to learn from a competent observer the actual condition of the various institutions which, in that wide and populous region, are specially devoted to the treatment of the various forms of mental disease.

T. S. K.

ART. XXIV.—*Dental Chemistry and Metallurgy: Chemistry and Metallurgy, as applied to the Study and Practice of Dental Surgery.* By A. SNOWDEN PIGGOT, M.D. Philadelphia: Lindsay & Blakiston, 1854. Pp. 516.

THIS new work is designed to fill a vacancy in the dental library, and meet a pressing want of the profession. Its author gives ample proof of the sufficiency of his resources, and exhibits great skill in their employment for the special use intended. For practical purposes, it has the character of a manual and operative directory; and for instruction in the scientific relations of his theme, it could scarcely be more judiciously and profitably executed. It is neither incumbered nor deficient in chemical science. It at once guides the operative dentist in the details of his every-day work, and teaches the student the principles directly involved in the philosophy of his profession. The liberal learning and the practical art of dentistry are alike provided for, with a perspicuity, compass, and exactitude that are worthy of high commendation. In the first book, "The Ultimate Chemical Elements of the Human Body" are well presented for the general purposes of the work. In the second, we have "The Chemistry of Digestion." These departments, which occupy one hundred and fifty pages of the treatise, are clearly necessary to the dentist who would understand the functional agencies which affect the organs whose diseases he must understand and treat. The general principles of organic chemistry must necessarily form the basis of a successful investigation of any of its specialties, and it is quite impossible to understand the fluids of the mouth, and the processes which take place in it, without some knowledge of those ulterior stages of digestion with which its functions are directly connected. These introductory divisions of the work are, therefore, of primary importance in the discussion of the subjects which are the specific aim of the work. The third book is occupied with "The Chemistry of the Mouth"—the teeth, saliva, the morbid changes of saliva, in all their forms; mucous and salivary calculi. The fourth book is upon "The Chemistry and Metallurgy of the Metals and Earths used by the Dentist;" the first chapter—on the different methods of applying heat, furnaces, and auxiliary apparatus—illustrated by a large number of well-executed engravings. The remaining ten chapters are upon as many metals, their alloys, compounds, and behaviour in the processes to which they must be subjected.

The chapters on gold and silver, and especially the tables of the coinage of different nations and dates, showing their weight, fineness, and value, are of great importance every way, but particularly in enabling the mechanical dentist to avoid those crystalline, unmalleable alloys that prove so troublesome in practice, as well as ascertain the exact composition of the plate, are matters of very great moment. To all this are added seven or eight chapters on the materials used in making incorruptible teeth, the colouring matters, and the preparation of the materials.

The work, it will be seen by this brief synopsis, is a full one, well and methodically arranged. It appears to us to be as well treated as it is planned, and we are satisfied it will contribute handsomely to that commendable effort which the profession is now making to liberalize and elevate its study and practice.

The publishers have got out the book in their best style.

E. T.