

Finally, the committee appointed last year to investigate the fauna and flora of the Trias of the British Isles made its first report. It was written by Mr. H. C. Beasley, and deals with cheirotheroid foot-prints. The attendance at the meetings of the section was good, and on several occasions the papers led to animated and interesting discussions.
H. W. M.

ZOOLOGY AT THE BRITISH ASSOCIATION.

THE president's address—which was postponed until Friday, September 11, in order to avoid the hours fixed for the opening addresses in the other biological sections—dealt first with the inadequacy of the public provision made for the advancement of zoology and its applications in this country, and secondly with some considerations bearing on the problems of variation and heredity, more especially as seen in the Cœlenterata. In fact, influenced no doubt by the personal work of the president, a considerable number of the communications brought before the section this year dealt with the Cœlenterata, especially with corals and coral reefs.

Thursday, September 10.—The forenoon was given up to coral papers, and the afternoon mainly to reports of committees. Dr. J. E. Duerden (from the United States) gave two papers, "Septal Sequence in the Coral *Siderastræa*" and "Morphology and Development of Recent and Fossil Corals"—these being some of the results of the author's studies of living West Indian corals while he served as curator of the museum at Jamaica. He directed attention to the general occurrence of boring filamentous Algae, and to the fact that the colours of West Indian corals are mainly due to the presence of symbiotic yellow cells (zooxanthellæ) in the endoderm. Mr. C. Crossland had a paper describing the coral formations he met with on the east coast of Africa, near Zanzibar, and Mr. Stanley Gardiner gave a general account of the coral reefs of the Indian Ocean. In connection with this, Prof. Herdman directed attention to the fact that, in the Gulf of Manaar, calcareous masses ("calcrettes") of great extent are formed *in situ* on the sea-bottom by the cementing of sand and other loose material by calcareous incrusting Polyzoa. Miss Edith Pratt had a paper on the assimilation and distribution of nutriment in *Alcyonium digitatum*. The polypes exercise choice, and feed mainly on small Crustacea. Miss Pratt regards the so-called nerve-plexus as part of a system of amoeboid endoderm cells conveying nutriment throughout the colony. Prof. Hickson described a case of polymorphism in a *Pennatula murrayi* from eastern seas. Dr. J. Cameron gave a lantern demonstration on the origin of the epiphysis in Amphibia as a bilateral structure.

The reports of committees were as follows:—(1) On bird migration in Great Britain and Ireland. This is the final report, and consists chiefly of Mr. Eagle Clarke's observations on the starling and the rook. (2) Naples Zoological Station. This includes a detailed account, by Mr. W. Wallace, of his investigations on the oocyte of Tomopteris. (3) "Index Animalium." The first volume, dealing with the period 1758–1800, has been issued, and the indexing of 1801–1900 is now being continued by Mr. Sherborn. (4) Zoology of the Sandwich Islands. This is the thirteenth report, and the work is still in progress. (5) Coral reefs of the Indian region. (6) Plymouth Marine Laboratory. (7) Millport Marine Laboratory. As on this occasion the physiological section did not meet separately, the physiological papers were taken in Section D. These included two reports:—(1) The microchemistry of cells. This dealt chiefly with the localisation of potassium in the living cell, and was drawn up by Prof. A. B. Macallum. (2) The state of solution of proteids.

Friday, September 11.—After the presidential address came a paper by Dr. Gamble and Mr. Keeble on the bionomics of *Convoluta roscoffensis*, with special reference to its green cells. This was followed by three short notes by Prof. R. J. Anderson—the skull of *Ursus ornatus*, the skull of *Grampus griseus*, and the peritoneum in *Meles taxus*. The section did not meet on Saturday.

Monday, September 14.—The morning was devoted to a joint discussion with botanists on fertilisation, in which the president, Prof. Hartog, Prof. Bretland Farmer, Mr. W. Bateson, Mr. M. D. Hill, and Mr. Jenkinson took part.

The following papers were then read:—M. D. Hill, on nuclear changes in the egg of *Alcyonium*; Prof. Hartog, on the function of chromatin in cell division, and on the tentacles of Suctoria; Prof. Hickson, on conjugation in Dendrocometes (demonstrated with slides); J. W. Jenkinson, on some experiments on the development of the frog; Dr. Leighton, on British reptiles; N. Annandale, on the coloration of Malayan reptiles; H. C. Robinson, on the walking fish of the Malay Peninsula, and also an exhibition of convergent series of Malayan butterflies.

Tuesday, September 15.—Prof. Herdman gave a short account of a remarkable phosphorescence phenomenon observed in the Indian Ocean, which led to descriptions of other similar occurrences by the president, Mr. Stanley Gardiner, Mr. Bateson, and others. Prof. Herdman then read a joint note by Mr. James Hornell and himself on pearl-formation in the Ceylon pearl oyster, giving a biological classification of pearls into (1) ampullary, (2) muscle pearls, and (3) cyst pearls. The remaining papers were mainly physiological in their bearing, viz. Captain Barrett-Hamilton, on a physiological theory of the winter whitening of animals; Prof. B. Moore, on a new form of osmometer for direct determinations of osmotic pressure of colloids, and also experiments on the permeability of lipid membranes; Prof. Sherrington and Dr. Grünbaum, on the cerebrum of apes; Mr. J. Barcroft, on the origin of water in saliva; Dr. Greaves, demonstration of visual combination of complementary colours; Mr. C. V. Hughes, note on two rare birds; Dr. Rennie, on epithelial islets in the pancreas of Teleosteans; Mr. D. C. McIntosh, on variation in *Ophiocoma nigra*; and Prof. W. C. M'Intosh, on the eggs of the shanny. Dr. Rennie suggests that his epithelial islets are blood-glands which have entered into a secondary relation to the pancreas, and that they maintain their primitive function of producing an internal secretion.

The section did not meet on Wednesday, but on Thursday, September 17, there was a dredging expedition, in which the president and a number of the members of Section D took part. The expedition was in the Lancashire Sea-Fisheries steamer, *John Fell*, kindly lent for the purpose by the committee, and was under the leadership of Mr. Dawson (Superintendent of Fisheries), Mr. Isaac Thompson (of the Liverpool Marine Biology Committee), and Prof. Herdman. The first hauls of the fish and shrimp trawls were taken in the shallow waters off Southport and the estuary of the Mersey, in order to show the fauna of the characteristic Lancashire small-fish "nurseries"; a visit was paid to the local shrimping fleet, a fishing boat was overhauled and boarded and its nets examined, and the other routine operations of the fisheries steamer in policing and inspecting the district were fully explained to the party. The processes of taking the physical observations, and of examining, counting, and recording a haul of the trawl were also gone through. Later in the day dredging and tow-netting took place further out to sea on harder ground with a more varied fauna. Although not strictly part of the work of the section, this dredging expedition made an interesting and appropriate finish to a very successful zoological meeting.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

DR. SYDNEY YOUNG, F.R.S., professor of chemistry in University College, Bristol, has been appointed to the chair of chemistry in Trinity College, Dublin, vacant by the resignation of Prof. Emerson Reynolds.

ONE of the two open entrance scholarships which were recently founded at the Victoria University of Manchester, each of the value of 100l., has been awarded to Mr. W. C. Denniston.

DR. JOHN WHITE, of the University of Nebraska, has been appointed head of the department of chemistry at the Rose Polytechnic Institute, succeeding Prof. W. A. Noyes, who was recently appointed chief chemist of the American National Bureau of Standards.

THE course of Saturday morning lectures on the teaching of mathematics, which the London Technical Education