Whiteaves J. F. On the palaeontology of the Coralline oolites of the neighbourhood of Oxford.// The annals and magazine of natural history, including zoology, botany and geology, 1861.– Ser. 3, vol. 8, №44.– p. 142-147, pl. 9B. <08.1861>

Joliaf

Genus ANOMIA, Linnæus.

1. *Anomia radulina*, A. Adams.

A. testa valva dorsali ovata, irregulari, convexa, alba, radiatim costellata, costellis squamulosis, squamulis acutis imbricatis; regione umbonali lævi; apice acuto, postico; intus alba, margaritacea; cicatrice musculari superiore magna, rotundata.

Hab. Mino-Sima; 63 fathoms.

2. *Anomia pustulosa*, A. Adams.

A. testa valva dorsali ovata, regulari, planiuscula, sordide alba, lineis incrementi concentricis instructa, tuberculis confertis, rotundis, planiusculis, areolis depressis circumcinctis ornata; umbone parvo, vix prominulo, ad marginem posticum posito; intus margaritacea; margine crenulato; cicatrice musculari superiore magna, oblonga, inferne dilatata.

Hab. Tabu-Sima; 25 fathoms.

N.B. In a paper on new species of Mollusca from Japan, forwarded by me in May last from Shang-tung, for publication in the 'Annals,' I described one species under the name of *Agatha virgo*. The generic name should have been *Myonia*, not *Agatha*.

Shanghai, China,
Dec. 6, 1860.

XIV.—*On the Palæontology of the Coralline Oolites of the Neighbourhood of Oxford.* By J. F. WHITEAVES, F.G.S. &c.

[Plate IX. B.]

THE object of the following paper is to give a detailed list of the fossils from the Coralline Oolite of the neighbourhood of Oxford, in order that geologists may be enabled to compare the faunas of the same formation in the respective counties of Oxon, Berks, Yorkshire, Wilts, and Dorset.

One of the leading features in the palæontology of this stratum in the neighbourhood of Oxford is the great rarity of the Brachiopoda. During several years' active collecting I have not met with even a fragment of a shell that belonged to this family, nor do I know of a specimen in any of our local collections. The Cephalopoda of the Oxfordshire Coralline Oolites appear to have a somewhat limited range in time, being, generally speaking, confined to the Middle Oolites. This seems to favour D'Orbigny's well-known views on the limited vertical range of that class. On the other hand, many of the Bivalves and Gasteropoda occur as low down in the series as the Great and Inferior Oolites. Eighteen species in my list of the Oxfordshire Coralline Oolite fossils have been recorded also from the Inferior Oolite; and the catalogues of fossils from the Coral Rag and Calcareous Grit of Yorkshire and the neighbourhood of Weymouth would supply many more species common to both formations. As the exact boundary between the Coral Rag proper and the Lower Calcareous Grit of the district now under consideration has not been accurately defined, the term "Coralline Oolite" is used in this paper collectively, to include both of these formations. From the Upper Calcareous Grit (if that stratum occurs near Oxford) I have no fossils, nor do I know of any.

The principal localities whence these fossils have been procured are,—Headington quarry, Bullingdon Green, the quarry near the windmill on the Shotover Road, another between Cumnor and Besselsleigh, and the well-known pits at Marcham, near Abingdon. The *Crenatula Listeri*, mentioned in Prof. Morris's Catalogue of British Fossils as occurring in the Coralline Oolite of Shotover (but with a query attached), I omit, having good reason to suppose that the Portland Oolite is the stratum to which it should be referred. Again, Dr. Fitton, in his elaborate paper "on the Strata below the Chalk," gives the well-known Liassic *Rhynchonella tetraedra* as a fossil of the "Oxford Oolite" at Wheatley, but with some doubt. Surely this is a mistake. Omitting these two species, the following series has been procured from the Coralline Oolite of the Oxfordshire district. The species with an asterisk affixed are found also in the Inferior Oolite.

PLANTÆ.

Carpolithes conicus, *Lind. & Hutt.*

ZOOPHYTA.

Thecosmilia annularis, *Flem.*
Rhabdophyllia Phillipsi, *M.-Edw.*
Cladophyllia Conybearei, *M.-Edw.*
*Isastræa explanata, *M'Coy.*
—— Greenhoughi, *M.-Edw.*

ECHINODERMATA.

