CATALOGUE OF BIRDS IN THE INDIAN MUSEUM.

III. CAPITONIDAE (BARBETS).

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INTRODUCTION.

Parts I and II of the Catalogue by Roonwal (1941, 1947) dealt with the collections of Columbae and Pterocletes of the Indian Museum. The work had to be discontinued by him, due to his appointment in 1945, as Mammalogist to the G. H. Q. (I), Indian Field Typhus Research Team. In 1949 he was appointed as the Forest Entomologist, Indian Forest Research Institute, Dehra Dun. The author who is working in the Bird Section of the Indian Museum has undertaken to continue the cataloguing work. The present contribution dealing with the barbets forms the third part of the series.

During World War II, the Zoological Survey of India, which is the custodian of the zoological collections of the Indian Museum including those of the Asiatic Society, was shifted, with all its collections, in 1942 from Calcutta to Banaras, and was housed there in a building on the bank of the Varuna river. In September 1943 an unforeseen and unprecedented flood of the Varuna river played havoc with the collections: a part of the material was submerged under water for three days before it could be salvaged. Many skins were washed away, a number of them had to be discarded being so thoroughly drenched, and many have lost all their history, their labels being washed away, so that they do not serve any practical purpose. Furthermore, many old skins could not withstand the rigors of packing and repacking during transfer from and to Calcutta. It is pitiable indeed that among the lost material a good number of specimens were from now inaccessible places, like Yunnan, Shan States (Burma), and Yarkand. The loss to the collections as calculated in the family Capitonidae alone was 69 per cent. However, since the catastrophe the staff of the Zoological Survey of India has been making every possible effort to restore the damaged collections by repairing whatever was possible, but mostly by adding new material. The collections went on accumulating for more than a hundred years when the disaster came; this fact alone may give the reader an idea of the magnitude of the project of replacement before the Survey.

At the present moment there are 174 specimens of barbets in the Indian Museum collections, on which this catalogue is prepared. This number includes recently collected specimens, old undamaged skins and those salvaged from flood damaged lot.

As far as possible information on the following points for each specimen has been given:

(i) Zoological Survey of India Registered number; (ii) number given in Blyth's (1852) catalogue, (iii) Sex; (iv) Locality; (v) Date of collection; (vi) Collector or Donor, and (vii) Measurements. Miscellaneous information has been given under 'Remarks'. Unless otherwise stated all specimens are adults.

As for the synonomy, I have given under each form the original reference and any subsequent modifications made after the publication of Peters' (1948) check list. I have given my remarks on the taxonomy when called for.

In the Fauna of British India, Baker (1927) accepted six genera of barbets within the Indian limits (India, Nepal, Pakistan, Burma and Ceylon). Ripley (1945), followed by Peters (1948) and Biswas (1953), recognised only two genera within the above defined area. The generic names as used by Baker (1927), Ripley (1945), Peters (1948) and Biswas (1953) are as follows:—

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Baker (1927).

Ripley (1945), Peters (1948) and Biswas (1953).

1. Megalaima G. R. Gray
2. Thereiceryx Blanford
3. Chotorhea Bonaparte
4. Cyanops Bonaparte
5. Xantholaema Bonaparte
6. Calorhamphus Lesson

Ripley (1945), Peters (1948) and Biswas (1953).

Megalaima G. R. Gray

Calorhamphus Lesson
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For the Indian species and subspecies I have followed Peters (1948) as far as possible. In some cases, however, I have differed from him, and such instances have been discussed in appropriate places.

The following species and subspecies are listed in the present cata logue:—

- 1. Megalaima virens marshallorum Swinhoe
- 2. Megalaima virens magnifica Baker
- 3. Megalaima virens clamator Mayr
- 4. Megalaima virens virene (Boddaert)
- 5. Megalaima lineata hodgsoni Bonaparte
- 6. Megalaima lineata kutru Mukherjee
- 7. Megalaima zeylanica zeylanica (Gmelin)
- 8. Megalaima zeylanica inornata Walden
- 9. Megàlaima zeylanica caniceps (Franklin)
- 10. Megalaima viridis (Boddaert)
- 11. Megalaima mystacophanos mystacophanos (Temminck)
- 12. Megalaima flavifrons (Cuvier)
- 13. Magalaima franklini franklini (Blyth)
- 14. Megalaima asiatica asiatica (Latham)
- 15. Megalaima asiatica davisoni Hume
- 16. Megalaima henricii (Tomminck)
- 17. Megalaima pulcherrima Sharpe
- 18. Megalaima australis cyanotis (Blyth)
- 19. Megalaima australis duvauceli (Lesson)
- 20. Megalaima haemacephala indica (Latham)
- 21. Calorhamphus fulginosus hayi (J. E. Gray)
- 22. Calorhamphus fulginosus fulginosus (Temminck)
- 23. Gymnobucco peli Hartlaub
- 24. Pogoniulus pusillus uropygialis (Heuglin)
- 25. Tricholaema melanocephalum melanocephalum (Crotzschmar)
- 26. Lybius undatus thiogaster Neumann

The following species and subspecies although occur within the Indian limits are not represented in our collections:—

- 1. Megalaima incognita Hume
- 2. Megalaima australis stuarti (Robinson & Kloss)
- 3. Megalaima franklini ramsayi (Walden)
- 4. Megalaima rubricapilla (Gmelin)

I am indebted to the authorities of the Bombay Natural History Society and the Bengal Natural History Society, for the loan of some specimens for my study. I am grateful to Dr. S. L. Hora, Director, and Dr. B. Biswas, Assistant Superintendent, Zoological Survey of India, for critically reading through the manuscript and suggesting improvements.

Order PICIFORMES

Suborder GALBULAE

Superfamily Capitonoidea

Family Capitonidae

Genus Megalaima G. R. Gray

Megalaima virens (Boddaert)

The species ranges throughout the Himalayas from West to East and through Upper Burma extends to Eastern and Southern China, South to Tenasserim, Northern Siam and Northern Annam.

In the Indian Museum collections all the four subspecies admitted by Peters (1948) are represented.

Megalaima virens marshallorum Swinhoe

(The great Western Himalayan barbet)

1870. Megalaima marshallorum Swinhoe Ann. Mag. nat. Hist., (4), 6:348 - Simla, Western Himalayas.

Megalaima virens marshallorum is represented by the following skins:—

| Reg. Sex. | Localit | Locality. Date of collection. | | Collector or Donor. | Mea | sureme | nts. | Remarks. | |
|-----------|---------|-------------------------------|--------|---------------------|--------------|--------|------|----------|------------------------------|
| 110. | | | | conection. | or Donor. | w. | Tl. | в. | |
| 7944 | ₫ : | Kashmir (ca. | 4500') | 5 May 1876 | J. Biddulph | 153 | 105 | 47 | •• |
| 14453 | ₫ : | Muree, Dist., West | | 3 Feb. 1876 | J. Biddulph | 143+ | 100+ | 45 | Wing and tail slightly worn. |
| 14454 | ያ : | Muree, Dist., West | | 3 Feb. 1876 | J. Biddulph | 155 | 104 | 47 | •• |
| ·20230 | : | Muree, Dist., West | | 24 June 1873 | F. Stoliczka | 145+ | 102 | 43 | Wing slightly worn. |
| 876 | : | Simla, *PEPS | SU | 1873 | F. Stoliczka | 148 | 100 | 41 | •• |
| 14451 | \$ | Simla, PEPS | u | 1876 | J. Biddulph | 143 | 105 | 43.5 | Wing slightly worn. |
| 14452 | : | Simla, PEPS | su | 1876 | J. Biddulph | 149 | 101 | 44 | •• |
| 25965 d | | Tainital (ca Uttar Pradesh | | 6 Nov. 1928 | S. C. Law | 152 | 105 | 45 | •• |

Patiala and East Punjab States Union.

