10. In some genera the inner surface of the integument is covered by a net-work of nerves and ganglia in connection with, and most probably issuing from, the integumentary nerves given off by the supracœsophageal ganglion.

11. In the most primitive condition the eye of the Pycnogonid consists of a rounded transparent part of the integument, the inner surface of which is furnished with some small ganglia and nerve-fibres issuing from the integumentary nerve bundle. The highly developed eye of the shallow-water species shows ganglionic cells, distinct retinal rods, and a lens consisting of a thickened part of the chitinous skin of the animal.

12. Those eyes which have lost their pigment and their retinal rods are rudimentary. They cannot be considered as forming the transition between the highly-developed eye and its most primitive condition.

13. That part of the œsophagus which runs through the proboscis has the function of a masticating apparatus. Where the œsophagus enters the intestinal tract (the stomach) small glands (pancreatic, most probably) are present.

14. The original condition of the genital glands is in the form of a U-shaped mass, placed above the intestine and giving off branches which penetrate the legs. Whereas for the male glands the original form prevails in most (all ?) genera, for the female glands it seems to be a rule that only the lateral parts entering the legs are developed. The genital pores of the females are larger than those of the males; they are found ventrally towards the extremity of the second joint of the leg. Whereas for the females it is the rule that these pores are present on all the legs; it often happens in the males that they are only present on the two or three hindmost pair of legs.

15. There are always distinct vasa efferentia, but there are not always true oviducts.

16. In *Nymphon brevicaudatum*, Miers, females also bear the eggs on the ovigerous legs.

17. The larva creeping out of the egg is already furnished with an azygous outgrowth of the region surrounding the mouth (the proboscis). As a rule in that stage only three pairs of appendages (the later cephalic ones) are present.

18. These larvæ are often furnished on their mandibles with an apparatus producing a single or numerous threads, wherewith the young is attached to the ovigerous leg of its parent.

19. About the relation in which the Pycnogonida stand to either the Crustacea or the Arachnida we know as much or as little as we do about the relation in which these two classes Arthropoda stand to each other.

Note.—While I was engaged in preparing the index of this report, and after the rest of it had been printed off, Mr Edmund B. Wilson of Baltimore kindly sent me two papers which he had recently published. In one (the Pycnogonida of New England and Adjacent Waters, Report of the United States Commissioner of Fish and Fisheries, part vi. for 1878, pp. 463–506, pls. i.–vii.) the author gives an account of the present know-