kun-ia pin Ophir Road Kong-chioh-a Canal Road Havelock Road Kong-chioh-a chiu-long lai Cheang Lim Hien Street Chin Swee Road Cheang Hong Lim Lane Kong-chioh-a chiu long thau Tong Watt Road Kong-chioh hi-hng au-koi

Lim Eng Bee Lane

Kuan-chha tiam koi

Kui-lan hang

Macao Street

Shaik Madersah Lane

Tan Quee Lan Street

Ku ba-li

Lau-chui khe<sup>n</sup> Stamford Road Lau-ia-keng khau Phillip Street Lau kha-khu-keng khau Bras Basah Road Lau pa-sat khau Malacca Street Market Street Lau pa-sat ma-ta-chhu au Cecil Street Lau toa-peh-kong hit-tiau Anson Road Leng-thau chen River Valley Road Lô-kun chhu General Hospital Lô-ma pan-jiang Rochor Road Lô-ma pan-jiang hang Fish Court Lô-ma pan-jiang toa-bechhia lo North Bridge Road Ma-cho-kiong au Amoy Street Ma-cho-kiong hi-thai au Stanley Street Ma-cho-kiong pin Japan Street Jour. Straits Branch

Lam-in-tang-tho-kho kak-

De Souza Street

Alexandra Road

Minto Road

### Hokkien .- Continued.

Ma-kau koi Hong Kong Street Man-li Mandi Mang-ku-lu Middle Road Mang-ku-lu chhai-tng koi Waterloo Street Mang-ku-lu chhia-kuan Middle Road Mang-ku-lu kang-a ki<sup>n</sup> Rochor Canal Road Mang-ku-lu sau-lo koi Prinsep Street Mang-ku-lu Seng-ong-kong Albert Street Mang-ku-lu chhio" pi" Middle Road Mang-ku-lu toa lo Bencoolen Street Meng-sun kang Morai Mi<sup>n</sup>-kua<sup>n</sup> keng Thomson Road Muan-lut Muar Road Nan-tau hang Rangoon Road Nam Seng hue-hng pin Tan Tok Seng's Hospital O-chhai hng Tiong Bahru O-kiô Balestier Road Delta Road

Ong-hu hang

R. A. Soc., No. 46, 1906.

Pahang Street

Ong-hu khau Sultan Gate Ong-hu khut-thau hang Padang Alley Ong-ke pen-chhu General Hospital Ong-ke sua" Fort Canning Hill Ong-ke sua<sup>n</sup> au Tank Road Ong-ke sua<sup>n</sup>-kha Hill Street River Valley Road Ong-ke sua<sup>n</sup>-kha be-liau pi<sup>n</sup> Damar Road Ong-ke sua"-kha kong-pan-ge phah chioh Damar Road Ong-ke sua"-kha thih chhio" Ord Road sua"-kha thih-Ong-ke chhio" pi" Read Street Ong-ke sua<sup>n</sup>-kha thih-long pi<sup>n</sup>-thau Tan Tye Place Pa-sô bue Cantonment Road Peh keng-a Cheang Hong Lim St. Peh sua-pu Buggis Street Peh-thah koi Java Road

Peh-thah koi au-koi

Palembang Road

#### Hokkien .- Continued.

Pak-ki lin Chinese Protectorate Pek-ki-lin tui-bin hi-hng koi Wayang Street Phah-tang koi Sultan Road Phau-be po chhau chhi Kerbau Road Phau-be po hang Belilios Road Roberts Lane Kinta Road Birch Road Kerbau Lane Phong-hut Ponggol Phue-kuan Post Office Pik-ki-lin au Canal Road Po-le Magistracy Po-le-au kang-a ki<sup>n</sup> South Canal Road Po-le-au Sun Hong koi George Street Po-le-au te-ji tiau koi Synagogue Street Po-le pin Macao Street Upper Macao Street Pun-sô chhia Canal Road Sai-ek-a-lui koi thai-tu long pi<sup>n</sup> Syed Alwee Road

Sang-che lo High Street Sang-chiau Chancery Lane Sang khau tian Alexandra Road Sang-leng Ulu Pandan Sek-a-ni koi Manila Street Queen Street Sek-a-ni le-pai-tng pi' Middle Road Sek-a-ni le pai tng tui-bin hang Bain Street Holloway Lane Seng Pô toa-chhu au Armenian Street Si-pai po Outram Road Si-pai po ma-ta chhu Sepoy Lines Police Station Siau-lang keng Lunatic Asylum Sin ba-li Bali Lane Sin kam-kong Kampong Bahru Sin koi-a khau Merchant Road Sin koi-a khau hi-hng koi Merchant Road Sin koi thau

Jour. Straits Branch

Teo Chew Street

## Hokkien .- Continued.

Sin pa-sat pin Sit-lat mng Ellenborough Street Teluk Blangah Fish Street Keppel Harbour Sua<sup>n</sup>-a teng Sin pa-sat ma-ta chhu Kling Street New Bridge Road Sua<sup>n</sup>-kia teng Police Station Kling Street Sin pa-sat ma-ta chhu Tai-jin ge cheng New Bridge Road Chinese Protectorate Sin pa-sat sin koi Tan-jiong gu Tanjong Rhu Chin Hin Street Tan-jiong gu-thau Sin sua" Kampong Bahru - Tanjong Gol Tan-jiong pa-kat Siô pan-lan Tanjong Pagar Road Pandan Kechil Siô-pô ang-mo phah-thih Tan-jiong pa-kat Chin Seng Middle Road sua"-khau Siô-pô hai-ki<sup>n</sup> Bernam Street Beach Road Tan-jiong pa-kat Seng-ong Siô-pô hue-chhia lo kiong pi North Bridge Road Wallich Street Siô-pô phah-chioh koi Tan-seng-ong koi Java Road Magazine Road Siô-pô phah-thih koi Tang-leng ma-ta chhu Sultan Gate · Orchard Road Police Siô-pô sam-pai yang Station hang Tang-leng ma-ta-chhu au Jeddah Street Paterson Road Siô-pô sin-koi Tang-leng ma-ta-chhu tui-Fraser Street bin Siô-pô thih-chhio" au-koi Scott's Road Holloway Lane Tang-leng pa-sat koi Siok-Ui sua"-teng Orchard Road Chin Swee Road Tang-leng pa-sat tui-bin hang Chhoa Lam Street Killiney Road Siong-pek koi Tang-leng peng-pang Nankin Street The Barrack (Tanglin)

R. A. Soc., No. 46, 196.

#### Hokkien .- Continued.

Tau-hu koi Chin Chew Street Chin Chew Upper Street Tek-kha Selegie Road Tek-kha chui-ti Mackenzie Road Tek-kha kang-a ki<sup>n</sup> Bukit Timah Road Tek-kha khut-thau hang Annamallai Chitty Lane Tek-kha ma-ta-chhu Kandang Kerbau Sta-Tek-kha ma-ta-chhu tui-bin gu-long pin koi Sungei Road Tek-kha so-si-tek hong Short Street Tek-kha tit-koi Selegie Road Tek-kha tng-tiam hit-tiau Selegie Road Tek-kha tng-tiam tui-bin tesa\*-tiau Annamalai Chitty Lane Tek-kha tng-tiam tui-bin teii-tiau Nagapa Lane tng-tiam tui-bin Tek-kha thau-tiau hang Veerappa Chitty Lane Thai-tu long khau Pulau Saigon Thian-kha keng

Tan Tok Seng's Hospital

Thih pa-sat Gek-lu-ma hang Garden Street Thih pa-sat khau Beach Road Thih pa-sat khut-thau hang Beach Lane Thih-pa-sat ma-ta-chhu tuibin hang Clyde Street Thih pa-sat tui-bin hang Garden Street Jeddah Street Thih thiau Kling Street Thih tiau-kiô Elgin Bridge Tho-kho au Battery Road Collyer Quay Tho-kho bue Flint Street Tho-kho hue-hng Raffles Place Tho-kho' khau Commercial Square Tho-kho le-long-kwan D'Almeida Street Tiam-pang lo-thau Boat Quay Tiau-kiô thau Hill Street Tiau-kiô thau bi-kau North Boat Quay Ti-kong Pulau Tekong

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Tio"-sian-su pi"

Jalan Klapa

#### Hokkien .- Continued.

Tiong koi Toa-ong sua" Market Street Government Hill Tit-lok a-ek bue-tiau koi Toa-ong suan au-koi Mc Cullum Street Cavenagh Road Tit-lok a-ek kit-leng biô pi<sup>n</sup> Toa pa-iô Japan Street Wayang Satu Tng-lang leng-su-hu hit-tiau Toa pan-lan Japan Street Pandan Besar Toa-che kha Toa-pô sin koi-a Kampong Glam Beach Chin Hin Street Toa-kau-thau-e ge-mng Toa Tang-leng Police Office Tanglin Toa kok Tok-sun lut Supreme Court Duxton Road Toa-kok-cheng chhau-po Tsô be-chhia koi Esplanade Hokkien Street Toa-kok koi Tuan Kat tho-kho au-bue High Street Bonham Street Toa-mng lai Tui-ku-pa-sat khi tan-jiong Ramah Street pa-kat hai-ki" hit-tiau Club Street Anson Road Toa-mng-lai hang-a lai Ua"-tiam khau Mohamed Ali Lane Clyde Terrace Toa-ong chhu Yu-long Government House Jurong

## Cantonese.

Chan chü shan
Pearl's Hill
Chan hing tai uk
North Boat Quay
Chan shing shan hau
Raub Street
Enggor Street
Krian Street

Chan shing tai uk fong pin Coleman Street

Chan sui kai Chin Swee Road

Cheung sin sz fong pin Jalan Klapa

Chha tin ma thau Keppel Harbour

Chha tin ma thau tui min Pulau Brani

Chhan shing wong kai Magazine Road

Chhat muk kai South Bridge Road

Chheung thai kai Upper Hokkien Street

Chheung thai kai ha kai Hokkien Street

Chhiu chau kai Teochew Street

Chhiu chau san kai Chin Hin Street

Fan chai mei Banda Street Fan chai mei ma-ta liu pin Spring Street

Fat lan sai lai pai thong pin Bras Basah Road

Fo chhe thau or cham Singapore Railway Sta-

tion Fuk nam kai

Hock Lam Street Fuk Yam kun hau kai

Bain Street

Fuk yam kun hau pin wang hong

Cashin Street

Fung hing lô Kim Seng Road

Ha mun kai Amoy Street

Amoy Street Hau kong

Serangoon Road Hau ma chhe lô tseung kuan

ye miu Johor Road

Hing Lung kai

Robinson Road Hip Fat kai

D'Almeida Street

Ho man nin hau pin kai Sago Lane

Hoi kuan ma-ta liu Marine Police Station

Hoi nam kai

Hylam Street Hoi nam wui kwun hoi pin

Beach Road

Jour. Straits Branch

## Cantonese.—Continued.

Hoi nam wui kwun hong Malabar Street

Hoi nam wui kwun pin Middle Road

Hoi pin thit tiu khiu Cavenagh Bridge

Hoi shan kai Upper Cross Street

Hoi shan kai ha kai Cross Street

Hoi shan kai hung mô shü kwun hau pin

Mosque Street

Hung khiu

Thomson Road Bridge

Hung khiu thau Thomson Road

Hung mô fan

Kampong Java Road Ka-lung khiu

Kallang Road

Ka-lung khiu Kallang Bridge

Ka-tei-lei hong tsai Guthrie Lane

Kam fong Gaol

Kam-lan miu Narcis Street

Kam pong hoi pin Beach Road

Kam pong ka pok Clive Street

Weld Road Dickson Road

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Kam pong ka pok thong chü fong

Jalan Besar

Kam pong ka pok wang (or tai) kai

**Dunlop Street** 

Kam pong ma-lak-kah Chhan Sheng Wong hau Fisher Street

Kam pong ma-lak-kah hei yün kai

**Cumming Street** 

Kam pong ma-lak-kah hoi pin

Hong Lim Quay

Kam pong ma-lak-kah khiu Read Bridge

Kam pong ma-lak-kah Lai pai thong hau pin Keng Cheow Street

Kam pong ma-lak-kah lapsap chhe tui min Kerr Street

Kam pong ma-lak-kah san pa-sat kai

New Market Road

Kam pong sai kong hung mô thit chhong Merbau Road

Kam pong sai kong chhung pin

Tampinis Road Kam pong san kai Fraser Street

#### Cantonese .- Continued.

Kam pong ta shek kai Java Road Kam pong tai ma lô North Bridge Road Kam pong yi ma lô

Victoria Street

Kat leng lai pai thong ts'in

Muar Road Kat leng miu pin

Mosque Street

Kat leng miu pin kai Pagoda Street

Kau ka-ku hau

Bras Basah Road

Kau ma li

Shaik Madersah Lane

Kau pa-sat

Malacca Street

Kun-yam miu chai-thong Waterloo Street

Kun-yam miu hei-thoi hau Stanley Street

Kung Pô kuk

Municipal Office

Kwai lan kai

Tan Quee Lan Street

Kwong-Fuk-miu kai Lavender Street

Kwun ts'oi phô kai Macao Street

Lam sam tai uk kai

Queen Street

Lam yin thung thô fu kok

De S

De Souza Street

Lan keuk kwun

Tan Tok Seng's Hospital.