Systematic notes.—The single specimen from Kashmir has interesting abnormalities in its plumage. It has some sulphur yellow spots on lores and a band of sulphur and dirty cream yellow feathers on the upper and central back.

The birds of Garhwal and Kumaon cannot be separated from marshallorum and are therefore, included here.

Range.—North-Western Himalayas from Kashmir to Kumaon between 3,000 and 8,000 feet.

Megalaima virens magninfica Stuart Baker

(The great Eastern Himalayan barbet)

- 1926. Megalaima virens magnifica Stuart Baker, Bull. Brit. orn. Cl., 47: 43. Machi, Manipur.
- 1945. Megalaima virens mayri Ripley, Proc. Biol. Soc. Wash., 61: 100.-Mishmi Hills, N. E. Assam.

Megalaima virens magnifica is represented by the following skins:—

| | | | | _ | - | | | |
|---------------|----------|--|---------------------|---------------------|-----------|--------|-------|------------------------------|
| Reg. S No. | ex | . Locality. | Date of collection. | Collector or Donor. | Meas | sureme | ents. | Remarks. |
| 15236 | đ | Nepal valley | 8 Dec. 1877 | J. Scully | w. | Ti. | в. | Juvenal. |
| 274 06 | ð | Godavari, Nepal valley | 11 May 1947 | B. Biswas | 140 | 95 | 43.5 | 9 |
| 27407 | ð | Godavari, Nepal valley | 13 May 1947 | B. Biswas | 142 | 99 | 42 | • • |
| 274 08 | đ | Godavari, Nepal valley | 13 May 1947 | B. Biswas | 141+ | 94-5 | 44 | Wing slightly- |
| 27409 | ð | Godavari, Nepal valley | 13 May 1947 | B. Biswas | 141+ | 105 | 46 | worn. Wing slightly |
| 15237 | φ | Nepal valley | 9 Nov. 1877 | J. Scully | 137 | 90 | 44 | worn. |
| 27410 | ₽ | Godavari, Nepal valley | 15 May 1947 | B. Biswas | 138 | 97 | 46 | Wing slightly |
| 4891 | • • | Kathmandu, Nepal | •• | Mus. Collector | 130+ | •• | 41 | worn. Wing slightly worn and |
| 871 | ð | Darjeeling, North Bengal | •• | J. Anderson | 142 | 90 | 46 | tail worn. |
| 18278 | ð | Darjeeling, North Bengal | •• | G. Mason | 142 | 92 | 48 | •• |
| 872 | ₽ | Darjeeling, North Bengal | •• | J. Anderson | 137+ | 98 | 42 | Wing slightly |
| 18279 | P | Darjeeling, North Bengal | •• | G. Mason | 140 | 91 | 44 | worn. |
| 869 | | Darjeeling, North Bengal | •• | J. Anderson | 140 | 92 | 40 | • • |
| 870 | | Darjeeling, North Bengal | •• | J. Anderson | | • • | | Subadult. |
| 874 | | Darjeeling, North Bengal | • • | J. Anderson | 142 | 90 | 43 | Body feathers. |
| 14455 | | Darjeeling, North Bengal | 3 Feb. 1876 | Col. Mainwair- | 139 | 91 | 44 | in moult. |
| 2 7465 | ð | Kyozing-Temi Road (ca. 5800') West Sikkim. | 7 Jan. 1953 | ing. B. Biswas | 140 | 98•5 | 45 | •• |
| 27466 | ð | Temi (ca. 5000'), West Sikkim. | 9 Jan. 1953 | B. Biswas | 144 | 100 | 44 | •• |
| 27464 | φ: | Dentam, West Sikkim | 1 Jan. 1953 | B. Biswas | 140 | 87 | 43•5 | Tail moulting. |
| 27467 | •• | Dikchu-Gangtok Road, (ca. 5000'), Sikkim. | • • | B. Biswas | 148.5 | 102 | 46 | •• |
| 14807 | • • | Garo Hills, Assam | • • | O. L. Fraser | 147 | 97.5 | 49 | • • |
| 27411 | Ş | Barapani (ca. 3300'), Khasi Hills, Assam. | 22 May 1949 | H. L. Hiteshi | 146 | 99 | 45 | •• |
| 22939 | ₽ | | 28 May 1898 | E. C. S. Baker | 138+ | 92+ | 48.5 | some w havi |
| 27413 | ð | Chongli-emseu, Hills, Assam. | 4 Mar. 1935 | Z. S. I. Party | 143 | 162 | 47 | worn. |
| 27412 | 9 | Chongli-emseu, Naga Hills, Assam. | 4 Mar. 1935 | Z. S. I. Party | 146 | 97 | 48 | • • |
| 12969 | | Manipur State | Jan. 1882 | R. D. Oldham | 140 | 94 | 44 | • • |
| 25276 | £ | Rotung (ca. 1400'), Abor Hill North-East, Assam. | 2 Jan. 1912 | S. W. Kemp | 144 | 94 | 44 | |

Systematic notes.—Baker (1927) placed the birds of Nepal and Sikkim with marshallorum and stated that they are intermediate between marshallorum and magnifica, but are nearer the former. The birds of central Nepal, Darjeeling and Sikkim, when compared with topotypical marshallorum, are found to be smaller and deeply coloured, quite distinct from the Simla population and approximate closer to the Eastern Himalayan race magnifica. I have, therefore, listed them with magnifica. The race M. virens mayri Ripley from Mishmi Hills, N. E. Assam, is differenciated from M. v. magnifica in being darker and larger. specimens of magnifica from Sikkim and Abor Hills are darker compared with the topotypical specimen of magnifica, all the specimens present in our collection being in fresh plumage and were collected in January. Some of the specimens from Khasi, Garo, and Naga Hills, are more or less of the same size or slightly smaller than mayri, (vide above Table), and a specimen from Sikkim (No. 27467), is even larger. I am unable to differentiate mayri from magnifica.

Range.—The Himalayas from Central Nepal to Eastern Assam and the hills of North Burma.

Megalaima virens clamator Mayr

(The great Burmese barbet)

1941. Megalaima virens clamator Mayr, Ibis, (14) 5: 489. - Shweli-Salween divide, Upper Burma.

Megalaima virens clamator is represented by the following skins:—

| Reg. Sex. No. | Locality. | Date of collection. | Collector or Donor. | Meas | sureme | nts. | Remarks. |
|------------------|-----------|---------------------|----------------------|--------|----------|------|----------|
| 140. | | conection. | or Donor. | w. | . Tl. B. | | |
| | | Möng | C o l. C. Bingham | T. 133 | 94 | 48 | •• |

Remarks.—In this specimen the scapulars are deep maroon. In size it is smaller than the type of clamator.

