The Swedish Fisheries

IN NATURE of April 20 you ask for an explanation of the difference in the figures of Dr. Oscar Dickson and Dr. Lundberg relating to the Swedish fisheries.

1. You mention that Dr. Lundberg, in the "Notizen über die Schwedischen Fischereien," 1880, valued the herring fisheries of Sweden at 5,000,000 marks (3,547,303, p. 27), but you forget that Lundberg's book only refers to the "Ostsee und Susswasser Fischereien," and Dr. Dickson only speaks of the west coast or North Sea fisheries.

2. About the "millions of barrels representing millions of pounds sterling," the Swedish North Sea Herring Fisheries statistics value the barrel herring now only at 1 to 2 shillings in the first (fisherman's) hands. And you will notice that the millions of barrels mentioned by Dr. Oscar Dickson in the *Scotsman*, refer to a former period, nearly a century ago, not to the present period, commenced 1877.

Pyphis, Sweden, May 3

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THE OLDEST EGYPTIAN TOMBS AND TENANTS

ALTHOUGH the existence of mankind in the dawn of civilisation at the Stone age, and using Palæolithic tools is distinctly proved in Northern Africa and Algeria, the specimens discovered on the soil of Egypt are not so unequivocally Palæolithic, although those published by Sir J. Lubbock approach the type. Of the Neolithic stone weapons, numerous examples have been found, some undoubtedly in use at the time of the eleventh and twelfth dynasty, others probably descending to the eighteenth and nineteenth dynasties. The indications, however, of sepulchres of the Palæolithic period are absolutely wanting on the soil of Egypt, and except the stone huts in the Arabian Peninsula, belonging to the more ancient period, there are no remains of contemporary construction.

In the graves around the oldest pyramids Neolithic remains are occasionally found, and there can be no doubt that flint weapons were extensively used at the oldest pyramidal period, which, however, was one of copper and bronze, copper and even iron objects having been found in the air passages of the great Pyramid, and indications of the use of the hollow bronze drill in the stone sarcophagi of the same epoch. The pyramids were arranged chequer-wise in groups, and each separate site belonged to a different dynasty, the kings and other royal personages being inhumed in them, while around the pyramid of each site were arranged the tombs of the courtiers and officers of the court. The arrangement of these tombs differs at the respective sites. At Sakkarah they are arranged in rectangular groups of streets, and the same arrangement prevails at Gizeh. At Abusir the last undulations of the step-shaped hills which crown the pyramids are occupied by some tombs scattered about of the time of the fourth and fifth dynasty. At Dashour there are also some tombs of a very early and unknown period, and at Meidum, tombs of the third dynasty. All these tombs bear a general resemblance to each other, and pass by the general Arab name of *mastabas*, "counters," or "beds." At first sight they look like the pedestals of pyramids, or truncated pyramids, being of rectangular shape, with sloping sides; they are, however, not square, but rectangular, and the angle of the sides is so great that the walls, if produced upwards, would rise to 600 feet, an impossible height for such a construction. Consequently they are not of the class of pyramids, but only show the Egyptian preference for converging lines, instead of purely parallel or rectangular forms; the short sides also in some instances are step-shaped, the layers of stone are squared and laid in horizontal courses, and not polygonal masses. These rectangular masses of masonry or brick-work, the details of which will be subsequently described, did not contain the sepulchral chamber, for that is always found in the solid rock beneath, the access to which was by a

rectangular shaft or well, down which the coffin and mummy were lowered by ropes; the mass of masonry above had only in it the sepulchral chamber and the cell for the sepulchral statue. The general "cemetery," with its street of tombs, was called in Egyptian *kher* or *khet*; the individual tombs bore the general name of *maha* "sepulchres," which was applicable to any class of tomb, whether those of the kings or used by the inhabitants of the town or city. The term *mer* was applied to any tombs which had pyramidal construction, as those made of brick with pyramidal tops cut out of the flank of the hill at the time of the eleventh dynasty at the Drah Abu'l Neggah, in the western quarter of Thebes; but the term applied to the syringes or hollowed passages and tunnelled tombs at Gournah and elsewhere is *asi*, a word applied to a plant, perhaps a "reed," but also meaning a chamber, and this word was used to express the so-called mastaba, or quadrilateral sepulchre of the early dynasties. The great necropolis of Sakkarah is supposed to be that of the ancient Ka-Kam, the city of the Black Bull, known to the Greeks under the name of Cochoe, and the pyramid there to have been named *Ap*, the "elevation" or "Mount," and the pyramid was step-shaped, made of unbaked brick, probably when first built in seven stages.

The mastabas were the mausolea of the richer and more important personages of the court hierarchy and Egyptian bureaucracy, for the poor and slaves were not buried with any consideration; they were hustled into superficial graves about three feet deep beneath the soil, and at this distant period of time are found only as skeletons, with no linen wraps remaining or other traces of emblems, and must therefore be regarded as the oldest and most primitive examples of Egyptian interment, and their bodies were unprovided with coffins. Occasionally, perhaps, some of the least poor, or slaves of extraordinary merit, had rectangular vaulted chambers, constructed of brick-work, vaulted and covered with a white coating; in the interior of these rude graves are found small vases or cups of coarse pottery or calcareous stone or alabaster, but uninscribed. These graves recall to mind those of the later Roman period, although the Memphian ones belong to a period long anterior.

The mastabas vary in size and dimension, but their average or normal dimensions are nearly fifty yards long, twelve yards wide, and thirty deep. The chief of these mastabas is the Mastabat-il-Pharaoun, which recent discoveries show to have been the sepulchre of Unas of the fifth dynasty, who was not buried in a pyramid. The mastabas are said to be peculiar to Gizeh, and not to be found elsewhere, and a long interval of civilisation must have preceded the construction of these tombs, as they show a considerable knowledge of architecture by their regular and geometric construction, while the square blocks and regular layers, each vertical joint being overlapped by a square stone, evidence considerable technical experience in the art of masonry. The other mastabas are made of similar masses of brick-work, and the bricks are of two kinds, those of the oldest mastabas, made of rectangular yellow bricks, composed of sand, pebbles, and some Nile mud, their dimensions being 22×11×7 of a metre, and black bricks made of alluvial soil and straw, larger in size, being 38×18×14 of a metre; these bricks are not older than the middle of the fourth dynasty, while the others are as old as the second line. The black bricks continue till the time of the Romans, and both kinds are sun-dried, no burnt bricks, with the exception of the conical stamped bricks, found at the tombs of the Drah-Ahi'l Neggah, having been employed in constructions till the age of the Cæsars.

In the masses of brick-work or masonry which stood above the soil over the sepulchral chamber, hewn out of the solid rocks beneath, were constructed the mortuary chapel, for the performance of masses or liturgies to the