Lo cho kai

Rochor Road

Lo cho kwat thau hong

Carine Street

Lo cho lut mô mei hong Bernard Street Farquhar Street

Lo cho ma-ta liu

Rochore Police Station

Lo cho mei

Crawford Road

Lo cho pa-sat

Crawford Road

Lo lam kai

Noordin Lane

Lo ma pan yang hong

Fish Court

Lo men san kai

Robinson Road

Lo ngan nga mun Court of Requests

Lo Ts'am kai

Lorong Teluk

Ma chhe kai

Upper Circular Road

Ma kau kai

Hong Kong Street

Ma lai fan tui min chung kan

ko thiu lô

Jalan Kledek

Ma lai fan tui min ma fong

Jalan Kubor

Ma lai fan tui min tai yat thiu lô

niu lo

Jalan Pisang

Ma li hong

Bali Lane

Jour. Straits Branch

## Cantonesc .-- Continued.

Ma miu kai Phillip Street Mang ku lô Middle Road Bencoolen Street Mang ku lô chhung pin Rochor Canal Road Mang ku lô shau chhe kuk Middle Road Mang ku lô sô lô kai Prinsep Street Mang ku lô thit chhong pin Middle Road Man hing kai Malacca Street Man hing mai kau Beach Road Mo ma yau kai Albert Street Mui hi kuk Kallang Road Ng toi thin kung Church Street

New Bridge Road Ngau chhe shui hei yün hau kai

Ngau chhe shui ve ma lô

Almeida Street Ngau chhe shui hei yün kai Smith Street

Ngau chhe shui hei yün ts'in kai Sago Street Ngau chhe shui hei yün wang kai

Tringganu Street
Ngau chhe shui ma-ta liu
Kreta Ayer Police Station

Ngau chhe shui ma-ta-liu chik sheung Neil Road

Ngau chhe shui tai ma lô South Bridge Road

Ngau kok hong Cheng Cheok Street

Pa-so mei Cantonment Road

Pak khei lun
Chinese Protectorate

Pak khei lun chik kai

Havelock Road Pak khei lun hau pin kai Canal Road

Pak khei lun tui min hei yün hau kai

Lim Eng Bee Lane

Pak khei lun tui min hei yün kai

Wayang Street Pak thap kai

Java Road Pak thap kai hau kai Palembang Road

Pek shan theng

Thomson Road Peng thau shan

Government Hill Phai kwun

Chinese Protectorate

#### Cantonese. - Continued.

Phau ma po ts'ô shi Kerbau Road Phau ma po hong Belilios Road Birch Road Buffalo Road Kerbau Lane Kinta Road Roberts Lane Po lei hau South Canal Road Po lei hau tai yi thiu kai Synagogue Street Po lei sz Magistracy Po lei sz fong pin Macao Street Po lei sz hau pin kai George Street Pô tsz chheung kai China Street Pun kei fan hai phô Stamford Road Sai pak mun Teluk Blanga Sai yeung lai pai thong pin Middle Road San chü sek tui min Pulau Brani San kai hau Merchant Road San kam kong Kampong Bahru San pa-sat ma-ta-liu

New Bridge Road Police

Station

San pa-sat ma-ta-liu ts'in kai New Bridge Road San pa-sat pin Ellenborough Street Fish Street San yi fuk kung sz hau pin Clarke Street Seng pô tai uk hau pin Armenian Street Sha tsui Tanjong Rhu Sha tsui hung mô thit chhong tui min Beach Road Shan tsai teng Kling Street Shan yeung tai uk pin Craig Road Shap pat kan Boat Quay Shap pat kan hau Circular Road Shap sam hong Boat Quay Shap sam hong hau Circular Road Shap sam hong wang kai tsai Canton Street Shek lat mun Keppel Harbour Shui sin mun ma fong kwat thau hong

Jour. Straits Eranch

Bain Court

Marine Office

Shun ching theng

#### Cantonese. - Continued.

Si-pai lin ma-ta liu Sepoy Lines Police Station Si pai po Outram Road Si shü kai Cecil Street Siu pan lan Pandan Kechil Siu po ta thit kai Sultan Gate Sui lan theng Ann Siang Hill Sui lan theng Club Street Ta thung kai Sultan Road Tai cheng keuk Kampong Glam Beach Tai kang thau nga mun Police Office Tai kot Supreme Court Tai kot kai High Street Tai mun noi Club Street Tai mun noi hong tsai Mohamed Ali Lane Tai mun noi tsau tim kak lei Ramah Street

Tai shu kwun fong pin Bras Basah Road Tai shü sun kwun Post Office Tai shui thong Thomson Road Reservoir Tai tang leng Tanglin Tai wong shan hau kai Cavenagh Road Tai yi yün General Hospital Tak sun lut Duxton Road Tan pin kai North Canal Road Upper Macao Street Tan yung pa-ka Tanjong Pagar Road Tan yung pa ka chan shing shan hau Bernam Street Tang leng Orchard Road Tang leng ma-ta-liu Orchard Road Police Station Tang leng ma-ta-liu hau pin kai Paterson Road Tang leng ma-ta-liu tui min Scotts Road Tang leng pa-sat tui min hong Killiney Road

Tang leng peng fong

The Barracks (Tanglin)

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Tai pan lan

Tai pak kung miu kai

Pandan Besar

Tai peng thau chü ka

Teluk Aver Street

Government House

#### Cantonese .- Continued.

Tau fu kai Chin Chew Street Upper Chin Chew Street Tei shui sz Land Office Tek kha chhung pin Bukit Timah Road Tek-kha kwat-thau hong Annamalai chitty Lane Tek-kha ma-ta-liu Kandang Kerbau Police Station Tek-kha ma-ta-liu tui-min ngau-lan-pin kai Tek-kha tong-phô tui-min tai-vat thiu hong Verappa Chitty Lane Tek-kha tong-phô tui-min tai-yi thiu hong Nagapa Lane Tek-kha tong-phô tui-min tai-sam thiu hong Annamalai Chitty Lane Thit pa sat hau Beach Road Thit pa-sat kwat thau hong Beach Lane Thit pa-sat tui min hong Garden Street Jeddah Street Thit tiu khiu Elgin Bridge Thô fu fa yün pin

Commercial Square

Battery Road

Raffles Place

Thô fu ham lang kwun D'Almeida Street Thô fu hau họi pin Collyer Quay Thô fu mei Flint Street Thong chü fong Pulo Saigon Thong chü fong pin sai a lui kai Syed Alwee Road Thung chai yi yün kai Wayang Street Tin fong Lunatic Asylum Tiu khiu thau Hill Street Tsau long noi Beng Hoon Road Cheang Hong Lim Lane Cheang Lim Hien Street Chin Swee Road Cornwall Street Havelock Road Tsau long pin Cheang Wan Seng Road Ts'ô shi

Cheang Wan Seng Road
Ts'ô shi
Park Road
Tsô sz kung
Gopeng Street
Tras Street
Ts'oi thong hau
Bencoolen Street
Ts'ung pak kai
Nankin Street
Upper Nankin Street
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#### Cantonese. - Continued.

Tün kat-thô-fu hau mei Bonham Street.

Wong fu hong Kampong Malayu

Padang Alley Wong fu kwat thau hong

Padang Alley

Wong ka fa yün

Botanical Gardens

Wong ka shan

Fort Canning Hill

Wong ka shan hau Tank Road

Wong ka shan keuk

River Valley Road Hill Street

Wong ka shan keuk ma fong pin

Damar Road

Wong ka shan keuk thit chhong pin

> Read Street Tan Tye Place

Wu hap thong. Balestier Road

Wu khiu

Delta Road

Wun tìm hau

Clyde Terrace

Yat hô ma-ta liu

Central Police Station

Yat pun chai kai Malay Street

Yat pun kai Japan Street

Yau wa kai

Arab Street

Yau wa kai hong tsai Haji Lane

Yau wa ta thung kai Little Cross Street

Yi fuk kai

Carpenter Street

Yi ma lô

New Bridge Road

Yi ma lô khiu

Coleman Street

Yi peng thau nga mun Colonial Secretary s

Office

Yi seung kai

Pekin Street

Yi shap kan

Beach Road

Jalan Sultan

Yi wong shan keuk

Niven Road

Yi wong shan keuk yau tek

kha hui

Sophia Road

Wilkie Road

Yü liu

Kampong Martin



# Grasses and Sedges of Borneo.

BY H. N. RIDLEY.

The following list is compiled from the collections of the Right Reverend Bishop Hose and Miss Hose, and of Dr. Haviland and other collectors as well as the lists of those collected by myself in Sarawak and Sandakan.

In so large a country as Borneo, of which the greater part may be said to be unknown botanically, a list of this kind can only be a preliminary one, and will be very much enlarged as the country opens up. The glumaceous plants too of several large collections such as those of Beccari in Sarawak, Creagh in Sandakan, Motley and Barber in various parts of Borneo, have not at all or only partially been worked out. The best known part of Borneo is Sarawak where Bishop Hose and Miss Hose, Dr. Haviland, and I myself on a short trip have collected. Dr. Haviland whose collections of trees and shrubs were remarkably fine devoted himself but little to herbaceous plants, except on his expedition to Kinabalu.

Most of the Bornean grasses and sedges here also found in the Malay peninsula, and in the adjacent islands of the archipelago.

#### GRAMINEÆ.

- Paspalum scrobiculatum, L. Common. Kuching, Sarawak (Miss Hose), Lundu, Sarawak (Miss Hose), Matang (H.N.R.), and a large form at Bau.
- P. conjugatum, Berg. Sarawak, Kuching (Miss Hose), Bau (Ridley), Sandakan (Ridley).
- P. distichum, L. Sarawak at Santubong (Bp. Hose), Kudat (Bp. Hose).

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- P. sanguinale, Lam. Common.
  - var. commutatum. Sarawak, Lundu, (Bp. Hose), Bau and Bidi (Ridley).
  - var. debile. Sarawak, Kuching (Bp. Hose).
  - var. pruriens. Kuching (Bp. Hose).
- P. longiflorum, Retz. Sarawak, Kuching (Bp. Hose).
- Eriochloa polystachya, H. B. K. Sarawak river bank (Bp. Hose). Kuching.
- Isachne australis, Br. Sarawak, Limbang, Kuching (Bp. Hose).
- I. rigida, Nees. Labuan. Open sandy country. (Ridley 9034).
  Sarawak, Mt. Matang about 1000 ft. alt (Ridley 11702).
- javana, Nees. Borneo sine loc. (Hook, fil. Fl. Brit. (Ind. p. 24).
- I. Kunthiana, Nees. Kinabalu (Haviland), Lundu (Ridley).
- Panicum colonum, L. Sarawak, Kuching (Haviland), Limbang (Miss Hose) Lengga (Bp. Hose).
- P. muticum, Forsk. Sandakan (Ridley).
- P. repens, L. Sarawak, Pinding Road (Miss Hose). (Ridley) Common.
- P. plicatum, Link. Sarawak, Saribas at Kundang Padili (Bp Hose), Lundu. Abundant. (Ridley).
- P. pilipes, Nees. Sarawak, Kuching (Miss Hose), Bidi, Matang (Ridley 11697); Sandakan, Bongaya River (Ridley)
- P. patens, L. Sarawak, Matang (Ridley 11701), Bau (Ridley 11703), Quop (Miss Hose). Br. N. Borneo, Bongaya (Ridley).
- P. setigerum, Retz. Sarawak, Bau (Ridley).

