	ft.	in.
1. Chalk rubble	0	10
2. Fine sand and flints, with elephant remains	3	0
3. Sand and ferruginous gravel		?
4. Flint-material, waterworn		?
5. Sand, the lower portion with different-sized flints		?

There were no shells or Microzoa.

The Author speculated on the probable lapse of time, and on the importance of the discovery of *E. meridionalis*, a preglacial mammal, so far west. A list of the bones found was given.

MISCELLANEOUS.

Transverse Bone of a Chelonian.

By G. A. Boulenger.

I regret to see that my paper "On the Transverse Bone of a Chelonian" is published in the last No. of the 'Annals' without the corrections which I made on the proof having been attended to *.

Thus, the bone lettered *vom.* on the figure should be *pal.* and the azygous bone should be lettered *vom.*, as may be seen by a comparison with the text.

I now find that I was mistaken in believing in the existence of a transverse bone in *Hydraspis Hilairii*. Professor Stewart, after examining a young specimen of the same species without finding the bone in question, suggested to me that I might have been deceived by the presence of a very deep groove in the jugal, a view which has been confirmed on complete disarticulation of one side of the skull. I had, however, previously taken the precaution of partly detaching the bones, and, finding the suture formed by the anterior and posterior borders of the groove to extend as far inwards as I could see, it did not occur to me that what appeared to be two distinct bones could in reality be but one.

On the "Nursing"-habits of Dendrobates.

By G. A. Boulenger.

Professor Lütken has kindly drawn my attention to a contribution by Wyman which I had overlooked when writing upon the nursing-habits of Batrachians. The curious habit of *Dendrobates* of

* [This was entirely owing to the Author not having returned his proof before the last day of the month.—W. F.]

carrying its tadpoles, recently noticed by Kappler and by H. S. Smith, was observed by Wyman, in Surinam, as early as 1857 (Proc. Bost. Soc., Sept. 1857), and a description and figure were published in the 'American Journal,' 2nd ser. vol. xxvii. 1859, p. 5, fig. 1. The animal is named *Hylodes lineatus*, D. & B.; but it is quite clear from the figure that it is *Dendrobates trivittatus*, Spix. The question of the sex of the parent remains obscure, for although he speaks of it as "the mother," Wyman does not appear to have investigated the matter. A specimen with young was fortunately preserved in the Museum of Comparative Anatomy at Cambridge, U. S. A.

On the Species of Galathea *found on the Coasts of France.*

By M. Jules Bonnier.

All the carcinologists who have taken up the study of the Galatheidæ agree in recognizing the difficulties presented by these *Anomura* in the precise determination of the different species. I was led to see the confusion that reigns in this group when, in the course of researches which are being made by Professor Giard and myself upon the Bopyrina, we arrived at the study of the genus *Pleurocrypta*. The necessity of establishing with certainty the name of the host infested by each of our species of Epicaridæ determined me to undertake a preliminary study, if not of the entire group, at least of the species most common on the French coasts. I hope soon to publish the results of my observations, with the necessary details and figures, in the 'Bulletin Scientifique,' and here I will only give the new diagnoses which I propose for some common and insufficiently described species.

* * * *

The genus *Galathea* is represented on our coasts by five species which may be distinguished by the presence or absence and the number of the epipodites on the thoracic feet, and then by the relative sizes of the ischiopodite and meropodite of the third maxilliped.

1. *Galathea intermedia*, Lillj. (= *G. Andrewsi*, Kin., *G. Giardi*, T. Barr., *G. Parroceli*, Gourret).

Upon the thoracic feet there is only a single pair of epipodites placed on the first pair of feet; carapace nearly smooth in the adult and terminated by an acute triangular rostrum, with four pairs of scantily developed lateral teeth; two short spines upon the rostro-gastric groove; *ischiopodite of the third maxilliped shorter than the meropodite*; inner branch of the last three pairs of pleopoda in the male only of a single joint. Besides the normal differences of the

pleopoda in the two sexes the sexual dimorphism affects the rostrum, which is more elongate in the male, and also the first pair of thoracic feet of the male, which attain a much greater development than in the other sex; sometimes the left, sometimes the right chela presents the deformation characteristic of the male.