Range.—Upper Burma in the Hpimaw Hills and the Shweli-Salween divide (Peters).

Megalaima virens virens (Boddaert)

(The great Chinese barbet)

1873. Bucco virens Boddaert, Tabl. Pl. enlume. 53, Based on Pl. enlum., 871. - China.

Megalaima virens virens is represented by the following skins:-

| Reg. Sex. | Locality. | Date of collection. | Collector or Donor. | Measurements. | | | Remarks. |
|-----------|--|---------------------|---------------------|---------------|-----|----|---------------|
| No. | | | | w. | Tl. | в. | |
| | chow, Fukien Dist., outh-East, China. | I)ec. 1889 | C. B. Rickett | 147 | •• | 43 | Tail damaged. |
| 21219 Foo | chow, Fukien Dist., outh-East, China. | May 1891 | C. B. Rickett | 138 | 100 | 41 | •• |

Remarks.—The white streaks on the back are absent in the specimen number 21218.

Range.—Southern and South-Eastern China, South to Tenasserim, Northern Siam, Laos and Northern Annam.

Megalaima lineata Blyth

The species is distributed in the lower Himalayas as far West as Sutlej and Eastward through the Northern and Southern Assam and Burma to Yunnan, Siam, Cambodia and Cochin-China, South to Malay Peninsula, Java, Bali; Westward to Orissa in the Indian Peninsula.

Out of the three recognizable subspecies, two occur within the Indian limits. The Indian Museum collections are represented by the following two subspecies.

Megalaima lineata hodgsoni Bonaparte

(The Assam lineated barbet)

1850. Megalaima hogdsoni (sic) Bonaparte, Consp. Gen. Av., 1: 144.-Nepal.
1950. Megalaima zeylanica rana Ripley, Proc. Biol. Soc. Wash., 63: 101.-Bajora, W. Nepal.

Megalaima lineata hodgsoni is represented in the collections by the following skins:—

| Reg. No. | Sex | . Locality. | Date of collection. | Collector or Donor. | Meas | sureme | nts. | Remarks. |
|---------------|-----|---|---------------------|---------------------|-------|--------|------|----------------------------|
| | | | concenion. | or Donor. | w. | Tl. | в. | |
| 2 7414 | ð | Hardwar, Dehra Dun Dist., W. Himalayas. | 22 May 1947 | H. L. Hiteshi | 135 | 77 | 35 | •• |
| 26437 | · P | Gish, Jalpaiguri D i s t., N. Bengal. | 21 Nov. 1938 | Z. S. I. party | 131 | 85.5 | 35 | Bengal Duar Coll. 1938. |
| 7716 | Ŷ | Dafla, Assam | 24 Oct. 1876 | Godwin Austin | 126 | 77 | 35 | •• |
| 26905 | ð | Tangla, Darrang Dist., Assam. | 14 Nov. 1939 | M. L. Roonwal | 128 | 79 | 34 | •• |
| 26 906 | \$ | Lokra, Balipara Frontier Tract, Assam. | 14 Nov. 1939 | M. L. Roonwal | 127 | 75 | 34 | •• |
| 27433 | ₫ | Palasbari, Kamrup Dist., Assam. | 16 May 1950 | B. Biswas | 136 | 83 | 34 | •• |
| 27434 | ð | Barnihat, Khasi H i l l s, Assam. | 23 May 1949 | R. V. Sherard | 134 | 81 | 34 | •• |
| 27435 | Ş | Nangpoh, Khasi Hills, Assam. | 11 Feb. 1940 | Mrs. A. E. Ford | 136 | 87 | 36 | •• |
| 24601 | ዩ | South Sylhet, Lusker- pore valley, Assam. | 1903 | C. B. Antram | 128.5 | 77 | 33.5 | Purchased. |
| 24602 | Р | South Sylhet, Luskerpore valley, Assam. | 1903 | C. B. Antram | 129 | 74 | 34 | Purchased. |
| 24603 | 오 | South Sylhet, Luskerpore valley, Assam. | 1903 | C. B. Antram | 135 | 85 | 35 | Purchased. |
| 2 0552 | ₽ | Kutta, N. Cachar, Assam. | 6 June 1892 | E. C. S. Baker | 134 | 81 | 35 | •• |
| 24124 | •• | Heiblintaung, between Chin and Victoria Hills, Upper Burma. | 5 Dec. 1901 | Lieut. Wood | 135 | 86 | 35 | •• |
| 24125 | •• | Heiblintaung, between Chin and Victoria Hills, Upper Burma, | 4 Dec, 1901 | Lieut. Wood | 135 | 84 | 85 | |

| Reg, No. | Sex | . Locality. | Date of collection. | Collector or Donor. | Me | Measurements. | | Remarks. |
|-------------|-----|---|---------------------|----------------------|-----------------|---------------|------|-----------------|
| | | | | | w. | TI. | В. | |
| 5899 | •• | Arakan, W. Burma | •• | Museum Colle tor. | c- 130 | 77 | 32.5 | •• |
| 892 | 1 | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle tor. | c- 129 | 87 | 34 | •• |
| 893 | 1 | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle tor. | c- 133 | 83 | 35 | •• |
| 895 | 1 | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle | c- 129 | 87 | 34 | •• |
| 896 | •• | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle | c- 131 | 80 | 31 | •• |
| 900 | | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle | ec- 134 | 85 | 34 | •• |
| 901 | •• | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle | ec- 126 | 80 | 31 | Complete moult- |
| 902 | •• | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle | oc- 128 | 80 | 31 | •• |
| 903 | •• | South of Irrawaddy, Burma. | Mar. 1873 | Museum Colle | ec- 127 | 81 | 32 | •• |
| 23293 | 우 | Möng löng, (ca. 2900') Möng Köng, S. Shan States, U. Burma. | 2 Jan. 1900 | C. T. Bingham | 12 ⁸ | \$0 | 31 | Flood damaged. |
| 23294 | Į Į | Möng löng (ca. 1900') Möng Köng, S. Shan States, U. Burma. | 2 Jan. 1900 | C. T. Bingha | m 132 | 77 | 32 | Flood damaged. |

Range.—The Himalayas from Mussorie and Simla to Eastern Assam the Shan States and Annam, South to the Malay Peninsula, Siam, Cambodia and Cochin-China (Peters).

Megalaima lineata kutru Mukherjee

(The Simlipal lineated barbet)

1952. Megalaima lineata kutru Mukherjee, Bull. Brit. orn. Cl., 72: 36.-Chahālā Simlipal Hills, Mayurbhanj, Orissa.

Megalaims lineata kutru is represented in the collections by the following skins:—

| Reg. Sex. | | Locality. | Date of collection. | Collector or Donor. | Measurements. | | | Remarks. |
|-----------|------------|---|-------------------------------|---------------------|---------------|-----|------|-----------|
| No. | | | confection. | or Donor. | w. | Tl. | в. | |
| 27297 | 7 8 | Chāhāla, Simlipal Mayurbhanj Orissa. | Hills, 13 Feb. 1951 Dist., | B. Biswas | 125 | 77 | 32 | Holotype. |
| 2729 | 3 đ | Chāhāla, Simlipal Mayurbhanj Orissa. | Hills, 13 Feb. 1951 Dist., | B. Biswas | 122.5 | 78 | 33 | Paratype. |
| 2729 | 4 ♀ | Chāhāla, Simlipal Mayurbhanj, Orissa. | Hills, 8 Feb. 1951 Dist., | B. Biswas | 132 | 77 | 31.5 | Paratype. |
| 2729 | 5 ұ | Chāhāla, Simlipal Mayurbhanj Orissa. | Hills, 13 Feb. 1951 Dist., | B. Biswas | 128 | 79 | 32 | Paratype. |
| 2729 | 6 9 | Chāhāla, Simlipal Mayurbhanj Orissa. | Hills, 13 Feb. 1951 Dist., | B. Biswas | 126 | 78 | 33•5 | Paratype. |

Range.—So far known only from the Simlipal Hills, Orissa.

