

always) slightly emarginate with an apiculus in the notch, together with the spike-like arrangement of the heads, are marked characteristics of this species, which is very abundant in the valley of Llanberis, Caernarvonshire. I have seen what is apparently the same plant from Hope in Derbyshire, Berwick-upon-Tweed, Bembridge in the Isle of Wight, and Edinburgh; but I have not seen the radical leaves of either of these plants.

5. *A. minus* (Schkr.); inflorescentia racemosa, capitulis brevipedunculatis arachnoideis (parvis), squamis involucri floribus brevioribus, parte superiori corollæ tubo ejus subæquali subcylindrica ad basin attenuata sub dentibus nunquam constricta glabra, tubo corollæ ad basin fructu multo angustiore, petiolis fistulosis, foliis radicalibus cordato-prolongis grosse dentatis dentibus apiculatis.

A. minus, Schkr. *Handb.* iii. 49 (1803); *Fries*, Nov. 263.

A. Lappa α , Linn. *Fl. Suec.* ed. 2. 277 (teste *Fries*).

A. Lappa, *Curt. Fl. Lond.* ii. 173 (fasc. iv. 55); *Woodv. Med. Bot.* t. 15.

Lappa minor, DC. *Fl. Fr.* iv. 77; *Prod.* vi. 661; *Fl. Dan.* t. 2662. *Bardana capite minore*. Small-headed Burdock, *Pet. Eng. Pl.* t. 23. f. 3.

Stem often 4–5 feet high, its top and the tops of the branches usually nodding, bearing rather loose racemes of heads. Heads small (usually about the size of a hazel-nut), ovoid with flowers, not umbilicate, mostly globular with fruit, greenish, usually much webbed. Radical leaves acute, longer than broad, broadest at one-third above the insertion of the petiole; teeth very broad but shallow; petioles hollow, slightly angular, scarcely furrowed above.

This common plant is known by its small ovoid racemose stalked heads, and its very coarsely dentate, not crenate, leaves.

II.—*New Land-Shells from Travancore, Western and Northern India*. Described by W. H. BENSON, Esq., Retired List, Bengal Civil Service.

1. *Helix Basilessa*, B., n. sp.

H. testa anguste umbilicata, solida, depressa, striatula, sub epidermide luteo-fusca purpurascente, subtus versus umbilicum albida; spira convexiuscula, apice valde obtuso, sutura impressiuscula, demum impressa; anfractibus 5, rapide accrescentibus, ultimo antice leviter descendente, dilatato, subtus demum subplanato, supra peripheriam fascia castanea superne albida munito; apertura obliqua, transversim oblonge ovato-lunata, intus fuscescente,

peristomatis marginibus callo albido junctis, dextro rotundato, superne antice arcuatim prominente, tenuiter marginato, columellari brevi reflexiusculo, basali longe oblique descendente, intus incrassato, albido.

Diam. major. 48, minor 38, axis 21 mill.

Habitat in montibus prope Cottyam in regione Travancorica.

I am indebted for this and the following shell to Mr. F. Day, Assistant-Surgeon Madras Medical Service. The form is peculiar, and unlike that of any known Indian species.

2. *Helix Anax*, B., n. sp.

H. testa late umbilicata, subovato-discoidea, utrinque concava, solidula, superne oblique costulato-striata, subtus striata, nitidiuscula, fusco-castanea, subtus lætiore; spira immersa, apice elevatiusculo, sutura subprofunda; anfractibus 5, primis convexiusculis, ultimo convexo, antice descendente, dilatato, deflexo, ad diametrum minorem angustiore; apertura perobliqua, rotundato-oblonga, lamellis 2, parietalibus, albis, superiore longe intrante, sinuata, inferiore obliqua sinuata, brevior, ab apertura remotiuscula, palatalibus 3 longiusculis subprofundis obliquis parallelis ab apertura conspicuis extus perlucetibus coarctata; peristomate cæruleo-albido, subcalloso, breviter reflexiusculo, marginibus callo albido junctis, inferiore subdentato-incrassato.

Diam. major 23, minor $17\frac{1}{2}$, axis 8 mill. Apert. lata vix 10, longa 9 mill.

Habitat cum specie præcedente in montibus Travancoricis Mavillicurray dictis.

Four oblique parallel palatal lamellæ, similar to the three within the aperture, are visible through the shell at the commencement of the last whorl near the left lip of the peristome*.

