

begins (and necessarily *must* begin) at the top of the tree, and its fluxion is generated gradually downwards until the whole is in motion." It is by means of this descending fluidity, and not by any descent of the sap itself, that he explains the callosities or swellings observed above a ligature, on the upper edge of a wound, and in various other circumstances. Instead of attributing the formation of the tissues of the plant to the organizable property of the elaborated sap, he believes that the membranes and every other organic part or constituent of the plant have rudimental existence and identity before development. He regards the *cambium* as the seat of vegetable life and the origin of all vegetable growth. From this living body (which he calls the *indusium* or *vital membrane*) he believes that the axis of wood is annually enlarged in diameter, and the bark is thickened; from this, and this only, buds and roots are produced; and wounds are healed by its gradual extension. The paper concludes by a reference to the opinions of Bonnet, DeCandolle, Mirbel, and Dutrochet.

#### ZOOLOGICAL SOCIETY.

July 9, 1844.—William Horton Lloyd, Esq., in the Chair.

" Descriptions of new species of Tritons, collected chiefly by H. Cuming, Esq. in the Philippine Islands," by Lovell Reeve, Esq.

**TRITON GALLINAGO.** *Trit. testā abbreviato-clavæformi, varicibus duobus, rotundis, solidis; spirā breviusculā, acuminatā; anfractibus supernè angulatis, tuberculorum serie unicā ad angulum armatis, tuberculis peculiariter plano-vellicatis, acutis, anfractū ultimi valde irregularibus; anfractibus infra costatis, costis crenulatis, sub tuberculis flexuose nodulosis, costarum intersittiis elevato-striatis; albā, varicibus aurantio-fusco vivide tinctis; columella rugoso-plicatā, aperturæ fauce albd, labro intus fortiter denticulato; canali subelongato, ascidente.*

Conch. Icon., *Triton*, pl. 2. f. 5.

*Hab.* Cagayan, province of Misamis, island of Mindanao, Philippines (found in sandy mud at the depth of twenty fathoms); Cuming.

The ribs of this delicate species are noduled, and more strongly developed on the varices than on the body of the shell; and the central dorsal tubercle of the last whorl is unusually prominent, with all the appearance of a double tubercle. The canal is much shorter than that of most of the club-shaped Tritons, and is particularly curved or bent upwards.

**TRITON RANELLOIDES.** *Trit. testā Ranellæformi, varicibus decem nodiferis; spirā elevatā; anfractibus, superficie totā subtilissimè reticulatā, supernè depresso, infra nodis grandibus biseriatim, anfractu ultimo triseriatim, cinctis, nodis inferioribus minoribus; luteo-albida, fuscescente varid, tæniis subtilissimis fuscescente alboque articulatis, lineis fuscis fortioribus inter nodos, cincta; columella maculā purpureā albirugosa supernè tincta; aperturæ fauce albā, labro intus leviter denticulato; canali brevissimo.*

Conch. Icon., *Triton*, pl. 3. f. 10.

*Hab.* Matnog, province of Albay, island of Luzon, Philippines (found on the reefs); Cuming.

Partaking as this shell does in almost equal proportion of the characters of both *Triton* and *Ranella*, it has been a matter of some difficulty to decide to which of the two genera it might with the greater propriety be referred.

**TRITON EXILIS.** *Trit. testa clavaformi, varice unico parvo; spiræ breviusculæ; anfractibus supernè angulatis, infernè coarctatis, transversim subirregulariter costatis, costis liris parvis longitudinalibus decussatis, tuberculatis, tuberculis grandibus, prominentibus, subcompressis; albâ, aurantio-fusco sparsim tinctâ; columellâ plicata, plicis superioribus valde majoribus, apertura fauce albâ, labro intus rugoso-denticulato; canali longissimo, supernè peculiarter contorto.*

Conch. Icon., *Triton*, pl. 4. f. 11.

*Hab.* San Nicolas, island of Zebu, Philippines (found in sandy mud at the depth of ten fathoms); Cuming.