Megalaima zeylanica (Gmelin)

The species is distributed in India and Ceylon. In India it ranges as far as Kangra (E. Punjab) in the North-West and Mt. Abu (Rajasthan in the West, and West Bengal in the East, and occupies the greater part of the Peninsular India.

There are three recognizable subspecies. All of them are represented in the collections of the Indian Museum.

Megalaima zeylanica zeylanica (Gmelin)

(The Ceylon green barbet)

1788. Bucco Zeylanicus Gmelin, Syst. Nat., ed., 13, 1(1): 408.—Ceylon.

Megalaima zeylanica zeylanica is represented by the following skin:—

| Reg. Sex. | Locality. | Date of collection. | Collector or Donor. | Measurements. | | | Remarks. | |
|-----------|----------------|---------------------|---------------------|---------------|-----|----|------------------------|--|
| 2,07 | | conceinon. | of Donor. | w. | Tl. | в. | | |
| 19132 | Ceylo n | 1891 | R. Templeton | 115 | 65 | 33 | Flood damaged skin. | |

Range.-Travancore and Ceylon (Peters).

Megalaima zeylanica inornata Walden

(The Bombay green barbet)

1870. Megalaima inornata Walden, Ann. Mag. nat. Hist., (4) 5: 219. - "Malabar, Coorg, and Candeish", restricted to Malabar by Mukherjee (1952).

Megalaima zeylanica inornata is represented by the following skins:—

| Reg. S | ex | Locality. | Date of collection | | Collector or Donor. | Measu | remei | nts. | Remarks. |
|--------|----|---|--------------------|----|---------------------|-------|------------|------|---------------------|
| | | | 0011000101 | •• | or Donor. | w. | Tl. | в. | |
| 11921 | ð | Munche = Murshi, Ratnagiri Dist., Bombay Presidency. | 3 Mar. 187 | 78 | J. Armstrong | 119+ | 73 | 37 | Wing slightly worn. |
| 11266 | ď | Munche = Murshi, Ratna- giri Dist., Bombay Presidency. | 3 Mar. 18 | 78 | J. Armstrong | 119 | 7 5 | 35 | •• |
| | | Munche = Murshi, Ratna- g i r i Dist., Bombay Presidency. | 2 Mar. 18 | 78 | J. Armstrong | 120 | 75 | 36 | Flood damaged. |
| | | Munche=Murshi, Ratna- g i r i Dist., Bombay Presidency. | | 78 | J. Armstrong | 123 | 78 | 36 | Flood damaged. |
| | | Munche = Murshi, Ratnagiri Dist., Bombay Presidency. | | 78 | J. Armstrong | 116.5 | 72 | 36.5 | Flood damaged. |
| | | Ratnagiri, Ratnagiri Dist., Bombay Presidency | | | J. Armstong | 121 | 75 | 40 | Flood damaged. |
| | | Bhoura = Bavda, Kolha- pur Dist., Bombay Presidency | | | | . 119 | 75 | 37 | Flood damaged. |
| | | Bhoura = Bayda, Kolha- tur Dist., Bombay Presidency. | | 78 | J. Armstrong | 123 | 76 | 37 | Flood damaged. |
| | | Bhoura = Bavda, Kolha- pur Dist., Bombay Presidency. | _ | 78 | J. Armstrong | 111 | 69 | 36 | Flood damaged. |
| | | Bhoura = Bavda, Kolha- pur Dist., Bombay Presidency. | - | | J. Armstrong | 118 | 70 | 38 | Flood damaged. |
| 11860 | Ş | Bhoura = Bavda, Kolha- pur Dist., Bombay Presidency. | 6 Apr. 187 | 8 | J. Armstrong | 113 | 69 | 37 | Flood damaged. |

Range.—The distribution of his race in South and East has not been clearly defined so far. Baker (1927) stated that it extends as far as Travancore in the South and the Nilgiris in the East. Peters (1948) gave its range in the South at least to Cannanore, and the Godaveri river to the East. I am unable to agree with Peters regarding the distribution of this race in the East. The specimen of Eastern Hyderabad has been noted by Whistler (1935) as intermediate, agreeing close in colour with T. z. caniceps but is too small for the race. The distribution may be redefined as follows:—

Throughout the Bombay Presidency along the Sahyadri ranges, and as far as Mt. Abu (Rajasthan) in the North and Malabar in the South. It extends Eastward to the Nilgiris.

Megalaima zeylanica caniceps (Franklin)

(The Northern green barbet).

- 1831. Bucco caniceps Franklin, Proc. Zool. Soc. Lond., (1): 121.—"On the Ganges between Calcutta and Banares, and in the Vindhyian Hills between the later place and Gurrah Mundela on the Nerbudda".
- 1934. Thereiceryx zeylanicus kangrae Whistler, J. Bombay Nat. Hist. Soc., 37: 516.—Ranital, 2,000 feet, Kangra.

Magalaima zeylanica caniceps is represented by the following skins:—

| Reg. Sex. | | Locality. | Date of collection. | Collector or Donor. | Measurements. | | | Remarks. |
|-----------|----|---|---------------------|-------------------------|---------------|------------|------|--------------------------|
| 210, | | | 00110001021 | VI DVII. | w. | Tl. | В. | |
| 25964 | \$ | Faridpur, Bareilly Dist., Uttar Pradesh. | 24 Oct. 1928 | S. C. Law | 125 | 71 | 36 | •• |
| 4893 | •• | Nepal | • • | Museum Collector. | 115 | 75 | 33 | Complete moult. |
| 27415 | ð | Banaras C a n t., Uttar Pradesh. | 9 Sept. 1945 | Kartar Singh | 123 | 76 | 35 | •• |
| 27416 | ð | Banaras Cant., Uttar Pradesh. | 8 July 1946 | A. N. Fernan- dez. | 118 | 77 | 34 | • • |
| 27417 | đ | Banaras Cant., Uttar Pradesh. | 16 Feb. 1943 | M. N. Dutta | 126 | 80 | 35.5 | •• |
| 27418 | đ | Dharhara, Monghyr Dist., Bihar. | 26 Nov. 1947 | A. N. Fernan- dez. | 124 | 78 | 32 | •• |
| 885 | •• | Manbhum Dist., Bihar | •• | Lieut. R. C. Beavan. | 125 | 76 | 35.5 | •• |
| 19012 | | Darbhanga, Bihar | •• | E. Stewart | 122 | 79 | 34 | •• |
| 26228 | 2 | Ranchi, Bihar . | 3 Nov. 1931 | S. C. Law | 120 | 7 5 | 34 | •• |
| 26248 | \$ | Ranchi, Bihar | 8 Nov. 1931 | S. C. Law | 116 | 70 | 31 | ${\bf Complete\ moult.}$ |
| 27299 | đ | Chahala, Simlipal Hills, Mayurbhanj District, Orissa. | 13 Feb. 1951 | B. Biswas | 121 | 77 | 33 | •• |
| 27452 | ₽ | Sikargung, Rewa Dist., Vindhya Pradesh. | 10 Apr. 1947 | M. L. Roonwal | 121 | 74 | 36 | •• |
| 27419 | ð | Pachmarhi, Hoshangabad Dist., Madhya Pradesh. | 15 Feb. 1941 | M. L. Roonwal | 119 | 72 | 32 | Flood damaged. |

Range.—Foothills of the Himalayas from Kangra in the West to Nepal in the East and the Northern Indian plains (except Punjab, Sind and Eastern Bengal). Southward its range extends as far as the Godavari Delta and Eastern and Northern portion of the Hyderabad State.