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- P. latifolium, L. Common. Sarawak, Saribas (Bp. Hose.)
   Quop (Miss Hose), Bau (Ridley 11688), Limbang (Bp. Hose); Sandakan, Bongaya in Labuk Bay (Ridley).
- P. myurus, H. B. K. Sandakan (Ridley), Sarawak, Kuching (Bp. Hose).
- P. auritum, Presl. Sarawak, Labu (Bp. Hose); Sandakan (Bp. Hose); Bongaya (Ridley).
- P. indicum; Linn. Common. Sarawak, Kuching (Miss Hose Dr. Haviland), Bau, Mt. Matang (Ridley); Sandakan (Ridley); Labuan (Merrill).
- P. myosuroides, Br. Sarawak, Kuching, Bau (Ridley).
- P. nodosum, Kunth. Sarawak, Limbang River (Bp. Hose), Bau (Ridley), Kuching (Miss Hose, Dr. Haviland 1910), Saribas (Bp. Hose).
- P. ovalifolium, Poir. Sarawak, Kuching (Miss Hose), Bau (Ridley); Sandakan, Bongaya (Ridley).
- P. sarmentosum, Roxb. Sarawak, Kundang Padili, Saribas (Bp. Hose).
- P. trypheron, Schultes. Borneo (Fl. Brit. Ind).
- P. caesium, Sarawak. Bau (Bp. Hose).
- P. maximum, Sandakan, Kudat among rocks by the sea (Bp. Hose); Sarawak, Kuching (Bp. Hose).
- P. humile, Nees. Borneo (Fl. Brit. Ind).
- Ichnanthus pallens, Munro. Sarawak, Puak (Ridley).
- Thysanolaena agrostis, Nees. Sarawak, Matang (Ridley); British North Borneo, Gaya Island (Haviland).
- Axonopus cimicinus, Beauv. Sarawak, Saribas (Bp. Hose).
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- Oplismenus compositus, Beauv. Sarawak, Limbang (Bp. Hose), Road to Bau (Ridley), Quop (Miss Hose), Dahombang River (Haviland).
- Pennisetum italicum, Sarawak, Quop (Cultivated) Bp. Hose.
- Cenchrus echinatus, L. British North Borneo, Limbarra Island Labuk Bay in sand (Ridley 9040).
- Thuarea sarmentosa, Pers. Labuan (Ridley), Sarawak, Santubong (Bp. Hose).
- Oryza sativa, L. Cultivated.
- O. Ridleyi, Hook, Fil. Borneo (Hook Fil. Fl. Bri. Ind. p. 93).
- Leersia hexandra, Sw. Sarawak, Kuching (Ridley, Haviland), Saribas (Bp. Hose).
- Leptaspis urceolata, Br. Sarawak, Santubong (Havilan d); Lundu near Waterfall (Ridley); British North Borneo, Bongaya River (Ridley).
- Coix Lachryma Jobi, L. Cult. at Labu, Sarawak, etc. (Bp. Hose).
- Zea Mays, L. Cultivated.
- Dimeria ornithopoda, Trin. Sarawak, Kuching (Ridley 11718), Bau (Ridley).
- Imperata arundinaçea, Cyrill. Sarawak, Kuching (Haviland, Bp. Hose), a branched form at Bidi (Ridley), Sandakan (Ridley), Labuan (Ridley).
- I. exaltata, Brngn. Sarawak, Santubong (Bp. Hose), British North Borneo, Kudat (Bp. Hose), Sandakan.
- Miscanthus sinensis, Anderss. Common. British N. Borneo, Kinabalu (Low), Gaya Island (Ridley), Sarawak, Common everywhere. Quop (Miss Hose), Kuching, Bau. (Ridley).

- Pollinia Ridleyi, Hack. Borneo, sine loc. (Hook. l.c. 114).
- P. nuda, Trin. A form with the calli of the spikelets glabrous. Sarawak, Bau (Ridley).
- Saccharum arundinaceum, Retz. Sarawak, river bank (Bp. Hose), Bau, Skerang, Saribas, etc., (Bp. Hose).
- Erianthus chrysothrix, Hack. Borneo (sine loc. Hook. fil. l.c.)
- Ischæmum magnum, Rendle. Labuan (Ridley); Sarawak, Kuching (Bp. Hose, Ridley 11698). Top of Matang (Ridley).
- I. muticum, L. Sarawak, Kuching, Santubong (Miss Hose).
- I. ciliare, Retz. Common everywhere. Sarawak, Kuching (Miss Hose, Haviland 1913).
- I. timorense Kunth. B. N. B., Sandakan (Ridley); Sarawak Kuching, Limbang, Labu (Bp. Hose), Labuan (Bp-Hose).
- I. Beccarii, Hock. Borneo (Beccari).
- Pogonatherum crinitum, Trin. Sarawak, Matang (Hullett), Bau (Ridley).
- Polytrias præmorsa, Hook. Sarawak, Kuching, river bank (Bp. Hose).
- Rottboellia glandulosa, Trin. Sarawak, Limbang (Bp. Hose), near Bau (Ridley 11681), Quop (Bp. Hose).
- Andropogon intermedius, Br. Sarawak, Bau (Ridley 11609).
- A. aciculatus, Retz. Sarawak, Kuching (Haviland), B. N. B., Sandakan, (Ridley).
- A. halepensis, Brot. Sarawak, Bidi (Ridley), abundant. Busau.
- A. squarrosus, Linn. Cult. at Kuching (Bp. Hose).
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- A. schoenanthus, Linn. Cult.
- Anthistiria gigantea, Cav. Sarawak, Sebayor, Saribas (Bp. Hose), Bau (Ridley), Busau.
- Eriachne triseta, Nees. Jesselton (Bp. Hose).
- E. pallescens, Br. Sarawak, Kuching (Miss Hose); Labuan (Ridley 9106), Merrill.
- Sporobolus diander, Beauv. Sarawak, Kuching, (Miss Hose), Dr. Haviland, Ridley), Bau (Bp. Hose); Sandakan (Ridley).
- Agrostis canina, L.
  - var. Borneensis. British N. Borneo, Kinabalu (Haviland 1399) at 13,000 feet alt.
- Deyeuxia epileuca, Stapf. Kinabalu at 13,000 feet (Haviland).
- Deschampsia flexuosa.
  - var. ligulata, Stapf. Kinabalu at 13,000 feet (Haviland).
- Eleusine indica, Gaertn. Everywhere. Sarawak, Kuching (Miss Hose), Sandakan (Ridley).
- E. agyptiaca, Desf. Sarawak, Santubong seashore (Miss Hose); Sandakan (Ridley).
- Cynodon dactylon, L. Sarawak, Kuching (Miss Hose).
- Leptochloa chinensis, Nees. Sarawak, Kuching, (Miss Hose).
- Phragmites karka, Trin. "Tebu Ayer," "Buluh Ayer," Sarawak. Bau (Bp. Hose), Skerang (Bp. Hose).
- Eragrostis tenella, R. and S. Sarawak, Lundu (Miss. Hose). Kuching (Bp. Hose).
- E. amabilis, Wight. Everywhere. Sarawak, Kuching (Miss Hose).
- E. malayana, Stapf. Sarawak, Kuching (Haviland).

- E. elegantula, Steud. Sarawak, Kuching (Miss Hose), Sandakan (Ridley).
- E. pilosa, Beauv. Sarawak, Kuching (Ridley).
- Centotheca lappacea, Desv. Common everywhere. Sarawak, Kuching (Bartlett, Miss Hose), Pengkulu Ampat (Haviland), Bau (Ridley).
- Lophatherum Lehmanni. Sarawak, Quop (Miss Hose), Limbang (Bp. Hose), Rejang (Haviland).
- Bambusa near Ridleyi, (fide Gamble). Kinabalu, Tawaran (Haviland 1387). Stapf. in the Linnean Transactions p. 248 gives this as Schizostachyum Blumei, Nees. All the specimens seem too imperfect, but the one in the Singapore herbarium seems to me no Schizostachyum.
- Schizostaehyum brachycladon, Kurz. Sarawak, Bau (Ridley).
- Gigantochloa Atta, Kurz. Sarawak Riverbank (Haviland).
- Dendrocalamus flagellifer. Sarawak, Kuching (Bp. Hose), Quop (Bp. Hose).
- Dinochloa Tjankorreh, Buse. Penokok River (Haviland 1390), Abundant, foot of Matang, and near Kuching. A very elegant climbing bamboo.

## CYPERACEÆ.

- Kyllinga monocephala, Rottl. Everywhere. Sarawak, Kuching (Haviland 1926), Bau (Ridley).
- K. brevifolia, Rottl. Everywhere. Sarawak, Kuching, Lundu (Miss Hose), Bau (Ridley). British North Borneo, Sandakan (Ridley).
- Pycreus sanguinolentus, Nees. Sarawak, Bau (Ridley).
- P. nitens, Nees. Sandakan (Ridley 9031). A tall weak form. R. A. Soc., No. 46, 1906.

- P. polystachyus, Beauv. Sarawak, Kuching, Mt. Matang (Ridley), Sandakan (Ridley).
   var. laxiflora. Sarawak, Santubong (Miss Hose).
- P. pumilus, Nees. Borneo, (Motley), forma Borneensis (Burbidge).
- P. sulcinux, Clarke. North Borneo, (Burbidge), Sarawak, Puak in the rubber plantation. A very pretty yellow spikeletted plant.
- Cyperus cephalotes, Vahl. Banjermassin (Motley).
- C. cuspidatus, H. B. K., Borneo (Motley).
- C. Haspan, L. Sarawak, Kuching (Miss Hose), Bau (Ridley) Mt. Matang (Ridley), B. N. Borneo, Sandakan. Bongaya (Ridley), forma Malasica, sine loc. (Motley).
- C. pulcherrimus. Banjermassin (Motley).
- C. malaccensis, Lam. Sarawak, Kuching (Miss Hose, Ridley), Lundu (Miss Hose).
- C. pilosus, Sarawak, Quop (Miss Hose), Kuching (Haviland 1916, Ridley), Bau, Matang (Ridley).
- C. zollingeri, Steud. Sarawak, Kuching, Lundu (Miss Hose).
- C. rotundus, L. Borneo sine-loc. (Barber), Labuan (Motley) Sarawak, Kuching, Santubong (Bp. Hose).
- C. stoloniferus, Retz. Sarawak, Santubong (Miss Hose, Ridley). On the sandy shore.
- C. tegetum, Roxb. Sarawak, Kuching (Bp. Hose).
- C. platystylis, Br. Banjermassin (Motley).
- C. diffusus, Vahl. Sarawak, Bau (Ridley), Santubong (Miss Hose).
- C. radians, Nees. Sarawak, (Beccari), Banjermassin (Motley).

- C. compressus, L. Sarawak, Kuching, Bau (Ridey).
- C. Iria, L. Sarawak, Kuching (Ridley), Lundu (Miss Hose).
- C. distans, L. Sarawak, Kuching (Miss Hose).
- Mariscus dregeanus, Kunth. Borneo, (Hook. fil. Fl. Br. Ind.)
- M. cyperinus, var tenuifolins, Schrad. Sarawak, Quop, (Miss Hose).
- M. biglumis, var cylindro stachys. Sarawak, Bau (Ridley).
- M. albescens, Gaud. Borneo (Barber), Santubong (Miss Hose).
- M. microcephalus, Presl. Sarawak, Kuching Bau (Ridley), Lundu, (Miss Hose), B. N. Borneo, Bongaya River (Ridley).
- M. ferax, Borneo (Barber).
- Heleocharis plantaginea, Br. Sarawak, Limbang (Bp. Hose).
- H. variegata, Kunth. Sarawak, Kuching (Ridley), Limbang (Bp. Hose).
- H. capitata, Br. Labuan (Bp. Hose).
- H. chætaria, R. and S. Sarawak, Matang (Ridley), Bau (Bp. Hose), Kuching. Common. B. N. Borneo, Bongaya River (Ridley).
- Fimbristylis acuminata, Vahl. Sarawak, Kuching (Miss Hose), Sandakan, (Bp. Hose).
- F. nutans, Vahl. Sarawak, Bau, Limbang (Bp. Hose) Brunei, Brooketon (Bp. Hose, Labuan (Bp. Hose).
- F. polytrichoides, Vahl. Sarawak, Santubong (Miss Hose).
- F. pauciflora, Br. Sarawak, Matang (Ridley), Kuching, Santubong (Miss Hose); Brunei, Brooketon, (Bp. Hose).
- F. schænoides. Vahl. Sandakan (Ridley); Sarawak, Santubong (Bp. Hose); Labuan (Bp. Hose).
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- F. diphylla Vahl. Everywhere. Sarawak, Kuching, (Miss Hose), Sandakan (Ridley).
  - var. pluristriata, Clarke. A curious weak form on rocks, high up on Mt. Serapi Matang.
- F. spathacea, Roth. Sarawak, seashore, Santubong (Miss Hose).
- F. tenera, R. and S.
  - var. obtusata. Borneo (Hook. fil. Fl. Brit. Ind.) Sarawak Kuching (Miss Hose).
- F. asperrima, Boeck. Sarawak, Quop (Miss Hose), Bau (Ridley), Kuching (Bp. Hose).
- F. miliacea, Vahl. Everywhere. Sarawak, Kuching (Haviland, Ridley), Quop (Miss Hose).
- F. globulosa, Kunth. Sarawak, Pinding Road (Bp. Hose), Kuching (Miss Hose), Brunei, Brooketon, (Bp. Hose).
- F. leptoclada, Benth. Borneo, (Hook. fil. l.c.)
- F. fusca, Benth. Labuan (Bp. Hose, Ridley 9042).
- Bulbostylis barbata, Kunth. Sarawak, Kuching (Miss Hose) Labuan (Merrill).
- Scirpus mucronatus, L. Sarawak, Kuching (Ridley), Lundu (Miss Hose), Sabu (Bp. Hose).
- Sc. clarkii, Stapf. Kinabalu (Haviland No. 1398).
- Sc. inundatus, Spreng. Kinabalu (Haviland).
- Sc. debilis, Pursh. Lundu, rice fields (Ridley).
- Fuirena umbellata, Rottb. Sarawak, Kuching (Ridley, Haviland 1918), Lundu (Miss Hose).
- Lipocarpha argentea, Br. Sarawak, Kuching (Haviland 1906) Quop (Miss Hose), Matang Bau (Ridley).