This highly interesting species has been erroneously published by Mr. Sowerby in his 'Genera of Shells,' and by myself in my 'Conchologia Systematica,' vol. ii. plate 243. fig. 3, for the *Triton clavator*, and demonstrates how necessary is the examination of an entire genus by comparison for the proper discrimination of the species. No question as to the specific difference of these two shells could however be urged, for they vary materially both in form and detail of sculpture. The *Triton clavator* is comparatively full and ventricose, with the upper ribs only moderately tubercled; the *Triton exilis* is small, peculiarly contracted round the lower part, with the tubercles very prominently developed entirely across the whorls: in the former species there is a varix on the penultimate whorl as well as upon the last whorl; in the latter species, as in the *Triton canaliciferus*, there is no varix upon the penultimate whorl; lastly, the mouth of the former species is either yellowish or yellowish scarlet, whilst that of the latter exhibits not the slightest indication of colour, and the stains of orange-brown with which it is marked externally are of a character not to be misunderstood.

**TRITON PFEIFFERIANUS.** *Trit. testa fusiformi, varicibus septem prominentibus, acutangularibus; spiræ elatæ; anfractibus subirregulariter convolutis, convexis, supernè plano-depressis, leviter canaliculatis, transversim costulatis, costulis irregularibus, nunc angustis, nunc latioribus, striis elevatis longitudinalibus nodulosodecussatis, anfractuum parte medianâ nodosâ, nodis distantibus, longitudinaliter subplicatis; fuscescente, fusco pallidè variâ; columellâ rugulosa, labro intus rugoso-denticulato; canali subelongato.*

Conch. Icon., *Triton*, pl. 4. f. 14.

Reeve, Pro. Zool. Soc., 1844.

*Hab.* —?

This species may probably be recognised as one of not uncommon occurrence, though not hitherto described; its leading features are the rude manner in which one whorl is deposited on the other, the

prominent sharp-angled structure of the varices, and the delicate granulated sculpture of the ribs where they are crossed by the raised striae; and its general appearance is altogether peculiar.

I take the liberty of dedicating this characteristic species to Dr. Pfeiffer of Cassel, Germany, on account of the diligence that gentleman has exercised in arranging the synonyms of the genera *Triton* and *Ranella* in his "Memoir of the genus *Tritonium*," *Revue Zoologique de la Société Cuvierienne*.

**TRITON SAULIÆ.** *Trit. testā elongato-conicā, tubæformi, paululūm contortū, basim versus subangulato-attenuatā, varicibus novem decemve plano-depressis; spirā acuminatā; anfractibus subangulatis, nodorum prominentium seriebus duabus infra angulum armatis, subtilissimè liratis, liris apicem versus minutissimè crenulatis; albido aut lutescente, rubido-fusco variegatā et maculatā; epidermide tenui; columellā lœvi, obsoletē plicatā, plicā albā unicā supernè munitā; labro intus denticulato; aperturā angulato-ovatā, fâuce cœrulescente-albâ.*

Conch. Icon., *Triton*, pl. 5. f. 17.

Hab. Matnog, island of Luzon, Philippines; Cuming.

I was about to figure a somewhat discoloured specimen of this shell, collected by Mr. Cuming at the above-mentioned locality, when a smaller but very richly painted example presented itself for comparison from the collection of Miss Saul. It is unquestionably distinct from any of the trumpet-shaped species, though curiously intermediate between the *Triton variegatus* and *australis*. I now dedicate it with great pleasure to a much-esteemed collector, whose cabinet bears interesting testimony of her excellent discrimination of species.

**TRITON SINENSIS.** *Trit. testā elongato-clavæformi, varicibus duobus rotundis; spirā subelatā; anfractibus costis duplicibus subdistantibus undique cinctis, strid unicā elevatā interveniente, costis superis leviter nodosis, costis interstitiisque subtilissimè crenulatis; albida, lutescente tinctā, varicibus inter costas lutescentibus; columellā multirugosâ; labro denticulato; aperturae fauce albâ; canali elongato, subcontorto.*

Conch. Icon., *Triton*, pl. 6. f. 18.

Hab. China.

This shell is not uncommon in collections, though it appears to have been singularly neglected by naturalists. It presents a most remarkable modification of the *Triton canaliferus*: the entire sculpture of the two species—such as, for example, the double rib, the intervening raised line, the two only varices, the profusely wrinkled columella, the long slightly twisted canal, &c.—is the same in both; but the canalculated structure of the sutures, which forms so very important a specific character in the *Triton canaliferus*, is wanting. The *Triton sinensis* might therefore be recognised as an example of the *Triton canaliferus* with the spire pushed out as it were; or one in which the whorls have not been subject to that peculiar depression which forms so deep and characteristic a channel round the suture.