A species belonging to the restricted form of *Corilla*, Adams, consisting of the Ceylon shells, *C. erronea*, Albers, *C. Rivolii*, Desh., *C. Charpentieri*, Pfr., and *C. Humberti*, Brot. It comes nearest to *C. erronea*, but differs in the more rounded aperture, the dark chestnut colour, the palatal and parietal lamellæ, and other characters. It is an interesting Southern Indian approach to Ceylon forms, observable also in *Cataulus recurvatus*, Pfr., and other Travancore shells. When we consider the small tracts

* In one of my Ceylon specimens of *H. Rivolii*, found in a different quarter from the rest, there are four oblique parallel lamellæ in the same position as the four remote ones near the parietal lip in *H. Anax*, and visible also from the exterior, the upper one being less plainly seen through the strong sculpture. In others they are deficient, even when sought for by cutting into the shell. In page 22 of the 'Journal de Conchyliologie' for 1864, Brot correctly states that there are four palatal lamellæ in *H. erronea* and *H. Rivolii*, instead of three as recorded by Pfeiffer. In those species their irregular relative position is very different from that which is observable in *H. Anax*.

which have come under the observation of inexperienced collectors on the outskirts of this extensive mountainous region, we may expect a large and valuable addition to conchology when the country can be explored by careful collectors. The Mavillikurray Hills are 2000 feet in height, to the east of the station of Cottyam.

3. *Helix Travancorica*, B., n. sp.

H. testa anguste perforata, subconoideo-depressa, tenui, superne oblique confertissime plicato-striata, striis confertis spiralibus granulatis decussata, subtus læviore polita, striis spiralibus versus umbilicum obsoletis; spira depresso-conoidea, versus apicem acutiusculum elevatiuscula, sutura impressa, anguste marginata; anfractibus $5\frac{1}{2}$, convexiusculis, gradatim increscentibus, ultimo ad peripheriam anguste albidam compresso carinato, subtus inflato; apertura obliqua, rotundato-lunata; peristomate tenui, margine parietali superne triangulatim reflexo.

Diam. major 29, minor 23, axis 15 mill. Apert. lat. 15, alt. 14 mill. Habitat in montibus Travancoricis non procul a Cottyam. Teste D. Kohlhoff.

A single specimen of this shell, with the surface in perfect condition, but with an injured aperture, was obtained with my most gigantic one of *Helix Basileus*. I was at first disposed to refer it to *H. Isabellina*, Pfr.; but, on comparing it with Dr. Pfeiffer's description, with a fine specimen of that shell (from Hapoorthalle) in Mr. F. Layard's collection (40 mill. in diameter and 16 in axis, having the yellowish-green epidermis in good condition), and with another specimen now in my possession, I found the Travancore form to be clearly distinct. The figure of *H. Isabellina* in Reeve's 'Conchologia Iconica' is not a satisfactory one.

On either side of the whitish carina of *H. Travancorica* the colour is somewhat deeper than on the rest of the surface. Further specimens may exhibit darker bands at this part. The gradual increase of the narrower whorls, in conjunction with the conoid spire, more elevated towards the somewhat pointed summit, when compared with the more flattened and depressed spire and more rapidly enlarged whorls of *H. Isabellina*, prove the Travancore shell to be distinct, besides its more impressed suture, its less transversely widened aperture, and its more granulate sculpture.

4. *Helix pedina*, B., n. sp.

H. testa perforata, orbiculato-depressa, tenuissima, irregulariter striatula, superne nitidiuscula, subtus nitida, translucente, fulva, vel pallide cornea; spira depressa, apice obtuso, interdum acutiusculo, sutura anguste marginata; anfractibus 6, convexiusculis, ultimo latiore, superne ad peripheriam obtuse angulato; apertura

obliqua, lunari, latiuscula, peristomate tenuissimo, intus non labiato, margine columellari superne breviter reflexo.

Diam. major 32, minor 28, axis 14 mill.

Habitat prope Bombay et Ahmednugger.

I have had specimens of this shell from Dr. Jerdon, Major H. Alexander, Mr. Fairbank, and others. Mr. Shurtleff assigns it to *H. labiata*. It has also been considered a variety of *H. vitrinoides*. Besides its great thinness, the absence of any labiation inside the peristome, and of the colours observable in the aperture of *H. labiata*, Pfr., which I discovered, in 1838, in the Western Himalaya, it is distinguished by its subangular periphery and marginate suture from that and any other allied form.

5. *Helix chloroplax*, B., n. sp.