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- Rhynchospora wallichiana, Kunth. Sarawak, Kuching (Miss Hose).
- R. malasica, Clarke. Borneo (Fl. Brit. Ind).
- R. aurea, Vahl. Sarawak, Kuching (Haviland 1914), Pinding Road (Bp. Hose).
- R. glauca, Vahl. Sarawak, Bau, (Bp. Hose), Kuching (Miss Hose).
- Schænus apogon, R. and S. Kinabalu (Haviland).
- Sch. melanostachyus, R. Br. Kinabalu (Haviland).
- Cladium undulatum, Thw. Labuan (Ridley 9105 Bp. Hose).
- C. samoense, Cl. Kinabalu (Haviland 1405).
- Gahnia javanica, Moritzi. Sarawak, Matang (Ridley 11685), Santubong, Sabu (Bp. Hose).
- G. tristis, Nees. Brit. N. Borneo, Jesselton (Bp. Hose).
- Remirea maritima, Aubl. Sarawak, Coast opposite Santubong (Bp. Hose).
- Hypolytrum latifolium, Rich. Common in woods. Sarawak, Matang, Bau (Ridley), Lundu (Miss Hose), Santubong (Bishop Hose).
- H. proliferum, Boeck. Borneo (Fl. Brit. Ind).
- H. costato-nux, C. B. Clarke n. sp. Culmo 4-6 dm. longo, remote foliato foliis perlongis, 8-10 mm. latis, panicula 5 cm. longa et lata composita polystachya, spicis parvulis; stylo 2-fids, nuce 1½ mm. longa longitudinaliter leviter 10-12 costata nec reticulata castanea nigrescente culmus basi lateraliter pullularis vix stolonifer apice triqueter fere levis, nux obvoidea compressa apice obtuse conica. Sarawak, Matang (Ridley 12345).
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Thoracostachyum bancanum, Clarke. Sarawak, swampy ground in a wood near Puak (Ridley 12339).

Th. Ridkyi, Clarke. New species. Quasi umbellae radiis 5 usque ad. 5 cm. longis 1-3-stachyis spicis ovoideis densifloris 6 mm. longis, nuce 1½ mm. longis anguste obovoidea trigona, lucide castanea, rostro cum ½ partenucis aequilongo lineari-conico. Rhizoma gracile ligneum, culmi basi robuste pullulantes 5 dm. longi graciliores. Folia omnia basalia 3-4 dm. longa, 7 mm. lata. Bracteae 3, ima. 12 cm. longa filiformes. Species eximia. Sarawak, Kuching. Common in the woods. (Ridley 12346).

This plant is abundant in the sandy woods near Kuching. It is about 15 inches tall with a rather hard woody rhizome, and somewhat stiff leaves; the culms is slender and ends in an umbel of about 5 rays one of which is usually branched: the globose spikes are solitary on the ends of the umbels rays: the glumes are crowded, rather pale, and the nut small and rather long beaked.

Mapania radians, Clarke n. sp. Rhizome stout woody. Leaves flacid linear 18-24 inches long, \$\frac{1}{2}\$ inch wide, acuminate to a long point, glabrous, nine ribbed distichous crowded at base. Scapes very slender, 3-6 inches long, purple with a close fitting sheath 1 inch long halfway, spikes terminal in a head 4 to 12, \$\frac{1}{4}\$ inch long dark red viscid cylindric covered with scale like ovate obtuse bracts with ciliate edges. Outer squamellae flattened with short thick bristles on the keels; Inner squamellae 2 thin lanceolate glabrous. Stamens slender, filaments filiform. Stigmas 3, nut stalked globose, with a very long conic blunt grooved beak, much longer than the rest of the nut. Sarawak, Rocks on Matang, Siul, Puak; Sandakan, Bongaya River (Ridley).

This new species is about 2 feet tall, with a rather slender stem triquetrous above. Leaves narrow linear

- acuminate  $\frac{1}{2}$  inch broad, pale beneath, a panicle about  $3\frac{1}{2}$  inches long, and small black globular ribbed nuts.
- M. triquetra, Ridl. Sarawak, Matang; Bau, Siul, Bidi (Ridley 11698). Common in the woods, also occurs in the Malay Peninsula.
- M. humilis, Naves and Villars. Sarawak, Matang, etc., (Ridley). A common plant in Sarawak.
- M. debilis, Clarke n. sp. Fere levis. Foliis 6 dm. longis, 6 mm. latis, utrinque attenuatis, scapo 15 cm. longo gracili, capite florifero 8 mm. in diametro subgloboso e 5 spicis inter se distinctis exstructo, spicis (floriferis) 5 mm. longis ferrugineis densis. Species M. multispicatae affinis. Sarawak, Matang (Ridley 12344).

This is a tufted plant, with long narrow grassy leaves, and a small heads of flowers on a slender peduncle about 4 inches long.

- M. zeylanica, var. A big tufted plant, with numerous stiff rough leaves and heads of flowers on long or short peduncles. Matang (Ridley 12335), also collected in Borneo at Banjermassin by Motley. Mr. Clarke who identifies this, writes that it is otherwise a plant confined to Ceylon.
- Scirpodendron costatum, Kurz. Sarawak, Santubong (Bp-Hose). Sandakan, Bongaya (Ridley 9038).
- Lepironia mucronata, Rich. Labuan (Merrill).
- Scleria lithosperma, Sw. B. N. Borneo; Kudat (Bp. Hose).
- Scl. zeylanica, Poir. Borneo, Kuching (Miss Hose).
- Scl. caricina, Benth. Sarawak, Kuching (Ridley 11691), Limbang, Bau (Bp. Hose).
- Scl. neesii, Kth. Borneo (Fl. Brit. Ind.).
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- Scl. bancana, Miq. Everywhere. Sarawak, Kuching (Miss Hose).
- Scl. multifoliata. Sarawak, Saribas, Kuching (Bp. Hose).
- Scl. sumatrensis, Retz. Sarawak, Kuching (Miss Hose) Matang (Ridley), Labuan (Ridley).
- Scl. trigonocarpa, Ridl. B. N. Borneo; Gaya Island (Ridley) Kudat (Bp. Hose).
- Scl. laevis. Common. Sarawak, Bau (Ridley).
- Carex rara, Booth. Kinabalu (Haviland).
- Carex borneensis, Clarke. Kinabalu (Haviland).
- C. Havilandi, Clarke. (C. hypsophila, Stapf). Kinabalu (Haviland).
- C. saturata, Clarke. (C. filicina, Stapf). Kinabalu (Haviland).
- C. speciosa, Kunth. Banjermassin (Motley 1222).
- C. Dietrichiae, Boeck. River banks at Busau. Common. (Ridley).

Mr. Clarke who names this says it is very frequent in Malaya, and North East Australia. I have never seen it from the Malay Peninsula.

## Scitamineae of Borneo.

BY H. N. RIDLEY.

The order of Scitamineae is as well represented in Borneo as in the Malay Peninsula, but it is probable that present a very large number are yet uncollected or if collectnot vet described. The Zingiberaceae and antaceae of Beccari's and Korthas' collections were described by Schumann in the Pflanzenreich. Some of these however, I have quite failed to identify with plants collected on the same ground, viz., Kuching and Matang in Sarawak, the scene of Beccari's researches. Dr. Haviland's collection contains but few of the o. ler, but Mr. J. Hewitt, the curator of the museum, has added a gool many species to the flora. The genera of Bornean Scitamineae are very much the same as those of the Malay Peninsula. I have not however seen any representatives of the genera Geostachys or conamomun or Hedychium.

The genera *Haplscharema* and *Burbidgea* are peculiar to Borneo.

Comparatively few of the Bornean species are actually the same as those of the peninsula, but closely allied forms appear, such as *Hornstedtia reticulava*, closely allied to *H. scy-phifera* and *H. brachycheilus* closely allied to *H. metriochilus*. It is rather curious to note that while yellow Globbas are common in the Malay Peninsula and white ones comparatively rare, the reverse is the case in Borneo, where yellow flowered species are scanty. The number of species *Globba* is also comparatively small.

There must be very many more species of this order in Borneo. The *Marantaceae* especially want working up. I have several which are not in a good enough state to be described. The flowers are so fugacious that they want very R. A. Soc., No. 46, 1906.

careful drying separately from the inflorescence. This paper must be taken therefore as a mere preliminary one for the Scitamineae of Borneo.

#### GLOBBA.

Gl. atrosanguinea, Teysm. and Binn.

This pretty Globba with its large bright red bracts and yellow flowers is abundant in the Sarawak woods, Kuching (a small form), Bau (Ridley 11803), Bidi, Puak, (Ridley), Barang (Haviland), Rejang, Sibu (Haviland 368).

Gl. aurantiaca, Miq.

Was obtained in Borneo by Korthals, no locality being given for it. It is common in the Malay Peninsula.

Gl. (marantella) propinqua, n. sp.

Stems about 2 feet tall. Leaves lanceolate acuminate narrowed into a short petiole glabrous above beneath slightly pubescent 6 inches long 1\frac{3}{4} inch wide, sheaths roughly short hairy, ligule oblong pubescent. Raceme nodding, shortly or not branched. Bracts lanceolate oblong pubescent green approximate (when young) \frac{1}{4} inch long. Rachis pubescent. Calyx tubular rather long shortly 3 lobed, lobes ovate, mucronulate red. Corolla tube rather long, petals lanceolate acute orange yellow. Lip linear oblong, rather short apex emarginate, lobes slightly divaricate orange yellow with a red central spot. Filament long yellow, anther elliptic with four nearly equal linear acuminate lobes, upper ones slightly the broadest. Bulbils cylindric hairy reddish.

Sarawak, Matang (Ridley 12260), Lundu, Bau (Ridley).

A plant with the habit of  $\mathcal{G}$ . cernua, but resembling Gl. aurantiaca, Miq. in the form of the flower. The only yellow globba I have seen from Borneo.

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## Gl. (\(\xi\) ceratanthera) tricolor, n. sp.

Stem about 2 feet tall spotted red. Leaves lanceolate cuspidate acuminate at both ends nearly glabrous 6 inches long 2 inches wide base slightly pubescent, sheath ribbed glabrous except the edge pubescent, ligule rather large retuse lobes rounded. Panicle large, branches distant projecting little over an inch long with a few flowers at the ends. Bracts at base of branches lanceolate cuspidate \(\frac{1}{4}\) inch long. Floral bracts ovate. Calyx rather short campanulate with two ovate cuspidate lobes longer than the third white. Corolla tube rather short little over \(\frac{1}{4}\) inch long violet. Petals elliptic upper one boat shaped violet, staminodes linear yellow. Lip narrow linear rather long apex bifid with linear obtuse yellow lobes, the rest white tinged violet. Filament long slender, anther oblong with a linear acuminate curve I horn at the base on each side.

Sarawak, Kuching (Ridley 12360), Matang 11806.

# Gl. polyphylla, Schum.

Gunong Praraeng (Korthals).

# Gl. pumila, n. sp.

A small prostrate plant, the stems lying on the ground 6 to 9 inches long. Leaves lanceolate acuminate or lower ones ovate 1-2 inches long  $\frac{1}{2}$  inch wide above glabrous except on the nerves, the mid rib hairy, the others less so, back with the nerves elevated and hairy, petiole  $\frac{1}{5}$  inch long, sheath hairy especially the ligule. Panicle short  $1\frac{1}{2}$ -2 inches long, lower bracts lanceolate, upper ones obovate glabrous. Branches  $\frac{1}{4}$  inch or less glabrous. Calyx tubular funnel-shaped with 3 long equal teeth  $\frac{1}{5}$  inch long. Corolla tube long and slender  $\frac{1}{4}$  inch long, petals ovate obtuse boat-shaped. Lip short bilobed with oblong truncate lobes, all white. Anther with 2 processes, from the base of anther triangular at base linear candate longer than the anther capsule elliptic  $\frac{1}{4}$  inch long, minutely red pustular.

Sarawak at Puak (Ridley 12357).

This curious small species lays its stems quite flat on the ground. The flowers are white, and the leaves are remarkable for the close set venis being thickly hairy giving the back of the leaf a curious ribbed appearance.

## Gl. brachyanthera, Schum.

A small plant usually about a foot tall with lanceolate acuminate leaves, usually glabrous, 3 inches long 1 inch wide, sheath hairy. Panicle short usually 3 inches long with a few branches about ½ inch long. Bracts ovate persistent pure white rather large. Calyx tubular eventually turbinate white glabrous with three equal lanceolate teeth. Petals ovate boat-shaped white or tinted yellow at the tip. Staminodes linear white or pale yellow. Lip narrow linear oblong very shortly bifid, white with a bright yellow tip. Filament moderately long anther yellow with two lanceolate acuminate horns rising from close to the base.

Sarawak. Common, Kuching, (Ridley 12359), Bidi (Ridley 11805).

var. angustisfolia. Leaves 9 inches long 1 inch wide candate, much narrower in proportion to their length than in the type. Matang, 800 feet elevation.