**TRITON GRANDIMACULATUS.** *Trit. testā ovato-turritā, crassā, infernē coarctatā, varicibus tribus; spirā subobtusa; anfractibus supernē angulatis, transversim exiliter striatis et liratis, liris superis tuberculato-nodosis; fuscescente-fulvā, varicibus et columellāe parte superiori maculis grandibus nigerrimo-fuscis ornatis; columellā lāvi vel obsoletē plicatā; labro intus dentato, dentibus niger-rimo-fuscis; aperturāe fauce albā; canali breviusculo, subascen-dente.*

Conch. Icon., *Triton*, pl. 6. f. 20.

*Hab.* Matnog, province of Albay, island of Luzon (found on the reefs); Cuming.

This shell appears at first sight to be nothing more than a casual variety of the *Triton lotorium*; it will be found, however, upon examination to differ materially. The large tuberculated humps of the *Triton lotorium* are here represented by regular series of small rounded knobs, which impart a kind of cancellated structure to the earlier whorls which is very characteristic; the lower part of the shell is not distorted, and the varices, especially at the back, are vividly painted with large distinct brown blotches.

**TRITON SARCOSTOMA.** *Trit. testā subabbreviato-clavēformi, varici-bus duobus, rotundis, solidiusculis; spirā brevi, apice subdepresso; anfractibus supernē angulatis, transversim costatis, costis noduloso-crenatis, costarum interstitiis subtiliter crenato-liratis, costis su-peris tuberculatis, tuberculis grandibus, prominentibus, subcom-pressis; spadiceo-fuscescente, costis inter tuberculā albimaculatis; columellā supernē et infernē leviter corrugatā, labro intus fortiter rugoso-denticulato; columellā labroque carneo eximiē tinctis.*

Conch. Icon., *Triton*, pl. 7. f. 21.

*Hab.* Island of Ticao, Philippines (found on the reefs); Cuming.

This shell has somewhat the aspect of the *Triton cynocephalus*; it differs in being much less ventricose, and in having very prominent tubercles round the upper part of the whorls. The mouth is stained with a pale flesh-tint without any indication of dark colour on the columella.

**TRITON AQUATILIS.** *Trit. testā fusiformi-turritā, varicibus septem octo rotundis, prominentibus; spirā elata; anfractibus convexis, transversim costatis, costis duplicitibus, subdistantibus, liris undatis tuberculiferis longitudinaliter decussatis; pallidē rufescente-fusca, fusco maculata et variegatā; columellā et aperturāe fauce carneo-tinctis, albirugosis, labro intus albidenticulato; canali brevi, ascen-dente.*

Conch. Icon., *Triton*, pl. 7. f. 24.

*Hab.* Island of Ticao, Philippines (found on the reefs at low water); Cuming.

The longitudinal waved ridges which adorn the surface of this interesting species have, in the fine specimen before me, a beautiful ripple-like appearance which is very characteristic. The columella and interior are covered with enamel of a bright uniform flesh-tint, and the varices are very round and prominent. I have seen several

examples of this species in different stages of growth, all exhibiting the above peculiarities with remarkable specific distinctness.

**TRITON TRILINEATUS.** *Trit. testá clavato-fusiformi, varicibus tribus; spirá breviusculá; anfractibus supernè angulatis, ad angulum compresso-tuberculatis, transversim plano-liratis, liris subtilissimè crenulatis, interstitiis lineis tribus elevatis sculptis; albidd, fusco variegatd, varicibus fusco-maculatis; columellá lutescente-albá, costatd; canali subelongato, leviter ascende; labro fortiter denticulato-costato; aperturæ fauce albd.*

Conch. Icon., Triton, pl. 10. f. 31.

*Hab.* Philippine Islands; Cuming.

This is a strongly marked species, with the denticulated sculpture of the lip extending into the aperture after the manner of ribs; and the body of the shell is crossed by flattened ridges, between each of which are three very characteristic raised lines.

**TRITON ÆGROTUS.** *Trit. testá subpyriformi, varicibus validis duobus; spirá acutd; anfractibus supernè angulatis, transversim costatis, liris minutis tribus vel quatuor inter costas decurrentibus, costis superis tuberculatis, tuberculis infernè evanidis; albidd, fuscescente maculatd; columellá plicatd; canali subelongato, subascende; aperturæ fauce albd; labro intus denticulato.*

Conch. Icon., Triton, pl. 12. f. 42.

*Hab.* China.

Care must be taken not to confound this shell with the *Triton trilineatus*, in which the dorsal tubercles are more strongly developed, and which has no varix on the back of the penultimate whorl.

