

I have examined the marginal nerves in the leaves of a great number of Mosses, and in some instances have seen them extending from the very cells of the axis or stem to the point, or beyond the point, of the leaf-blade; and these nerves may generally be found when the border of the leaf is described as "cartilaginous" or "thickened," though their structure, being commonly a soft and juicy prosenchyma, has no relation whatever to the structure of cartilage, nor to the bryological definition of it—"a hard close texture, not tender and succulent."

The following extracts from my note-book will render it easy for the bryologist to examine these nerves, without the aid of a drawing, particularly as the kindness of Mr. Mitten has made me sure of the identity of the species.

Atrichum undulatum. Dec. 1859. Very distinct marginal nerves from the stem to the point of the leaf, and $\frac{1}{12\frac{1}{80}}$ of an inch in diameter, the mid-nerve being fully thrice as large. The measurements in this and the following instances are made near the middle of the nerves.

Fissidens bryoides. Dec. 3, 1859. Marginal nerves very plain, $\frac{1}{2\frac{1}{80}}$ of an inch in diameter, while the mid-nerve is $\frac{1}{7\frac{1}{10}}$.

Fissidens tamarindifolius. Dec. 23, 1859. Marginal nerves as distinct as in *F. bryoides*, and $\frac{1}{4\frac{1}{60}}$ of an inch in diameter, the mid-nerve being $\frac{1}{6\frac{1}{96}}$.

Mnium hornum. Jan. 1860. Marginal nerve $\frac{1}{8\frac{1}{00}}$ of an inch in diameter, extending most plainly from the base to the apex of the leaf, and composed of about three rows of prosenchymatous cells remarkably distinct from the contiguous squarish or polyhedral parenchymatous cells of the leaf-blade.

Bryum capillare. Jan. 1860. Marginal nerves $\frac{1}{12\frac{1}{30}}$ of an inch in diameter, scarcely distinguishable from the neighbouring cells of the leaf-blade, though portions of the nerve may be sometimes torn off, and it can be traced into the apiculus of the leaf. This leaf is a fair specimen of a connecting link between the presence and absence of a plain marginal nerve.

XXXIV.—On some New Genera and Species of *Mollusca* from Japan. BY ARTHUR ADAMS, F.L.S., &c.

To the Editors of the *Annals of Natural History*.

GENTLEMEN,

Tsu-Sima, Straits of Korea,
5th Dec., 1859.

In the course of our circumnavigation of the Sea of Japan, in H.M.S. 'Actæon,' the dredge was sometimes put in requisition, and, in addition to a better acquaintance with the geographical distribution of marine life which was thereby afforded,

new forms were occasionally met with. I enclose, with a request that you will be so good as to insert them in your Journal, descriptions of those among the *Mollusca* which were the most interesting, and am, Gentlemen,

Your obedient servant,

ARTHUR ADAMS.

Genus *CONSTANTIA*, A. Adams.

Testa acuminato-ovalis, rimata, spira elata, attenuata; anfractibus rotundatis, ultimo ventricosus, plicis tenuibus longitudinalibus et liris elevatis transversis decussatis. Apertura ovalis, longior quam lata; peritremate libero, continuo, margine integro, acuto.

This genus, I believe, belongs to the natural family *Scalidæ*, although the whorls are not disunited or ribbed; the aperture, moreover, is oblong, and the texture of the shell very thin.

Constantia elegans, A. Adams.

C. testa tenui, rimata, acuminato-ovalis, pallide fusca; anfractibus sex, tribus supremis lævibus simplicibus, anfractibus alteris plicis tenuibus longitudinalibus et liris transversis reticulatis; apertura oblonga, peritremate continuo, margine libero, acuto.

Hab. Straits of Korea, near Mino-Sima; dredged from 63 fathoms.

Genus *IOLE*, A. Adams.

Testa turrito-subulata, umbilicata; anfractibus convexiusculis, transversim sulcatis, sulcis subdistantibus, interstitiis longitudinaliter concinne striatis. Apertura oblonga, postice acuminata, antice integra, rotundata; labio libero, simplici, acuto.

