5. *Rana tigrina*, Daud.

Localities—Soondrijal and Katmandu, Nepal (4,000 to 5,000 feet).

6. *Rana limnocharis*, Boie.

Localities—Soondrijal, Nepal; Bhim Tal, Kumaon.

[A specimen was also taken at Dharampur in the Simla hills in May.—N. A.]

7. *Rana formosa*, Gthr.

Locality—Soondrijal, Nepal.

LACERTILIA.

By N. Annandale, D.Sc.

The collection includes examples of nine species of this group, of which species two are new. The others are common Himalayan forms, the distribution of which is rendered considerably clearer by these specimens. The occurrence of the two allied skinks *Lygosoma himalayanum* and *L. sikkimense* in the same locality is of interest; while the eastern limits of the range of *Agama tuberculata* can now be fixed with tolerable certainty.

1. *Hemidactylus nepalensis*, sp. nov.

One male specimen from Katmandu, Nepal: altitude 4,500 feet. Reg. No. Ind. Mus. Reptiles, 15779.

Diagnosis—

Allied to *Hemidactylus platyurus* (Schneid.) and to some extent intermediate between this species and *H. garnotii*, D. and B.

Head and body depressed; tail slender, flat, tapering, denticulated at the edges. A distinct fold of skin along the sides, measuring about 1 mm. in breadth, and another along the hind limbs posteriorly. Head long, slender, the length of the snout slightly exceeding the distance between the eye and the external ear; the extremity of the snout rounded. Toes webbed at the base; all the digits well developed. Dorsal surface of head and body covered with minute rounded tubercles which are almost homogeneous, but are smaller on the snout than elsewhere; dorsal surface of tail covered with minute imbricating scales; subcaudals large; ventral surface of belly covered with small imbricating leaf-shaped scales (about thirty in a transverse line across the middle of the body) changing gradually into minute tubercles on the throat. Nostril between the rostral and three small scales; eight upper and eight lower labials; one pair of chin shields meeting behind the mental and followed by several small scales on either side. An almost straight series of thirty femoral and præanal pores interrupted in the middle line. Three lamellæ under the inner, and seven under the middle posterior digit; four under the inner, and six under the

middle anterior digit. The dorsal surface pale grey, marbled with a darker shade; the ventral surface immaculate white.

Length of head	13	mm.
Breadth of head	8	,,
Length of body	33	,,
Length of tail	45	,,
Breadth of tail at base	5	,,
Length of anterior limb	12	,,
Length of posterior limb	18	,,

I take this opportunity to figure another Himalayan Gecko (*Gymnodactylus himalayicus*) recently described by me (*Journ. Asiat. Soc. Bengal*, 1906, p. 287).

2. *Acanthosaura major* (Jerd.).

I took a fine male of this rare species just outside the town of Simla at an altitude of about 8,000 feet. The coloration was very bright but otherwise agreed with the published descriptions; there was a patch of pale lilac scales under the throat. The lizard was sunning itself on a bare bank by the roadside and appeared to be very sluggish.

3. *Acanthosaura kumaonensis*, sp. nov.

Several specimens of both sexes from Naini Tal and Mussoorie. Type Reg. No. Ind. Mus. Reptiles, 15755.

Diagnosis—

Small, slight; the body feebly compressed; the tail more than twice as long as the head and body, hardly compressed; the adpressed hind limb reaching the tympanum. Snout slightly longer than the diameter of the orbit; canthus rostralis and superciliary ridges angular; forehead sloping, slightly concave. Dorsal and medial crests continuous, reduced in both sexes to a single row of strongly keeled scales; no parallel rows of keeled scales on the back or sides. Scales on dorsal surface of head of different sizes, strongly keeled, not enlarged on the superciliary regions; six or seven upper and six lower labials; dorsal and lateral scales of two kinds, *viz.*, large, lozenge-shaped, strongly keeled tubercles and smaller imbricating scales with much feebler keels, the two being mingled irregularly; ventrals leaf-shaped, imbricate, strongly keeled, larger than throat scales; caudals strongly keeled, imbricate, of different sizes above, slightly enlarged below. Dorsal surface and sides marbled and blotched with various shades of grey and brown, with a series of large, dark angular marks on the mid-dorsal line; a broad, dark triangular band extending from the eye to the ear, its apex directed towards the eye; upper and lower lips vermiculated with black, belly white, sometimes sprinkled with minute

black dots; a small triangular patch of bright blue on the throat of the male (in October).

	♀	♂
Length of head	18 mm.	15 mm.
Breadth of head	12 ,,	10 ,,
Length of body	44 ,,	37 ,,
Length of tail	126 ,,	110 ,,
Length of hind limb	40 ,,	35 ,,
Length of fore limb.	26 ,,	22 ,,

Remarks—

I have known this lizard, which appears to be not uncommon in the neighbourhood of Naini Tal and Mussoorie, for some time but have hitherto regarded it as the young of *A. major*, from which it is really quite distinct. It is allied to *A. dymondi*, Boulenger, from which it is readily distinguished by the absence of parallel rows of keeled scales on the back. There are female specimens in the Museum, taken at Mussoorie in September or October, containing eggs. The only individual I have seen in life was a male; it was caught climbing a tree in a garden in the town of Naini Tal. Another male was taken by Mr. L. L. Fermor at an altitude of about 6,000 feet in the same district. The species has evidently a restricted range, which probably does not extend beyond those parts of Kumaon and the Mussoorie district situated at moderate elevations.

4. *Acanthosaura tricarinata* (Blyth).