**TRITON ENCAUSTICUS.** *Trit. testá pyriformi, varice unico depresso-si sculo; spirá rotundato-depressd; anfractibus transversim costatis, tuberculorum seriebus plurimis longitudinalibus armatis, inferioribus minoribus; albidd, fusco varie tinctd; columellá lœvi, crassissimè encausticd, aurantio-lutescente; canali elongato, ascende; labro aurantio-lutescente, intus denticulato.*

Conch. Icon., Triton, pl. 12. f. 43.

*Hab.* Island of Ticao, Philippines (found on the reefs); Cuming.

The enamelled character of the mouth of this shell is somewhat like that of the *Triton tuberosus*; the form is that of the *Triton retusus*.

**TRITON RIDENS.** *Trit. testá elongato-ovatd, subfusiformi, solidiusculd, distortd, varicibus quinque sexve subindistinctis; spird acuminatd; anfractibus liris angustis elevatis prominentibus distantibus eleganter clathratis, liris transversis duplicatis; cœrulescente-albá, epidermide sericd indutd; columellá fortiter rugosd, aurantio tincta; canali breviusculo, vix ascende; aperturâ parvâ, coarc-tatd; labro intus fortiter dentato, albo, aurantio marginato.*

Conch. Icon., Triton, pl. 12. f. 46.

*Hab.* Philippine Islands; Cuming.

Although this species exhibits little more than a modification of the characters of the *Triton cancellinus*, the difference is of good specific

importance. The cancellated sculpture is wider and more prominent, whilst the ridges are more sharply noduled in crossing over each other. The wrinkles and denticulations which surround the aperture are much more strongly developed, and the orange-stained colouring of the enamelled disc is peculiarly characteristic.

**TRITON THERSITES.** *Trit. testā subfusiformi, varicibus quatuor; spirā exsertā; anfractibus transversim granoso-liratis, angulatis, ad angulum tuberculatis, tuberculis validis, valde prominentibus, anfractuum totā superficie subtilissimè granulosā; columellā albā, subexcavatā, leviter rugosā, callositate supernè armatā; canali longiusculo, subascendente; labro intus leviter denticulato.*

Conch. Icon., Triton, pl. 13. f. 48.

Hab. —?

Several shells have been named after the rude enemy of Achilles as significant of their deformity. The *Triton* under consideration, though it has quite a hump-backed appearance from the prominence of the dorsal tubercles, is however beautifully granulated, the granulated ridges being especially neatly sculptured in passing over the tubercles and varices.

**TRITON MORITINCTUS.** *Trit. testā ovato-oblongā, ventricosā, varice unico elevato; spirā depresso; anfractibus supernè plano-angulatis, transversim crenulato-costatis, ad angulum fortiter tuberculatis, tuberculis acutis, infernè evanidis, transversim subtiliter sulcatis; rubidā, varicibus albimaculatis; epidermide subsetosā; columellā rufo-aurantiā, maculā grandi, nigricante-purpureā, albirugosā, tinctā; canali subelongato, subcontorto; aperturæ fauce rufo-aurantiā; labro intus fortiter dentato.*

Conch. Icon., Triton, pl. 13. f. 49.

Hab. Philippine Islands; Cuming.

This shell, which is not uncommon in collections, approximates very closely to the *Triton cynocephalus*; it is however specifically distinct. The whorls of the *Triton moritinctus* are very strongly tubercled, the tubercles being disposed in waved longitudinal rows, whilst in the *Triton cynocephalus* the tubercles have more the appearance of regular nodules.

**TRITON EXARATUS.** *Trit. testā subtrigono-fusiformi, varicibus duobus; spirā elevato-turrīta; anfractibus supernè planissimo-angulatis, ad angulum subnodosis, transversim liratis, liris compressis, duplicatis, crenulatis, interstitiis excavato-sulcatis; albida, fuscescente cœruleoque varie tinctā; columellā albā, subrugosā; canali longiusculo; aperturā rotundā; labro intus dentato.*

Conch. Icon., Triton, pl. 13. f. 50. a and b.

Var. β. *Testā nigricante-fuscā, albibalteatā.*

Hab. North coast of New Holland.

This is a very characteristic species, with the transverse ridges standing out in bold relief, and the upper part of the whorls peculiarly flat and indented at the sutures.

