

sence of the right kidney and ureter. In the bladder there was no evidence of an orifice for the ureter. The left kidney was lobulated, not enlarged, and was situated close to the brim of the pelvis, in front of the common and external iliac arteries. The left ureter was larger than normal, particularly near the kidney. The left renal artery arose from the bifurcation of the aorta.

In the same article is described an atrophied kidney of the size of a large bean. The left kidney of the same individual weighed nine and one half ounces. The atrophied organ was composed mainly of dense fibrous tissue, with occasional tubes, larger in calibre than the ordinary renal tubules. Well-developed Malpighian capsules were rarely observed. The ureter was pervious at its entrance into the bladder, became fibrous near the kidney, and was lost in the loose subperitoneal tissue before reaching the atrophied organ.

CARPENTER ON MICROSCOPY AND FREY ON HISTOLOGY.

THE demand for a fifth edition of Carpenter's work¹ shows how widely the interest in microscopy has spread. Professor Carpenter is entitled to many thanks for his share in bringing this about, and we are glad that he is reaping a substantial reward. This new edition is a marked improvement on the preceding ones; it is handsomely got up, and is heartily to be recommended to the class for which it is written—amateur microscopists. It is not meant for advanced students, nor for those wishing to study the minute elements of animal tissues, but it is excellent for those who would acquire some general knowledge of structure. It opens the road to almost all parts of the animal and vegetable kingdoms, giving enough information to satisfy those who wish to play and to stimulate those who wish to work. Our criticism on the work as a whole is that too large a portion of it is devoted, not to what is seen, but to the way of seeing it. We do not seriously object to the part on optics, though we think most of it superfluous. We heartily indorse the remarks on the care of the eyes and of the microscope, but we object decidedly to about one hundred pages that have very much the appearance of a compilation from the catalogues of English makers, Nacet being the only foreigner deemed worthy of a place. In a work avowedly for amateurs the description of what the author calls first-class, and what we should call complicated, microscopes is out of place. The tendency is to encourage what we look upon as the bane of almost all the American and English microscopists who have not had, at least indirectly, the benefit of German training, namely, an inclination to make machinery take the place of the educated hand, and to waste time and money on optical effects quite valueless except for test objects. While the followers of this school have been struggling with diatomes and Nobert's test lines, those

¹ *The Microscope and its Revelations*. By WILLIAM B. CARPENTER, M. D., LL. D. Fifth Edition. Philadelphia: Lindsay and Blakiston. 1875. Pages 848.

using simple instruments have made the discoveries that are revolutionizing science.

Professor Frey's book,¹ which we are glad to see in English, is of quite another nature. It is not for the amateur, but for the student of histology of man and of the higher animals. Kölliker's book, though good, no longer represents the progress of science, and Stricker's Handbook is the only one with which we need compare this work. The former is a series of monographs by able, and, in many cases, by eminent investigators; the latter is a compilation carried up to the present time. In it we miss the conviction, the brilliancy, and sometimes the clearness that characterize many of the monographs, but, on the other hand, the work which is smaller, without being meagre, has an order and completeness that is impossible in a series of disconnected papers. The various opinions on disputed points are fully and fairly presented. The book is in three parts; the first on chemical composition, the second on the structure of the tissues, and the third on that of organs. We are inclined to criticise Frey's definition of a cell, "which consists of a soft mass including within it a peculiar structure." This latter is explained to be the nucleus and nucleolus, which surely are not essential parts. Too much importance is, we think, given to the so-called cell-wall. We are sorry we find the term neurilemma applied to the sheath of Schwann, which envelops the myelin, as this usage tends to confusion. The chapter on the structure of the brain deserves great praise for the large amount of clearly expressed information it contains. The description of the mucous membrane of the stomach embodies the latest researches of Haidenham and of Rollett. Though for the purposes of reference this work will not take the place of Stricker's Handbook, it is, we think, the best one on this subject for students that we are acquainted with. The translation is very good.

T. D., Jr.

SALTER ON DENTAL PATHOLOGY AND SURGERY.²

THIS is an excellent work, largely original, rich in pathology, clear and concise in description. So far as we are aware, it is much superior to other works of its class which have been published in this country. The position of the author as the official examiner in dental surgery at the Royal College of Surgeons gives weight and authority to his conclusions. Other and more voluminous works on oral surgery have seemed to us to contain much on general surgery which was wholly irrelevant to the dentist.

The pathology and treatment of the teeth comprise a dentist's duties. But a fair general knowledge of the affections of the mouth is also of importance to him.

¹ *The Histology and Histo-Chemistry of Man*. By Professor HEINRICH FREY. Translated from the Fourth German Edition, by Dr. ARTHUR E. J. BARKER, of Dublin. New York: D. Appleton & Co. 1875. Pages 683.

² *Dental Pathology and Surgery*. By S. JAMES A. SALTER, M. B., F. R. S., Member of the Royal College of Surgeons, Examiner in Dental Surgery at the College, Dental Surgeon to Guy's Hospital. New York: Wm. Wood & Co. 1875.