

Reviews and Notices.

Journal for Crystallography and Mineralogy. (Zeitschrift für Krystallographie und Mineralogie.)

WE learn with much pleasure that a Journal is to be published in Leipsic for the purpose of furnishing a complete repertory of all discoveries and investigations relating to Crystallography and Mineralogy. The first number will appear this month, and as soon as there is sufficient material at hand others will follow. Each will consist of about 100 pages, 8vo, and six parts will complete a volume in nine months or a year. The volumes will not cost more than 30s. a piece. Prof. Groth, of Strasburg, has undertaken the duties of Editor, and he has been promised the co-operation of many distinguished crystallographers and mineralogists in all parts of the world. We propose giving our readers abstracts of all important papers, so that they may be kept thoroughly *au fait* with the progress of the science of mineralogy.

Plattner's Assaying with the Blowpipe; 5th Edition, Leipsic, 1877. (Plattner's Probirkunst mit dem Löthrohre; fünfte Auflage Leipzig, 1877.)

THE first part of the new edition of Plattner's standard work, which has just been issued, comprises about one-fifth only of the entire book. The second and concluding part is in the press and will be published at Easter this year.

As in the case of the previous edition, it is to Prof. Richter, Director of the Freiberg School of Mines, that we are indebted for having revised, enlarged, and improved the original work. The amount of new matter, however, in the first part, seems to be small, and has been introduced at the expense of some portions of the previous edition, for the 144 pages of the new edition cover the same ground as 148 of the old. This diminution in size is partly due to the use of smaller type in places. Among the additions we notice descriptions of stands for holding blowpipe nozzles steady, further details on the use of the Bunsen burner, Foster's substitute for pieces of charcoal, and Rüger's and Kleritj's instruments for ascertaining the weight of small buttons of gold and silver. We may here remark that Griffin's name should have been mentioned in

connection with the biscuit supports for charcoal pastilles, as the support proposed by Foster is merely a modification of that invented by Griffin many years ago and figured in his "Chemical Handicraft," p. 366.

Among the re-agents not included in the list given in the 4th edition are gypsum, used in testing for lithium and boron, the mixture of potassic iodide and sulphur for detecting bismuth, and magnesium, instead of sodium, for Bunsen's test for phosphoric acid. On the other hand two re-agents, formerly recommended, are omitted, viz., oxalate of nickel and tincture of galls.

As illustrative of the difficulty of recognising the less conspicuously coloured flames, we remark that the colouring produced by metallic antimony formerly, included among the blue flames, is now placed under the head of the green. Some standard of colour, such as the colour-gauge devised by Mr. Otto Radde,* seems to be requisite, and especially in the case of coloured beads, for on p. 103 we are told that oxide of manganese imparts a light carmine-red colour to a microcosmic salt bead (O.F. cold), whereas on p. 125 the colour is said to be a reddish-violet.

Reference is made in a note to the labours of Emerson, G. Rose, Sorby, and Wunder, with regard to crystals formed in borax beads, but we are surprised to find that no notice whatever is taken of Major Ross' work on "Pyrology." Surely Prof. Richter must have seen the book, and we should have liked to have heard his opinion, that of the greatest authority living for such matters, on Major Ross' new methods of testing the aluminium plate as a support, use of boric acid and phosphoric acids as re-agents, &c. Prof. Richter's tendency seems to be to restrict rather than increase the application of boric acid, for in speaking of its uses he omits to notice its employment for Berzelius' test for phosphoric acid, which is mentioned in the previous edition. No doubt the test will be fully described in the latter part of the work, and hence the omission while speaking of the use of the re-agent. We are glad to see that he advises that the fused boric acid should be kept in fragments, and not in powder as was formerly recommended. We look forward anxiously to the completion of the work, when perhaps some remarks will be made on Major Ross' methods of assaying, both qualitatively and quantitatively.

* Jour. Soc. Arts, 15 Dec., 1876. p. 69.