

ART. XXI.—*Animal Chemistry, with reference to the Physiology and Pathology of Man.*  
By Dr. I. FRANZ SIMON, Fellow of the Society for the Advancement of Physiological Chemistry, at Berlin, &c. Translated and edited by GEORGE E. DAY, M.A. and L.M., Cantab., Licentiate of the Royal College of Physicians. Part I. Philadelphia: Lea & Blanchard, 1845. 8vo. pp. 292.

THIS is a reprint of one of the valuable series of works issued by the Sydenham Society, and we have been much pleased that it has been selected for republication in this country, as it will enable our medical brethren to avail themselves of the great mass of information contained in its pages on the chemistry of man. Among the numerous essays and treatises on organic chemistry that have appeared within the last few years, the "*Chemistry of Man*," by Dr. Simon, is generally acknowledged to be the most complete and satisfactory, and as containing the best conducted series of observations on the constituents of the animal system. The present publication not only includes the original work, but is also greatly enriched by extracts from the subsequent writings of the author, and by an able introduction by the translator and editor, based on a former treatise of Dr. Simon's, and containing an abstract of the researches of other investigators in this difficult branch of science. Dr. Day's introduction is by no means the least instructive portion of the work, as it gives a brief but clear view of the constituents of animal matter, thus much facilitating the perusal of the work, to those who have not paid close attention to the progress of organic chemistry within the last few years.

What renders Dr. Simon's work more peculiarly interesting to the physician is, that it treats not only of the physical and chemical relations of the solids and fluids in a state of health, but also of the modifications they undergo in disease. The order he has adopted is more exactly physiological, but at the same time is the most natural. Thus, after treating of the circulating fluids, he takes up the consideration of the secretions and excretions, which is followed by that of the solids, and concludes with a description of solid and fluid morbid products. The part now published contains only the analysis of the circulating fluids in a healthy and morbid state. The author's views on the blood, and its relations to nutrition and animal heat are thus summed up by him. "The blood is subjected to a continuous metamorphosis, which may be regarded as the expression of its vitality. The nutrition of the peripheral system is effected by the liquor sanguinis, not by the blood corpuscles. The liquor sanguinis affords nutriment to the cells and organs which possess an inherent power of selecting proper material, or of forming it from new homologous matter, at the same time secreting the products of decomposition. The principal nutritive matters in the liquor sanguinis are albumen, fibrin and fat.—The chief products of this metamorphosis are the extractive matters and lactic acid, which occur in the excretions, especially in the urine. Urea, bilin and carbonic acid are either not products of the metamorphosis of the blood during the act of nutrition in the peripheral system, or at most they are only in part formed by it. They must be regarded as products of the vital energy of the blood corpuscles, which, doubtless, possess the same power of attracting nutriment and of throwing off decomposed products as other living cells. The proper nutriment of these corpuscles is oxygen, albumen, and probably also fat, which are furnished them by the liquor sanguinis. The most important products of their metamorphosis are carbonic acid, urea, fibrin, extractive matters, and very probably some of the constituents of the bile. The leading and most important object of this vital energy of the blood corpuscles is the production of animal heat, without which every function of the organism, nay, even life itself, would be instantaneously annihilated. The production of animal heat is due to the combination of oxygen with the carbon of the globulin; the principal products of this reaction are carbonic acid and urea, or uric acid. The urea excreted may thus be regarded as a measure or equivalent of the animal heat developed."

The tables of analysis of the fluids in different forms of disease are highly interesting, though we are more than skeptical as to the practical importance of them as a guide in the treatment of these maladies, as we find so great a variation in the results, both of the normal and abnormal fluids, that it is impossible to

admit more at present, than that in health a certain average of the constituents prevails, which is variously modified in disease; at the same time we cannot deny their utility, but it will require a long time, and a vast number of analyses, before we can connect the greater or less proportion of these constituents in a definite manner with functional derangements of the organs, and still more with sympathetic phenomena. The work we are noticing is an excellent model for these investigations, and is well worth an attentive study, both to the chemist and pathologist, and we hope that the second portions of it may soon appear, when we shall endeavour to give a full view of the whole subject. R. E. G.

ART. XXII.—*On the Theory and Practice of Midwifery.* By FLEETWOOD CHURCHILL, M.D., M.R.I.A., &c., &c. With Notes and Additions by ROBERT M. HUSTON, M.D., &c., &c. Second American edition. With one hundred and twenty-eight illustrations, from Drawings by Bagg and others: Engraved by Gilbert. 8vo. pp. 525. Philadelphia, 1845: Lea & Blanchard.

OUR opinion of Dr. Churchill's treatise having been already, on more than one occasion, very fully expressed, it will be unnecessary again to repeat our high estimate of its merits. Few treatises will be found better adapted as a text book for the student, or as a manual for the frequent consultation of the young practitioner.

The edition before us is enriched by the very judicious labours of the American Editor. Without loading the text of the author with unnecessary and frivolous notes—the additions of Dr. Huston will be found very materially to augment the value of the treatise of Dr. Churchill—by bringing it up to the present state of our knowledge of the physiology of the female sexual organs, and the practice of obstetrics generally.

All the more important "facts and observations which have transpired since the publication of the last edition," have been carefully supplied;—the work may, consequently, be received as a very complete summary of the most approved views in relation to the theory and practice of midwifery, which are well arranged and clearly detailed. D. F. C.

ART. XXIII.—*Report on the Progress of Practical Medicine in the Departments of Midwifery and the Diseases of Women and Children, during the years 1844–5.* By CHARLES WEST, M.D., M.R.C.P., Physician to the Royal Infirmary for Children, Lecturer on Midwifery at the Middlesex Hospital, &c., &c. London, 1845.

THIS is a very full and well drawn up report, and reflects credit on the author for the research, and the discriminating and critical judgment which it displays. We shall enrich our summary with such facts as have not already been noticed by us.

ART. XXIV.—*Accidents—Popular Directions for their immediate Treatment; with Observations on Poisons and their Antidotes.* By HENRY WHEATON RIVERS, M.D., Surgeon to the U. S. Marine Hospital, Providence, R. I. 12mo. pp. 108. Boston: Thomas H. Webb & Co. Providence: B. Cranston & Co., 1845.

IN the motto of this useful little compendium, "*For the want of timely care, millions have died of medicable wounds,*" is to be found the necessity and utility of a work, which professes to teach, to the unlearned in medical matters, the means of relieving persons who have met with "sudden accidents under circumstances where a surgeon cannot be immediately obtained." The author states that his exclusive object is "to impart advice to the people generally, rather than to the profession," and desires to be understood as not intending "to preclude the neces-