Cidaris Smithii, *Wright.*
—— florigemma, *Phil.*
Hemicidaris intermedia, *Flem.*
Pseudodiadema versipora, *Phil.*
Hemipedina Marchamensis, *Wr.*
Pygaster umbrella, *Agassiz.*
Echinobrissus scutatus, *Gmel.*
Pygurus pentagonalis, *Phil.*
—— costatus, *Wright.*
—— Blumenbachii, *Koch & Dunk.*(?)

ANNELIDA.

Serpula tricarinata, *Sow.*
—— runcinata, *Sow.*
Vermicularia ovata, *Sow.*
Vermilia sulcata, *Sow.*

CRUSTACEA.

Glyphea rostrata?, *Phil.*

MOLLUSCA.

Gryphæa mima, *Phil.*
—— nana, *Sow.*
*Ostrea gregaria, *Sow.*
*—— solitaria, *Sow.*
Placunopsis similis, n. sp.
*Pecten lens, *Sow.*
*—— vagans, *Sow.*
—— similis, *Sow.*
*—— vimineus, *Sow.*
*—— articulatus, *Schl.*
*Hinnites abjectus, *Phil.*

*Lima pectiniformis, *Schloth.*
—— rigida, *Sow.*
—— rudis, *Sow.*
—— rustica, *Sow.*
—— læviuscula, *Sow.*
—— elliptica, n. sp.
Gervillia aviculoides, *Sow.*
Avicula expansa, *Phil.*
—— ovalis, *Phil.*
Perna ——?
—— ——?
Trichites Plotii, *Lhwyd.*
Pinna lanceolata, *Sow.*
*Modiola bipartita, *Sow.*
—— pulchra, *Phil.*
—— Lycetti, n. sp.
Lithodomus inclusus, *Phil.*
Arca, n. sp.
Cucullæa contracta, *Phil.*
—— corallina, *Lyc.*
Trigonia clavellata, *Sow.*
*—— costata?, *Sow.*
Corbis lævis, *Sow.*
Lucina ——?
Sowerbya triangularis, *Phil.*
? —— Deshayesia, *Buv.*
Cardium Crawfordii, *Leck.*
—— ——?
Isocardia tumida, *Phil.*
Cypricardia isocardina, *Buv.*
*Opis Phillipsii, *Mor.*
—— corallina, *Lyc.*
——, n. sp.
Astarte ovata, *Smith.*
——, n. sp.
*Cyprina dolabra, *Phil.*
*Quenstedtia lævigata, *Phil.* sp.
Thracia Studeri?, *Ag.*
*Myacites Jurassi, *Goldf.*
Goniomya litterata, *Sow.*
Pholadomya ——?

Actæon retusus, *Phil.*

Cylindrites Luidii, n. sp.
Bulla elongata?, *Phil.*
Pleurotomaria bicarinata, *Sow.*
—— reticulata, *Sow.*
——, n. sp. allied to *Anglica*, Sow.
Phasianella ——?
Littorina muricata, *Sow.*
—— lævissima, n. sp.
*Nerita minuta, *Sow.*
Neritopsis Guerrei, *Heb. & Desl.*
Chemnitzia Heddingtonensis, *Sow.*
*—— striata, *Sow.*
—— melanoides?, *Phil.*
Natica cincta, *Phil.*
—— arguta, *Phil.*
—— clio?, *D'Orb.*
Ceritella costata, n. sp.
Nerinæa Goodhallii, *Sow.*
—— ——?
—— ——?
—— ——?
Cerithium muricatum, *Sow.*
Alaria seminuda, *Heb. & Desl.*
Ammonites perarmatus, *Sow.*
—— plicatilis, *Sow.*
—— excavatus, *Sow.*
—— vertebralis, *Sow.*
—— cordatus, *Sow.*
Nautilus hexagonus, *Sow.*
Belemnites abbreviatus, *Miller.*

PISCES.

Gyrodus Cuvieri?, *Ag.*
—— ——?
Pycnodus ——?
Sphærodus ——?
Lepidotus ——?
Hybodus obtusus, *Ag.*

REPTILIA.

Teleosaurus? (teeth of).

Notes on the preceding Species.

Pygurus costatus and *Blumenbachii*.—These are given on the authority of Dr. Wright. I have never seen specimens in this district.

Pecten articulatus, Schlotheim.—Of this species I have several very perfect specimens, and believe it to be only a variety of *Pecten vimineus*, Sow.

Pinna lanceolata.—Inserted on the authority of Prof. Phillips.

Lithodomus inclusus, Phil.—The *L. amygdaloides* of Prof. Morris is identical with this shell. The figure given by Lhwyd

gives a tolerably good idea of Phillips's species; and it is common in the Bullingdon Coral Crag and the Islip Cornbrash—two localities given by Lhwyd for his "*Pholas amygdaloides*."

