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shells to which it is affixed, by inequalities in the form and surface of the shell, than by any real attachment of the substance of the shell itself, for the attached valves are covered with a continuous periostraca.

As all attached shells have a free young state, as may be seen by examining the umbones of *Arcinella*, *Chama*, and other attached bivalves, the young of *Etheria* are doubtless free, and there is nothing peculiar in the young of *Mülleria* being free; but there is a great peculiarity in the young shell becoming united into a tubular case, and one of the valves, after the other has become attached, separating itself from its younger part by a natural caries or crack.

June 27, 1854.

Dr. Gray, Vice-President, in the Chair.

The following papers were read:—

1. DESCRIPTIONS OF THIRTY-NINE NEW SPECIES OF SHELLS,
FROM THE COLLECTION OF HUGH CUMING, ESQ.

BY ARTHUR ADAMS, F.L.S., &c.

(Mollusca, Pl. XXVIII.)

1. VOLVA ROSEA, A. Adams. (Pl. XXVIII., fig. 9.) *V. testa elongata, medio ventricosa, ad extremitates attenuata, coarctata, rectiuscula, rosea, albo-varicosa, laevi, dorso fascia angusta, transversa, albida ornato, labio in medio ventricoso, ad extremitates subrecurvo, labro crasso, antice angulatim arcuato, ad canalem emarginato.*

Hab. China. Mus. Cuming.

Like *V. birostrata*, but is more slender, and more attenuated posteriorly, and wants the spiral fold on the hind part of the inner lip; the anterior beak is straight and not recurved, and the marginal varix of the outer lip is thinner.

2. AMPHIPERAS MARGARITA, A. Adams. *A. testa ovali, ventricosa, alba, nitida, semipellucida, transversim striata, dorso obscure angulato; apertura angusta, canalibus brevibus, obtusis, integris, labio postice vix calloso, antice excavato, labro complanato, lirato, intus denticulato.*

Hab. New Caledonia. Mus. Cuming.

This is a pure white, pearl-like shell, semi-pellucid, finely striated across, gibbous on the back, with hardly any trace of the usual callus at the hind part of the inner lip, and with a prominent longitudinal ridge at the fore part.

3. AMPHIPERAS RHODIA, A. Adams. (Pl. XXVIII., fig. 8.)
A. testa ventricosa, subpyriformi, rosacea, albo-varicosa, dorso

subgibboso, ad extremitates subacuta, canalibus brevibus, subproductis, integris; apertura angusta; labio lævi, tumido, postice callo producto, spirali instructo, ad canalem tortuoso, antice excavato, ad canalem obscure uniplicato, labro complanato, lirato, intus denticulato.

Hab. Japan. Mus. Cuming.

A beautiful delicate pink species, with the posterior canal a little produced, and the inner lip at that part spirally contorted, the anterior part excavated and the extremities transversely sulcated.

4. AMPHIPERAS SCITULA, A. Adams. *A. testa ovali, ventricosa, lævi, alba, transversim striata, ad extremitates subproducta; apertura angusta, canalibus brevissimis, integris, labio postice callo spirali instructo, antice uniplicato, labro complanato intus et ad extremitates usque ad marginem plicato-dentato.*

Hab. New Caledonia. Mus. Cuming.

This is a small species of a white colour somewhat resembling *A. concinna*, Sow., but the back is not gibbous, and is transversely striated; the striæ are sometimes almost obliterated in the middle.

5. AMPHIPERAS PYRULINA, A. Adams. *A. testa ventricosa, pyriformi, albida, ad extremitates subproducta et pallide fulva, transversim striata; apertura angusta; labio lævi, in medio tumido, canalibus brevibus vix emarginatis, postice callo simpliciter instructo, labro intus crenulato.*

Hab. New Caledonia. Mus. Cuming.

A neat pyriform species very much resembling *A. bimaculata*, but the interior of the beaks wants the orange spots seen in that species, and the general form of the shell is pyriform and constricted anteriorly.

6. AMPHIPERAS BIMACULATA, A. Adams. *A. testa ovali, subpyriformi, albida, fasciis tribus pallide fuscis, transversis ornata, ad extremitates vix producta, transversim striata, canalibus intus aurantiaco tinctis; apertura angusta, labio postice callo crenato instructo, labro intus crenulato-plicato.*

Hab. New Caledonia. Mus. Cuming.

Somewhat resembling *A. pyrulina* in colour, but is not so pyriform; the posterior callus of the inner lip is crenate, and there are three pale brown bands across the back of the shell; the orange marks in the beaks are also peculiar.

7. AMPHIPERAS (OVULA) PUDICA, A. Adams. *A. testa ovata, ventricosa, carnea, albo-varicosa, lævi, canalibus brevibus, vix emarginatis; apertura angusta, alba; labio postice tuberculo elevato, subacuto instructo, antice producto, angulato, ad canalem uniplicato, labro intus crenulato, margine serrato.*

Hab. New Caledonia. Mus. Cuming.

A flesh-coloured bulliform species with the aperture and varix of the outer lip white and the margin of the outer lip serrated; it is

spira acuminata, apice mamillato, anfractibus transversim striatis, superne excavatis, in medio serie unica nodulorum instructis; apertura ovali, intus violascente, columella callosa, plica antica obliqua instructa, canali producta, valde recurva, labro acuto, margine sinuoso, intus lirato.

Hab. Senegal. Mus. Cuming.

