

Many years ago, when I was the Naturalist at the Scottish Marine Station, St. Andrews, I paid special attention to *Myxine*, for the reason that no one had ever seen a male specimen, and very little was known about its eggs. One egg only was known to scientific men, so far as I am aware, viz., a single specimen in the Bergen Museum, Norway. No doubt it was the study of this unique and valuable specimen which enabled Professor Allen Thomson, of Glasgow, to describe and figure the hagfish's egg in his article "Ovum," in Todd and Bowman's Encyclopædia of Anatomy. I dissected many hundreds of specimens and found plenty of eggs, yellowish brown, very hard to the touch, and about the size of a small bean. Each egg was narrow at the two ends, as Professor Thomson had described, but I never found the bunch of hooks at both apices, which appeared in his description and figure. Carl Claus, in his "Zoology," says that "the deposited egg is recognisable by the filaments attached to both poles, and which probably serve to fix it to sea weeds," while Professor Arthur Thomson, of Aberdeen (Outlines of Zoology, 1892) states that "each has an oval horny case, with knobbed processes at each end. By these they become entangled together." In Dr. Lenn's "Synopsis der Thierkunde," Hanover, 1883, Bd. I., Professor Hubert Ludwig describes the "horny shell as provided at both ends with a long bunch of thread-like hooks." This bunch of threads or filaments is evidently pushed out after the eggs are deposited, for I saw no trace of them in the large number of eggs, many thousands, which I removed from ripe hagfish in Scotland. I may add that I found no males, and this was due to a fact, one of the most astonishing in the whole field of zoology, viz., that only the very small specimens are males, and, as they grow bigger, each changes its sex, and, later in life, produces not sperms but eggs. This sex-transformation, first discovered by Mr. J. T. Cunningham, and by the famous Dr. Nansen, is called "protandry."

It was with very great delight that I found in July last some of these exceedingly rare objects, the ripe eggs of *Myxine*, at the Biological Station, St. Andrews, N.B. Professor Philip Cox, of Fredericton, who was engaged in scientific researches at the station, had placed them in a sea-water tank, under a constant circulation of water, with the hope that they might hatch out. The larval hagfish has never been seen by any zoologist, and a description of it would be of the profoundest scientific interest. After several weeks the eggs died and began to show signs of decay, and before their condition was too advanced I made a study of their external features. In view of my work on *Myxine* in Scotland, I felt a special interest in ex-