I do not see that the anther is remarkably short as Schumann gives it.

Glabba versicolor, Smith.

Borneo, Timbang-Penang near Kudat (Fraser fide Schumann) not seen. It is an Indian species.

Camptandra angustifolia, Ridl.

Sarawak on Matang, (Ridley, Haviland etc.).

Kæmpferia gracillima, Schumann.

Sarawak near Selebut on rocks (Haviland 448).

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K. decus-silvæ, Hallier.

Liang Gagang; and between Mandai and Kymas (Hallier).

K. ornata, N. E. Brown.

Introduced into cultivation 1884.

K. atrovirens, N. E. Brown.

Introduced into cultivation 1886.

Haplochorema palyphyllum, Schum.

Sarawak by Lemdu (? Lundu) (Beccari 2324).

H. oligospermum, Schum.

Sarawak. Marupi, Batang Lupar (Beccari).

H. gracilipes, Schum.

Sarawak. Gunong Wah (Beccari).

H. petiolatum, Schum.

Sarawak, Singhi mountain (Haviland).

H. uniflorum, Schum

Sarawak Gunong Tiang Ladschin, Batang Lupar (Beccari) abundant on Matang, a charming plant with deep velvety green leaves barred paler, flowers white except a deep red spot edged with yellow on the lip. (Ridley).

H. extensum, Schum,

Sarawak Gunong Tiang Ladschin, Batang Lupar (Beccari).

Gastrochilus Hallieri, Ridl.

G. anomalum, Schum. Kampferia anomala, Hallier. Liang Gagang, Mandai, Kapuas (Hallier) Sarawak (H. N. Ridley).

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G. parvus, Ridl.

Sarawak. Bidi (Ridley).

G. reticosa. Ridl.

Sarawak, Bidi (Ridley).

Gastrochilus pulchella, n. sp.

Stems several short covered with red sheaths, 2 inches tall. Leaves 3, ovate to lanceolate acute base rounded  $3\frac{1}{2}$  inches long  $1\frac{1}{2}$ -2 inches wide bright shining green with about 8 pairs of nerves conspicuous above. petiole 1-1½ inch long. Spike shorter acute several flowered bracts lanceolate acuminate cuspidate red. Flowers opening singly. Corolla tube iust jecting about 1 inch long, lobes linear oblong obtuse white. Staminodes rounded oblong vellowish shorter than the stamen. Lip  $\frac{1}{2}$  inch long entire, sides elevated, saccate, white, a central bar A shaped and the tip broad and rounded cherry crimson. Filament short, anther oblong not crested pubescent.

Sarawak Bidi, Jambusan Caves. In wet woods. Flowering September to January.

This resembles G. pulcherrima, Wall. of Burma, but differs in its smaller size, short stem, leaves and spike, the lip is beautifully colored with its crimson red tip behind which is a white spot surrounded by the arms of a A of which the stem runs to the lip base.

#### CURCUMA.

C. aromatica, L.

"Entimut or Entimu," much used by Dyak women as soap, and in medicine for shingles. Kuching, (R. Shelford).

Zingiber parphyrosphaera, Schum.

Sarawak Rejang, (Haviland).

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Z. stenostachys, Schum.

Gunong Balacan, and Sakumbang, (Korthals).

Z. coloratum, N. E. Br.

N. W. Borneo, (Burbidge),

Z. borneense, Schum.

Sarawak, Kuching (Haviland), S. Borneo, Gunong Sakumbang, (Korthals).

Costus speciosus, L.

Common in Sarawak. var. B. angustifolia, Schum. Sarawak, (Beccari).

C. globosus, Bl. C. Ridleyi, Schum.

Schumann makes a new species of this being doubtful as to what the *C. globosus* of Blume was as he had only seen scraps of foliage and the description is incomplete. I saw however a drawing in Buitenzorg by Hasselt the collector of Blume's plant which seems undoubtedly this plant. Valeton (Ic. Bogor C. L. XIII has figured and described the same plant as *C. globosus*. Bl. Sarawak, Puak, Bau, (Ridley).

Common all over the Malay peninsula and also in Sumatra.

C. microcephalus, Schum.

Lumpei Island, (Korthals).

#### AMOMUM.

- § Geanthi, no appendage to the stamen.
- A. nasutum, Schum. This is distinguished by the lip being prolonged into a beak. Kuching, (Beccari).
- A. bicorniculatum, Schum. Gunong, Sakumbang, (Korthals).
- A. dictyocoleum, Schum. Sarawak, Kuching, (Beccari).
- B. A. Soc , No. 46, 1906,

- A. macroylossa, Schum. Sarawak, Matang, (Beccari).
- § Euamomum, Anther crested.
- A. laxisquamosum, Schum. Sarawak, Kuching, (Beccari).
- A. oliganthum, Schum. Sarawak, Matang, (Beccari).
- A. stenosiphon, Schum. Sarawak, Maropin, Batang Lupar, (Beccari).
- A. fimbrio-bractea, Schum. Sarawak, Tubao River near Bintulu, (Beccari).
- A. gracilipes, Schum. Borneo, (noloc.), Korthals.
- A. flavidulum, n. sp.

Stems not very stout. Leaves lanceolate acuminate narrowed at the base into a short petiole, margins and tip ciliate, otherwise glabrous, 12 inches long 2\frac{3}{4} inch wide, petiole \frac{1}{4} inch long, ligule papery glabrous an inch long truncate, sheath ribbed reticulate. Spike dense many-flowered cylindric 3 inches long on a peduncle 8 inches tall, sheaths papery smooth glabrous, rachis woolly; bracts smooth ovate acute, brittle when dry \frac{3}{4} inch long or less. Bracteoles similar smaller. Ovary pubescent silky. Calyx very shart \frac{1}{6} inch long glabrous, campanulate shortly 3 lobed, lobes truncate. Petals linear oblong reddish yellow nearly \frac{1}{2} inch long blunt tube very short. Lip entire obovate. Anther with two side arms, no terminal crest. Capsule pubescent.

Sarawak, Matang (Ridley 11802).

# A. sylvestre, n. sp.

Rhizome woody. Leaf stems 2-3 feet tall ½ inch through leaves narrow lanceolate or oblanceolate acute narrowed acuminate to base. 12 inches by 1½ inch wide glabrous above and beneath except the midrib on both sides faintly pubescent, ligule short broad truncate entire hairy, sheaths ribbed and with hairy transverse reticulations. Spike obconic on a peduncle

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covered with sheaths, 3 inches long. Bracts ovate papery pubescent pale brown when dry acute ½ inch long. Ovary silky. Calyx campanulate ¼ inch long, pubescent with short broad rounded lobes. Corolla tube funnel-shaped, as long as calyx tube, lobes oblong obtuse white pubescent. Lip very fleshy oblong apex fimbriate, white with a yellow central bar. Staminodes long slender setiform. Anther oblong with 2 small linear side auricles, no terminal crest, pubescent, style hairy. Capsule globose pubescent, terminated by the short thick calyx tube.

Sarawak. Common in the woods at Kuching.
One plant I found had 2 complete anthers.

## A. cerasinum, n. sp.

Stems very tall about 10 feet pruinose. Leaves oblong lanceolate with a very broad base, and a long (inch) cusp 15 inches long 4 inches wide glabrous except the edges and covered with yellowish hairs, petiole 1 inch long channeled back rounded, ligule oblong 1/2 inch long glabrous, sheath ribbed glabrous spikes 3 inches long. rachis silky. Bracts white lanceolate acute 1 inch long. Bracteoles lanceolate. Epicalyx tubular ½ inch long, with 3 equal ovate lobes calvx 1 inch long lobes linear white as long as the corolla tube. Corolla cherry red. petals an inch long, upper one hooded, lower ones with a white central bar oblong obtuse. Lip large side lobes broad rounded as long as the petals white dentate spotted with red on the edge, midlobe bifid short oblong narrow dentate, with 3 red bands, and 2 broad red bands on the inside of the side lobes. Stamen creamy white, the anther with a broad semilunar entire crest, no distinct central lobe. Fruit globose an inch through green.

Sarawak, on the lower slopes of Matang, (Ridley 12421).

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## A. Hewittii, n. sp.

Stem large. Leaves lanceolate cuspidate acuminate narrowed at the base petiolate 16 inches long 3 inches wide glabrous, close veined midrib on both surfaces closely ribbed and light colored, petiole  $\frac{1}{2}$  inch glabrous black ligule  $\frac{1}{2}$  inch long entire dark brown glabrous apex rounded oblong. Scape 1 foot tall slender, with a few long narrow sheaths, ribbed linear rounded and margined at the tip, spike 2 inches long obconic rachis silky pubescent. Bracts lanceolate acute ribbed  $1\frac{1}{2}$  inch long corolla yellow anther rather large oblong with a rounded short crest. Fruit elliptic pear shaped  $1\frac{1}{2}$  inch long  $\frac{1}{2}$  inch through covered with oblong processes armed with short horizontal thorus.

Sarawak, Matang (Ridley), Santubong (Hewitt).

The flowers spoilt; near A. gracilipes.

### HORNSTEDTIA.

This genus is well represented in Borneo.

H. sarawacensis, Schum.

Sarawak, Matang (Beccari).

This species is insufficiently described to be identifiable.

H. phæochoana, Schum.

Sarawak, Kuching (Beccari) is also insufficiently described.

H. velutina, Ridl.

B. N. Borneo, Bongaya (Ridley).

H. affinis, Ridl.

Sarawak, Kuching (Haviland, Ridley).

### H. villosa, Val.

Stems tall and stout. Leaves elliptic or lanceolate acute or subobtuse narrowed at the base 12-16 inches long 4-5 inches across glabrous above softly pubescent, beneath petiole 1 inch long pubescent, ligule oblong bilobed coriaceous ½ inch long, lobes truncate, sheaths ribbed and reticulate. Spikes nearly sessile oblong obconic 4 inches long over 1 inch through. Bracts ovate  $1\frac{1}{2}$  inch long or less, obtuse finely ribbed and lower ones reticulate pubescent, margins strongly cili-Calyx 1½ inch long tubular apex bifid 2 setiform processes from the sides. Corolla tube 3 inches long red passing abruptly into the lobes, lobes oblong obtuse, red lip stiff oblong with a rounded point  $\frac{3}{4}$  inch long little longer than the petals slightly pubescent within, flame colored. Anther shorter pubescent with a large semiorbicular crest. Capsule subglobose glabrous.

Sarawak, Matang, (Ridley 11811) also at Bau.

The flowers of this plant resemble a duck's beak. The short broad petals and stiff coriaceous lip are very striking.

## H. brachychilus, n. sp.

Leaves elliptic cuspidate base rounded, 12 inches long, 3 inches wide glabrous except the upper edge and tip, edged with ciliate hairs, petiole distinct \( \frac{3}{4} \) inch long, ligule oblong truncate entire 1 inch long, sheath strongly ribbed scabrid pubescent. Spike 3 inches long, cylindric. Bracts thin oblong ribbed, more or less hairy, flowers scarlet. Bracteole 3 inch long lanceolate mucronulate pubescent. Calyx 2 inches long covering the corolla tube with 3 equal lanceolate mucronulate points pubescent. Corolla lobes elliptic oblong rounded broad inch long pubescent at the tips. Lip very short not longer than the corolla lobes, broad obovate with very large rounded side lobes, pubescent within, the central line strongly elevated. Anther oblong glabrous on the back hairy in front, no crest.

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Sarawak Kuching; Bau (Ridley).

This has a curious lip for a Hornstedtia more like that of an Amomum.

### H. spathulata, n. sp.

Leaf oblong lanceolate cuspidate narrowed to the base, no petiole 2 feet long, 6 inches wide glabrous above finely velvety pubescent beneath, ligule oblong hispid sheath sparingly pubescent. conic, on a short ½ inch yellow hairy peduncle, 3 inches Bracts few lanceolate acute pubescent tips woolly,  $1\frac{1}{2}$  inch long, purple within ribbed thinly coriaceous. Flowers 3½ inches long. Bracteoles linear woolly. Calvx  $1\frac{1}{2}$  inch long tip bifid pubescent apex woolly. Corolla tube enlarged upwards 3 inches long red, lobes linear obtuse red. Lip an inch long sides elevated long rounded, limb spathulate with a narrow claw and elliptic ovate limb \(\frac{1}{4}\) inch across, whole lip red centre darker edge white at base. Anther with a short triangular acute crest.

Sarawak Matang (Ridley) Perak (Ridley).

## H. reticulata, Schum. H. Havilandi, Schumann.

A large plant with the habit of *H. scyphiphora*, but with a much branched rhizome elevated above the ground on stout roots. Leaf stems about 12 or more feet tall. Leaves lanceolate acuminate 2 feet long 4 inches wide glabrous except the edge and tip which are pubescent, base, petioled very shortly or winged to the sheath, ligule oblong yellow hairy. Spikes on longer or shorter peduncles, sometimes as much as 6 inches in length, obcenic or nearly cylindric. Bracts broad deep red ovate 2 inches long by 1½ or less pubescent with numerous fine ribs overlaid by larger ribs and transverse reticulations. Bracteole linear acute 3 inches long white. Calyx spathaceous shorter, white with 3 points. Corolla tube 3 inches long red, lobes narrow

linear 1 inch long red. Lip yellow with a red central mark between the two rounded lobes limb little longer than the petals linear spathulate, dilated a little before the tip. Stamen pinkish shorter than the lip, anther oblong crest oblong ovate rounded.