**TRITON FICOIDES.** *Trit. testā trigono-ficiformi, varicibus quinque;*

*spirâ brevi, obtusâ; anfractibus dorsim tumidiusculis, transversim liratis, liris nodosis, super varices duplicatis; columellâ nodosâ et rugosâ, infernè luteo-sanguineo tinctâ; canali brevi; labro intus fortiter dentato.*

Conch. Icon., *Triton*, pl. 13. f. 51.

Hab. Africa.

M. Kiener should have been sure of this shell being the *Ranella caudata* of Say, before he ventured to question the generic appropriation of that species. It is quite another thing, and I much doubt if a shell of such bright and vivid colour were ever found within the latitude of New York. The *Ranella caudata* belongs to a small group of *Ranellæ*, of which the *R. Muriciformis* is the type.

**TRITON ACUMINATUS.** *Trit. testâ subfusiformi, varice nullo; spirâ acutissimè acuminatâ; anfractibus numerosis, transversim elevato-striatis, longitudinaliter costatis, costis subobliquis, crebriusculis; columellâ subtilissimè rugosâ; canali breviusculo, ascendente; aperturâ parvâ, rotundâ; labro intus denticulato.*

Conch. Icon., *Triton*, pl. 14. f. 54.

Hab. China.

The *Triton acuminatus* is another very aberrant form, though belonging to that interesting section of the genus of which the *Triton niveus* is the type.

**TRITON GRACILIS.** *Trit. testâ gracili-fusiformi, varicibus tribus; spirâ subelatâ; anfractibus tuberculato-nodosis, liris parvis subtilliter decussatis; lutescente-albâ, vel fuscâ, albibalteatâ, epidermide tenui subsetosâ indutâ; columellâ fortiter rugosâ, albd; canali subelongato, ascendente; aperturâ fauce albâ; labro intus peculiärer rugoso-denticulato.*

Conch. Icon., *Triton*, pl. 15. f. 58.

Hab. Philippine Islands; Cuming.

A delicate little species, in which the outer lip is peculiarly fully wrinkled within.

**TRITON ELONGATUS.** *Trit. testâ elongato-fusiformi, varice unico subindistincto; spirâ acuminatâ; anfractibus supernè leviter angulatis, transversum liratis et striatis, liris striisque granulosocrenatis, aequidistanter nodulosis; cinered, liris livido-purpureis; columellâ excavatâ, rugosâ, callositate supernè armatâ; canali elongato, subcontorto; labro intus dentato, dentibus binis.*

Conch. Icon., *Triton*, pl. 15. f. 59.

Hab. Philippine Islands; Cuming.

This shell approximates very closely to the *Triton vespaeus*; so closely indeed, that I may be thought rather venturesous to describe it as a new species. The differences however are as follows: the canal is much more elongated, the whorls are not tubercled, and the beaded ridges are of a peculiar livid-purple colour.

**TRITON GEMMATUS.** *Trit. testâ elongato-oblongâ, varicibus quatuor vel quinque; spirâ subobtusa; anfractibus liris, pulcherrimè gemmatis, cingulatis, interstitiis striis elevatis longitudinalibus et transversis eximiè clathratis; aurantio-lutescente; columellâ rugosâ,*

*callositate supernè armatâ ; canali breviusculo ; labro intus dentato, dentibus binis.*

Conch. Icon., *Triton*, pl. 15. f. 60.

Hab. Island of Ticao, Philippines (found under stones at low water); Cuming.

Var.  $\beta$ . *Testd albd, varicibus duobus ad sex ; liris subnodosis.*

Hab. Island of Annaa (Chain island), South Pacific Ocean, and island of Burias, Philippines (found under stones in both localities at low water); Cuming.

The sculpture of this shell is very similar to that of the *Triton rubecula*; the beaded ridges are however wider apart, and on the varices have three smaller ridges between them.

**TRITON OBSCURUS.** *Trit. testd elongato-turritd, varicibus undecim ; spirid acuminate ; anfractibus transversim granulosis, longitudinaliter subobsoletè sulcatis, sulcis creberrimis ; fuscesciente, fusco pallidè balteatd, maculis fuscis quadratis perpaucis seriatim pictd, varicibus fusco maculatis ; columellâ lævi, crassissimè encausticâ ; canali brevissimo, labro intus denticulato.*

Conch. Icon., *Triton*, pl. 16. f. 63.

Hab. East. Indies; Lieut. Babb.

