

it is true, as the season is late or early, but yet each retaining its general place in the succession, and each appearing at the same time.

The banks of the railway-cuttings, which some condemn as being ugly, are the flower-gardens that gladden the eyes, especially in early spring, of thousands who have been pent up in the smoke of London for months. When first the golden coltsfoot spangles the banks, I can scarcely resist the desire to be moving along the lines. These flowers come and go in a day, almost as if by magic. They are followed, at least near London, by the lilac lady-smock; then come the cowslips, and in the copses which are often to be seen at the bottom of the banks, and in the hedges by the field-sides, the primrose and the wood-anemone, and, more obscure, but easily seen by sharp eyes, the wood-sorrel; and the hyacinth forms a blue carpet in the distance, and the beautiful golden broom and furze on the bank itself. Then come the large white beds of the wild chervil (*Anthriscus sylvestris*); and these are followed by the ox-eye daisy, all nearly of the same height, and each turning its little star-flower towards the great luminary as the world moves. The plants of the same kind being all nearly of the same height add much to the beauty of their appearance. This is especially seen in the fields of clover, which form a purple carpet; but I was especially struck with it in an alpine meadow that was just about to be cut down near the hospital on the Via Mala: there the flowers showed four beautifully even carpets, each to be seen through the other. Just above the pale green herbage, chiefly composed of the alpine dandelion, came the purple gentian, then the blue *Phyteuma*, and above all was the beautiful golden *Trollius*, or globe-flower. It was a sight never to be forgotten.

Planorbis crista.

To the Editors of the *Annals and Magazine of Natural History.*

GENTLEMEN,—Will you permit me to withdraw that portion of my letter in your last Number which states that I followed M. Moquin-Tandon in adopting the Linnean name *Planorbis crista*? Having adopted it, as any reader of my book may see, in opposition to the views of that author, it only remains for me to apologize to you for my carelessness in making the statement.

I am, Gentlemen,

Your obedient Servant,

LOVELL REEVE.

May 1, 1863.

On the Occurrence of Lymnæa stagnalis in Scotland.

By ROBERT O. CUNNINGHAM, Esq., Prestonpans.

Mr. Lovell Reeve, in his recently published valuable work on the Land and Freshwater Mollusks of Great Britain, says, with respect to *Lymnæa stagnalis*, "This fine species stands alone among the Lymnæacea of the Eastern hemisphere for the conspicuous prominence of its size. In the Western hemisphere it is represented in a remarkable degree of parallelism by the *Lymnæa jugularis* of

Lake Superior, distinguished by the same prominent assemblage of characters. It ranges, in this country, with *L. auricularia*, not being found in Scotland, and appearing extremely rare and local in England, north of the midland counties."

In the summer of 1857, while engaged in looking over the collection of Mollusca of the late Prof. Fleming, of Edinburgh, he mentioned in the course of conversation that the *Lymnæa stagnalis* was reported to have been obtained by the late David Don, the botanist, in Gulane Loch, between seventeen and eighteen miles to the east of Edinburgh; but that, so far as he was aware, its occurrence in the aforesaid locality had not been confirmed by any subsequent observer. At the same time, he strongly recommended me to attempt, if possible, to ascertain the truth of the report. Accordingly, since that time I kept a sharp look-out for this interesting species in the habitat specified. It was not, however, until the 30th of April of the present year that my efforts were crowned with success, when I succeeded in procuring abundance of excellent specimens.

Gulane Loch is a sheet of water of inconsiderable depth, but of some extent, in the sandy common of the same name, which slopes gently downwards to the seashore in the neighbourhood of the small village of Aberlady. Owing to the extent and variety of its surface, this common has for a long time been known to the botanist as a locality for rare plants, several of which occur in the loch itself,—e. g. *Utricularia vulgaris*, *Menyanthes trifoliata*, *Sium repens*, and other plants which are not commonly met with in the adjoining district. Owing to the water being very much choked up with aquatic plants, it becomes a matter of very considerable difficulty to drag it with a net, more especially in the middle of summer, when the plants have grown up; and to this I attribute my want of success hitherto; for, on visiting the locality last month, which was much earlier than my wont, and when most of the plants were yet beneath the surface of the water, I easily procured the specimens already mentioned. The animals were generally clinging to plants of the genus *Chara*, near the surface of the water, and were associated with individuals of *Lymnæa peregra*, *L. palustris*, *Physa fontinalis*, *Cycas cornea*, and various small species of *Planorbis*. I brought home about two dozen specimens, the greater number of which are at present in a state of captivity, and appear to be, on the whole, very active. I think it of some importance to record this fact, because of its interesting relation to the geographical distribution of this so much the finest species of our British Lymnææ. Should Mr. Reeve desire to possess Scotch specimens of it, I shall be only too happy to furnish him with them.

Descriptions of two new Species of Pycnogonoidea.

By GEORGE HODGE.

Pallene attenuata, n. sp., Hodge.

