1. Descriptions of five new Species of *Helicidæ* of the Subgenus *Plectopylis*, with remarks on all the other known forms. By Major H. H. GODWIN-AUSTEN, F.R.G.S., F.Z.S., &c., Deputy Superintendent, Topographical Survey of India

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(Plates LXXIII. & LXXIV.)

The new species here described are from a collection of shells made in the Nágá Hills and Munipúr, when I was employed on the survey of that part of the country, which has proved so rich in Molluscan fauna.

Plectopylis was established as a good and distinct subgenus of the *Helicidæ* by Mr. W. H. Benson, in the 'Annals & Magazine of Natural History' for April 1860. I have been led to give drawings of all the species I could obtain, in order to better elucidate the interesting change that has taken place in the form of the internal barriers, and which on the examination of many specimens of local species I have found most constant.

Benson's excellent paper leaves very little to be added; but I trust the drawings now given may be useful not only as illustrative of the new species but of his paper and the forms he described, as well as those afterwards collected by Mr. W. T. Blanford, and described by him in the Journ. Asiat. Soc. Beng.*

The subgenus arranged under its principal physiological characters, as given in the table annexed, presents two well-marked divisions, the first of which can be further subdivided into two, and the second into three subgroups.

HELIX (PLECTOPYLIS) SERICA, nov. sp. (Plate LXXIII. fig. 5.)

Shell dextral, very openly umbilicated, discoid, pale horny brown, very flat above, with regular narrow oblique bands of brown crossing the whorls. Epidermis thin. The apex very slightly higher than the adjacent and outer whorls. Whorls 7, narrow and closely wound, flat above, the last descending near the aperture, which is diagonal; outer margin circular; peristome white, reflected, continuous on the body-whorl or parietal margin. The palatal teeth, 6 in number, are situated rather more than one third the circumference from the aperture; and, counting from above downwards, the first is very minute, the 4th, 5th, and 6th the largest. On the parietal side of the whorl there is one single vertical lamina with short bifurcations or supports above and below,

Major diam. 0.50 inch, minor diam. 0.43, alt. axis 0.16.

Hab. I first collected this shell on the peak of Henozdan, Burreil

* 'Contributions to Indian Malacology,' No. V. vol. xxxiv. part ii. pp. 8, 9. *Vide* also notes by same on a species of *Plectopylis*, 'Ann. & Mag. Nat. Hist.' for April 1861, ser. 3, vol. xi. p. 86.

NEW SP. OF PLECTOPYLIS.
N. E. FRONTIER, BENGAL.

Godwin-Austen, del.

Maclure & Macdonald, Lith.

range, in the spring of 1868. I again found it abundant above 5000 feet on the same range as far east as the Kopamedza ridge. It is essentially a forest species, found in the dead leaves and moss at the foot of the trees.

This species may be known at once by its regular banding, and in fresh shells by the upper very smooth silk-like surface; this, however, in old specimens is not observable, the epidermis becoming more coarsely striated. After opening out several specimens to examine the internal arrangement of the barriers, I found one shell to have two vertical parietal lamellæ, precisely similar in form, a reduplication of structure to which I think is clearly due the more compound forms of the plicæ and lamellæ in the Burmese species.

HELIX (PLECTOPYLIS) SHIROIENSIS, nov. sp. (Plate LXXIII. fig. 3.)

Shell sinistral, openly umbilicated, discoidal, thin, light brown, very finely striated. Apex flatly convex; suture slightly impressed; umbilicus open and deep. Whorls 6, the last rounded, sharply compressed on the lower part behind the aperture and descending to it. Aperture broadly lunate, very oblique; peristome white, continuous, reflected. From the centre of the parietal ridge completing the peristome a lamella runs up that side of the whorl for three sevenths of the circumference towards the parietal plication, but does not join it; and here a short free horizontal lamina lies parallel to and below it. The parietal vertical lamina is simple, with one short support at the lower anterior end; and below this is another, free, narrow, horizontal lamella. Palatal teeth consist of 4, that are horizontal; the 4th is long, narrow, and curving inwards. Between the 3rd and 4th is a vertical double-notched tooth, evidently a compound and representative of two very oblique plicæ.

Major diam. 0·30 inch, minor diam. 0·28, alt. axis 0·15.

Hab. This very distinct species occurred most abundantly on the slopes of the peak of Shiroifurar, N.E. of Munipúr, at an altitude of from 3000 to 9000 feet, and there only in the short grass skirting the edge of the forest that clothed the shady north-east slopes of the ridge. This form has the highest range of any of this subgenus yet collected in this part of India.

In general outward form it is like *H. macromphalus*, W. Blf.; but its nearest local ally is *H. nagaensis*, which has only one single horizontal lamella, and palatal plicæ simple and nearly parallel. It is very interesting to find close allies to this shell in the Burmese forms *H. perarcta* and *H. pseudophis*, Plate LXXIV. figs. 4 and 3. These last two are very similar; but in the former the horizontal lamella is not continuous, and in the latter the vertical barrier is notched.

HELIX (PLECTOPYLIS) NÁGÁENSIS, nov. sp. (Plate LXXIII. fig. 4.)

Shell sinistral, widely umbilicated, discoid, dull ochry brown, epidermis thick and coarsely striate; above depressedly pyramidal. Whorls 7, flat, narrow, and those near apex closely wound, the last

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