This shell may have been probably confounded with the *Triton maculosus*; it differs however in not being transversely grooved, in having a different arrangement of the varices, and in other minor particulars.

**TRITON CRISPUS.** *Trit. testd ovatd, subfusiformi, varicibus duobus vel tribus ; spirid breviusculd ; anfractibus liris crispis prominentibus, subdistantibus, decussatis, liris ad decussationem nodulosis, interstitiis striis crispis elevatis subtilissimè cancellatis ; cinereo-cærulescente, varicibus lirisque albidis ; columellâ excavatâ, rugosâ, callositate supernè armatâ ; canali breviusculo ; labro intus fortiter denticulato.*

Conch. Icon., *Triton*, pl. 17. f. 68.

Hab. —?

Quite distinct from any hitherto described species.

**TRITON EBURNEUS.** *Trit. testd ovato-oblongâ, varicibus tribus vel quatuor remotiusculis ; spirid brevi ; anfractibus liris parvis obtusis creberrimè decussatis ; intus extusque albd ; columellâ excavatâ, infernè subrugosâ ; canali brevissimo ; labro intus denticulato.*

Conch. Icon., *Triton*, pl. 17. f. 69.

Hab. Island of Ticao, Philippines (found under stones at low water); Cuming.

This shell has somewhat the form of the *Triton Quoyi*, an interesting little New Holland species, which M. Kiener thought to be the recent analogue of Lamarck's fossil *Triton viperinum*.

**TRITON VERRUCOSUS.** *Trit. testd subpyramidalis-oblongâ, varicibus quatuor vel quinque ; spirid mediocri ; anfractibus supernè impressis, transversim striatis et liratis, liris longitudinalibus prominentioribus decussatis, ad decussationem nodosis ; aurantio-fuscescente,*

*anfractuum parte inferiori fusco inter nodos articulatā; columellā excavatā, vix rugosā; canali brevissimo.*

Conch. Icon., *Triton*, pl. 17. f. 71.

Hab. —?

Care must be taken not to confound this shell with the lesser New Holland species, *Triton Quoyi*.

**TRITON TORTUOSUS.** *Trit. testā oblongo-turritā, subangustā, vari-cibus octo obliquè invicem subsequentibus; spirā tortuosā; anfractibus granulis parvis subtiliter reticulatis; lutescente, maculis fuscis grandibus, longitudinaliter undatis, eleganter pictā; columellā excavatā, subgranulosā; canali brevissimo, recurvo.*

Conch. Icon., *Triton*, pl. 17. f. 74.

Hab. Island of Burias, Philippines (found under stones at low water); Cuming.

This interesting species approximates very closely to the *Triton distortus*; it differs in being of a more delicate and slender form, in the granules being less prominent, and in the peculiar waved style of the painting.

**TRITON SCULPTILIS.** *Trit. testā oblongo-turritā, varice nullo; spirā exsertā; anfractibus longitudinaliter costellatis, costellis angustis, interstitiis striis elevatis cancellatis, anfractūs ultimi parte inferiori conopeo carinæformi prominente peculiariter ornatā; albidā, suturis fuscis; columellā lāvi; canali brevissimo.*

Conch. Icon., *Triton*, pl. 18. f. 76.

Hab. Island of Capul, Philippines (found under stones at low water); Cuming.

In addition to the above account of this beautiful species, it may be noticed that the transverse striae are brown upon the ribs and white in the interstices; the sutures are brown in consequence of the whorls being encircled with a brown line just at the point where one whorl lodges in its spiral growth upon the other, over the basal canopy, as if to mark out the exact plan of convolution.

**TRITON EXIMIUS.** *Trit. testā oblongo-turritā, varice nullo; spirā acuminatā; anfractibus costellis minutis eximie cancellatis, longitudinalibus majoribus, valdē remotioribus; albd, fuscescente obscurè fasciatā; canali brevissimo.*

Conch. Icon., *Triton*, pl. 18. f. 77.

Hab. Lord Hood's Island, Pacific Ocean (on the reefs), and island of Capul, Philippines (under stones at low water); Cuming.

A neatly cancellated, almost colourless, shell.

**TRITON EGREGIUS.** *Trit. testā elongato-ovatā, varice nullo; spirā acutā; anfractibus longitudinaliter costatis, striis elevatis transversis cancellatis; albā, costis medio albīs, supra et infra fuscis; canali brevi, recurvo.*

Conch. Icon., *Triton*, pl. 18. f. 78.

