

deposits of one and the same river. Neither are they Miocene, if the evidence of fossils is to be trusted; and we have no other guides in this case but the lithology and palæontology, since the identifiable and most characteristic fossils are also found in the Middle Bagshots of Bournemouth, in a precisely similar matrix, and in the same state of preservation. In determining the age of the deposits, great stress was laid on the supposed identity of the *Sequoia Coultasic* of Bovey with that of the Hamstead beds; but by visiting Bovey not long since, and obtaining perfect specimens of the cones, I satisfied myself that the Bovey plant is a true *Sequoia*, with scales growing at right angles from the axis, and with compressed winged seeds; while even more perfect specimens from Hamstead, obtained soon after, showed the scales inserted at the base, and the seeds wingless, falling thus more properly into *A. hrotaxis*. The foliage growth is also entirely different, though the leaves are similar. The point is of some importance, yet the mistake having been made by such "heroes of geology" as Heer and Pengelly, is extremely hard to eradicate.

J. STARRIE GARDNER.

**A Rejected Address.**

CONSCIOUS that the protestant is a weak-kneed *urochs*, I ask permission to protest by implication against a common trivial mistake. How long will people go on writing about "political meteorology" and the like, meaning, by this, haphazard prediction? The meteorologist is as near a cousin to the local "weather-prophet" as Helmholtz to the artisan who is making a spectacle-case; or, to use an illustration lent me by a lady, as the astronomer is to the astrologer.

April 9.

NUBES.

**THE LIMBS OF LEPIDOSIREN PARADOXA.**

DR. GÜNTHER, in his valuable work, "The Study of Fishes," says of Natterer's *Lepidosiren* from the Amazons, "It is one of the greatest desiderata of

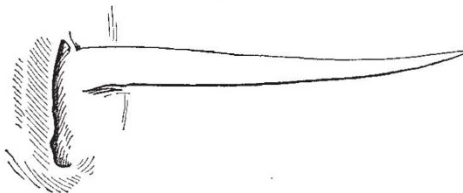


FIG. 1.

natural history collections." In fact, only seven years ago the opinion was current that Natterer had been deceived by specimens of *Protopterus* imported from Africa, or that in some way African specimens had been mixed with his American collections.

I was therefore greatly pleased to obtain recently for the Oxford University Museum, by purchase from a London dealer, specimens of the *Lepidosiren* of the Amazon well preserved in spirit. I immediately noticed a peculiarity about the pelvic fins, which it is the object of the present note to make known. These fins, whilst more robust than the pectorals, were remarkable for exhibiting upon their dorso-mediad surface a clothing of well-developed "villi," the appearance of which is best gathered from the accompanying sketches (Figs. 2 and 3).

As many as four "villi" were in some cases united at the base, or mounted on a short trunk.

No such "villi" are known in the African *Protopterus*, nor in *Ceratodus*.

The specimen figured by Natterer showed no trace of these "villi." This was a female, whilst the specimens recently imported which exhibit the "villi" are males.

I am at present engaged in an examination of the minute structure of these "villi" of the pelvic limbs of

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*Lepidosiren*. Whether tactile or respiratory, they form a most remarkable feature, and it seems worth while to place a brief notice of them at once in the hands of naturalists.

Natterer's figure of *Lepidosiren* (which has often been copied) is not good. It does not give a fair idea of the proportions of the animal. I hope soon to publish a careful drawing of life-size. *Lepidosiren* is distinctly

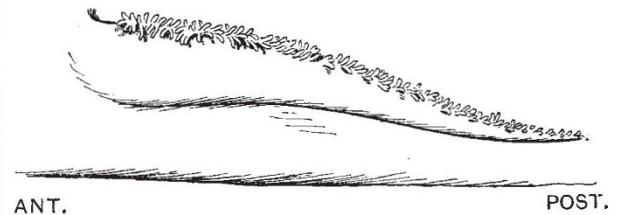


FIG. 2.

longer in proportion to breadth than is *Protopterus*, and there is a greater distance between the pectoral and pelvic fins in *Lepidosiren* (in proportion to total length) than in *Protopterus*. The median fin is not so deep in *Lepidosiren* as in *Protopterus*.

The woodcuts are as follows:—

Fig. 1 represents the left pectoral fin and opercular opening.

Fig. 2 shows the left pelvic fin, drawn to the same scale, in its natural position of rest; the long axis nearly parallel with the long axis of the body.

Fig. 3 shows the same pelvic fin turned forward (a position which the animal can give it in life), exposing the dorso-mediad face of the fin with its numerous "villi."

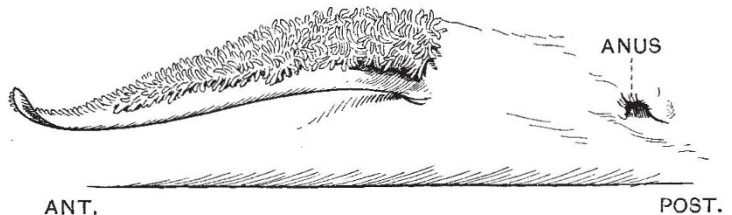


FIG. 3.

The lifting of the fin has also exposed the anus, which lies on the left side of the median line of the body.

March 20.

E. RAY LANKESTER.

**BEEES AND DEAD CARCASSES.<sup>1</sup>**

DURING the last two hundred years our knowledge of natural and physical science has advanced by leaps and bounds, until, in most departments, it has risen to a level far exceeding anything which has been recorded during historic times. Hence, in dealing with improbable or impossible statements which have come down to us from classical or mediæval times, we are perhaps too apt to forget the old proverb that "there is no smoke without fire," and to dismiss them at once as vulgar superstitions, instead of seeking for the substratum of truth which will often be found to underlie them. Even so plain and simple a statement as that ants store up food was long discredited; for, as the ants of Northern Europe do not possess this habit, it was supposed to

<sup>1</sup> "On the so-called *Bugonia* of the Ancients, and its Relation to *Eristalis tenax*, a Two-winged In-sect." By Baron C. R. O'ten-Sa'cken. Reprinted from the *Bulletino della Societa Entomologica Italiana*, Anno xxv. 1893.