

The codfish lays its 9,000,000 eggs, the shark its dozens. Those of the codfish are naked and defenceless, whilst the others are carefully protected by a horny and persistent covering. The cercaria marginata leaves its sporocyst and the body of the paludina where it was generated, and swims in the surrounding water. Although numerous animals have been examined, the particular species in which it can develop into a distoma has not yet been discovered. Hence the chances for the destruction of this parasite vastly exceed those favorable to its final development. Accordingly this species of cercaria is produced in great abundance, so great indeed, that they often completely fill the testes and ovaries of the paludina in which they are developed.

Pathological conditions as well as those that are physiological afford a nidus for the development of parasites.

The class of parasites infesting the animal creation, to which by far the greatest interest is attached, are the Entozoa. They have received a corresponding degree of attention. The perfect adaptation of all living beings to the circumstances in which they are intended to pass their existence, is a never ending source of admiration to the scientific observer.

Turning to these Entozoa, we see purpose or function just as strongly manifested as elsewhere. High intelligence has been provided for in the conditions of the air and dry land. Here, in the interior of organisms, enshrouded in darkness, and in relation with vitalized structures, what sort of organization would be expected? The intelligence required for the obtaining of their food is a minimum, for their food is prepared at hand; muscular activity of any kind is as unnecessary as intelligence, with the absence of muscular development a nervous apparatus is unnecessary. Food is prepared already elaborated, hence no digestive apparatus, or only a simple one is required.

Accordingly upon examination of these creatures we find no definite nervous system, no muscular development or a feeble one, no brain, no digestive canal, (with exceptions.) Eyes these animals have not, for they could see nothing if they possessed them. Ears they have not, for no waves of sound ever approach them, a general sense of touch it is to be presumed they have. They must be amenable to the great law of *omne vivum ex ovo*; i. e. they have a very complete generative apparatus, which is always present in the perfect