

SCIENTIFIC JOURNALS AND ARTICLES.

THE leading article in the August number of the *Journal of Nervous and Mental Disease* is Dr. Stedman's address as president of the American Neurological Association. His subject was 'The Public Obligations of the Neurologist,' and he urged the establishment of charitable sanatoria for the care of the poor who suffered from nervous diseases. He spoke of the fading out of the division between psychiatry and neurology, and the advance of the treatment of mental disorders by mental and moral methods. He also emphasized the importance of public provision for the after care of patients discharged from the state hospitals, and urged the removal of the feeble-minded to separate colonies. Drs. Spiller and Weisenburg contribute the report of eleven cases of carcinoma involving the nervous system, with a number of illustrations. Dr. Burr follows with a note on the temporary disappearance of the sensory symptoms in syringomyelia, and Dr. Martin adds a short study of the sphincter reflexes in tabes dorsalis and paresis.

THE *Annals of Iowa* for July, 1906, a magazine published quarterly by the State Historical Department at Des Moines, contains an appreciative biographical memoir of the late Dr. C. C. Parry, by Dr. Charles A. White. This memoir thus becomes a part of the state archives.

DISCUSSION AND CORRESPONDENCE.

THE PRIMARY SEPTA IN RUGOSE CORALS.

IN SCIENCE, June 30, 1905, there appears an abstract of a paper, 'Early Stages of some Paleozoic Corals,' read by Mr. C. E. Gordon before the New York Academy of Sciences. The abstract is mainly a criticism of my paper, 'Relationships of the Rugosa (Tetracoralla) to the living Zoanthææ,' 1902. Having delayed a reply until the publication of the complete contribution,¹ I am now in a better position to estimate the value of the evidence upon which the author's assertions are based. A full discussion, with additional evidence in support of my contentions, will appear later,

¹ *Amer. Jour. Science*, February, 1906.

but in the meantime the importance of the subject calls for a brief statement.

The greater part of Gordon's final paper is devoted to a demonstration that the septal arrangement in *Lophophyllum proliferum*, the form studied by me, can be brought into agreement with the usually accepted septal plan of zaphrentoid corals, a fact upon which there could possibly be no divergence of opinion. To accomplish this he reproduces most of my figures, but in an inverted manner, and then shows how they agree with the septal plan of a zaphrentoid coral as represented by a schematic figure taken from Kunth, 1869-70. In the course of this Gordon corrects a confusion of mine, corrected elsewhere, in which I transpose the terms cardinal and counter septa; apparently, however, he does not realize the difference in the septal plan as established from the external ridges and grooves and that from the disposition of the septa within the calice.

In inverting my figures Gordon is altogether at variance with every recent worker on the Zoantharia. The dorso-ventral disposition of Kunth's schematic figure was given before much was known of the morphology and relationships of the Zoantharia. It would have been much easier and displayed a wider appreciation of recent work on the subject if Gordon had inverted his own figure and allowed the others to retain the orientation originally given them.

The main contention of the paper centers in the number of primary septa (protosepta) in the Rugosa, whether four or six. The great importance for phylogenetic purposes of a correct determination of this demands that Gordon's remarks and evidence should be submitted to thorough analysis. In my paper on *Lophophyllum proliferum* I showed that this species has six primary septa, thereby confirming the account of Pourtalès in 'Deep Sea Corals.' Gordon does not question this hexamerism, but attempts to explain it as a case of acceleration; according to his idea four primary septa were originally present, but the time of appearance of a third pair has been hastened so as to give six primary septa. No facts nor valid arguments are adduced in