Rostrum thick, constricted at the base, swelled near the middle, and rounded at the apex. Legs long, sparingly hispid; first, second,



Vlaams Instituut voor de Zee
Flanders Marine Institute

VLIZ (VZW)
VLAAMS INSTITUUT VOOR DE ZEE
FLANDERS MARINE INSTITUTE

Oostende - Belgium

27070

Hodge, G. (1863). Ann. Mag. Nat. Hist. 19 (3rd ser.)
463-464

and third joints short, the second the longest; fourth rather stout, and as long as second and third united; fifth and sixth slender, and about the length of fourth; seventh very short; eighth convex on outer margin, straight on inner, with a few short hairs scattered along both margins. A single claw at the extremity, which, when pressed against the limb, reaches to junction of seventh joint. Foot-jaws long and slender, projecting considerably beyond end of rostrum. Anterior portion of thorax attenuated, and advanced to nearly on a line with the tip of rostrum, where it slightly bulges, and gives origin to foot-jaws; immediately behind which is seated the oculiferous tubercle, which is long and narrow. Abdomen long, rounded at apex, slightly tapering to base. At the origin of each leg on the dorsal aspect is a large wart-like protuberance.

One female of this species was taken near the Dogger Bank, in 25-30 fathoms, on an oozy bottom.

Nymphon brevirostre, n. sp., Hodge.

Rostrum short and stout; foot-jaws thick, divergent; second joint or hand nearly as long as first; palpi five-jointed, brush-like; first and second joints long and nearly of the same length, each of which is equal to the three terminal, the last being the shortest. Thorax robust. Abdomen stout and conical. Oculiferous tubercle midway between first pair of legs. Legs stout, sparingly furnished with stout spine-like hairs; first and third joints short; second slender at origin, but swelling upwards; fourth and fifth each as long as the three first; sixth much longer, slender; seventh short; eighth long, slightly bent, and furnished along its inner margin with a few short spines, and terminating in one moderately large claw and two small ones.

One female of this species was taken near the Dogger Bank, under the same circumstances as the foregoing.—*Trans. Tyne. Nat. Field Club*, 1863, p. 281.

On the Change in Form of the Teeth of the Susu (Platanista).

By Dr. J. E. GRAY, F.R.S. &c.

The front of the beak, in the younger specimens, is dilated and oblong, but it gradually becomes as compressed as the rest of the beak; and in the older specimens the end of the beak is turned up.

The teeth in the front half of the younger specimens are very long, slender, subcylindrical, slightly arched, and more or less flattened on the front and hinder side by the friction of the teeth of the other jaw, which alternate and fit between them when the jaws are closed. The hinder teeth of the animal at this age are short and cylindrical, with a conical end; the hindermost ones are very short, scarcely raised above the gums.

As the animal increases in age, the bases of the teeth increase in longitudinal diameter, and the apices become worn off, until they be-

come the short, compressed, conical teeth figured by Sir Everard Home in the 'Philosophical Transactions' for 1818-1820, where they have a compressed, more or less hollow base; but in the more aged animal the bases of the teeth are solid, squarish, very rugose, or divided into short tubercles or broader lobes.

In the Museum of the College of Surgeons there is the skull of a young specimen, and another of an animal rather older than the one above described; and in the British Museum there is one rather older, showing the gradual change in the form of the teeth, and intermediate between the younger state and the jaws figured by Sir E. Home, which are also to be seen in the College of Surgeons' Museum. In the British Museum there is the skull of an aged individual, in which the teeth have solid rugose and lobed bases, as above described.

The change in form is so great that I was inclined at one time to consider the skull of the young animal as forming a genus distinct from *Platanista*, which is always characterized as having compressed teeth; and any one comparing the teeth of the old and young animals, without the intermediate gradations, might, at first sight, easily come to the conclusion that they could scarcely pass from one form to the other, as the long cylindrical front teeth of the young animal are converted, in the older one, into short, conical, compressed ones, by the wearing away of the tops and the alteration of the form of the base.

The sutures of the skull of this animal seem to be soon knit, for they are well closed in the skulls of the young animals.

Aquatic Hymenoptera.

At a recent meeting of the Linnæan Society, Mr. J. Lubbock read a paper on two aquatic Hymenoptera, one of which uses its wings in swimming. Till now, the author stated, no aquatic Hymenoptera or Orthoptera had been discovered, though the former group alone has been estimated as comprising some 50,000 species, 3500 of which live in Great Britain. In a basin of pond-water, on an early day in August last, he had been astonished to see one of these Hymenoptera (*Polynema natans*) quite at ease in the watery element, and actually swimming by means of its wings. At first he could hardly believe his eyes; but having found several specimens, and shown them to some friends, the fact was undoubted. The same phenomenon, moreover, was again observed, within a week, by Mr. Duchess, of Stepney. Another of the aquatic Hymenoptera, now first described under the name of *Walkeria aquatica*, was found in the same pond; but this, unlike the former, which swam by means of its wings, held its wings motionless when under water, and used its legs only; and though these were neither flattened nor provided with any well-developed fringe of setæ, they seemed very well to serve this purpose; indeed the motion of this species was more rapid than that of the former. Both species are fond of creeping along the sides of the vessel in which they are kept, or on the leaves and stems of aquatic plants; but they frequently quit their support, and swim boldly out