Hab. Island of Masbate, Philippines (found under stones at low water); Cuming.

The style or arrangement of the sculpture not much unlike the preceding species; the shell is however larger, more globose, and

has a very pretty appearance, arising from the dark brown upper and lower portions of the ribs being crossed by white striae.

**TRITON SIPHONATUS.** *Trit. testā fusiformi-turritā, varicibus novem, subindistinctis; spirā acuminatā; anfractibus creberrimè reticulatis, ultimo anticē quasi siphonato; roseo- aut cæruleo-albida, aurantio-fusco sparsim maculatā; lamīnā columellari tenui, lāvi; aperturā elongato-ovatā; labro subtilissimè denticulato.*

Conch. Icon., *Triton*, pl. 18. f. 81.

*Hab.* —?

Chiefly distinguished by its anterior extension.

**TRITON DECAPITATUS.** *Trit. testā elongato-turritā, varice nullo; spirā decollatā; anfractibus longitudinaliter concentricè costellatis, costellis angustis, numerosis, confertis, transversim striatis; lutescente, fusco subindistinctè maculatā; costellis aurantio-fuscis, lineā lutescente anticē interruptis, anfractu ultimo lineis lutescentibus duabus; canali brevissimo.*

Conch. Icon., *Triton*, pl. 18. f. 85.

*Hab.* Island of Burias, Philippines (found under stones at low water); Cuming.

Care must be taken not to confound this species with the *Triton truncatus*, in which the ribs are larger and wider apart, and the colour not interrupted.

**TRITON DIGITALE.** *Trit. testā oblongā, varice nullo; spirā acuminatā; anfractibus seriatim granulosis, granulis numerosis, confertis, obtusis; albida, fuscescente sparsim punctatā; canali brevissimo.*

Conch. Icon., *Triton*, pl. 19. f. 86.

*Hab.* Island of Capul, Philippines (found under stones at low water); Cuming,

The sculpture of the shell is much like the granular surface of a thimble.

**TRITON CONCINNUS.** *Trit. testā oblongā, tenuicula, varice nullo; spirā subacuminatā; anfractibus longitudinaliter concentricè costellatis, transversim creberrimè striatis; lutescente, aurantio-fuscescente peculiariter picta, apice roseo-purpureo; canali brevissimo.*

Conch. Icon., *Triton*, pl. 19. f. 87.

*Hab.* Philippine Islands; Cuming.

The bright orange-brown painting is peculiarly festooned, as it were, round the upper part of the whorl next the suture.

**TRITON ANGULATUS.** *Trit. testā oblongā, turritā, varice nullo; spirā acuminatā; anfractibus supernè angulatis, longitudinaliter costellatis, transversim striatis, striis prominentibus, confertis; lutea, aut lutescente-alba, rubido-fusco alboque sparsim punctatā; canali brevissimo.*

Conch. Icon., *Triton*, pl. 19. f. 88.

*Hab.* Island of Ticao, Philippines (found under stones at low water); Cuming.

Chiefly distinguished by the angular structure of the whorls next the suture.

**TRITON LATIVARICOSUS.** *Trit. testā oblongā, solidā, subcompressā, varicibus tribus vel quatuor latis; spirā subobtusa; anfractibus longitudinaliter concentricè costellatis, costellis solidis, subdistantibus, transversim creberrimè striatis; canali brevissimo.*

Conch. Icon., *Triton*, pl. 19. f. 90.

The varices of this shell are unusually broad, and the ribs are wider apart on the back of the whorls than on the side.

**TRITON TESSELLATUS.** *Trit. testā elongatā, varice nullo; spirā acuminatā, acutā; anfractibus striis longitudinalibus et transversis subtilissimè reticulatis; albida, maculis grandibus rubido-fuscis subirregulariter tessellatā; canali brevi, subrecurvo.*

Conch. Icon., *Triton*, pl. 19. f. 91.

Hab. Island of Burias, Philippines (found under stones at low water); Cuming.

This shell may be easily recognised by its rude tessellated spots.

**TRITON BACILLUM.** *Trit. testā elongato-clavæformi, solidā, varicibus duobus; spirā elongatā, subretusa; anfractibus obtuso-granulosis; cœrulescente-albā; canali brevissimo, recurvo; aperturā breviusculā.*

Conch. Icon., *Triton*, pl. 19. f. 94. Hab. —?

This is the only species of *Triton* I have noticed with a single varix on each side.