This small species, which lives at depths of 10–50 fathoms, has been noted on the Scandinavian, Danish, Dutch, and English shores of the North Sea, in the Channel, in the Atlantic (England, France, Madeira, Azores), and in the Mediterranean.

2. *Galathea squamifera*, Leach (= *G. glabra*, Risso, *G. digitidistans*, Sp. Bate).

The first three pairs of thoracic feet are furnished with epipodites; carapace striated with numerous well-marked grooves furnished with short hairs; rostrum widened, armed with four pairs of lateral teeth, of which the first three pairs are well developed, and the posterior, at the inner angle of the orbital cavity, much reduced; two short spines upon the rostro-gastric groove; basal joint of the inner antenna with three anterior processes; *the ischiopodite of the third maxilliped shorter than the meropodite*; the inner branch of the last three pleopoda in the male is biarticulate; thoracic feet of the male of the same size as those of the female, and presenting in the first pair the sexual deformation in both chelæ.

A littoral species which has been noted in the North Sea and on the English and French coasts of the Atlantic and Mediterranean.

3. *Galathea nexa*, Embl. (non *G. nexa*, Heller).

The first three pairs of thoracic feet are furnished with epipodites; carapace striated with grooves furnished with short hairs; rostrum with nine nearly equal teeth, one median and four lateral pairs, the last pair smaller; no spines on the rostro-gastric groove, which is only undulated; basal joint of inner antenna with three anterior processes; *ischiopodite of the third maxilliped nearly equal to the meropodite*, which is armed with a single spine; the first pair of thoracic feet has the carpopodite and the propodite covered with long close-set hairs; the inner branch of the last three pairs of pleopoda of the male is biarticulate; in the first pair of thoracic feet of the male it is the left chela that is modified.

A species from small depths which has been found in the North Sea, on the Atlantic shores of England, and in the Channel.

4. *Galathea dispersa*, Sp. Bate (= *G. nexa*, Heller).

The first three pairs of thoracic feet are furnished with epipodites; carapace striated with grooves adorned with short hairs; the rostrum has nine teeth, the median one longer than those of the four

lateral pairs, which decrease from the first to the fourth, which is much reduced; on the rostro-gastric groove three pairs of teeth, of which the middle ones are the most strongly marked; basal joint of the inner antenna with three anterior processes; *ischiopodite of the third maxilliped longer than the meropodite*; the inner branch of the last three pleopoda is biarticulate; in the first pair of thoracic feet of the male it is the right chela that is modified.

A species from small depths found in the North Sea, on the shores of Ireland, in the Channel, and in the Mediterranean.

5. *Galathea strigosa*, Linné.

There are no epipodites upon any of the thoracic feet; carapace with the regions well marked by deep grooves furnished with long and close-set hairs; rostrum elongated, with nine teeth, of which the median one is the longest and the last lateral pair the smallest; from two to six teeth (according to age) upon the rostro-gastric line; two teeth a little behind the insertion of the outer antennæ and two other lateral ones on the hepatico-gastric grooves; basal joint of the inner antenna with three processes: *ischiopodite of the third maxilliped longer than the meropodite*; the inner branch of the last three pleopoda of the male is biarticulate. The two chelæ of the first thoracic feet are modified in the adult male.

This large species, which is found only at and below a depth of 10 fathoms, is the most widely distributed *Galathea* of our coasts; it has been noted as occurring from the North Cape and all the northern seas of Europe to the Canary Islands, and in the Mediterranean and Red Sea.—*Comptes Rendus*, June 11, 1888, p. 1686.

Remarks on the Phylogeny of the Lamellibranchiata.

By Dr. Benjamin Sharp.

The author brought forward some points regarding the classification of the Lamellibranchiata, and stated that in considering this group a diversity of type was to be found that is equal to, if not greater than, that found in any class of the animal kingdom, with the possible exception of the Hexapoda.

In examining the different forms, he pointed out two well-marked extremes, *Ostrea* and *Aspergillum*. In the former, as is well known, the two large unequal shells entirely cover the body, and they are closed by one large muscle, the adductor. The large and important organ, so common in the Lamellibranchiata generally, the foot, is entirely absent. The mantle-edges are separated for nearly their whole extent, and there is no indication whatever of the mantle uniting to form a siphon.

In *Aspergillum*, on the other hand, the two shells are so diminu-