Megalaima viridis (Boddaert)

(The small green barbet)

1783. Bucco viridis Boddaert, Tabl. Pl. enlum., 53.—Mahé, India, ex. Daubenton, pl. 870.

Magalaima viridis is represented by the following skins:—

| Reg. Sex | . Locality. | Date of collection. | Collector or Donor. | Measurements. | | | Remarks. |
|------------------|---|---------------------|-----------------------|---------------|------|------|--|
| No. | | conection. | or Donor. | w. | Tl | в. | |
| 11452 | Bhoura=Bavda, Kolhapur Dist., Bombay Presidency. | 26 Mar. 1878 | J. Armstrong | 114 | 62 | 26.5 | Flood damaged. |
| 11862 đ | Bhoura=Bavda, Kolha- pur Dist., B o m b a y Presidency. | 7 Apr. 1878 | J. Armstrong | 115 | 63 | 27 | Flood damaged. |
| 27453 | Yercaud (ca. 4500'), Shevaroy Hills, S. India. | 2 Feb. 1952 | R. V. Sherard | 109 | 65 | 27 | •• |
| 2 74 54 ♀ | Yercaud (ca. 4500'), Shevaroy Hills, S. India. | 2 Feb. 1952 | R. V. Sherard | 110 | 65.5 | 28 | •• |
| 26724 | Trivandrum, Travancore State, S. India. | 26 June 1942 | N. G. Pillai | 95 | 56 | 25.5 | Purchased. |
| 23892 ⊋ | Moonai, Trivandrum Travancore State, S. India. | •• | Trivandrum Museum, | 103 | 64+ | 25.5 | Received in exchange, tail some what worn. |

Range.—Hill ranges of South-Western India, from Tapti river in the North to Cape Comorin in the South and the Shevaroy Hills and Chitteri ranges in the Eastern Ghats.

Megalaima mystacophanos (Temminck)

The species extends from South Tenasserim South Ward to Malay Peninsula, Sumatra, Borneo and Batu Islands. There are three subspecies as recognised by Peters (1948), of which only the nominate subspecies occurs within the Indian limits.

Megalaima mystacophanos mystacophanos (Temminck)

(The gaudy barbet)

1924. Bucco mystacophanos Temminek, Pl. col., livr., 53, pl. 315.—Sumatra.

Megalaima mystacophanos mystacophanos is represented by the following skin:—

| Reg. Sex. | Locality. | Date of Collector collection. or Donor. | | Measurements. | | | Remarks. |
|----------------|-----------------|---|------------------------------------|---------------|-----|----|--|
| | | 001100070II. | or Donor. | w. | Tl. | в. | |
| 27437 (323) | Malay Peninsula | 1848 | Mr. E. Lindstedt and Mr. Firth. | 99 | 52 | 32 | One of the three adults of Blyth (1852). |

Range.—South Tenasserim, Southward over the Malay Peninsula and Sumatra (Peters).

Megalaima flavifrons (Cuvier)

(The yellow-fronted barbet)

1817. Bucco flavifrons Cuvier, Régne Anim., 1: 428, note 2.—Ceylon.

Megalaima flavifrons is represented by the following skin:—

| Reg. Sex. No. | Locality. | Date of collection. | Collector or Donor. | Mea | surem | ents. | Remarks. |
|------------------|-----------|---------------------|---------------------|-----|-------|-------|---|
| | | conection. | | w. | Tl. | В. | |
| 19126 (320) | Ceylon | 1848 | E. L. Layard | 90 | 62 | 22.5 | One of the three skins of Blyth (1852). |

Range.—Ceylon.

Megalaima franklini (Blyth)

The species is distributed in the hill ranges of the Himalayas from Nepal to Assam, Upper Burma and Yunnan, South to Malay Peninsula, Siam and Annam. Five subspecies of *M. franklini* have been admitted by Peters (1948) of which only two occur within the Indian region. In the Indian Museum collections, it is represented by the nominate subspecies only.

Megalaima franklini franklini (Blyth)

(The golden-throated barbet)

1842. Bucco franklinii Blyth, J. Asiat. Soc. Beng., 11 (1): 167.—Darjeeling. Megalaima franklini franklini is represented by the following skins:—

| Reg. Sex. | Locality. | Date of collection. | Collector or Donor. | Meas | sureme | ents. | Remarks. |
|----------------|-----------------------|---------------------|------------------------|------|--------|-------|---|
| No. | | conection. | or Donor. | w. | | в. | |
| 27460 | Godvari, Nepal Valley | 13 May 1947 | B. Biswas | 106 | 66 | 27 | •• |
| 27461 ♀ | Thankot, Nepal Valley | 31 Mar. 1947 | P. N. Mittra | 104 | 63 | 26 | •• |
| 26046 우 | Darjeeling, N. Bengal | 31 Mar. 1930 | S. C. Law | 101 | 61 | 26 | •• |
| 27405 (326) | Darjeeling, N. Bengal | 1845 | Mr. Webb | 87•5 | 43 | 20 | Juvenal, on e of the three cotypes listed by E. Blyth (1852). |

Range.—Lower hills of the Himalayas as far West as Nepal, Eastwards through Northern and Southern Assam, extends to Northern Burma, Southern Yunnan, Tonkin, Northern Laos and Northern Annam.

Megalaima asiatica (Latham)

The species ranges throughout the lower altitudes of the Himalayas, and the hills and plains of Assam, Bengal, Burma, Shan States and Yunnan; South to Tenasserim, Siam, Annam and North Borneo. According to Peters (1948), three of the five races recognised by him, occur within the Indian limits. I have, however, grouped these three subspecies into two.