Sarawak, very common Matang (Ridley 1182) also Bau, and Bidi. Pengkulu ampat (Haviland).

"Bungah Jungkal" The inner part of the leafy stem sweet and eaten.

The Penkulu ampat specimen of Dr. Haviland on which the species H. Havilandi is based, is not distinguishable from the common plant. It is said to differ in its more slender flowering spike, smaller flowers and unappendaged connective. The specimens in the Botanic Gardens herbarium however are as large as any other and the connective of the anther is plainly visible.

# H. Hewittii, n. sp.

A small plant; stem only 2 or 3 feet tall. Leaves oblanceolate to lanceolate cuspidate narrowed gradually to the base 9 inches long by 3 inches wide above glabrous nerves not close, beneath pubescent. Ligule short rounded entire hairy sheath strongly ribbed pubescent, with occasionally reticulations in the upper part. Spike short lower bracts papyraceous oyate ribbed subacute pubescent, on the edges. Bracteole tubular trifid inch long, thin. Calyx 1 inch long pubescent. Corolla tube 2 inches long lobes ovate red. Lip an inch long red with central yellow bar, wings long narrow elevated, claw narrow dilated slightly into a narrow bifid limb.

Anther short oblong deeply retuse with no crest.

Sarawak Santubong, (Hewitt). Siul (Ridley).

Near H. metriocheilus, of the Malay Peninsula.

### PHOEOMERIA.

## Ph. pyramidosphæra, Schum.

Pontianak, near Sungei Kanta; (Beccari). Sarawak, Tubao in Bintulu (Beccari) also occurs in Celebes.

### PLAGIOSTACHYS.

### P. strobilifera, Ridl.

Sarawak Puak (Ridley). British North Borneo, Bongaya River (Ridley) Sandakan (Creagh).

A fruiting specimen collected at Perak seems to me identical with the Sandakan plant-

## Pl. borneensis, n. sp.

A large stout plant stem  $\frac{1}{2}$  inch through. Leaves large lanceolate cuspidate 12-18 inches long 5 inches wide glabrous above softly pubescent beneath, base narrowed shortly  $\frac{1}{4}$  inch petioled pubescent, ligule short rounded ribbed obtuse bifid edge pubescent hairy sheath glabrous except the keel—hairy strongly ribbed. Spike simple or three flowered conic then lengthening to 6 or 7 inches long stout densely woolly hairy. Bracts lanceolate rather narrow hairy. Flowers red. Capsule globose  $\frac{1}{6}$  inch through hairy terminated by the cylindric remains of the calyx.

Sarawak, Matang (Ridley 11800). Bau (Ridley).

### ELETTARIOPSIS.

E. surculosum, (Schum. sub Cyphostigma).

Sarawak Matang, (Beccari, Ridley), not rare on banks.

E. stoloniferum, (Schum. sub Cyphostigma).
Sarawak at Kuching (Beccari).

### BURBIDGEA.

B. nitida, Hook. fil. Bot. Mag. 1879 t. 6903.

N. W. Borneo, Murat between the Lawas and Trusan rivers (Burbidge).

### ALPINIA.

A. § Hellenia exostylis, Schum.

Borneo no locality given (Korthals).

A. Fraseriana, Oliver. A. rosella, Ridl.

Brit. North Borneo; Kudat Ridley; Brunei Bay (Bp. Hose) also in Billiton (Schumann).

A. sumatrana, Miq.

Borneo no loc. (Korthals).

A. cornu-cervi, n. sp.

Leaves lanceolate acuminate 15 inches long  $1\frac{1}{2}$  inch wide glabrous petiole  $\frac{1}{6}$  inch long, ligule short truncate. Panicle on an 8 inch peduncle, 12 inches long with numerous short branches about  $\frac{1}{2}$  inch long glabrous. Bracts fugacious. Ovary glabrous. Calyx tube cylindric as long as the corolla tube with short ovate lobes. Petals short oblong blunt  $\frac{1}{4}$  inch long. Dorsal one hooded lip shorter split to base, lobes narrow subbifid truncate, one point shorter than the other. Staminodes short thick, cylindric obtuse. Filament short thick, anther as long, connective linear rounded.

Sarawak no locality (J. Hewitt).

A. reticosa, n. sp.

Stem about 4 feet tall. Leaves lanceolate acuminate 18 inches long 2 inches wide hardly petioled glabrous, midrib ribbed, ligule very large oblong rounded  $\frac{3}{4}$  inch long ribbed, sheath closely reticulated with rounded reticulations, all glabrous. Panicle shorter than the

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leaf 4 inches long glabrous. Flowers small greenish corolla tube terete slender  $\frac{1}{4}$  inch long, upper sepal under  $\frac{1}{4}$  inch narrowly boat-shaped hooded with a terminal process lateral lobes oblong broader. Lip  $\frac{3}{4}$  inch long entire obovate rounded staminodes at base 2 short cylindric processes stamen shorter than the lip, filament cylindric stout anther oblong with two horn-like excurved tips, and a thin entire short rounded crest. Capsule globose smooth  $\frac{1}{2}$  inch through green, no remains of calyx.

Sarawak, Bau (Ridley).

## A. cylindrostachys, Schum.

Matang (Ridley) Santubong (Hewitt). "Lip yellow along the centre limited by a red streak on either side rest of flower pale with a pink tinge."

I should hardly agree with Schumann in classing this plant as an *Alpinia*.

# A. brachypoda, Schum.

Sarawak, Matang (Beccari).

# A. § Bintulua, polycarpa, Schum.

Sarawak, Tubao Bintulu (Beccari).

# A. § Cenolophon glabra, Ridl.

This was described from a dried specimen of Haviland's collected on Santubong, I met with it at Bidi again and drew up a description from the living plant which may be of interest. The plant is but 4 or 5 feet tall. The leaves deep green plicate. The panicle curved about 5 inches long bearing about 20 flowers, on white pedicels the ovary glabrous. Calyx tube nearly straight white with 3 ovate lobes petals linear oblong, the upper one hooded white. Lip much longer flat depressed in the centre and tip decurved obovate edges wrinkled crenulate base dark cherry red passing into

orange at the tip, base channelled with 2 short ovate acute processes. Filaments slender red as long as the upper petal, anther oblong rather short red with a rounded toothed crest. Stigma white.

Sarawak, Santubong (Haviland). Bidi (Ridley 11810) (Bau 11807) Matang 11888.

A. (Catimbium), Korthalsi, Schum.

Pontianak, Sungei Unpanang (Beccari) Banjermasin (Korthals, Motley).

A. angustifolia, Schum.

Sarawak, Matang (Beccari).

A. laxiflora, Gagnepain.

Borneo, no specific locality (Chaper).

A. flexistamen, Schum.

Sarawak, Matang (Beccari).

- A. borneensis, Bull. Soc. Bot. France 1904 448. Borneo cultivated at Buitenzorg.
- A. Havilandi, Schum.

B. N. Borneo, Kinabalu (Haviland).

A. ptychanthera, Schum.

Sarawak, Gading near Lundu (Beccari).

- A. Niemvenhuizi, Val. Ic. Bog. excii. Borneo central (Nieuw-enhuiz).
- A. assimilis, Ridl. A. Hookeriana, Val. Ic. Bog. clxxxix. Borneo. Cultivated in Buitenzorg fide Schumann not seen.
- A. mutica, Roxb. Borneo (fide Valeton).
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### MARANTACEÆ.

Phrynium parviflorum, Roxb. Sarawak, Lundu (Ridley 12420) Jambusan and Bau.

Ph. fissifolia, n. sp.

Leaves ovate with a broad base, acuminate obtuse, eventually split up into lobes and resembling in form a Raphidophora leaf, 16 inches long 9 inches wide, above glabrous beneath the ribs fine hairy, stem and petiole hairy, sheath short 1 inch long hairy. Capitulum sessile  $2\frac{1}{2}$  inches through. Outer bracts ovate-lanceolate densely hairy, inner ones narrower covered with long hairs. Flowers white.

Sarawak, Pengkulu Ampat (Haviland) Puak (Ridley) 12358. The curious regular way in which these leaves break up so as to look like those of one of the aroids is very striking.

#### Musaceæ.

Musa violascens, Ridley.

Sarawak common near Perak (Ridley).

- M. campestris, Becc. (Foreste di Borneo p. 622). In deserted rice fields on the river Sarawak.
- M. borneensis, Becc. "Pisang Unkaok or Pisang Unkadan." Sarawak at Marop (Beccari).
- M. microcarpa, Becc. "Pisang Lenki." Sarawak at Marop (Beccari).
- M. hirta, Becc. "Pisang Genta"
  Sarawak at Marop (Beccari).

### LOWIACEÆ.

Lowia borneensis.

Orchidantha borneensis, Gard.-Chron 1886 ii 5.19. Introduced from Borneo.

# Begonias of Borneo.

BY H. N. RIDLEY.

Borneo, at least Sarawak, appears to be tolerably rich in Begonias at least as compared with the Malay Peninsula. Few seem to have been described however. The most abundant are the tall woodland species of the Petermannia section with very insignificant flowers. Young forms often have the leaves prettily spotted, but this soon goes off and the plate becomes tall and dull-colored. This section is a difficult one owing to the variability of the species, possibly some of the abnormal forms one meets with are hybrids. The presence or absence of petals in the male flower is hardly a good character though often used in distinguishing species and groups. I have in some of this section seen flowers with none, or one or two on the same plant. The limestone rocks and mouths of the caves produce a number of pretty species of which B. speluncæ, with its tufts of round leaves and pretty white flowers is one of the most attractive, while among foliage plants, the beautiful B. promethea, growing with only two or three large leaves flat on the rock faces of Bukit Tendong, near Busan, is perhaps the most worthy of cultivation.

§ Petermannia. Capsule 3 celled, wings 3 nearly equal narrow oblong, dehiscing by 2 valves.

### Stems tall.

Panicles very small axillary ... 1. B. axillaris
Panicles subterminal lax.

Leaves ovate nearly entire ... 2. B. propinqua.

Leaves ovate sinuate small ... 3. B. sarawakensis.

Leaves ovate toothed ... 4. B. borneensis.

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# BEGONIAS OF BORNEO.

Leaves oblong or lanceolate, ob-	е п11 'С.1'
lique	5. B. oblongifolia.
Leaves ovate lanceolate cordate	6. B. Pryeriana.
Panicles compact.	
Stipules broken up into fibres	7. B. inostegia.
Stipules not broken up	8. B. congesta.
Panicles diffuse flowers very small	
leaves narrow	9. B. polygonoides.
Stem short erect leaf	
Stem short erect lear	.y.
Leaves rhomboid broad hairy	10. B. pubescens.
Leaves rhomboid narrow glabrous	=
Leaves narrow lanceolate toothed glab-	,
	12. B. elatostemma.
§ Bractibegoniæ.	
Bracts large. Flowers large	12 D Parhidasi
Bracts small flowers small stems	15. D. Durouyer.
	14. B. rubida.
Stems prostrate or creeping	
Stems prostrate of creeping	13. В. ренаши.
Stems short rhizomatous.	
Leaves tufted orbicular cordate	
glabrous	16. B. speluncæ.
Leaves ovate oblique hairy	17. B. Havilandii.
Leaves few large hairy orbicular	11. D. Huviumaw.
cordate	18. B. Promethea.
Rhizome long leaves distant orbi-	10. D. I Tomechea.
cula	19. B. Pyrrha.
Rhizome long with distant long	TO. D. Lyiina.
petioled reniform peltate leaves.	20. B. calcarea.
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	over, christia Degreta

- § Platycentrum. Capsule with one large oblong wing and two smaller ones erect stemmed epiphyte ... ... 21. B. adenostegia.
- B. axillaris, n. sp.

Stems slender 2 feet and more tall very succulent. Leaves remote lanceolate acuminate base rounded slightly toothed quite glabrous 3 inches long by one wide, petiole \$\frac{1}{4}\$ inch. Stipules lanceolate cuspedate caducous. Panicles axillary under an inch long, one to each leaf axil. Peduncle very short branches flexuous, dichotomous. Bracts very small ovate, male flowers \$\frac{1}{2}\$ inch across. Sepals oblong rounded petals none. Anthers almost sessile oblong obtuse, about 12 crowded on a torns dehiscing the whole length. Female flowers not seen. Capsule an inch long \$\frac{1}{2}\$ an inch across the wings oblong, top truncate broad wings nearly \$\frac{1}{4}\$ inch at the tip narrowed to the base. Pedicel \$\frac{1}{4}\$ inch long.

Lingga Island 200 to 300 feet attitude 17-7-93 (Hullett 5707).

