

Rhea were single, whilst those of the Casuary, Emu, and Moruk had two feathers from each quill. The Apteryx, another member of this family, laid a white egg, the weight of the bird being 60 ozs., that of the egg 14 ozs., forming the most remarkable example in oology of the large size of the egg as compared to that of the bird.

On the Mollusca of Bath, and an account of Parasites found in *Anodon cygnea*. By J. E. DANIEL.

The Bath Natural History and Field Antiquarian Club had invited the author to prepare a list of the mollusca found in the vicinity of the city. The list contained ninety species, included in twenty-eight genera. The *Anodonta* found in the canals in the neighbourhood present objects of great interest in the parasites with which they are infested. The number of animals found in *Anodon cygnea* varies from about five up to as many as thirty. The parasites found in *Anodon anatina* are not so numerous, and they vary slightly in form, are darker and not so brilliant, and the abdomen is longer and not so tumid. The author had seen an entozoon living within the fleshy parts of the branchiæ, which may possibly be the larva of which the parasite before described may be the imago.

Some Observations on the Salmonidæ, chiefly relating to their Generative Power. By JOHN DAVY, M.D., F.R.S., &c.

In this communication the author first noticed the remarkable fact that the young salmon, the male in its parr-stage, has its testes fully developed, and that its milt is shed before it becomes a smolt and leaves the river for the sea—a fact the more remarkable, as the female of the same age has the ovaries undeveloped, merely in a rudimentary state.

He next considered the question whether the sea-trout and the common trout resemble the salmon as to the preceding peculiarity of function in the young fish. From his own observations, the conclusion he has arrived at has been in the affirmative as regards the former, and the negative as regards the latter.

Thirdly, he offered some remarks on the age at which the salmon and sea-trout begin to breed, adopting the commonly received opinion as well proved, that the salmon spawns on its first return from the sea as a grilse; but, contrary to what is supposed, that the sea-trout does not spawn until after a second return from the sea.

Fourthly, he adverted to the question of the spawning of the Salmonidæ, whether yearly or only in alternate years, stating facts which had come under his own knowledge, inducing him to infer that all the several species, viz. the salmon, sea-trout, common trout, and charr, have a fallow season, and that the fish of each kind called barren are examples of this rest of the generative organs.

He concluded with some remarks on the interesting subject of the differences exhibited by the nearly allied species of the Salmonidæ, all of which have at least one quality in common, viz. that their ova cannot be hatched except in fresh and well aerated water, leading, as he thinks, to the inference that the migratory species have always been migratory, unless indeed the seas were at one time less salt than at present, and the lakes and rivers less fresh, and that then the habits of the fish might have been formed, and they might gradually have become divided into the migratory and non-migratory species.

First Steps towards the Domestication of Animals.

By F. GALTON, F.R.S., F.G.S., F.R.G.S.

A large number of instances were adduced from all parts of the world to show that savages were addicted to making pets of animals, and the author concluded that almost every animal had been frequently captured and tamed by them. He also showed, from the histories of all the early monarchies, that it was customary for kings to exact, and for barbarians to give, enormous numbers of wild animals as tribute. The amphitheatrical displays of Rome made a similar demand on an immense scale. Hence every animal appears to have been frequently under the power of man; but only a very few of them have proved capable of permanent

domestication. The requisite qualities for domestication were separately discussed; they were stated as follows:—1, they should be hardy; 2, they should have an inborn liking for man; 3, they should be comfort-loving; 4, they should be found useful to the savages; 5, they should breed freely; 6, they should be gregarious. He believed that nearly every animal had had its chance of being domesticated, and that almost all of those which fulfilled the above conditions were domesticated long ago. It would follow as a corollary to this, that the animal creation possesses few, if any, more animals worthy of domestication, at least for such purposes as savages cared for. These qualities would be intensified by unintentional "selection:" the wildest members of every flock would escape; the wilder of those that remained would be selected for slaughter. The tamest cattle—those that kept the flock together, and led them homewards—would be preserved alive longer than the others. It is, therefore, these that would chiefly become the parents of stock, and bequeath their domestic aptitudes to the future herd. He did not believe that the first domestication of any animal, except the elephant, implied a high civilization among the people who established it. He could not believe it to have been the result of a preconceived intention, followed by elaborate trials, to administer to the comfort of man. Neither could he think it arose from one successful effort made by an individual, who might thereby justly claim the title of benefactor to his race; but, on the contrary, that a vast number of half-unconscious attempts have been made throughout the course of ages, and that ultimately, by slow degrees, after many relapses and continued selection, our several domestic breeds became firmly established.

*Essential Points of Difference between the Larynx of the Negro and that of the White Man.* By GEORGE DUNCAN GIBB, M.A., M.D., LL.D., F.G.S., F.A.S.

The author had examined the larynx of the negro in the dead and living, in fifty-eight instances, and the result justified him in arriving at certain conclusions, to be confirmed or modified by further experience. These were the almost invariable presence of the cartilages of Wrisberg, which were either quite rudimentary or absent in the white race, with some rare exceptions; they are present in the old and young of both sexes in the negro, probably more fully developed in the prime of life. Their general presence in the negro, and their absence or rudimentary condition in the white race, prove them to be characteristic of the former. The true vocal cords in the negro, instead of being horizontal and nearly in a plane with the general strike of the floor of the ventricles—a characteristic almost never varying in the white race—are represented by an oblique incline from within outwards, that is, their internal free border is elevated at a higher angle than their external or attached border, thus giving to each vocal cord a slanting or shelving direction outwards and downwards. This obliquity of the cords varies in degree and extent, but can be generally distinguished; the contrast, however, is striking between the flat horizontal surface and the oblique. In the white man the ventricle of Morgagni is situated external to, but immediately above, the plane of the true vocal cords; whilst in the negro, a long and narrow elliptical opening is seen leading downwards and outwards into the ventricle, the whole extent of which to its very fundus is visible in most black people. The change of position in the vocal cord, not unlike the saddle-bags on the side of a mule. The relative position of the thyro-arytenoid muscles is necessarily altered by the last-named condition. These facts the author brought forward regardless of any theory, and with no other object in view than to advance our knowledge of the anatomy of parts heretofore inaccessible to vision in the living. He had prepared, in a tabular form, all his examinations of black people, with the dates, country, and other points of interest, and the facts made out were explained by reference to large diagrams.

Dr. J. E. GRAY exhibited Van Beneden's Work on the Marine Leeches of the Coast of Brest.