Sowerbya triangularis, Phil., sp.—I am not prepared to admit, with my friend Dr. Lycett, that this species is the same shell as the *Isodonta Deshayesia* of Buvignier, at least if any reliance is to be placed on Prof. Phillips's figure.

The anterior umbones and the shortly-truncate anterior extremity of *S. triangularis* readily distinguish it from the *Sowerbya* (*Isodonta*) *Deshayesia*, a shell which is nearly equilateral. As the English variety of *I. Deshayesia* differs slightly from the French type; and as Prof. Phillips's figure of his "*Cucullæa triangularis*" is not very characteristic, I give new figures of each of these shells.

Cypricardia isocardina, Buv.—M. Buvignier describes and figures his shell as smooth; but my only specimen, fortunately in good preservation, shows a sculpture consisting of very strongly-marked longitudinal striæ covering the whole surface of the shell. The specimen figured is from the Coralline Oolite of Bullingdon. Prof. Phillips informs me that it occurs in the same stratum at Malton.

Opis Phillipsii, Morris.—The *Opis bicarinata* of Buvignier is very near to this species, and may perhaps be identical with it.

Cylindrites Luidii, n. sp.—This shell was rudely figured by Luidius (tab. 6. fig. 420) from the Coralline Oolite of Besselsleigh, where it is not uncommon: he calls it "cochlites cylindroides minor, turbine productiore." I have much pleasure in dedicating this species to the memory of one of our earliest local palæontologists.

Pleurotomaria, n. sp. (allied to *Pl. anglica*, Sow.).—Probably the shell alluded to by Sowerby, in the 'Mineral Conchology,' under the head of *Trochus* (*Pleurotomaria*) *similis*, of which he states that "the blue Lias of Weston, and in the neighbourhood of Yeovil, Lackington Park, *Shotover*, &c., abound with this *Trochus*."

In the Coralline Oolite at Bullingdon I met with a single example of this species, equal in size to Sowerby's type, and certainly closely resembling it; but, owing to the hardness of the matrix, I completely failed to extract it.

Littorina lævissima, n. sp. This shell has been figured in the Supplement to Mr. Damon's 'Geology of Weymouth' (pl. 5. fig. 6) as a *Phasianella*, but without any distinctive appellation. I have had a series of specimens from the Coralline Oolite of Besselsleigh for a long time in my cabinet, and, on the whole, think that they should rather be referred to the genus *Litto-*

rina. The specific term I have chosen refers to the smooth and unornamented surface of the shell.

Nerinæa.—These three species (two from Cumnor and one from Bullingdon) are evidently distinct, but are *too imperfect to be identified* satisfactorily.

My best thanks and acknowledgments are due to my friend Dr. Lycett for his most valuable assistance in determining several critical species mentioned in this paper.

Description of new Species.

Placunopsis similis. Pl. IX. B. figs. 1, 2.

Shell ovately orbicular, oblique; upper valve (the only one known at present) convex; umbones marginal; surface covered with dense, very fine, radiating striæ, which are decussated by the lines of growth.

Locality. Coralline Oolite near Besselsleigh, where it is somewhat rare.

Lima elliptica. Pl. IX. B. figs. 3, 4.

Shell convex, elliptic-ovate, oblique; centre of the shell covered with acute longitudinal costæ, which become nearly obsolete at the sides; interstices very finely longitudinally striate, as is also the anterior portion of the shell; auricles unequal (the posterior being the largest) and quite smooth.

Locality. Coralline Oolite about Bullingdon and the Shotover road; also in the same rock at Pickering, as I am informed by Dr. Lycett.

This shell bears a general resemblance to *Lima gibbosa*, Sow.; but that species is not so oblique; and when minutely examined, its sculpture will be found to be very different.

Modiola Lycetti. Pl. IX. B. fig. 5.

Shell oblong, concentrically striated, umbones terminal; dorsal surface convex, terminating in a ventricose, bluntly-rounded extremity; inferior border somewhat concave.

Locality. This little species occurs sparingly in the Coralline Oolite of Bullingdon, and in the quarry near the windmill on the Shotover road.

Ceritella costata. Pl. IX. B. fig. 10.

Shell turreted; spire elongated; whorls flattened, with straight longitudinal costæ, which, in the body-whorl, only occupy the upper part of the volution.

Locality. Coralline Oolite near Besselsleigh, but rare.

