PROCEEDINGS

OF THE

Boston Society of Natural History.

VOL. III.

1848 TO 1851.

CAMBRIDGE: PRINTED FOR THE SOCIETY,

BY BOLLES AND HOUGHTON.

1851.

August 15, 1849.

C. T. Jackson, Vice-President, in the Chair.

Present, eleven members.

Dr. W. I. Burnett gave an account, with illustrations on the blackboard, of certain animals which he had recently observed by the microscope in the blood of a person who had died with a chronic enlargement of the spleen. Dr. Burnett's account was as follows.

While recently examining with the microscope some blood taken from a human female who had died with an enlarged spleen, I was surprised to perceive in the field of observation, beside the usual corpuscles, very numerous naviculoid bodies. They were rather more than twice the size of blood corpuscles, swollen in the middle and pointed at both ends, and of a dark gray color. In many respects these bodies resembled the lorice of some of the naviculoid Infusoria; but they were not lorice, since by the addition of water they became swollen, and were therefore saccular. No motion could be perceived; but that they were animals can justly, I think, be inferred, from the fact that their external envelope presented some traces of organization.

I feel the more confirmed in this view as Glüge (Müller's Archives, 1842, p. 148) mentions a hæmatozoon, which, if I draw a correct picture in my mind from his verbal description, this one would closely resemble. Glüge found it in the blood of a frog. Valentin also mentions (Müller's Archives, 1841, p. 435) having found hæmatozoa in some of the lower Vertebrata.

Dr. C. T. Jackson read a letter from Increase A. Latham of Milwaukie on the subject of "Medical Geology." The tendency of the letter was to confirm the opinion heretofore expressed by Dr. Jackson, that cholera is not likely to occur on the primary formations.

Some conversation ensued on the subject, various members quoting authorities and mentioning facts at variance

with this opinion. Dr. Jackson said he did not ascribe any mysterious power to the primary formations in banishing cholera, but he thought this disease more likely to prevail over the more recent and tertiary rocks, from the character of the water drank by the inhabitants in such localities.

Dr. C. T. Jackson read a paper on the Mirage of Lake Superior of the months of July and August, 1847.

During these two seasons this phenomenon was often witnessed by Dr. Jackson. His theory of the mirage was as follows: The water of Lake Superior is very cold, the temperature seldom rising above 50° Fahrenheit, even in the hottest weather. In the summer season the temperature of the air in the forests near the shore is frequently as high as 90°, or even higher. Dr. Jackson supposes that a current of warm air loaded with moisture is blown from the shore, and coming in contact with a stratum of cooler air, in contact with the Lake surface, a film of moisture is condensed above it, which acts as a mirror to reflect the objects beneath.

Dr. J. B. S. Jackson gave an account of a recent visit he had made to Mr. Marsh's collection of Ornithichnites.

In connection with this subject Dr. C. T. Jackson said, that on the shores of Lake Superior he had seen some remarkable bird-tracks made under his observation by the American Raven. The peculiarity of these tracks consisted in the elongation for a number of inches of the impression of the middle toe. This was produced by the bird's trailing this toe on the sand as it slowly walked over the surface. Some of the Ornithichnites present this singular disproportion in the length of the track of the middle toe, which can hardly be accounted for in any other way. This mark of the toe is curved inwards also, as it is in the Ornithichnites, a natural result of the gait of the bird.

Dr. Gould gave descriptions with drawings of several new species of shells brought home from the United States Exploring Expedition, as follows:—

COLUMBELLA VALGA. T. ovato-lanceolata, sub-distorta, fulvomarmorata et lineolis crebris rufis cincta, ad apicem rosacea; spirâ acuminata, anfr. 9-10 convexiusculis, supernis longitors um tenuiter plicatis, ultimo lævi, contracto, cæteris nonconformi, $\frac{3}{3}$ long. testæ adequante; suturâ profundâ; apertura angusta, lunata; labro arcuato acuto, intus sulcato; columellâ transversim plicatâ, callosâ; sinu siphonali angusto, producto. Long. $\frac{1}{2}$; lat. $\frac{1}{2}$ poll. Hab. Pacific?

Closely allied to *C. avara*, Say, in form, size, and ground color, but readily distinguished by its distorted form, the encircling chestnut lines, and the want of revolving striæ between the folds.

COLUMBELLA CASTANEA. T. parva, solida, elongata, ovata, lævis, castanea vel fascià angustà albidà cincta: spira ovato conica, anfr. 7 convexis, ultimo ovali $\frac{5}{3}$ long. testæ superante, ad basim spiraliter striato: apertura ampla, alba; labro recto, posticè emarginato, rufo-tincto, intus sub-plicato; columellà anticè plicatà; sinu siphonali amplo. Long. $\frac{1}{2}$; lat. $\frac{3}{8}$ poll. Hal. Rio Janeiro.

Compared with C. unicolor it is smaller, the aperture is less rotund, and it has a pale cincture.

Columbella gausapata. T. parva, solidula, elongata, ovatoconica, ad basim spiraliter striata, sub epidermide rudi subruo concinnè rufo-reticulata vel variemodè maculata aut fasciata spira conico-turrita, anfr. 6-7 convexiusculis, ultimo $\frac{2}{3}$ long testæ, anticè subitò in rostrum brevem angustato; sutura valdè impressa: apertura angusta lunata; labro simplici, rufo, intus sparsè denticulato. Long. $\frac{1}{2}$; lat. $\frac{1}{5}$ poll. Hab. Puget Sound.

