the predilections of the instructor and the like. A rather careful reading of several sections reveals no serious faults, while typographical errors are few. We have not met any directions for injection; although starch mass is mentioned several times, no formulæ are given for its preparation. "Calkins" is referred to several times, but the beginner can hardly be expected to know of Calkins's work on the Protozoa. Aside from this, references to the literature are few. *Lencosolenia* occurs on p. 17.

J. S. KINGSLEY

Makers of Modern Medicine. By JAMES J. WALSH. Fordham University Press. 1907.

Dr. Walsh describes in this book the life and works of several famous men who are in a way the founders of modern medicine, but the names are hardly those which one would select as representing in a well-rounded way the foundation of modern medicine as a whole, since some of the very greatest are not mentioned. Vesalius, Harvey and Virchow would certainly deserve places if there were any intention of making such a complete list, but in his preface Dr. Walsh explains that this is a series of sketches which may be followed by others. In these subsequent sketches we may perhaps hope to find some mention of the great surgeons who have done so much to help in building the foundations. Morgagni, Auenbrugger, Jenner, Galvani, Laennec, Graves, Stokes and Corrigan, Müller, Schwann, Bernard, Pasteur and O'Dwyer form the subject of the sketches, which are very uniform in plan and general treatment.

Perhaps the most striking thing in this uniformity is that every one of the men described was of the Catholic faith and the essays in each instance lead up to a discussion of their devotion to the church, and to the dominant idea that great scientific work is not incompatible with devout adherence to the tenets of the Catholic religion.

Dr. Walsh recognizes well the salient characters of these men, the great teachers, the great humanitarians, the toiling investigators and the brilliant geniuses who make one step into the unknown, and makes clear too the interdependence of these qualities upon one another in the truly great. Thus there seems no doubt that in comparing Laennec with Auenbrugger we must see that while their most brilliant achievements were alike signal advances in the art of physical diagnosis, Laennec's power as a teacher, his discoveries in the realm of pathological anatomy and his deep human sympathies mark him out as a man standing on a higher plane than that of Auenbrugger. In any such series of essays it becomes necessary for the writer to form some such estimate of the relative importance of the life-work of each man and here doubtless many would differ from Dr. Walsh in some respects; but as far as he allows himself to discuss this, he is fair and his estimates well weighed.

The papers were written and published separately at intervals and later put together into book form, and this results in a good deal of repetition of monotonous discussion as well as of incident and quotation, but on the whole for the purpose for which they are aimed, the general instruction of the public in matters pertaining to medical history, they are, like the similar essays of Richardson, extremely entertaining and useful.

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SCIENTIFIC JOURNALS AND ARTICLES

The American Naturalist for July opens with a note on the "Agassiz Centennial," being the remarks of Charles W. Eliot. These remarks, being brief and to the point, and couched in smooth English give a much better idea of the charm of Agassiz and the great influence of his personality than do most of the longer articles that have appeared. A. W. Morrill gives a "Description of a New Species of Telenomus with Observations on its Habits and Life History," the species being named *Telenomus ashmeadi*. Frederic T. Lewis discusses "The Development of Pinnate Leaves" and D. P. Penhallow makes some "Contributions to [our knowledge of] the Pleistocene Flora of Canada," based on leaves from the interglacial deposits of the Don Valley,

Toronto. Finally, William E. Ritter gives the "Significant Results of a Decade's Study of the Tunicata." This is a most interesting paper, one of the kind that the student or "all around" naturalist appreciates, giving, as it does, in a concise form and clear language the results, and the bearing, of the observations made on this group of animals during the past ten years.

The Zoological Society Bulletin for July is an interesting number and records many important facts. First it notes the arrival of a pair of the Sudan African Elephants, *Elephas oxyotis,* the species with huge ears, and the one that attains the greatest size. The lamented Jumbo was a fine example of this species. "An Important Educational Collection" is contained in the Small Mammal House comprising examples of six orders of mammals to which it is hoped to add examples of three other orders (Pinnipedia will hardly rank as more than a Suborder). For teaching the rudiments of the classification of mammals this collection is most important, the more that it is well labeled, and the labeling at the Zoological Park is of the highest order, as instanced by the labels in the Reptile House. The ground in the north end of Baird Court has been laid out in a beautiful Italian garden and a new walk laid out through the fine beech woods by the beaver pond. Many species of birds living in the park have nested, including the rare Trumpeter Swan. Eighteen species of our warblers are now to be seen in the bird house, a most unusual number to be in captivity.

The Journal of Comparative Neurology and Psychology for July includes a paper by C. Judson Herrick on "The Tactile Centers in the Spinal Cord and Brain of the Sea Robin, *Prionotus carolinus,*" giving data hitherto unpublished upon which the author relied in part in his analysis of tactile and gustatory connections in fishes. The "accessory lobes" of the spinal cord of the gurnards are adapted for short reflexes, chiefly confined to the segment involved and not affecting greatly distant parts of the central nervous system. The second paper is "An Experimental Study of an unusual Type of Reaction in a Dog," by G. van T. Hamilton. The animal was trained in a complicated experiment box to determine the limits of complexity in association possible to the dog. James Rollin Slonaker reports on "The Normal Activity of the White Rat at Different Ages," recording by means of a kymograph record made by a revolving cage the total spontaneous activity of the rats from day to day.

DISCUSSION AND CORRESPONDENCE

STÖHR'S TEXT-BOOK OF HISTOLOGY

To the Editor of Science: My edition of Stöhr's "Histology," reviewed in Science, July 26, has been the subject of some misunderstanding. The publishers of the previous American editions obtained Professor Stöhr's permission to make additions and changes in the book, provided that a preface disclaiming his responsibility for such changes should be inserted. Several text-books written on essentially the same plan were then available for American students, namely Huber's excellent version of Böhm and Davidoff; MacCallum's edition of Szymonowicz which presents fully certain American researches; Schäfer's brief but instructive Essentials; Ferguson's Histology illustrated by photomicrographs; Bailey's, and others, each with peculiar and desirable features. There was, however, no book which presented histology from a strictly embryological point of view, describing the development of an organ as an introduction to its adult structure. Since this treatment was considered both scientifically and pedagogically practicable, and since its use at the Harvard Medical School was hampered by the lack of a text-book, the editor accepted the offer of Messrs. P. Blakiston's Son & Company to rearrange Professor Stöhr's book upon this plan. The editor had no desire to work over again and to illustrate anew the familiar facts of histology, which were so well presented in several available books, notably in that of Professor Stöhr. The resulting volume has been used with gratifying success in the elementary course at the Harvard Medical School. There are de-