H. testa perforata, subconoideo-depressa, tenui, superne subplicato-striata, infra striatula, tenuissime decussata, translucente, vix polita, viridescenti-cornea; spira subconoidea, depressa, apice obtuso, sutura impressa; anfractibus 5, lente accrescentibus, convexiusculis, ultimo ad peripheriam superne angulato, subtus convexo; apertura obliqua, angulato-lunari, peristomate tenui recto, marginibus remotis, columellari superne vix reflexiusculo.

Diam. vix 8, axis 4 mill.

Habitat in montibus Himalayanis prope Simla.

A single specimen was received from Mr. W. Theobald.

6. *Achatina leptospira*, B., n. sp.

A. testa oblongo-turrita, striatula, nitente, pallide fusco-cornea; spira subanguste turrita, apice obtuso, sutura profundiuscula, crenulata; anfractibus 9, convexiusculis, superioribus brevibus convexioribus, ultimo $\frac{1}{3}$ longitudinis non æquante; apertura subobliqua, elliptica, marginibus callo junctis, columellari arcuato, oblique truncato, dextro tenui.

Long. 16, lat. 6 mill.

Habitat in montibus Soomeysur dictis. Teste W. Theobald.

7. *Achatina Fairbanki*, B., n. sp.

A. testa subcylindraco-turrita, striatula, obsolete et minutissime spiraliter decussata, polita, translucente, luteo-cornea; spira versus apicem ad latera subconvexa, vertice obtuso, sutura distincte impressa; anfractibus 8, subconvexis, brevibus, 4 ultimis in diametro lente accrescentibus, ultimo subtus rotundato $\frac{1}{4}$ longitudinis æquante; apertura subobliqua, ovata, superne subtusque angulata, marginibus callo junctis, columellari leviter arcuato, oblique truncato, dextro basaliq̄ue tenuibus.

Long. 12, lat. 4 mill. Apert. long. 3, lat. $2\frac{1}{2}$ mill.

Habitat in montibus Mahabaleshwar.

The nearest Nilgiri form is *A. corrosula*, Pfr. The more

cylindrical form below, the sculpture, shorter whorls, &c., safely distinguish it. It was discovered by the Rev. S. B. Fairbank, from whom I have received a specimen of the sub-Himalayan form *Helix Barrakporensis*, Pfeiffer, obtained in the Mahabaleshwur Hills.

8. *Achatina Vadalica*, B., n. sp.

A. testa turrato-elongata, striatula, solidula, polita, translucente, luteo-cornea; spira versus apicem convexiusculo-turrata, apice obtusiusculo, sutura impressa; anfractibus 11, convexis, brevibus, superioribus costulato-striatis, ultimo subtus rotundato, $\frac{1}{4}$ longitudinis vix æquante; apertura vix obliqua, elliptico-ovata, marginibus callo junctis, columellari leviter arcuato, albido, oblique truncato, dextro basaliq̄ue tenuibus.

Long. 34, diam. 9 mill. Apert. long. 8, lat. 5 mill.

Habitat ad Wadale prope Ahmednugger. Teste S. B. Fairbank.

The convex sides of the upper part of the spire, the shorter whorls, with the sculpture and polish of this shell, distinguish it as well from the Nilgiri *A. Perrotteti* as from the neighbouring *A. notigena*, which has an attenuate spire and costulate sculpture in all the whorls. The Liberian *A. clavus*, Pfr., is a broader shell, with longer and wider whorls.

9. *Bulimus Smithei*, B., n. sp.

B. testa perforata, ovato-oblonga, irregulariter rugoso-striata, striis tenuibus plus minusve decussata, sub epidermide cornea albida, non nitente; spira oblongo-turrata, lateribus convexiusculis, apice obtusiusculo, sutura impressa; anfractibus $7\frac{1}{2}$, convexiusculis, ultimo antice leviter ascendente; apertura vix obliqua, subovata, peristomate tenui reflexiusculo, marginibus callo tenui junctis, columellari perforationem subtegente.

Long. 13, diam. 5. Apert. long. 4, lat. $3\frac{1}{2}$ mill.

Habitat in montibus prope Roopur et Fagoo.

Mr. J. Doyle Smithe, F.G.S., got this shell in the hills on the right side of the river Sutlej, in the Punjab; and Mr. W. Theobald subsequently got it at Fagoo, on the Simla side of the river.

Cheltenham, Nov. 30, 1864.

P.S. On a further examination of *Helix Anax*, under light through a powerful lens, I find a fourth long basal palatal lamella within the aperture. It appears externally nearly parallel with the suture, and is indistinctly visible from the mouth. The palatal lamellæ, though equal in number to those in *H. erronea* and *H. Rivolii*, still differ in the direction in which they are placed with reference to each other.