An inelegant, very simple species allied to the preceding; but it is less ventricose, the aperture paler and narrower, which with its tough, wooly epidermis sufficiently characterize it. Beneath the epidermis it is polished and finely reticulated, blotched or banded.

MITRA VITELLINA. T. lanceolata, solida, dilutè aurantia maculis albis fasciata, sulcis linearibus ad 15 lyrata et striis tenuibus crebris cincta; intersectionibus punctatis: spira elevata, ant 8-9 planis, ultimo $\frac{5}{8}$ long. testæ, cylindraceo, anticè angustato apertura angusta; labro recto, simplici; columellâ 4-plicatâ, sinu siphonali brevi, vix recurvo. Long. $1\frac{3}{4}$; lat. $\frac{7}{20}$ poll. Hab.

MITRA FIDICULA. T. lanceolato-fusiformis, livido-crocea, fas

cià albidà unicà cincta, plicis acutis albidis ad 12 lyrata; spira anfr. 9 planulatis posticè tabulatis, apicalibus (ultimo etiam ad basim) spiraliter striatis: apertura angusta, intus tenui-striata; columellà 4-plicatà; fauce rufo; canali siphonali curto, ferè recto. Long. $\frac{3}{4}$; lat. $\frac{3}{10}$ poll. Hab.

MITRA COPHINA. T. fusiformis, albida, liris volventibus et liris longitudinalibus altioribus ubique reticulata; areolis interceptis profundis: spira turrita, anfr. 9-10 planiusculis subtabulatis, ultimo antrorsum in rostrum contortum subitò desinente: apertura angusta, flexuosa, posticè obtusa; columellâ 4 plicatâ, plicis antrorsum minoribus. Long. $\frac{8}{10}$; lat. $\frac{3}{10}$ poll. Hab. Singapore.

The form, size, and color is like *M. suturata*, Reeve, but the sculpture is quite different, that species having no longitudinal ridges, and the transverse grooves are described as deep and punctured, and the intermediate ridges slightly granose.

MITRA RORATA. T. modica, solida, lanceolata, cinerea rubiginoso-marmorata, clathris longitudinalibus quadratis ad 30 et striis tenuibus volventibus decussata: spira elevata, anfr. 9-10 planis posticè angulatis; ultimo cylindraceo anticè sensim attenuato, dimidiam long. testæ superante: apertura angusta, labro acuto, roseo, 13-sulculato; columellà 4 plicata; rostro lato obliquè reflexiusculo; fauce incarnato. Long. $\frac{4}{5}$; lat. $\frac{3}{10}$ poll. Hab..

The form and sculpture is much like that of M. hebes, Reeve, but the coloring is more like M. crenifera. It is more cylindrical and the bars are less prominent than M. cophina, besides the difference in coloration.

MITRA CAPILLATA. T. parvula, elongata, ovato-fusiformis, polita, rufo-castanea lineolis longitudinalibus flexuosis croceis ornata: spira acuto-conica, anfr. 7 convexiusculis, ultimo bifariam attenuato, anticè striis prominulis cincto; suturâ impressâ: apertura $\frac{1}{2}$ long. testæ, angusta, elliptica; columellâ 3-plicata, posticè callosâ; fauce lurido. Long. $\frac{9}{20}$; lat. $\frac{1}{5}$ poll. Hab. Madeira-

This beautiful little shell is easily identified by its dark mahogany color and its delicate yellow lineations, like those on some species of Neritina. *M. semen*, Reeve, which is not so slender, and has fewer and broader lines, is the only species approaching it.

MITRA ENCAUSTA. T. parvula, solida, curta, ovato-rhomboidea, cinerea, longitrorsum 8-9 plicata et sulcis fuscentibus cineta: spira conica, anfr. 8 ventricosis, supernis granulosis, ultimo \(^2_3\) long, testæ adequante; sutur\(^2_3\) canaliculat\(^2_3\): apertura parva, linearis; labro acuto, vix sulcato; columell\(^2_3\) plicat\(^2_3\), postic\(^2_3\) callo copiono indut\(^3_3\). Long. \(^{7}_{20}\); lat. \(^{1}_{5}\) poll. \(^{7}_{40}\). Feejee Islands.

A small, very decidedly marked species, most remarkable for the deeply incised, somewhat punctate, dark revolving lines on an ash-colored ground, its wave-like folds and its short rhomboidal form.

Conus dilectus. T. parva, gracilis, conica, albida ferrugineo concinnè reticulata et seriebus binis macularum candidarum et rufarum alternantium cincta: spira elevata, concavo-conica, anfr. 8-9, angulatis, coronatis, posticè striatis, ultimo inermi, anticè 6-8 sulcato: apertura linearis; columellà rectà; fauce incarnato. Long. $\frac{1}{2}$; lat. $\frac{1}{4}$ poll. Hab. Fejee Islands.

Dr. Gould presented, in the name of Dr. George A. Perkins of Cape Palmas, Africa, a cranium of an adult specimen of *Troglodytes gorilla*, the new species described by Prof. Jeffries Wyman. Also two monkeys' skins, a number of jars of Echinoderms, Fishes, &c. Among them was an Achatina, which proves to be viviparous, its oviduct being filled with young.

Dr. Shurtleff presented, in the name of Mr. Theodore Simmons, of Boston, a white deer skin from Maine.

Mr. T. G. Cary, Jr., was elected a member of the Society.

September 5, 1849.

Dr. D. H. Storer, Vice-President, in the Chair.

Present, fifteen members.

In the absence of the Recording Secretary, James W. Stone was appointed Secretary pro tem.

Dr. Storer presented a monograph sent for publication in the Journal of the Society, by Dr. John Le Conte, on the