

The title of the book is used in a very wide sense, and at the end is a series of articles on renal secretion, its disorders and treatment. Nowhere does the author better show his powers of dealing with complicated problems—marshalling together his facts, and then in the most lucid and pleasant manner, often assisted by apt illustration, setting forth his view of the question. Great stress is laid upon the distinct blood-supplies of the glomeruli, and of the convoluted and straight tubes, and upon the distinct regulating mechanisms, while an attempt is made to classify diuretics accordingly.

### ALCHEMY

*Die Alchemie in älterer und neuerer Zeit.* By Hermann Kopp. Pp. 685. (Heidelberg: Carl Winter, 1886.)

THIS work is in two parts; the first part treats of alchemy up to the year 1775, and the second part subsequent to this date.

It is not written purely for the chemist, and indeed the student who looks here for the minor details of alchemy will be disappointed. These have already received ample treatment at the hands of Prof. Kopp in his "Beiträge zur Geschichte der Chemie," and the object of the present work is rather to lay stress upon the philosophy of the alchemists, to give some account of the organisations from which they received support, and to point out that such organisations had wider aims and a more distinguished following than is perhaps generally known. It will be read with as much pleasure by the student of literature and history as by the chemist. The difficulty of dividing a work of this nature into chapters is no doubt great, but we cannot help thinking that such a division would have been conducive to clearness; there is, however, a table of contents, a full and well-arranged index, and change of subject is indicated in the text by a break in the paragraphing. We have presented to us alchemy as a search after scientific truth under the guidance of principles which if ill-founded were yet sufficiently real to attract philosophers as well as representatives of wealth and power; as a science which survived persecution and failure, and whose allurements outlived the discredit brought upon it by dupes and swindlers. The relation between alchemy and medicine is traced in an interesting and careful manner. Although it has been by no means the author's intention to act as biographer, yet we have, if we may so speak, medallions of many of the more distinguished alchemists, in which the features calculated to indicate the growth and progress of principles are brought out with great clearness. Of such a type is the sketch of Leonhard Thurneysser, whose chequered career is indeed a romance of real life. In the second volume we have an interesting account of the "Rosenkreuzerbund," a secret society founded by Christian Rosenkreuz at the beginning of the fifteenth century. In this and kindred societies the "brothers" were encouraged to travel, gaining experience and knowledge which at their periodical meetings were retailed for the common interest and instruction of the members. Considerable latitude was allowed to the individual, and the following lines, by one who was himself connected with such a society, show that there was not always a servile respect for tradition:—

### DER WEISE UND DER ALCHEMIST

Gesund und fröhlich, ohne Geld  
Lebt einst ein Weiser in der Welt.  
Ein Fremder kam zu ihm und sprach: "Auf meinen Reisen  
Hört ich von deiner Redlichkeit;  
Du bist ein Phönix unsrer Zeit.  
Nichts fehlt dir als der Stein der Weisen.  
Ich bin der Trismegist, vor dem sich die Natur  
Stets ohne Schleier zeigt; ich habe den Merkur,  
Dadurch wir schlechtes Blei in feines Gold verkehren—  
Und diese Kunst will ich dir lehren."  
"O dreimal grösster Trismegist!—  
Versetzt der Philosoph—du magst nur weiter reisen!  
Der ist ein Weiser nicht, dem Gold so schätzbar ist.  
Vergnügt sein ohne Gold, das ist der Stein der Weisen."

The constitution of these societies is explained, and we are initiated into the mysteries of the various grades of rank: the juniors, the theorists, the practitioners, the philosophers, the minors, the majors, the adepts, the magister, and finally that rarest honour, the magus.

A considerable space is occupied with the history of one who was ever active in the welfare of such organisations—Georg Forster—born near Danzig in 1754. He was a remarkable man in every respect, unstable to a degree, holding peculiar opinions on religious topics, unskilled in all which contributes to success in the general occupations of life, and yet wielding powerful influence in the circle within which he moved. His earlier travels led him to England, where he was at the age of thirteen engaged in teaching French and German in a school at Warrington; then he passed into the East India Company's service; whilst at the age of eighteen we find him as a companion of Cook in his second voyage round the world; later he returned to the Continent, and became Professor of Natural History at Halle. Some thirty pages are devoted to a charming sketch of Georg Forster's character, and we do not know any other passage which affords such enjoyable reading.

S. Th. Sömmering was Forster's bosom friend and companion, a man not unlike him, and who shared all his trials and difficulties. In the concluding pages of the book it is shown how with the dawn of dynamical and quantitative ideas in chemistry at the close of last century, alchemy underwent modification, and, ultimately, rapid decline. One is tempted to wish that the author had given a concluding chapter on the rise and development of the principles of chemistry as shown by an examination of the doctrines of the alchemists.

Notes and references have been freely used throughout the work, and where remarks of such a length are required as to interfere with the continuity of the text, these are arranged in an appendix. These addenda occupy over 200 pages, and constitute in fact a most valuable contribution to the history of alchemy. The style and general character of the work will appear from the remarks that have been already made, and if there are occasionally passages that are somewhat abstruse, yet on the whole we have a clearness and picturesque delineation excelling in our opinion, anything that has hitherto appeared on the subject, and we congratulate the veteran author on his success in a new phase of literary effort. Our English readers will be glad to know that the book is printed in Roman type, and can be had bound in boards.

G. H. BAILEY