Megalaima asiatica asiatica (Latham)

(The blue-throated barbet)

1790. Trogon asiaticus Latham, Index orn., 1: 201.—India=Calcutta, vide Stuart Baker.

1896. Cyanops rubescens Stuart Baker, Novit. zool., 3: 257.—N. Cachar.

Megalaima asiatica asiatica is represented by the following skins:—

| Reg. Sex | . Locality. | Date of collection. | Collector or Donor. | Measurements. | | ents. | Remarks. |
|-----------------|--|---------------------|------------------------|---------------|------|-------|---|
| No. | | conection. | or Donor. | w. | Tl. | в. | |
| 15249 | Dehra Dun, Uttar Pradesh. | 1870 | J. Scully | 103+ | 70 | 29 | G .King coll. Wingslight- ly worn. |
| 1 5240 | Dehra Dun, Uttar Pradesh. | Jan. 1871 | J. Scully | 110 | 70 | 28.5 | G. King coll. |
| 15243 ♀ | Nowakot, Nepal | 29 Nov. 1877 | J. Scully | 100 | 69 | 28 | G. King coll. |
| 15245 | Nepal | 19 June 1877 | J. Scully | 107 | 66 | 28 | Wing and tail moulting. |
| 15247 | Nepal valley | 21 May 1877 | J. Scully | 100 | 70 | 27 | •• |
| 274 38 ♀ | Kathmandu, Nepal | 4 Apr. 1947 | P. N. Mitter | 101 | 65.5 | 27 | Tail moulting. |
| 27439 ♀ | Pasupatinath, Kath-mandu, Nepal. | 5 Apr. 1947 | P. N. Mitter | 102 | 68.5 | 28 | •• |
| 2744 0 ♀ | Pasupatinath, Kath-mandu, Nepal. | 11 Apr. 1947 | B. Biswas | 108 | 69 | 27 | •• |
| 27441 ♀ | Pasupatinath, K a t h - mandu, Nepal. | 11 Apr. 1947 | P. N. Mitter | 103 | 63 | 29 | Tail moulting |
| 2744 2 ♀ | Pasupatinath, Kath-mandu, Nepal. | 28 Apr. 1947 | P. N. Mitter | 102 | 65 | 27 | •• |
| 2744 3 & | Godavari, Nepal Valley, Nepal. | 13 May 1947 | B. Biswas | 105 | 66 | 27 | •• |
| 27444 đ | Hitaura, Doons, Nepal | 2 June 1947 | B. Biswas | 103+ | 65 | 29.5 | Wing some what worn. |
| 5530 | Darjeeling Terai, N. Bengal. | • • | J. Anderson | 102 | 65 | 26 | •• |
| 27445 | Teesta, Darjeeling Dist., North Bengal. | •• | S. C. Law | 107 | 65 | 25+ | Tip of the bill slightly da- maged. |
| 15250 | Sikkim | Jan. 1876 | J. Scully | 102+ | 66 | 28 | D. D. Cunning- ham coll. Wing s o m e w h a t |
| 274 68 ♀ | Rangpo, Rangpo valley, Sikkim. | 18 Dec. 1952 | B. Biswas | 108 | 66-5 | 28 | worn. |
| 5523 | Bengal | • • | •• | 105 | 70 | 29 | •• |
| 5529 | Calcutta | 1866 | Purchased | 102 | 64 | 29 | •• |
| 5535 | Calcutta | • • | J. Anderson | 101 | •• | 28 | Tail missing. |
| 25617 đ | Chakdah, Nadia Dist., Bengal. | 18 Oct. 1926 | A. Rahim | 108 | 70 | 27 | •• |
| 25674 | Chakdah, Nadia Dist., Bengal. | 7 Apr. 1927 | A. Rahim | 107 | 67 | 29 | •• |
| 26907 | Lokra, Balipara Frontier Tract, Assam. | 11 Nov. 1939 | M. L. Roonwal | 104 | 62 | 28 | Tail moulting. |
| | Kobo (ca. 400'), Abor Hills, N. E. Assam. | 9 Dec. 1911 | S. W. Kemp | 107 | 65 | 27 | British Abor Hill expedi- tion (1911). |
| 25292 đ | Rotung, Abor Hills, N. E. Assam. | 13 Mar. 1912 | S. W. Kemp | 105 | 66 | 27 | British Abor Hill expedi- tion (1911). |
| 446 đ | Gauhati, Kamrup Dist., Assam. | 30 May 1949 | H. L. Hiteshi | 100 | 65 | 27 | •• |

| Reg. No. | Sex. | Locality. | Date of collection. | Collector or Donor. | Measurements. | | ents. | Remarks. |
|-------------|------------|---|---------------------|------------------------------------|---------------|------|-------|----------|
| | | | | | w. | Tl. | в. | |
| 27447 | ਂ ਹੈ | Nongpoh, Khasi H i l l s, Assam. | 10 May 1949 | R. V. Sherard | 102 | 65 | 27.5 | •• |
| 27448 | 3 ♂ | Kekrima, Naga Hills, Assam. | 17 Feb. 1935 | Z. S. I. party | 103 | 64 | 26.5 | •• |
| 27449 | 9 | Kohima, Naga Hills, Assam. | 2 Feb. 1935 | Z. S. I. party | 100 | 66 | 26 | •• |
| 27450 |) ç | Khezhbma, Naga Hills, Assam. | 26 Jan. 1936 | Z. S. I. party | 103 | 64 | 26.5 | •• |
| 26977 | 7 8 | Manipur State, Assam | 2 Feb. 1936 | Naga Hills Survey, Z. S. I. party. | 103 | 67 | 27 | •• |
| 23300 |) đ | Kalaw, S. Shan States, Upper Burma. | Jan. 1900 | C. T. Bingham | 104 | 62 | 26 | * 1 |
| 23301 | LŞ | Kalaw, S. Shan States, Upper Burma. | 22 Jan. 1900 | C. T. Bingham | 100 | 60 | 26 | •• |
| 23298 | 3 đ | Wetpyne (ca. 3000'), S. Shan States, Upper Burma. | 25 Jan. 1900 | C. T. Bingham | 102 | 61.5 | 26 | •• |
| 8733 | 3 ♂ | Tsitkan, Kakhyen Hills, W. Yunnan, China. | 12 Feb. 1875 | J. Anderson | 102 | 64 | 28 | •• |

Systematic notes.—The Western Himalayan populations are larger as compared with those of the Eastern Himalayas. The crimson specks at the base of the lower mandible is universally present.

The ruddy barbet (Cyanops a. rubescens) of Baker (1927) from North Cachar, seems to be merely an erythristic form.

Range.—Throughout the lower hills of the Himalayas, Assam, Bengal, Upper Burma and the Northern Shan States.

Megalaima asiatica davisoni Hume

(Davison's blue-throated barbet)

1877. Megalaima Davisoni Anonymous.=Hume, Stray Feath., 5: 108.—Meetan, Tenasserim.

Megalaima asiatica davisoni is represented by the following skins:

| Reg. Sex. | Locality. | Date of collection. | Collector or Donor. | Mea | sureme | Remarks. | |
|----------------|--|---------------------|---------------------|-----|--------|------------|---------------------------|
| 110. | | conection. | or bonor. | w. | Tl. | в. | |
| 8129 & | Meetan=Mitan, Amherst Dist., S. Burma. | Jan. 1877 | J. Anderson | 102 | 58 | 2 8 | Tenasserim Expedition. |
| 27436 ♀ | Tenasserim, Burma | 1877 | J. Anderson | 101 | 59 | 27 | Tenasserim Expedition. |

Range.—Southern Shan States, Karenni, Tenasserim, Siam, South-Eastern Yunnan, Kwangsi, Tonkin, Northern Laos and Northern Annam (Peters).

