

line, a calcareous Wenlock-Niagara Series, is clear. A second level, a calcareous Hamilton-Devonian, is also reasonably distinct. The intermediate zone, the palæontological evidence of which is confused by differences of physical conditions, may fairly be inferred to hold a middle place between Wenlock and Devonian. If, indeed, there is no Devonian, as some have suggested, my argument will require to be remodelled; but it is difficult to study the magnificent series which intervenes between true Silurian and true Carboniferous in New York and Pennsylvania, and to come away with the conclusion that it is a mere base to the Carboniferous.

VII.—ON THE WEALDEN ENTOMOSTRACA.

By Prof. T. RUPERT JONES, F.R.S., F.G.S.

I SEND as a Supplement to my last communication the subjoined Synoptical view of the species of Wealden Entomostraca, treated of in the March Number of the *GEOL. MAG.*, trusting it may prove acceptable to both collectors and systematists.

TABULATED VIEW OF THE PURBECK-WEALDEN ENTOMOSTRACA OF ENGLAND, AS AT PRESENT KNOWN.

I.—From the Wealden Beds of the Southern Counties.

1. *Cypridea Valdensis* (Sow. and Fitton).¹ Sowerby's "Min. Conch.," pl. 485, (*Cypris faba*).
2. ——— *Austeni*, Jones. In Fitton's plate; "Trans. Geol. Soc.," ser. 2, vol. iv. pl. 21, fig. 1; *GEOL. MAG.* Dec. II. Vol. V. p. 109, 110, Pl. III. Fig. 8.
3. ——— ? *tuberculata* (Sow.). *Ibid.* p. 104, 105, Pl. III. Figs. 2*b*, *c*.
4. ——— ? *Fittoni* (Mantell). *Ibid.* p. 104, Pl. III. Fig. 2*a*.
5. ——— ? *granulosa* (Sow.). *Ibid.* p. 104, 105, Pl. III. Fig. 4.
6. ——— *spinigera* (Sow.). *Ibid.* Fig. 3.

II.—From the Neocomian Freshwater Sands of Shotover, near Oxford.

7. *Candona Phillipsiana*, Jones. *GEOL. MAG.* Dec. II. Vol. V. p. 108, Pl. III. Fig. 3.
8. *Cypridea verrucosa*, Jones. *Ibid.* Fig. 5-7.
9. ———, var. *crassa*, *Ibid.* Fig. 4.
10. ——— *bispinosa*, Jones. *Ibid.* p. 109, Pl. III. Fig. 9-10.
11. ——— *Valdensis* (Sow. and Fitton). *Ibid.* Fig. 11.
12. ——— *Austeni*, Jones. *Ibid.* p. 109, 110, Pl. III. Fig. 8.

III.—From the Purbeck Beds of the Subwealden Boring in Sussex.

13. *Cypridea Valdensis* (Sow. and Fitton). *GEOL. MAG.* Dec. II. Vol. V. p. 110, Pl. III. Fig. 13-15.
 14. ——— *granulosa* (Dunker). *Ibid.* Fig. 16.
- Besides some undetermined specimens. *Ibid.* p. 110.

IV.—From the Purbeck Beds of Dorsetshire.

a.—UPPER PURBECK.

15. *Cypris* ? *gibbosa*, E. Forbes (near *C. spinigera*, Sow.)
16. ——— ? *tuberculata*, E. F. (near *C. tuberculata*, Sow.)
17. ——— ? *leguminella*, E. F.

b.—MIDDLE PURBECK.

18. *Cypris* ? *striatopunctata*, E. F. (? Fr. A. Römer.)

¹ This is the species generally referred to by Dr. Fitton in his Memoir, but not the form figured by him in his plate.

19. *Cypris* ? *fasciculata*, E. F.
 20. ——— ? *granulata*, E. F. (? *C. granulosa*, Dunker.)
 e.—LOWER PURBECK.
 21. *Cypris* ? *Purbeckensis*, E. F.
 22. ——— ? *punctata*, E. F.

These are figured in Sir C. Lyell's "Manual of Geology," see GEOL. MAG. *l.c.* p. 105.

NOTE ON THE DISTRIBUTION OF THE SPECIES.

- Nos. 1, 11, and 13. Very common throughout the Wealden and in some Purbeck beds; also in Germany.
 2 and 12. Rather rare. Figured by Fitton from some unmentioned locality; Peasmarsh, Surrey; Shotover.
 3 and 16. Not uncommon in the Wealden Beds. In the Upper Purbeck.
 4. Accompanies *C. tuberculata* in some places.
 5. Hastings beds of Sussex; Purbeck beds of South Wilts.
 6. Not uncommon in the Wealden beds.
 7. Shotover; Obernkirchen, Hanover.
 8 and 9. Shotover.
 10. Shotover.
 14 and 20? Subwealden Boring, Sussex; Hanover; Middle Purbeck of Dorset?

Addenda et Corrigenda.—At page 101, line 25, *add*: It occurs throughout a bed about 15 feet thick, and is very characteristic of the zone. At p. 101, *add*: *Estheria tenella* (Jordan), "Monogr. Foss. Estheriæ," 1862, p. 31, etc., has been found abundantly by the Geological Surveyors of Scotland in the Coal-measures near Airdrie; and, in one instance (at Glenmavis Burn), it constitutes a bituminous shale, so thickly are the individuals massed together. From Palace-craig, near Airdrie, where *E. tenella* has lately been obtained, I remember to have seen specimens of a much larger *Estheria*, since lost. At p. 102, line 16 from bottom, *for* Fred. *read* Ferd. At p. 105, line 23, *for* on *read* in. Line 32, *after* figured specimen, *add*: = *Cypridea Austeni*. At p. 109, line 8 from bottom, *add*: Mr. H. Caudell has also found *Cypridea Valdensis* in the Ironstone of Wheatley, two miles S.E. of the other locality.

NOTICES OF MEMOIRS.

I.—ON THE GRAPTOLITE SCHISTS OF KONGSLENA IN WESTROGOTHIA, SWEDEN.¹ By Dr. G. LINNARSSON, Director of the Geological Survey of Sweden.

IN the Upper Graptolite schists of Westrogothia two divisions are recognizable—a lower division characterized by *Monogr. lobiferus* (M'Coy) and *Rastrites peregrinus* (Barr.); and a higher division characterized by *Monograpt. priodon* (Bronn) and *Retiolites Geinitzianus* (Barr.). The same divisions, well separated, appear in other parts of the country, and Törnquist has already proposed for them the respective titles of the *Lobiferus Schists* and *Retiolites Schists*.²

Among the localities in Westrogothia where the Upper Graptolite Schist is most accessible is Strommen in the parish of Kongslena. These schists, as well as the immediately underlying strata, the Brachiopod Schists and the Trinucleus Schists, are locally cut into by a considerable stream. The Lobiferus Schist is here a black

¹ Abstract of a paper published in the Geologiska Föreningens i Stockholm Förhandlingar, 1877, Nr. 41; Bd. III., Nr. 13.

² Törnquist, Ofvers. af K. Vet. Akad. Förhandl., 1875, p. 57.