

presence of foreign matter, apparently dust, in the interior of his magnetic instruments. He now writes:—"In NATURE, vol. vi. p. 286, Fig. 2, is a thing very like the organic functions I speak of as being seen on the knife edge and plane of the vertical force magnetograph. I have described it as looking like the 'inter-lacing tea leaf stalks,' doubtless it was beginnings of life."

Can any of your readers state if it is probable that such objects are to be found in the place he names.

Kew Observatory, Oct. 23

G. MATHUS WHIPPLE

THE APPEAL FOR SKELETONS OF WILD ANIMALS

I AM glad to see that Mr. Moseley has started the question of the acquisition of skeletons of wild animals, a subject which has hitherto been too much neglected by those who have charge of museums. Mr. Moseley might have put his case more strongly than he has done; for not only are the two museums he mentions destitute of skeletons of the wild specimens of the larger *Felidae*, but, so far as I know, no European museum possesses more than skulls. Possibly there may be an entire skeleton in the very rich museum of Leyden, but there are none in the British Museum, nor at Paris, nor Vienna, so far as I have been able to examine those collections. We are better off at Cambridge, for we not only have a considerable series of skulls of tigers, leopards, and the so-called "maneless" lion of Guzerat, but a fine skeleton of a Puma (*Felis concolor*) sent home from Florida in excellent condition by one of that much-abused class, "sportsmen."

There is, however, a subject even more important than the acquisition of foreign animals, namely, the collection of a good series of skeletons of different ages and sexes of all the European mammals. This is no easy matter, even in the case of the commoner species. We have only lately succeeded in acquiring an adult skeleton of the Red Deer (*Cervus elaphus*); but the one we have obtained (through the kindness of Mr. Balfour, of Trinity College) is an adult Royal stag, so fine as to be worth waiting any length of time for. Again, how many museums possess a skeleton of the brown bear of Europe, or the lynx, or the glutton, or the wolf, or even really good skeletons of such comparatively common animals as the badger, the otter, and the numerous small *Viverridae*? And yet the bones of these occur more frequently in turbaries than do those of the extinct *Felidae* in caves, while they are certain to become extinct from the pressure of civilisation and the consequent restriction of their range, far sooner even than those large animals which are directly persecuted, as tigers are in India.

I find it easier almost to get skeletons sent from abroad than to have them collected in England. Any gentleman who unites with love of sport a knowledge of natural history—no uncommon combination—will often send home considerable collections, and take great trouble to procure the different animals that he has been asked to look for. Such a collection we have just received from Lord Walsingham (of Trinity College), formed by him in North-west America. It includes complete skeletons of *Ovis montana*, *Antilocapra americana* (Pronghorn), white-tailed stag, mule deer, black bear, beaver, martin, besides a series of separate skulls. Last year we got an *Otaria* from San Francisco, one of the herd which the intelligent citizens of that capital are wise enough to preserve, and a musk-ox from the German North-Polar Expedition. In short, there are few animals that may not be acquired by energy and perseverance; and travellers in distant countries are fond of showing that they have not forgotten their old university; but it is infinitely more difficult to induce gentlemen, or their keepers, in England or Scotland, to collect the wild animals that still linger in their preserves; and this is the direction in which I venture to think an effort should be made.

The "directions for preparing skeletons" given by Mr. Moseley are excellent. Allow me to make one or two additions to them. It is most important to note the sex of each animal, with the locality in which it was taken and the date of its capture. I do not recommend the soaking of the carcase in water after the muscles have been removed. It loosens the ligaments, and makes the after-process of drying more difficult—a process which is difficult enough in Europe, especially in mountainous districts. Moreover, it is difficult to find a suitable place to do it in abroad. I find the colour of the bones not seriously affected by the non-extraction of the blood. The skeleton may be packed up before it is quite dry if sawdust be substituted for hay or straw. Pine sawdust is especially good for this purpose. It is very fine, dry, and slightly antiseptic.

Museum, Cambridge, Oct. 24

J. W. CLARK

THE ZOOLOGICAL STATION AT NAPLES

SINCE the last notice given in NATURE,* the building is almost finished, and all endeavours are now concentrated upon the arrangements of the interior. Two more months, and the fifty-three tanks of the public aquarium will be ready to be filled with the clear and limpid water of the Mediterranean.

The upper story receives still more attention. My plan of letting the tables having met with great applause from all sides, has worked some changes in the general arrangements of the rooms. The room previously intended for the library has been added to the great laboratory, which now measures 40 ft. in length, 25 ft. in breadth, and 24 ft. in height. It has three great arched windows 20 ft. high and 10 ft. broad, to the north, and three smaller ones looking into the small light-court in the centre of the building. The former three windows will give light to six microscopic tables, whilst the three smaller windows will yield enough light to three tables fitted up for common anatomical work. In the centre of the laboratory a wooden stand will be placed, 27 ft. in length and 8 ft. in breadth, and having three stories. This stand will bear tanks of different sizes—the lowest story the heaviest, the upper the smallest. The latter will be moveable, so as to allow close inspection on the working table. Each of them will receive a small current of sea-water, and will have its own outlet, so as to isolate completely its contents from the neighbouring tanks. There will be plenty of room for some sixty or eighty tanks. The water running out of them is collected, and runs down into the tanks of the public aquarium. Four doors unite the laboratory to the three adjacent smaller rooms, which are provided each with a working table and with tanks, whilst the fourth door leads to a corridor and to the staircase. A gallery all round the walls of the laboratory, at the height of fourteen feet, will furnish room for the library. Two small staircases unite it to the floor of the laboratory, and four narrow doors to four adjacent small rooms, of which two may be used as reading-rooms for making notes, &c. It will be absolutely forbidden to take any book out of the building.

On the same floor as this great morphological laboratory, the physiological one is to be found; indeed the door which opens to the corridor leads also immediately to the room destined for this purpose. Its length is 20 ft. by 14 ft.; it has several glass doors to the west, opening upon an ante-room as wide as the room itself, and which, in case of need, can easily be transformed into a laboratory, thus enlarging the physiological laboratory to double its present size; it has a separate tube, with a constant supply of sea-water, and a table for microscopic work. Prof. du Bois-Reymond has promised to assist in arranging instruments and apparatus for experimental use.

* See NATURE, Vol. v. p. 437.