Megalaima henricii (Temminck)

The species occurs in Peninsular Siam, Malay States, Sumatra and Borneo. Only two subspecies have been recognized by Peters (1948) of which *M. henricii henricii* is represented in the Indian Museum collections.

Megalaima henricii henricii (Temminck)

(Henrici's barbet)

1831. Bucco henricii Temminck, Pl. Col. livr., 88, pl. 524.—Sumatra.

Megalaima henricii henricii is represented by the following skin:-

| Reg. Sex. | Locality. | Date of | Collector | Me | easurements. | | Remarks. |
|--------------------|--------------------------------|-------------|--|----|--------------|----|---|
| No. | | collection. | or Donor. | w. | W. Tl. B. | | |
| 19127 & 3 (324) | Malacca, Malay Penin- sula. | 1844-1846 | Messrs. M. de Storr and Rev. J. W. Lindstedt. | 94 | 48 | 27 | One of the three specimens of Blyth (1852). |

Range.—Peninsular Siam and the Malay States; Sumatra (Peters).

Megalaima pulcherrima Sharpe

(The Bornean blue-throated barbet)

1888. Megalaima pulcherrima Sharpe, Ibis, (5) 6: 393, pl. 11, fig. 2.—Mt. Kina Balu, Borneo.

Megalaima pulcherrima is represented by the following skin:—

| Reg. Sex. | Locality. | Date of collection. | Collector or Donor. | Measurements. | | | Remarks. |
|-----------|---------------------|---------------------|------------------------|---------------|-----|----|----------|
| NO. | | сопесыон. | or Donor. | w. | Tl. | в. | |
| | Kina Balu (ca. 6000 | o') 21 Mar. 1892 | H. A. Haviland | 92 | 65 | 25 | •• |

Range.—Mountains of Northwestern Borneo. (Peters).

Megalaima australis (Horsfield)

The species ranges from North-Eastern India to Burma, Siam and Cochin-China, South to Malay Peninsula, Sumatra, Java and Borneo. Peters (1948) admitted seven subspecies, of which only two occur within the Indian limits.

Megalaima australis cyanotis (Blyth)

(The Indian blue-eared barbet)

1847. Bucco cyanotis Blyth, J. Asiat. Soc. Beng., 16 (1): 465.—Arakan.

1896 Cyanops robustirostris Stuart Baker, J. Bombay nat. Hist. Soc., 10: 356, pl. F1.—North Cachar Hills.

Megalaima australis cyanotis is represented by the following skins:—

| Reg. S | Sex. | Locality. | Date of collection. | Collector or Donor. | Mea | sureme | ents. | Remarks. |
|--------|------|-----------------------------------|---------------------|---------------------|-----|-------------|-------|------------------|
| | | | 00110011021 | 01 20101. | w. | T 1. | В. | |
| 27462 | ð | Gauhati, Kamrup Dist., Assam. | 1 June 1949 | R. V. Sherard | 83 | 49 | 19 | •• |
| 24557 | ₽ | South Sylhet, Assam | •• | C. B. Antram | 83 | 49 | 20 | Purchased. |
| 24558 | Ŷ | South Sylhet, Assam | • • | C. B. Antram | 84 | 44 | 20 | Purchased. |
| 24559 | •• | South Sylhet, Assam | • • | C. B. Antram | •• | • • | • • | Not fully adult. |
| 27463 | ₽ | South Sylhet, Assam | •• | A. M. Pomiror | 84 | 49 | 21 | •• |
| 5787 | ş | Samaguting, Naga Hills, Assam. | •• | Capt. Butler | 84 | 48 | 19 | •• |

Systematic notes.—Baker's Cyanops robustirostris from North Cachar Hills is a juvenile form of M. australis. (See also Biswas 1953, p. 34, and Ripley 1953, pp. 547-548.)

Range.—Sikkim, Assam, Burma, South to Tenasserim, Siam, Laos, Annam, Cambodia and Cochin-China. (Peters.)

Megalaima australis duvauceli (Lesson)

(The scarlet-eared barbet)

1830. Bucco Duvaucelii Lesson, Traité' Orn., livr., 3: 164.—Sumatra.

Megalaima australis davauceli is represented by the following skin:—

| Reg. Sex. | Locality. | Date of collection. | Collector or Donor. | Meas | sureme | Remarks. | |
|-----------|--|---------------------|---------------------|------|--------|----------|-----------------------|
| 240. | | concendr. | or bonor. | w. | Tl. | в. | |
| 924 | Welesley Province, Malay Peninsula. | 15 Aug. 1870 | •• | •• | • • | •• | Purchased. Juvenal |

Range.—Malay Peninsula, Sumatra, Banka, Borneo. (Peters.)

Megalaima hæmacephala (P. L. S. Müller).

The species is distributed practically throughout India, Burma, Malay Peninsula, through Siam to Cochin-China and the Polynesian Islands. Peters (1948) admitted five subspecies, of which only M. hæmacephala indica occurs in the Indian region.

Megalaima hæmacephala indica (Latham)

(The crimson-breasted barbet)

1790. Bucco indicus Latham, Index orn., 1: 205.—Calcutta.

Megalaima hæmacephala indica is represented by the following skins:—

| | Reg. Sex. Locality. | | Collector or Donor. | Mea | sureme | nts. | Remarks. | |
|------------------|--|--------------|--|-----|--------|------|--|--|
| 740. | | collection. | or Donor. | w. | Tl. | в. | | |
| 25811 | Bareilly, Uttar - radesh | 25 Oct. 1928 | S. C. Law | 82 | 37 | 18.5 | •• | |
| 27 4 55 ♀ | Banaras, Uttar Pradesh | 4 Oct. 1945 | Kartar Singh | 81 | 35 | 19 | •• | |
| 27456 & | Banaras, Uttar Pradesh | 21 May 1946 | M. N. Dutta | • • | •• | •• | Juvinal. | |
| 25729 đ | Angara, Ranchi Dist., Bihar. | 2 Oct. 1925 | S. C. Law | 70 | 35 | 18.5 | 5 | |
| 26244 Q | Hundroo Forest, Ranchi Dist., Bihar. | 8 Nov. 1931 | S. C. Law . | 78 | 83 | 19 | Flood damaged. | |
| 27 4 57 8 | Raghunathpur, Man- bhum Dist., Bihar. | 6 Dec. 1948 | Chotanagur Survey Z. S. I. party | 83 | 85 | 20 | •• | |
| 27458 đ | Chahala, Mayurbhanj Dist., Orissa. | 14 Feb. 1951 | B. Biswas. | 80 | 84 | 18 | •• | |
| 5538 | Calcutta . | •• | J. Anderson | 80 | + 33 | 18 | Flood damaged and wing somewhat worn. | |

| Reg. Sex. | Locality. | Date of collection. | Collector or Donor. | Measurements. | | nts. | Remarks. |
|----------------|--|---------------------|--------------------------|---------------|------|------|--------------------------------|
| | | | | w. | Tl. | В. | |
| 27458 đ | Calcutta . | 24 Sep. 1951 | R. V. Sherard | 8.5 | 34.5 | 19 | •• |
| 27459 đ | Palasbari, Kamrup Dist., Assam. | 17 May 1951 | B. Biswas | 83.5 | 37 | 20 | •• |
| 11541 đ | Ratnagiri, Ratnagiri Dist., Bombay Presi- dency. | 22 Dec. 1878 | J. Armstrong | 79 | 34 | 19 | •• |
| 11302 | Bombay Presidency | 1878 | J. Armstrong | 80 | 33.5 | 19 | • • |
| 26725 ♀ | Trivandrum, Travancore State, S. India. | 20 June 1942 | N. G. Pillai | 76 | 30+ | 18 | Purchased, tail slightly worn. |
| 23292 | Sinhi (Ca. 2900'), S. Shan States, (Upper Burma). | | Col. C. T. Bing- ham. | 86 | 34 | 20 | •• |
| 23566 | Myinmu, Shwebo, Upper Burma. | 1899 | Col. C. T. Bing- ham. | 86 | 35 | 18 | •• |

Systematic notes.—There is a tendency of the green streaks on the under parts to becoming oblescent from East to Northwestward.