Closely allied to *Ceritella longiscata*, Mor. and Lyc.; but our species wants the keel on the upper part of the volutions (one

of the distinctive features of *C. longiscata*), and in the last-mentioned species there are no costæ on the body-whorl.

EXPLANATION OF PLATE IX. B.

Fig. 1. *Placunopsis similis.*
Fig. 2. Portion of the shell magnified, showing the sculpture.
Fig. 3. *Lima elliptica.*
Fig. 4. Portion of ditto, magnified.
Fig. 5. *Modiola Lycetti.*
Fig. 6. *Cypricardia Isocardina*, Buv.
Fig. 7. *Sowerbya triangularis*, Phil. (sp.).
Fig. 8. *Sowerbya Deshayesia*?, Buv., var.

Fig. 9. *Cylindrites Luidii.*
Fig. 10. *Ceritella costata.*
Fig. 11. *Neritopsis Guerrei*, Heb. & Desl., var.

XV.—*Contributions to an Insect Fauna of the Amazon Valley.* Coleoptera : Longicornes. By H. W. Bates, Esq.

[Continued from p. 52.]

7. *Oreodera remota*, Pascoe.

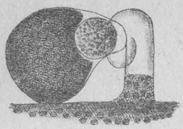
Ægomorphus remotus, Pascoe, Trans. Ent. Soc. n. s. vol. v. pt. 1.

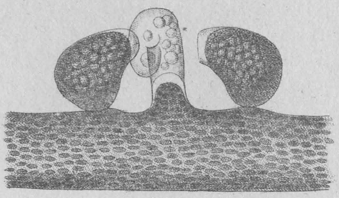
O. elongata, minus depressa, postice valde attenuata, tomento holosericeo violaceo-brunneo vestita : elytris marginibus maculis tribus lateralibus punctisque discalibus nonnullis quorum duobus majoribus pone medium atro-violaceis. Long. 8 lin. ♀.

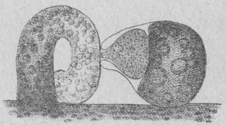
Head brown: eyes distant on the vertex. Antennæ brown; basal half of each joint, from the fourth, greyish. Thorax with the disk as well as the fore and hind margins punctured; lateral tubercles prominent, acute; anterior dorsal ones acute, posterior more obtuse, shining black. Elytra rather elongated, tapering to the apex, which is very obliquely truncated, the external angles of the truncature produced and acute; the base is densely studded with shining black granulations accompanied by punctures; the small rounded violet spots on the disk, near the apex, cover each a shallow shining puncture; the lateral spots are merely expansions of the dark violet border, and are placed, one at a third, another at two-thirds the length of the elytra, and the third, much smaller one, near the apex. Under-surface of the body and legs clothed with ashy-brown pile. The tarsi, especially the claw-joints, are remarkably elongated.

Taken at St. Paulo on the Upper Amazons, on the slender trunk of a dead standing tree. The pile covering this species is of a much coarser texture than that of most other species of the genus; it resembles in this respect *O. glauca*, but it does not lie

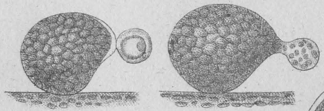
A.


23. b.

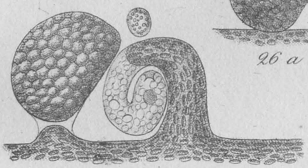

23. a.


23. c.

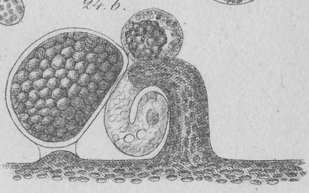

25. a.

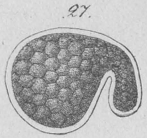

26. b.


c.


24. a.

26 a


24. b.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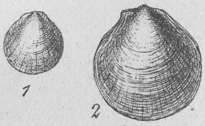
B.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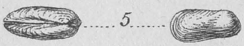
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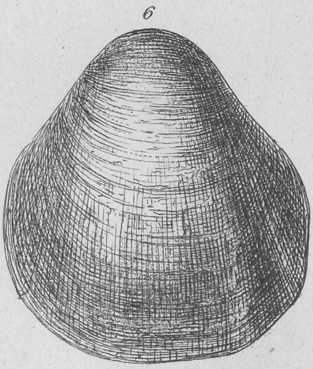
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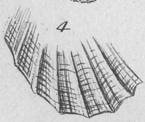
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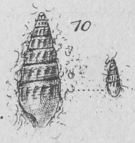
8


9

Auct.


10

Auct.


11