Allied to B. oblongifolia but very distinct in its small axillary panicles with very short peduncles and a few small dichotomous branches.

# B. propinqua, n. sp.

Stem succulent 2 or 3 feet tall. Leaves ovate acuminate base cordate unequal 8-9 inches long 4 inches wide glabrous margins slightly sinuate, nerves prominent beneath, petiole 3 inches long, stipules lanceolate oblong  $\frac{1}{4}$  inch long. Cymes lax branches slender spreading. Flowers small white or green. Bracts small rounded male flower  $\frac{1}{6}$  inch across, sepals 2 oblong obtuse. Petals narrower liner 2 stamens oblong narrowed to the base. Female flowers not seen.

Fruit oblong ½ an inch long and as wide apex truncate, wings equal narrow oblong dehiscing by two slits on each face.

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Sarawak common in woods. Matang, (Hullett, Haviland, Ridley 11771) Kuching (Haviland).

## B. propinqua, var.

Leaves ovate long acuminate dotted all over beneath with minute hairs when young. Panicle long slender as much as 9 inches or less diffuse. Flowers male as in isoptera. Capsule oblong longer than broad 1 inch long.

Sarawak, Sapudang (Haviland 534).

This may be a distinct species but I should like to see more than the only specimen I have.

### B. sarawakensis, n. sp.

Stem a foot or more tall slender branched glabrous. Leaves distant ovate acuminate base very unequal margins undulate quite glabrous pale beneath nerves distinct (young leaves at first dotted with small hairs) 3 inches long  $1\frac{1}{2}$  inch wide, petiole slender 1 inch long. Stipules lanceolate acute caducous small \( \frac{1}{8} \) inch long. Panicles lax few flowered, scurfy 1-2 inches long male flowers minute \frac{1}{8} inch across, on slender pedicels \frac{1}{4} inch long bracts very small ovate. Sepals 2 oblong ovate petals 3 narrower, pale. Stamens about 12 filaments very short, anthers dehiscing the whole length, oblong longer than the filaments. Female flower 2 or 3 together larger ovary scurfy sepals suborbicular 4. Petals narrow linear oblong 2, styles. Fruit oblong quadrate wings 3 equal straight narrow \frac{1}{8} inch wide whole fruit  $\frac{1}{2}$  inch long  $\frac{3}{8}$  inch wide across the two wings.

Sarawak; Path to Tabuan (Haviland 784, 76).

Certainly near B. isoptera but with much smaller flowers and leaves.

### B. borneensis. A. De C. Prod. XV, p. 320, Stapf., Trans-Linn. Soc. IV. 166.

A tall herb glabrous. Leaves obliquely ovate base unequally cordate, or subcordate toothed with a distinct

tooth at the end of each nerve and nervule, palmately 6-7 nerved dark green above pale beneath membranaceous 9 inches long 6 inches wide, petiole  $2\frac{1}{2}$ -3 inches. Stipules oblong setaceo-acuminate caducous. Male flowers in a large panicle for the section 5 inches long branches slender with long racemes. Bracts oblong  $\frac{1}{8}$  inch long pink caducous. Sepals white ovate or oblong. Petals 0. Anthers subsessile on an elongate torus oblong. Female flowers few. Capsule obovate three winged on a  $\frac{1}{2}$ -1 inch pedicel narrowed at the base truncate at the top 1 inch across at the top and as long wings sub-equal rounded  $\frac{1}{4}$  inch wide angled at the top edge narrowing to the base.

Borneo (sine loc) Barber. Kinabalu (Haviland 1707). Labuan (Motley).

This the first Bornean species described does not seem to be at all common. I have only seen Haviland's specimen. It differs from the common B. oblongifolia in its large ovate strongly toothed leaves and much bigger panicle.

# B. oblongifolia, Stapf. Trans. Linn. Soc. IV. p. 165.

A succulent herb about 2 feet tall, stem covered when young with short hairs. Leaf oblong or oblanceolate acute or acuminate, base inequilateral slightly subcuneate or obtuse, margins faintly undulate with very small teeth at the ends of the nerves, glabrous except the red scurfy nerves beneath, above dark green beneath pale, 5 inches long 2 across, nerves straight about 8, petiole \( \frac{1}{4} \) inch long hairy. Stipules oblong cuspidate green \( \frac{1}{2} \) inch long. Panicle terminal 3-4 inches with few short branches, the longest about \( \frac{1}{2} \) inch. Male flowers crowded on short \( \frac{1}{8} \) inch hairy pedicels. Bracts shorter ovate. Sepals rather firm textured oblong green \( \frac{1}{8} \) inch long blunt. Petals 0. Anthers oblong nearly sessile at the base of the torus, upper ones elliptic with a longer filament, opening by

a slit in the upper part, not splitting all the way down. Female flowers not seen.

Fruit an inch long oblong narrowed at the base,  $\frac{3}{4}$  inch across the two wings. Wings equal truncate at the top, broad and straight ( $\frac{1}{4}$  inch wide) to near the base.

Sarawak, Matang (Hullett, Ridley). Bau (Ridley 11774) Puak, Jambusan Lundu (R) Sepudang lc.k.m.t. Haviland.

This is the commonest species in Sarawak, and is abundant in the woods. It is somewhat variable in the form of the foliage which in the Kinabalu plant is quite oblong. Another form has leaves similar to those of the Kinabalu form but in some specimens the young parts are covered with stiff yellowish hairs. The flowers have occasionally one petal. This plant was collected by Dr. Haviland at Tabea at 1000 feet on conglomerate. It is probably a mere form of this species.

Another form collected at Niah by Haviland and Hose no 3225, is a slender plant with oblong acuminate leaves more of the shape of those of the Kinabalu plant but altogether smaller.

# B. Pryeriana, n. sp.

Stem slender glabrous. Leaves distant, lanceolate acuminate cordate very inaequilateral basal lobe broad round, margin sinuate quite glabrous, nerves slender about 6, 5 inches long 2 inches wide, petiole 1 inch slender stipules oblong ½ inch long subacute. Cymes small slender about 2 inches long. Female flowers solitary 2 on long pedicels in front at the base. Bracts (of male flowers) obovate convolate glandular denticulate. Male flowers ½ inch long sepals 2 orbicular. Petals 2 narrow linear obtuse. Anthers very numerous obovate cordate, filaments nearly as long. Female flowers not seen.

Capsule  $\frac{3}{4}$  inch long wings broad  $\frac{1}{4}$  inch broad at the top and narrowed and rounded at the base nearly equal, dehiscence on two lines on each face.

Sandakan Byte Estate (Ridley).

The foliage is narrower than that of B. Borneensis, the bracts are very different, and the fruit differs in its broad upper edge of the wings form any an angle with the vertical edge which narrows to a rounded base. Named after Mr. Pryer of Byte Estate, with whom I found it.

B. inostegia, Stapf. Ic. Pl. 2309. Trans. Linn. Soc. IV p. 166.

This plant only known from Kinabalu resembles B. congesta, Ridl. but has more ovate leaves, and a some what longer panicle. It is peculiar in the way its stipules are broken up into long fibres at the tip.

It was collected in Kinabalu at 6000 feet elevation by Haviland (1708).

B. congesta, n. sp.

Stems tall hairy. Leaves distant oblong ovate inaequilateral acute edge undulate with a few minute distant teeth, nerves prominent much forked about 6-9 inches long 4 inches wide, petiole 3 inches long, glabrous except the petiole and nerves scabrid Stipules ½ inch long oblong. Flowers crowded into a head, 2 females and many males. Capitulum very shortly pedicelled, pedicel stout about 1 inch long. Bracts broad thick outer ones suborbicular, inner ones narrower rough. Male flowers pedicelled, pedicel 1 Sepals 2 thick oblong shorter than the stainch long. Petals O. Stamens 12, filament short thick mens. anther oblong blunt slightly narrowed to the base, dehiseing by two linear short pores: Female flower not seen. Capsule oblong quadrate almost sessile, wings narrow linear, one smaller than the others. inch long  $\frac{1}{2}$  inch across the two wings.

Sarawak Bau (Ridley). Flowers white; Niah Limestone (Haviland and Hose 3224).

## B. polygonoides, n. sp.

Stem erect branched rather slender 2 feet tall, glabrous. Leaves narrowly lanceolate acuminate 4-5 inches long  $\frac{1}{2}$  inch wide slightly scaly on the midrib otherwise glabrous, base narrowed slightly almost equilateral nerves 5 prominent beneath, petiole  $\frac{1}{8}$ - $\frac{1}{4}$  inch long. Stipules ovate amplexicaul  $\frac{1}{4}$  inch long. Cyme terminal spreading with divaricate slender branches lower two or three bearing single female flowers, upper ones males. Bracts minute ovate, male flowers very small  $\frac{1}{8}$  inch rose pink sepals 2 orbicular oblong. Petals lanceolate acute smaller. Stamens 10 anthers club-shaped narrowed at the base.

Fruit with the wings almost orbicular  $\frac{1}{4}$  inch long, dehiscing by oblong valves on the face, wings rounded equal.

Sarawak, Matang (Ridley 11770, Haviland 1906.)

# B. pubescens, n. sp. B. hirsuta, (Bracemss).

Stem 2 to 4 inches long erect or decumbent leafy. Leaves close together alternate oblanceolate oblong base cuneate or rounded apex subacute margins dentate 5 inches long  $1\frac{1}{2}$  inch wide margins, nerves on the back hairy with stiff slender pale hairs. Upper surface sprinkled with hairs, petiole  $\frac{1}{6}$  inch long hairy. Stem also red hairy. Inflorescence axillary short with 2 bracts lanceolate acute or acuminate keeled hairy  $\frac{1}{4}$  inch long. Male flowers in pairs on slender pedicels several together. Sepals white orbicular  $\frac{1}{8}$  inch long. Petals 0. Stamens 12 filaments free nearly to base longer than the oblong oblanceolate, anthers which possess a ridge over the top. Female flowers not seen.

Capsule ovate long beaked  $\frac{1}{2}$  inch long and wider across the broad veined wings. Capsule punctate and

hairy dehiscing along the wing edge. Wings hairy on the edge.

Sarawak, Matang abundant (Hullett 346) Haviland 76 Ridley, on banks at 1800 feet alt.

Closely allied to B. Hulletti but differs in its hairiness, shorter broader leaves and beaked hairy capsule.

## B. Hulletti, n. sp.

Stems erect or decumbent 3 to 6 inches tall glabrous, leafy. Leaves alternate sesssile lanceolate falcate or oblique base cuneate, apex long acuminate, margin toothed at the apex, nerves alternate 3 pairs nervules reticulated, margins and nerves armed with bristles. Flowers axillary in strongly nerved lanceolate acuminate bracts, white, upper flowers male lower ones female male flowers  $\frac{1}{2}$  inch across pedicels nearly  $\frac{1}{2}$  inch long. Sepals 2 oblong obtuse. Petals 0. Stamens 13 or 14 filaments slender, free nearly to the base. Anthers elliptic short dehiscing by slits in the side. Female flowers sepals 2 or 3 petals. Styles three free for half their length, stigmas bifid with long arms. Capsule  $\frac{1}{2}$  inch across the wings, wings long oblong rounded.

Sarawak, Matang at 800-1000 feet (Hullett, Ridley 11776).

# B. elatostemma, n. sp.

Stem slender glabrous. Leaves narrow lanceolate long acuminate base acute, margins with a few distant teeth rather large about 12 on each side 4-5 inches long  $\frac{1}{2}$  to  $\frac{3}{4}$  inch wide glabrous petiole slender  $\frac{1}{2}$  inch long stipules oblong cuspidate  $\frac{1}{4}$  inch long. Panicle small  $1-2\frac{1}{2}$  inch long. Bracts obovate oblong  $\frac{1}{2}$  inch long male flowers crowded  $\frac{1}{4}$  inch across pedicel as long as the sepals. Sepals oblong 2. Petals 0. Stamens 8-10. Anthers ovoid opening by short slits at the top, filaments as short as anthers. Female flowers in pairs.

Capsule  $\frac{1}{2}$  inch long, cylindric swollen shortly beaked, wings 3 equal narrow  $\frac{1}{5}$  inch across, sides straight narrow to apex and base, slightly;  $\frac{1}{4}$  inch across the two wings.

Sarawak Rejang (Haviland 2946).

## B. Bractei (Begoniae) Burbidgei. Stapf. l.c. 165,

A tall branched plant 6 to 8 feet tall with ovate acuminate oblique leaves, glabrous, a short terminal panicle of large white flowers  $1\frac{1}{2}$  inch across, with large persistent greenish white bracts. Capsule semiorbicular an inch across the truncate top, the wings broadest at the upper angles rounded

Kinabalu at 7600 feet (Haviland 1706) and at Kiau (Barbidge).

The biggest flowered Begonia I have seen from Borneo. A plant collected at Tambusan by Haviland at 5000 feet on Kinabalu is rather more slender with smaller bracts but apparently the same, as Dr. Haviland suggests.