Range.—Throughout India, Ceylon and Burma, Northern Malay State, Siam, Cambodia and Cochin-China.

Genus Calorhamphus Lesson

Calorhamphus fuliginosus (Temminck)

The species is distributed in South Tenasserim, Malaya, Sumatra and Borneo. Peters (1948) recognised three subspecies, of which only C. fuliginosus hayi occurs within the Indian limits. In the Indian Museum collections only two subspecies are represented.

Calorhamphus fuliginosus hayi (J. E. Gray)

(The brown barbet)

1831. Bucco hayii J. E. Gray, Zool. Misc., 33.—Malacca.

Calorhamphus fuliginosus hayi is represented by the following skins:—

| Reg. Sex. | | Locality | | Date of collection. | Collector | Measurements. | | | Remarks. | |
|-----------|----|-------------------|-------|---------------------|--------------|------------------------------|----|-----|----------|------------|
| 110. | | | | | confection. | or Donor. | w. | Tl. | в. | |
| 944 | •• | Malacca, sula. | Malay | Penin- | 16 Aug. 1870 | •• | 81 | 37 | 26 | Purchased. |
| 13567 | •• | Malacca, sula. | Malay | Penin- | •• | Bengal Econo- mic Museum. | 85 | 50 | 24.5 | •• |
| 3568 | •• | Malacca, sula. | Malay | Penin- | • • | Bengal Econo- mic Museum. | 83 | 47 | 24 | •• |

Range.—Southern Tenasserim and Peninsular Siam, Southward over Malay Peninsula; Sumatra (Peters).

Calorhamphus fuliginosus fuliginosus (Temminck)

(The red-breasted brown barbet)

1830. Mycropogon fuliginosus Temminck, Pl. col. lior. 83.—West coast of Borneo, i.e. Pontianak.

Calorhamphus fuliginosus fuliginosus is represented by the following skin:—

Reg. Sex. Locality. Date of collection. Collector or Donor.

No. Collection. Collector or Donor.

W. Tl. B.

22583 .. Kuching, Sarawak, 16 Aug. 1898 Sarawak Mu- 81 51 24 Received in exchange.

Range.—Borneo (except Northern) (Peters).

Genus Gymnobucco Bonaparte

The genus is limited to Africa with four subspecies, as admitted by Peters (1948). The Indian Museum collections are represented by a single species G. peli.

Gymnobucco peli Hartlaub

(The bald-headed barbet)

1857. Gymnobucco peli Hartlaub, Syst. orn. Westafr., 175.—Dabocrom, Gold Coast.

Gymnobucco peli is represented by the following skin:—

Reg. Sex. Locality. Date of Collector Measurements. Remarks. collection. or Donor. w. Tl. В. British Museum 85 Fantee, W. Africa 45 20 8457 ... Received exchange.

Range.—Gold Coast colony, Southern Nigeria, Cameroons, and Gaboon (Peters).

Genus Pogoniulus Lafresnaye

Pogoniulus pusillus (Dumont)

The species ranges in Somaliland, Eritrea, Ethiopia, Lake Victoria in the West and Dar-es-Salaam in the South.

There are four subspecies as admitted by Peters (1948), of which only *P. pusillus uropygialis* is present in our collections.

Pogoniulus pusillus uropygialis (Heuglin)

(The fiery-rumped barbet)

1862. Barbatula uropygialis Heuglin, J. f. orn., 10: 37.—Ain Saba, Eritrea.

Pogoniulus pusillus uropygialis is represented by the following skins:—

| Reg. Sex. | Sex. Locality. | Date of collection. | Collector or Donor. | Measurements. | | | Remarks. |
|-----------|---|---------------------------|---------------------|---------------|-----|------|---|
| No. | | | | W. | Tl. | В. | |
| 9324 | Anseba valley (ca. 4000') Eritrea, N. E. Africa. | 29 July 1868 | W. T. Blanford | 56 | 32 | 12.5 | The British Abyssinian expedition of 1867-1868. |
| 9325 | N. E. Africa | J ul y 1868 | W. T. Blandford | 55 | 30 | 13 | The British Abyssinian expedition of 1867-1868. |

8 **Z**SI/53

Range.—Eritrea, Bogosland, the greater part of Ethiopia and Northern Somaliland (Peters).

Genus Tricholaema Verreaux and Verreaux

Tricholaema melanocephalum (Cretzschmar)

The species is distributed in Bogosland, Ethiopia, Somaliland, Kenya and Northern Tanganyika territory.

There are three subspecies as admitted by Peters (1948) of which only the nominate subspecies is represented in the Indian Museum collections.

Tricholaema melanocephalum melanocephalum (Cretzschmar)

(The Ethiopian black-foreheaded barbet)

1826. Pogonias melanocephala Cretzschmar, in Ruppell's Atlas., 1826, Vog: 41 pl. 28, f.a.—Kordofan and Sennar=Ethiopia? of. Sclater and Mackworth-Praed, Ibis, (11) 1, 1919: 637.

T. melanocephalum melanocephalum is represented by the following skin:—

Reg. Sex. Locality. Date of Collector Measurements. Remarks. collection. or Donor. w. Tl. В. 9428 P Massawa, Eritrea, N. E. 1868 W. T. Blanford 66 36 19 The British Africa. Abyssinian expedition of 1867-1868.

Range.—Bogosland and Northern Ethiopia, South to Addis-Ababa and Eastward to near Harar (Peters).

Genus Lybius Hermann

Lybius undatus (Ruppell)

The species is distributed throughout Eritrea and Ethiopia.

There are four subspecies as admitted-by Peters (1948), of which

L. undatus thiogaster is represented in the Indian Museum collections.

Lybius undatus thiogaster Neumann

(The undulated barbet)

1903. Lybius thiogaster Neumann, Orn. Monatsb., 11: 59.—Keren, Bogosland.

Lybius undatus thiogaster is represented by the following skins:---

Reg. Sex. Locality. Date of Collector Measurements. Remarks. collection. or Donor. w. Tl. 9331 & Addigerat (ca. 8000'), 3 Apr. 1868 W. T. Blanford 80 50 22 The British Eritrea, Africa. Abyssinian expedition of 1867-1868. 9333 Q Badraket, Tigre, N. 24 May 1868 W. T. Blanford 20 80 45 The British Abyssinia. Abyssinian expedition of 1867-1868.

Range.—Eritrea and Northern Ethiopia (Peters).

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