A single specimen from Chandragiri, Nepal: altitude 8,000 feet.

The dorsal surface of fresh specimens of this lizard has a livid green colour, which generally fades in spirit to greyish blue. The species is not uncommon at an altitude of 5,000 to 6,000 feet in British Sikhim.

5. *Calotes versicolor* (Daud.).

Several specimens from Katmandu.

This common species has a somewhat extensive range in the Himalayas. In British Sikhim it occurs at least as high as 7,000 feet, and I have seen it at about the same altitude in Kumaon. It is common at 5,000 feet in the Darjiling district and in the neighbourhood of Bhim Tal at a slightly lower altitude. Specimens from the Himalayas are generally small and have a somewhat depauperated appearance, the sexual characters being rather feebly developed; but it is not always possible to distinguish between such specimens and examples from Lower Bengal. A female was found in May at Kurseong (5,000 feet) whose oviduct contained large eggs still devoid of a shell. In Calcutta the young are hatched at the beginning of the rains and apparently take at least two years to reach sexual maturity. The breeding season is in progress as early as April.

6. *Agama tuberculata*, Gray.

Several specimens from Chitlong, Little Nepal Valley, and two from near Simla (8,000 feet).

In Kumaon this species is common as low as 4,000 feet, and I have seen it even lower. It has been taken, however, in the western Himalayas as high as 12,000 feet. It would appear to range considerably further east in the Himalayas than any other species of the genus; but *Agama himalayana*, which was originally described from Ladak, is found, north of the hills, in the Lhasa district. Despite the fact that it must be able to endure a very low temperature when hibernating during winter, *A. tuberculata* is sensitive to cold while active. It is found as a rule on bare rocks, and even on the walls of houses, on which the sun is shining. Even a passing cloud causes it to retire immediately. The posterior surface of the thighs and the throat were suffused with sky-blue in male specimens taken (both in Nepal and in Kumaon) in September and October. The young are apparently hatched at that time of year in Nepal.

We have long had in the Museum specimens of the species from Kashmir and from Quetta. The species is abundant in the Simla hills, but specimens from this district differ in colour from those taken in Kumaon and Nepal. In the eastern race the dorsal surface is of a very dark slate-colour, with numerous spots and blotches of yellow; while in the Simla form the back is of a rather pale brownish-grey with fewer and less conspicuous spots. The Simla form is more wary and agile than the eastern one.

7. *Mabuia macularia* (Blyth).

A single specimen from the Terai (sub-Himalayan plain) near Raxaul.

8. *Lygosoma sikkimense*, Blyth.

Numerous specimens from Chitlong, Little Nepal Valley, and one from Katmandu.

This species appears to be as common in the Little Nepal Valley as it is in British Sikhim. There is no evidence that it ranges further west than Nepal and it is certainly replaced in Kumaon by *Lygosoma himalayanum*. I recently recorded a specimen from Simla (*Journ. Asiat. Soc. Bengal*, 1905, pp. 146, 149), but a re-examination of this specimen which is in a bad state of preservation, convinces me that I was wrong in my identification. *L. sikkimense* is fond of sunning itself on stones and dry paths.

9. *Lygosoma himalayanum* (Günth.).

A single specimen from Chitlong.

This specimen (plate vi, fig. 3) is not quite typical. Its total length is 168 mm., of which the tail accounts for 108 mm.; the colours are brighter than usual and the longitudinal streaks more conspicuous, but it is difficult to find any very definite difference

in this respect. There are no projecting lobules or granules at the edge of the ear opening. On the whole, I cannot say that there is any distinction between this specimen and others from further west which would justify its being regarded as representing even a local race; but it is certainly larger and brighter than the majority of specimens I have examined. It has thirty scales round the middle of the body. The " obscure dark edging " of the ventral scales of this species to which I have referred in the paper cited above, appears to be entirely due to bad preservation of the specimens examined. *L. himalayanum* is by far the commonest skink in Kumaon between 4,000 and 7,000 feet. There are specimens in the Indian Museum said to come from the plains, but their history is one which has proved untrustworthy in other instances and I think that the locality attributed to them is incorrect. The habits of *L. himalayanum* differ somewhat from those of *L. sikkimense*, as the former appears to avoid the sun and is often found in rather damp situations. It is very abundant on the banks of the lake at Naini Tal (6,400 feet) and in gardens in the town of Simla, in the neighbourhood of which it is common at least as high as 9,000 feet. Males taken in this district in April and May had a lateral stripe of orange or bright reddish-brown running along the body below the dark lateral band. This conspicuous stripe was absent from females taken at the same season and from specimens of both sexes examined in Kumaon in autumn. The oviducts of the females contained eggs in May but not in September.

EXPLANATION OF PLATE VI.

FIG. 1.—*Gymnodactylus himalayicus*, Annandale.
FIG. 2.—*Hemidactylus nepalensis*, sp. nov.
FIG. 3.—*Lygosoma himalayanum* (Günther), from the Little Nepal Valley.
FIG. 4.—*Lygosoma sikkimense*, Blyth, from the same locality.

OPHIDIA.

By F. Wall, Major, I.M.S., C.M.Z.S.

I am indebted to Dr. N. Annandale for giving me an opportunity of examining a small collection of snakes from Nepal, and permitting me to make the following remarks upon them.

Among the twenty specimens, eleven species are represented, most of which are common.

The names used are those applied by Boulenger in his *Catalogue of Snakes in the British Museum*, 1893-96.

The specimens are as follows :—

1. *Python molurus.*

The head and part of the body are preserved of a small example from Bichiakoh, Nepal Terai.