First, it assimilates to the appearance of the larva of certain Entomostraca, being liberated from the ovum like them without eyes; after which it next approaches in character towards the adult Entomostraca, bearing an external resemblance to the bivalve Crustacea, and like these perfected animals possesses organs of sight, from which period they pass out of recognized tribes, and comprise a family peculiar to themselves. These observations tend to corroborate the now generally received opinion that they are true Crustacea, and among this class they appear to fill up a vacancy which alone was wanting throughout the whole range of the Invertebrata,—I mean a sedentary family, one or more of which exists among each successive race of animals.

The Polyp, from its analogy to the larva of the Medusa, may be looked upon as representing the sedentary family among the Acalephæ,—the fossil Encrinites and the larva of the Comatula as representing the same position among the Asteriæ. The Tunicata among Mollusks and the Serpulæ among Annelides appear to hold a similar relation, each to their separate class, as that which the Cirripedia occupy in relation to the Crustacea; and these last, by the different forms which they pass through in their individual development, may be said to represent the type of those separate forms in the sedentary character.

It would scarcely be just for me to close this paper without alluding to how much I am indebted to my friend Mr. Jeffreys both for specimens and a knowledge of the different species, his cabinet being as rich in this department of natural history as in that of British Mollusca; or without expressing my thanks to Mr. Darwin, but for whose kindness I should have been guilty of publishing more than a single error.

EXPLANATION OF PLATES VI. VII. VIII.

Fig. 1. *Balanus balanoides* as it appears when first liberated from the ovum.
— 2. The same after the first moult; 2 *a*, abdominal appendage.
— 3. The same after the second moult; 3 *a*, abdominal appendage.
— 4. The same, lateral view.
— 5. *Balanus perforatus* just liberated from the ovum; abdominal view.
— 6. The same after the first moult; abdominal view.

B. The (*so-called*) eye.
C. Abdominal appendage.
D. Caudal termination.
E. Proboscis.
F. Supposed oral aperture which is protected by the lip or valve G.
H. H. Horns or outer antennæ.
K. K. True or interior antennæ.
1. First pair of natatory legs.
2. Second ditto.
3. Third ditto.

These letters also refer to fig. 14.

Fig. 7. *Balanus porcatus*, abdominal view, just liberated from the ovum.
— 8. *Clitia Strömia*, do. do. do.
— 9. The same after the first moult; abdominal aspect.
— 10. The same after the first moult; dorsal aspect.
— 11. *Chthamalus depressus*, first form, abdominal view; 11 *a*, caudal extremity.
— 12. The same after first moult; dorsal aspect.
— 13. The same after first moult; abdominal view.
— 14. The same, lateral view.
— 15. *Balanus balanoides*: the pupa, or stage of the larva immediately previous to its becoming a fixed animal, in a state of activity.
— 16. The same at rest.
— 17. The same, viewed in front.
— 18. The same, anterior member with sucker and hooks.
— 19. The same, posterior natatory leg and caudal appendage.
— 20. The same, soon after its becoming fixed.
— 21. The same, do. seen from above.
— 22. The same, a little older.
— 23. *a*, Spermatozoa of *Balanus balanoides*.
b, do. do. *Balanus perforatus*.
c, do. do. *Clitia Strömia*.

XXVII.—*A Catalogue of British Spiders, including remarks on their Structure, Functions, Œconomy and Systematic Arrangement.* By John Blackwall, F.L.S.

[Continued from p. 102.]

77. *Agelena celans.*

Agelena celans, Blackw. Linn. Trans. vol. xviii. p. 624.
Argus celans, Walck. Hist. Nat. des Insect. Apt. t. iv. p. 504.

This scarce species may occasionally be met with running upon the ground or concealed under stones in woods about Llanrwst. The palpal organs of the male are developed in August. Though intimately allied to the *Agelenæ*, yet M. Walckenaer has included this spider in the genus *Argus*.

Genus Tegenaria, Walck.

78. *Tegenaria domestica.*

Tegenaria domestica, Walck. Hist. Nat. des Insect. Apt. t. ii. p. 2. pl. 16. fig. 2; Koch, Die Arachn. B. viii. p. 25. tab. 260. fig. 607, 608; Blackw. Linn. Trans. vol. xix. p. 117.
—— *petrensis*, Koch, Die Arachn. B. viii. p. 27. tab. 260. fig. 609.
Aranea domestica, Latr. Gen. Crust. et Insect. tom. i. p. 96.
Agelena domestica, Sund. Vet. Acad. Handl. 1831, p. 125.
Philoica domestica, Koch, Uebers. des Arachn. Syst. erstes Heft, p. 13.

I have received specimens of *Tegenaria domestica* from Cambridgeshire, Oxfordshire and Middlesex; but I have not ob-

served it in the north of England and Wales. It inhabits old buildings, spinning an extensive horizontal sheet of web in the angles formed by the transverse junction of their walls, and in various other situations: connected with the web, which, in addition to its lateral points of contact, is supported by numerous fine lines attached to both surfaces and to adjacent objects above and below it, is a short tube, usually situated in the angle formed by the walls, which being open at its extremities not only affords a retreat to the spider, but a ready medium of communication also with every part of its snare. The sexes pair in May, and in the two following months the female constructs several lenticular cocoons of white silk of a fine texture, measuring about $\frac{5}{6}$ths of an inch in diameter, each of which contains from 130 to 150 spherical eggs of a yellowish white colour, not agglutinated together. All the cocoons are inclosed in separate sacs composed of compact white silk, having particles of plaster, whitewash, and other heterogeneous materials distributed upon their exterior surface.

The spider alluded to by Mr. Jesse in his 'Scenes and Tales of Country Life,' p. 339, as being peculiar to Hampton Court, and there named the "*Cardinal*," most probably is this species.

79. *Tegenaria atrica.*

Tegenaria atrica, Koch, Die Arachn. B. x. p. 105. tab. 353. fig. 825.
—— *sæva*, Blackw. Ann. and Mag. Nat. Hist. vol. xiii. p. 179.

In the autumn of 1843 Miss Gertrude Buller Elphinstone obligingly transmitted to me from Middlesex living specimens of this fine species, which ranks among our largest indigenous spiders; they were captured at East Lodge, Enfield, where Miss Elphinstone then resided, and in reply to some inquiries relative to their habits, she informed me that they were found in dwelling-houses and conservatories. Subsequently I have received specimens from Miss Ellen Clayton, who obtained them at Oxford.

The superior spinners of this species, like those of *Agelena labyrinthica*, are triarticulate, and have the spinning-tubes disposed on the inferior surface of their elongated terminal joint; when thus modified, the principal purpose subserved by these organs appears to be the binding down with transverse lines, distributed by means of an extensive lateral motion, of the filaments emitted from the inferior and intermediate spinners, by which process a compact tissue is speedily fabricated. When in captivity, *Tegenaria atrica* constructs a horizontal sheet of web, with a short tube at one of the margins, serving it for a retreat.

As the tenth volume of 'Die Arachniden' did not come into