In this species the whorls are encircled with a series of nodules; the columella is smooth and callous, the canal strongly recurved, and the interior of the aperture is of a delicate violet colour.

27. PSEUDOLIVA LIVIDA, A. Adams. *P. testa ovali, cinerascens, livida, spira obtusa, apice erosa, anfractibus 3-4 convexiusculis, transversim crebre striatis, anfractu ultimo antice oblique sulcato, sulco unico valde impresso; apertura ovali, columella alba, postice callo spirali instructa, antice oblique plicata, canali brevi, aperta, labro margine antice unidentato, intus lirato.*

Hab. West Coast of Africa. Mus. Cuming.

Most like *P. sepimenta*, Le Guillou, but the callous spiral ridge is less prominent, the inner lip is without the dark mark, the columella is less produced anteriorly, the spire is obtuse and eroded, and the whorls are rounded.

28. CLYPIDELLA BAIKIEI, A. Adams. (Pl. XXVIII. fig. 3.) *C. testa scutiformi, oblonga, depresso-conica, postice valde elevata, alba, lineis rufis, sagittiformibus radiatim picta, costis subnodulosis radiantibus ornata, concentricè striata; margine simplice; orificio magno, oblongo, postice valde inclinato.*

Hab. —? Mus. Cuming.

This is a very beautiful species, with the foramen placed far behind, and the posterior margin greatly elevated. It is dedicated to my friend and collaborateur in the 'Manual of Natural History for the Use of Travellers,' Dr. Baikie, who is now exploring the waters of the Chadda.

29. CONUS CONNECTENS, A. Adams. *C. testa turbinata, albida, aurantiaco sparsim tincta, spira vix elevata, apice submucronato, anfractibus angulatis, externe coronatis, supra excavatis ac radiatim striatis, anfractu ultimo levigato, antice transversim sulcato; apertura angusta, labro vix arcuato.*

Hab. China. Mus. Cuming.

This Cone appears to be most closely allied to *C. lithoglyphus*; it is whitish, clouded with pale orange; the spire is irregularly coronated, and the whorls are angulated.

30. SCONSIA GRAYI, A. Adams. (Pl. XXVIII. fig. 6.) *S. testa ovali, ventricosa, subtenui, sordide fulva, immaculata, spira brevi, anfractibus quinque, convexiusculis, transversim crebre sulcatis, longitudinaliter substriatis; labio callo laevi, expanso oblecto, columella antice corrugato-plicata, labro margine subreflexo, postice ascendente, intus incrassato ac plicato, canali brevi, vix recurva.*

Hab. —?

This species is thinner and more ventricose than *S. striata*; it is spotless, and more finely transversely grooved; the spire is less acute, the outer lip not so much thickened and inflexed, and plicate, not crenate, internally.

31. OPERCULATUM PICTUM, A. Adams. *O. testa orbiculato-ovali, plana, apice producto, fusco, incurvato, epidermide tenui, corneo obtecta, concentricè striata, albida, aurantiaco radiatim picta, intus nitida ad marginem aurantiaca.*

Hab. Lord Hood's Island. Mus. Haslar.

This species is richly painted with reddish-orange, disposed in a radiated manner round the outer margin, the rays extending towards the centre; the apex is hooked and more elevated than in the other species. The Linnean name of the genus is here used, but it has also been called *Umbrella* by Chemnitz, and *Umbrella* by Lamarck.

32. STYLIFER BARRONII, A. Adams. *S. testa ovali, turrata, alba, nitida, semipellucida, apice mucronata, anfractibus septem, planis, postice angulatis, longitudinaliter oblique striatis; apertura oblongo-ovali, labro postice angulato, margine subincrassato.*

Hab. — ? Mus. Cuming.

This species, remarkable for the angulated form of the whorls, is named after its discoverer, Mr. Charles Barron, who found it imbedded in the skin of a tropical species of *Asterias*, in which it had formed for itself a cystiform cavity.

33. PANOPÆA MIDDENDORFII, A. Adams. *P. testa transversa, ovato-trigonalis, alba, epidermide corrugata, cornea, fusca obtecta, transversim irregulariter plicata; latere antico rotundato, angustiore, postico latiore, subtruncato, ligamento prominente.*

Hab. Arctic Seas. Mus. Haslar.

This species appears to differ entirely in form from other known species, being more triangular and truncate posteriorly; the epidermis is peculiarly plicato-corrugate.

34. RHIZOCHILUS ASPER, A. Adams. *R. testa umbilicata, ovato-turrata, alba, rufo sparsim tincta, anfractibus sex, longitudinaliter plicatis, superne excavatis, in medio angulatis, transversim liris, liris asperulatis, ad plicas spinulosis; apertura ovali, canali brevi, viâ recurva, labro intus lirato.*

Hab. Gulf of California. Mus. Cuming.

This is a very beautiful white *Murex*-like species, with transverse spinulose liræ, and longitudinally plicate, angulated whorls.

35. RHIZOCHILUS (CORALLIOPHILA) RADULA, A. Adams. *R. testa ovali, imperforata, candida, spira prominula, anfractibus convexis, longitudinaliter plicatis, transversim liris, liris squamulis, acutis, parvis asperulatis, interstitiis clathratis; apertura ovali, intus violascente, canali brevi, excurvata, regione umbilicali impressa, labro intus sulcato.*

Hab. China. Mus. Cuming.