This genus is founded upon a deep-water shell, of which, unfortunately, I possess but a single specimen. It most nearly resembles a perforate, elongated, sulcate *Odostomia*, without any tooth or fold on the inner lip.

I am unable to refer it to any genus, and consequently give it generic rank myself. The practice of throwing a doubtful form into any genus seems to me to retard the progress of science,—shirking a difficulty, and confusing the mind of the student. The number of genera is of no more moment to the naturalist than the number of species, provided they each represent a particular type of form. The natural position of *Iole* is, perhaps, between *Monoptygma* and *Menestho*.

Iole scitula, A. Adams.

I. testa subulato-turrita, profunde umbilicata, alba, solidiuscula; anfractibus sex, convexiusculis, transversim sulcatis, sulcis subdistantibus, interstitiis longitudinaliter concinne striatis; apertura oblonga, antice rotundata, postice acuminata; labio simplici; labro margine acuto.

Hab. Straits of Korea; dredged from 63 fathoms.

Genus MUCRONALIA, A. Adams.

Testa pupiformis, ovato-oblonga, apice subito mucronata; anfractibus mucronis tribus perparvis; anfractibus normalibus quinque planatis, ultimo ad basin rotundato. Apertura oblongo-ovalis, antice dilatata et producta; labio simplici; labro arcuato.

This curious genus seems to be compounded of *Leiostraca* and *Stylifer*, but is not variced or compressed like the former, and is not unicolorous and parasitic like the latter. The texture is unlike that of *Stylifer*, and resembles that of *Eulima*; and the structure of the mucro does not resemble that of the pointed apex in *Stylifer*.

Mucronalia bicincta, A. Adams.

M. testa albida, subpellucida, nitidissima, fascia rufa ornata; anfractu ultimo bicincto.

Hab. Straits of Korea, off Mino-Sima; dredged from 63 fathoms.

Genus MÖRCHIA, A. Adams.

Testa oblique ovata, late umbilicata, depressa, superne convexa, inferne plana; anfractibus subito crescentibus, ultimo dilatato ascendente alios involvente usque ad apicem. Apertura oblonga, obliqua, subhorizontalis, infra dilatata, supra angustata; peritremate continuo, incrassato.

M. obvoluta, A. Adams. BM 1878.1.28.195

M. parva, opaca, alba, ad peripheriam angulata, striis incrementi confertis ornata; umbilico patulo, ad suturas crenulato.

Hab. Tsu-Sima, Straits of Korea.

This curious little genus most nearly resembles *Teinostoma*; but the base is not covered with a callus, and the mouth is not produced. The last whorl embraces the others, as it does in *Neritula* or *Cyclops*. Both *Mörchia* and *Teinostoma*, however, together with *Vitrinella*, are not nacreous, and would seem to associate themselves rather with *Adeorbis* and *Cyclostrema* than with *Ethalia* among the *Umboniinae*, as Mr. P. P. Carpenter believes. The only specimen obtained was dredged from 26 fathoms, about a quarter of a mile from the shore, in Washington Sound, off Tsu-Sima, a very lovely island in the Straits of Korea. The bottom was coarse sand and broken shells.

The genus is named after M. O. A. L. Mörch, author of 'Prodromus Faunæ Molluscorum Grönlandiæ,' and a man "in advance of his age."

Genus ZEIDORA, A. Adams.

Testa oblonga, dorso convexa, apice postice deflexo, superficie cancellata sulco mediano antice in fissuram desinente instructa.

Apertura ampla, septo interno plano semilunari ad partem posticam instructa; margine crenulato, antice valde fissurato.

This genus seems to combine the characters of *Crypta* and *Emarginula*, and almost deserves to be considered the type of a new family. The internal septum distinguishes it from all the other *Fissurellida*.

Zeidora calceolina, A. Adams.

Z. testa oblonga, lineis elevatis concentricis et radiantibus eleganter cancellata; sulco mediano lateribus elevatis; apice postice deflexo; septo margine acuto, integro.

Hab. Straits of Korea, 16 miles from Mino-Sima; 63 fathoms.

GENUS CRANOPSIS, A. Adams.