**TRITON CARDUUS.** *Trit. testā globosā, ventricosā, varice nullo; spirā brevi, acutissimā; anfractibus longitudinaliter costatis, transversim striatis, striis valde elevatis, costas super submuricato-nodosis; albida, fuscescente varid; columellā excavatā; canali brevi.*

Conch. Icon., *Triton*, pl. 19. f. 95. Hab. —?

A rather thin shell, of very sharply cancellated sculpture.

**TRITON PAGODUS.** *Trit. testā pyramidali-ovata; spirā acuminato-turrid, varice nullo; anfractibus subventricosis, supernè angulatis, transversim creberrimè elevato-lineatis, longitudinaliter costatis, costis compressiusculis, subdistantibus; albida, rubido-castaneo multifasciatā; canali brevi, valde recurvo; aperturā rotundā; labro intus elevato-striato.*

Conch. Icon., *Triton*, pl. 20. f. 97.

Hab. Bay of Montija, West Columbia; Cuming.

This species partakes more of the character of *Nassa* than the preceding; it might be referred indeed to that genus with almost as much propriety as to *Triton*.

**TRITON PICTUS.** *Trit. testā oblongo-ovata; spirā subacuminatā, varice nullo; longitudinaliter creberrimè costatā, transversim elevato-striatā; rubido-fusco alboque tessellatā; canali brevi; aperturā parvā, fauce albā.*

Conch. Icon., *Triton*, pl. 20. f. 97.

Hab. Gallapagos Islands (found under stones at low water); Cuming.

An interesting species tessellated with white and very rich dark brown, in which the latter colour greatly preponderates.

**TRITON DECIPIENS.** *Trit. testā elongato-ovata, subfusiformi, dis-*  
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*tortuosa, varicibus quinque sexve indistinctis; anfractibus liris angustis elevatis clathratis; albido-lutescente, epidermide sericea indutâ; columella profunde excavata, rugosa, subobsoletè umbilicata, callositatibus plurimis supernè armata, rufo-aurantia; labro plano-concavo, rufo-aurantio radiato, intus fortiter rugoso-dentato.*

Conch. Icon., *Triton*, pl. 20. f. 102.

*Hab.* Island of Mindanao, Philippines; Cuming.

I have long hesitated to consider this shell any other than a variety of the *Triton cancellinus*: the differences, though slight, seem however to remain constant. It is uniformly of smaller size, the transverse ridges are not duplicate, and the colour and wrinkled denticulations of the columella and outer lip are of a peculiar and distinct character.

#### ROYAL INSTITUTION.

Feb. 14, 1845.—W. R. Hamilton, Esq., V.P. and Treasurer, in the Chair.

Professor E. Forbes delivered a lecture "On some important Analogies between the Animal and Vegetable Kingdoms."

The Professor commenced by briefly adverting to the distrust with which, as he was well aware, speculations on the analogies of animated beings were regarded, especially among British naturalists. He stated his own firm persuasion, however, that the transcendental philosophy of natural history was one of the most important developments of that science.

He proceeded to represent the relations on which he was about to discourse as consisting,—1. *Of the relation of analogy*, depending on the manifestation of common laws relating to animals or vegetables composing a species, or else to the groups under which species are assembled; and 2. *Of the relation of polarity*, depending, not on the resemblance, but on the opposition or divergence of beings composing the animal and vegetable kingdoms. This relation of *polarity* was thus illustrated. The animal is superior in structure and function to the vegetable; yet, from whatever point of the vegetable kingdom we may begin, we cannot proceed by a series of continually advancing organisms to the highest point of the animal. Thus, instead of finding, as we might expect *à priori*, the most perfectly developed vegetable bearing the closest resemblance to the lowest animal form, we find, on the contrary, that it is at the lowest points of both systems (the Sponges, &c. in the one, and the marine Fuci in the other) that the closest resemblance exists. Reverting to the *relation of analogy*, the Professor noticed that every composite organism, as, for instance, a plant in flower, was not a single being, but a combination of individuals; that each leaf, in its ordinary form, was an individual, serving one purpose (that of maintaining the existence of the plant), but that, for the purpose of reproduction, it was transformed into flower, petal, stamen, pistil, &c. This metamorphosis was first declared by Linnaeus in the 'Philosophia Botanica,' then maintained by Wolf, and still later by the poet Goethe; and as this principle of morphology had been generally accepted by botanists, the Professor now applied it to zoology. Among the lowest zoophytes there are