# B. rubida, n. sp.

Stems tufted succulent about 3 feet tall slender glabrous. Leaves distant ovate inaequilateral acute, base cordate glabrous succulent 8 inches long, 11 inch wide, margins almost entire, nerves radiating from the base about 5, petiole 2 inches long. Bracts of long obtuse ½ inch long caducous. Inflorescence panicled loose terminal radies flexuous branches slender. Bracteoles obovate convolute is inch long rounded truncate edges glandular dentate crowded. Male flowers \frac{1}{8} inch Sepals semiovate dark red, petals 2 narrower and shorter linear oblong. Stamens crowded yellow aciniform. Female flowers solitary on the lower branches ovary semiovate with 3 equal rounded wings  $\frac{1}{2}$  inch long red sepals 2 ovate blunt rounded. Petals 3, 2 nearly as large as the sepals oblong, one linear subacute. Styles connate for more than half their length

arms 3, stigmas reniform with rather strong processes. Fruit  $\frac{1}{2}$  inch long, 1 inch wide across the broad triangular rounded wings.

Sarawak on the Limestone rocks at Jambusan caves, (Ridley 12393) Braang (Haviland 94).

The flowers and fruit are considerably larger in Haviland's specimens than in mine, but I think they are the same species.

## B. pendula, n. sp.

Stems slender a foot or more long creeping and rooting at the nodes. At each node a pair of oblong lanceolate cuspidate, scale leaves \(\frac{1}{8}\) inch long. Leaves fleshy lanceolate, base rounded apex acute  $2-2\frac{1}{2}$  inch long  $1-1\frac{1}{2}$ inch across, glabrous, margins irregularly toothed or nearly entire, petiole slender  $1\frac{1}{4}$  inch long. Panicles slender lax. Flowers few very small pink males terminal in cymes, female solitary at the base. Bracts minute lanceolate pedicels slender  $\frac{1}{8}$  inch long, male flowers  $\frac{1}{8}$ inch long. Sepals 2 obovate obtuse. Petals 0. Stamens numerous filaments free longer than the elliptic anthers. Female sepals 3 red oblong. Petals 2 smaller. Styles 3 connate at base, stigmas reniform hairy. Capsule elliptic with the broad rounded wings transversely elliptic  $\frac{1}{2}$  inch wide  $\frac{3}{5}$  inch long one wing smaller than the others.

Sarawak on Limestone rocks at Jambusan, Bau (Ridley 11772).

A slender creeping plant hanging down over the rock faces, with fleshy leaves the nerves of which are invisible and red stems, at least in the long trailing stems of the Jambusan plant. In the stouter Bau plant the nerves are more conspicuous the leaves inaequilateral and ovate acuminate. This appears to be the lowest part of the plant, the Jambusan one being creeping sprays.

### B. speluncæ, n. sp.

Stems very short. Leaves tufted orbicular cordate, 1½ inches across glabrous strongly reticulate petioles slender 2-3 inches long. Cymes on slender peduncles 2 inches long flowers small white those on terminal branches male the lower are female. Bracts very small lanceolate acuminate. Male flower ½ inch across sepals 2 obovate petals 2 linear narrow. Stamens free near by to the base about 20, anthers oblong, pale dehiscing the whole length, filaments as long. Female flower sepals and petals as in male, stigmas 3, styles separate for part of their length. Capsule fusiform with 3 large broad rounded wings ½ inch across the wings and ½ inch long dehiscing by two slits on each face.

Sarawak, Limestone caves, Bidi; Jambusan (Ridley 11773). Mt. Braang (Haviland 873). Tabea on conglomerate at 1000 feet (Haviland.)

This pretty little white flowered begonia reminding one of a violet grows abundantly in the mouths of the caves in the limestone districts.

## B. Havilandii, n. sp.

A small herb with a short creeping rhizome and erect branches 2 inches tall leaves ovate broad acute, base very unequal, broad lobe rounded 4 inches long  $2\frac{1}{2}$  inch wide, margins toothed each tooth bearing a hair, nerves reticulate, bearing on nerves and nervules rather stiff pale hairs, petiole  $\frac{1}{4}$  to  $1\frac{1}{2}$  inch long hairy when young. The leaves apparently purple marbled when young. Stipules persistent ovate cuspidate keeled  $\frac{1}{4}$  inch long. Panicle terminal 3 inches little branched. Bracts persistent ovate white, toothed, each tooth bearing a glandular hair. Male flowers  $\frac{1}{4}$  inch across pedicel about as long. Sepals oblong 2 petals smaller 2. Stamens about 12 oblong nearly sessile.

Female flowers not seen "segments 6." Capsule orbicular with broad rounded wings, † inch across the

two wings. Wings semilunar narrowed to the tip broader at base. Ovary 3 celled placentas bifid.

Sarawak, Pengkulu Ampat (Haviland 279).

Begonia promethea, n. sp.

Stem very short prostrate one inch long. Leaves 2, rarely 3 ovate rounded at the tip unequal at the base petiole an inch long thick hairy red, lamina glabrous except a few hairs on the edge and veins on the back, shining light or emerald green with broad brown bars, finally entirely olive green, nerves depressed on the upper surface, lower surface red with elevated nerves, 6 inches long 4 inches wide. Scape rather slender 9 inches long peduncle glabrous red. Bracts oblong \$\frac{1}{2}\$ inch long or more in pairs light green. Panicle of few usually two branches, terminal branch bearing one or two female flowers opens first the lower branch bears male flowers and after the female flowers are almost over grows till it is much longer than the female branch, and the male flowers then open.

The male flowers in three or more terminal sepals 2 semiorbicular  $\frac{1}{4}$  inch long, red shining outside, pale pinkish white within. Stamens connate, torus cylindric rather thick, anthers very numerous in a round head, yellow oblanceolate 2 celled with a short stalk.

Female flowers one or two only, ovary equally 3 winged with rounded wings,  $\frac{3}{8}$  inch long, as broad as long. Sepals 4, 2 ovate obtuse white with red backs 2 narrower all white. Petals linear white narrow (not always present) styles 3 short thick stigmas four lobed unequally all yellow, 2 curved hornshaped, 2 reniform.

Borneo. Sarawak on sandstone rocks at Bukit Tendong near Busau, also Haviland 485,188. This very pretty begonia grows quite flat on the vertical surfaces of the high rocks. I could reach but few plants of it, but two I brought to Singapore grew very readily and flowered in December and January.

### B. Pyrrha, n. sp.

Stem creeping slender woolly. Leaves distant orbicular, base cordate 2 inches across, margins hairy with rather pale long hairs upper surface sprinkled with hairs under surface glabrous except the veins covered with wooly appressed hairs, petiole \(\frac{1}{2}\) inch long wooly. Panicle lax few branched and few flowered 3 inches long hairy. Bracts in pairs convolute oblong denticulate \(\frac{1}{2}\) inch long, green. Male flowers nearly sessile, \(\frac{1}{4}\) inch across. Sepals 2 oblong obtuse pink. Petals 2 obovate oblong shorter white. Stamens 13-14 filaments free to the base as long as the linear oblong anthers. Female flower pink, sepals and petals oblong obtuse subequal. Styles separate about halfway, stigmas 3 capsule oblong elliptic with three broad subtriangular obtuse wings \(\frac{1}{2}\) inch long.

Sarawak, Saribas, Haviland 2034, 1848.

The flowers both male and female are very shortly pedicelled, the toothed bracts being longer than the pedicel. B. repens, Miq., from Java and Borneo might possibly be intended for this but the flowers are not described and it is impossible to be certain what was intended.

### B. calcarea, n. sp.

Rhizome long creeping, over 4 inches covered with appressed hairs roots long and wiry. Leaves erect from the rhizome with stout hairy petioles 6 inches long densely brown hairy, blade peltale almost reniform rounded 6 inches wide. 4 long base rounded margins sinuate with distant teeth, nerves palmate spreading about 8; blade pale green (when dry) above glaucous beneath, fleshy, sprinkled with short stiff hairs above, backs glabrous except the main nerves dark brown hairy. Inflorescence on a very short peduncle rising directly from the rhizome covered with scale like leaves. Male flowers not seen. Capsule obovoid in outline with 3

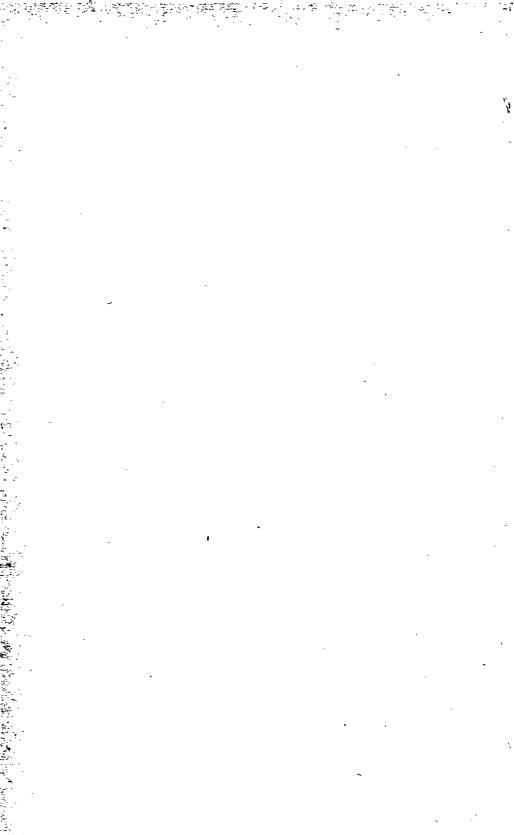
equal wings,  $\frac{1}{2}$  inch long narrow at the base widened towards the apex, perianth apparently 6 lobed.

Sarawak, top of Mount Braang old jungle limestone (Haviland).

I have only seen one specimen of this curious begonia with a single capsule and no flowers. It is hardly sufficient to describe.

B. (Platycentrum), adenostegia, Stapf., Trans. Linn Soc. IV. 164. An erect epiphytic plant under a foot tall glabrous with leaves entire acute shortly petioled a short little branched panicle with small persistent oblong bracts male flowers ½ inch across, sepals 2 petals 2 white. Female flowers 5 lobed capsule with one large oblong wing and two smaller ones.

Kinabalu, at Kinitaki 4500 feet, (Haviland 1270).



## Short Notes.

## Curious Nesting Place of Simotes Octolineatus.

In September last an old Spathodea nilotica tree which had been sickly for some time was cut down in the Botanic Gardens. In breaking it up one bough was found to be full of old borings of some longicorn beetle, and ensconced in one of these tunnels was found a living female snake (Simotes octolineatus) about a foot long which had already laid about a dozen oblong eggs an inch long in the tunnel. The bough was more than twenty feet from the ground, and the tree was isolated and with a bare trunk so that the snake must have climbed up the slightly roughened bark of the trunk. There were several openings into the bough whence the beetles had escaped and through one of these the little snake must have entered the burrow.

H. N. Ridley.

# Fertilization of Barringtonia.

In Journal No. 41. p. 124 a description of the fertilization of Barringtonia racemosa was given. The moth described as conveying the pollen to the stigma and so fertilizing the flower has been identified by Sir George Hampson as Zethes rufipennis Hampson.

H. N. Ridley.

Jour. Straits Branch R. A. Soc., No. 46, 1906.

## Errata.

Journal No. 45 p. 89 line 2 "and Nymphakina" lege subfam. Nymphalinæ, fam. Lemoniidæ.

Line 9. Amaen leg. Amoen.

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Page 90, line 25, Nias leg. Nicev.
                6. Woodmajor leg. Woodmason.
      91.
               20, et. seq. Crymanthis leg. Erymanthis.
  ,,
      93,
               27, 28 tenthras leg. teuthras.
                7, iphitat osca leg. iphita tosca.
      95,
               21, Dugapa leg. Ducapa.
     101.
     102,
                3, Stibochiana leg. Stibochiona.
                8, Mr. leg. Mt.
     103.
               76, clandius leg. claudius.
            ,,
                7, ð leg. ♀.
               22, ambara leg. amhara.
     106,
                2, discoval leg. discoidal.
     108,
               18, sclenophora leg. selenophora.
      ,,
            ,,
               19, zeroco leg. zeroca.
                7, milsi leg. mihi.
     109.
     110,
               14, cognitia leg. cynitia.
     117,
                5, Here leg. there.
               34, blade leg. black.
            ,,
     118,
               26, place leg. phase.
            ,,
               23, on leg. all.
     122,
            ,,
     125,
               13, Rhinopoepa leg. Rhinopepla.
     127,
                3. sericins leg. sericeus.
            ,,
                16. Wioeus leg. Uraeus.
     129,
            ,,
     134,
                1, zemera leg. zemara.
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Journal 45, on p. 56 the notes are misplaced. Sus verrucosus should refer to the Javan. Sus barbatus tô the-Bornean pig.

25, Kina leg. Kinabalu.

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Page 286. line 17, for
                          Negrite
                                      read:
                                              Negrito.
                 22,
     286.
                          Fascicugi
                                              Fasciculi.
             ,,
      286,
                 23,
                          L'nougs
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                 26,
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      286.
                 33,
                          g'noug
                                              g'ngong.
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