

vered with a dark deposit, from the impure condition of the water, and large numbers of the ova died daily in consequence. Another batch of filters was then fixed, and a fresh supply of filtered water obtained; and no more sediment was deposited upon the ova. Notwithstanding this, they continued to die for some days; but about the 20th, the whole of the deposit, which had settled upon the bottom of the boxes and upon the ova, began to rise towards the surface in the form of Confervæ; the bottom of the boxes and the remaining ova appeared quite fresh and clean; the surviving ova rapidly assumed the perfect state of the young fish; and on March 7th the young fry began to move about (the outer covering being thrown off), endeavouring to hide themselves between the stones and gravel. The temperature of the water during this experiment was 57°. In order to ascertain if any advantage could be gained by placing some of these in filtered water at a lower temperature, a number of them were carefully removed to a glass tank, supplied with a fountain at the temperature of 54°. In this they appeared to be doing well, were evidently larger and more active, and exhibited great promise. Unfortunately, on the morning of the 13th, the workmen having been ordered to make some alteration in the water pipes in the building, turned off the water, leaving the young salmon, together with the ova which had not yet been hatched, five or six hours without fresh water, in the tropical end of the building: in consequence of this, they were all destroyed, and this interesting experiment delayed for a whole year, as it is impossible to obtain the ova until the next breeding-season.

There are, however, some important facts learned from this experiment, one of which is the early period of hatching. Previous experiments have shown that 60 days usually expire before the young come to life; sometimes 140 days have passed. This experiment has proved that the young fish can be hatched in 30 days: it yet remains to be tested whether this is an advantage. It is certain that in the case of more highly organized and warm-blooded animals, their production at an earlier period than the ordinary one is attended, if not with death, at least with great debility; while, on the other hand, it is not possible to retard the operations of nature beyond the ordinary period without destroying the mother or the offspring. There are many circumstances that induce the belief that the young fish would be stronger by the early development; but no positive conclusion can be arrived at without further experiments.

Mr. Gould took occasion to lay upon the table specimens of all the known species of the genus *Elanus*, and made some observations upon their habits and economy, and their distribution over the face of the globe. With the exception of *Elanus leucurus*, which is confined to America, all the other species of the genus are inhabitants of the Old World, the *Elanus melanopterus* being found sparingly in Southern Europe, Africa, the Indian Peninsula, and pro-

bably Java,—the *Elanus axillaris* inhabiting Australia, and perhaps extending its range to Java (he said perhaps, because a slight difference is observable between the only Javan specimen he had seen and those from Australia), and the fine *Elanus inscriptus* having been hitherto found only in Australia. To these he now added, to the Old World a fourth species, and to the entire group a fifth, by characterizing a fine bird from Celebes as *Elanus hypoleucus*. This new species is one of the largest members of the genus, and is rendered conspicuous by the entire under surface being white, even the basal half of all the primaries being of this hue,—in which respect, and in its larger size, it materially differs from the *E. melanopterus*, the only bird with which it could be confounded.

ELANUS HYPOLEUCUS, Gould.

Adult.—Face, space over the eye, ear-coverts, all the under surface of the body, under tail-coverts, under surface of the tail feathers, and the thighs, pure white; the under surface of the wing is also pure white; basal half of the under side of the first six primaries white, slightly speckled with grey, passing into blackish grey; on their apical halves this grey hue also pervades the under surface of the remaining primaries; crown of the head, back of the neck, back, and scapularies, deep grey; on the shoulders a large patch of black; secondaries and basal half of the primaries deep grey, passing into blackish grey at their tips; two centre tail feathers grey above, the next on each side grey on their outer margins, the rest white; cere and legs orange yellow; bill and nails black.

Total length, 14 inches; bill, $1\frac{1}{4}$; wing, $12\frac{1}{8}$; tail, $6\frac{3}{4}$; tarsi, $1\frac{5}{8}$.

Young.—At apparently about nine months old differs from the adult in having the crown lined with reddish brown, and a crescent of white at the tip of the primaries, secondaries, scapularies, and wing-coverts.

Hab. Vicinity of Macassar, Celebes.

Remark.—The above description of the adult is taken from a fine example in the possession of J. H. Gurney, Esq., which, as well as the young bird in the possession of Mr. Gould, was collected by Mr. Wallace.

Dr. Crisp exhibited a hen, six years of age, that had taken on the plumage of the cock; the bird also had spurs an inch long. On dissection, the ovary was found converted into a hard cartilaginous mass of uniform consistence. He placed the specimen before the Society, not because this abnormal state of the ovary, and consequent change of external character, was of rare occurrence, but rather for the purpose of ascertaining whether such changes of plumage occurred in birds living in a state of nature. Dr. Crisp had seen them in the Hen, tame Duck, and common Pheasant; but the last-named bird in this country could scarcely be called a wild bird.

There was one curious physiological deduction which he might notice: viz. that when quadrupeds were castrated (young), they