Testa ovata, pileiformis, superficie cælata, apice integro, subspirali, postice recurvo. Perforatio elongata, intus concamerata, inter apicem et marginem anticum posita. Apertura ovalis, expansa, margine crenulato.

This genus has the internal vaulted chamber over the foramen, as in *Cemoria*, and the sculptured surface and median position of the perforation, as in *Rimula*. The specimens serving for the description were all adult shells, and are not the young of *Glyphis*.

Cranopsis pelex, A. Adams.

C. testa pileiformi, liris radiantibus crenulatis interstitiis cancellatis ornata; fissura intus concamerata, marginibus callosis, extus labiis elevatis longitudinalibus marginatis; foramine lineis incrementi transversis apicem versus currentibus; margine crenulato.

Hab. Off Mino-Sima, Straits of Korea; dredged from 63 fathoms.

GENUS KLEINELLA, A. Adams.

Testa ovata, tenuis, umbilicata, superficie cancellata; spira producta, apice obtuso. Apertura elongata, antice producta et integra; labio tenui, simplici; labro postice angulato, in medio recto, margine acuto.

This genus most nearly resembles *Actæon*, but is without any fold on the columella; the umbilicus, moreover, is wide and deep, and the surface of the shell is cancellated. The outer lip forms an angle posteriorly with the last whorl, and is straight in the middle.

Kleinella cancellaris, A. Adams.

K. testa oblonga, late et profunde umbilicata; spira elatiuscula, apice obtuso; pallide fusca; anfractibus $3\frac{1}{2}$ convexiusculis (ultimo ven-

tricoso), regulariter cancellatis; apertura ovali; labio tenui, simplici; labro in medio recto, postice angulato. Long. $\frac{1}{8}$ poll.

Hab. Straits of Korea; dredged from 63 fathoms.

Genus SAREPTA, A. Adams.

Testa transversim ovalis, æquivalvis, æquilateralis, intus non-margaritacea. Cardo dentibus pluribus acutis in serie rectiuscula dispositis; ligamento interno, in fossula centrali posito. Impressiones musculares distantes; impressio pallii integra.

This genus agrees with *Nucula* in the simple pallial line and internal ligament, and with *Malletia* in not being nacreous or pearly within, and in general form and character. It belongs to a distinct subfamily between *Nuculinæ* and *Malletiinae*.

Sarepta speciosa, A. Adams.

S. testa ovata, alba, epidermide tenui obtecta, concentricè substriata, compressiuscula, postice vix hiante, intus non-margaritacea.

Hab. 16 miles from Mino-Sima, Straits of Korea; from 63 fathoms.

Genus HUXLEYIA, A. Adams.

Testa æquivalvis, transversim oblonga, obliqua, valde inæquilateralis, clausa, intus non-margaritacea, epidermide tenui obtecta, superficie valvarum concentricè sulcata. Cardo dentibus sex acutis divergentibus (cristam formantibus), postice inclinatis et in lamina curvata desinentibus; ligamento interno in fossula sub umbone. Impressiones musculares distantes; linea palliali simplici.

Perhaps the nearest approach to this genus is *Limopsis*, and in some respects it also resembles *Sarepta*, but it differs widely from both. It is named after Prof. Huxley, who has devoted so much attention to the structure of the lower forms of Mollusca. It would seem to belong rather to the family *Arcidæ* than to *Nuculidæ*, the interior not being nacreous.

Huxleyia sulcata, A. Adams.

H. testa antice brevior, postice longior, valvarum superficie concentricè sulcata, sulcis profundis distantibus; intus non-margaritacea; umbone parvo, simplici, margine ventrali integro.

Hab. 16 miles from Mino-Sima, Straits of Korea; dredged from 63 fathoms.

P.S. I may take this occasion to observe, for the information of conchologists, that Dr. Chenu, in his last beautiful work (*Manuel de Conchyliologie*, p. 162, fig. 775), has figured by mistake the *Nassa elegans* of Kiener as the type of *Zaphon*, H. and A. Adams, instead of *Buccinum elegans*, Reeve, which is a very different shell, and a very singular typical form.

[To be continued.]