Dr. Van Heurck's book is in the line of this change of relation. Its purpose is a survey of microscopical science from its technical, or, perhaps we should say, manipulative side. Although the language into which the work is translated is seldom wholly easy and natural, and occasionally becomes even awkward and obscure, the author may feel that, on the whole, his subject is presented to English readers in an interesting and attractive form. Dr. Van Heurck has long been known as a patient student of certain difficult problems in interpretation and a diligent cultivator of lines of microscopical work calling for expert skill in the handling of accessories, and it is in these directions that his book is strongest and most complete. We should hardly be justified, however, in characterizing his work as a symmetrical and systematic résumé of even the mechanical side of what is commonly known as microscopy. In truth it seems to us to be somewhat lacking in order and in equality of treatment of its various topics. It is in a measure a record of the author's own contributions to the progress of his favorite department of learning and therefore of necessity bears an evident personal stamp. The pride which he feels in his long experience and creditable achievements doubtless affects to some extent his sense of proportion, so that points to which he has himself happened to give particular attention are at times accorded what we may regard as a little undue prominence. Thus, for example, we are inclined to think too much space is given, and too much importance attached, to the subject of electrical illumination (pp.109-117), and that the praise bestowed upon the stand devised by Dr. Van Heurck (pp.224-232) is rather more unqualified than is appropriate to the circumstances under which it appears. One may reasonably question his assertion that "electrical incandescent illumination is superior to any other kind of illumination" for the microscope, and may well doubt whether he is fully justified in pronouncing his own stand "a perfect instrument." But these criticisms need not be taken as any disparagement of Dr. Van Heurck's authority on questions of construction and manipulation. In these matters, as we have already said, his knowledge and ability are generally conceded, and the novice will not go far astray in following

his advice. If there is any fault to be found with his guidance it is likely to be that in places it is too profuse and painstaking. Thus, in common with most other writers of microscopical text-books, he appears to us unnecessarily lavish in the space devoted to the mere cataloguing of the instruments of many makers, which differ from one another mainly in pattern ; and we feel disposed to ask whether a general description of the essential parts and qualities of a good stand, in each class, would not answer every purpose and enable the author to dispense with some pretty bad borrowed woodcuts. While on this subject, we venture to suggest, also, that much of the details under the heading "The Photographic Processes" might be omitted with profit, since they rehearse particulars which one may obtain in any manual of photography and which are not peculiar to photo-micrography. Indeed, some of the directions seem to be merely extracts from a general hand-book, as, for instance, where we are told (p. 272) that in development we shall get "first the sky and the high lights."

Beyond those portions which deal with the handling of the instrument and the preparation of specimens, this work undertakes to cover the theory, the history and the literature of the microscope. The chapter devoted to "Experiments on the Application of Dr. Abbe's Theory of Microscopic Vision" is a reproduction of Mr. J. W. Stephenson's very valuable paper presented to the Royal Microscopical Society in 1877, which Dr. Van Heurck has edited with a view to making it conform to the modifications which Prof. Abbe's views have since undergone. The chapter on "The Microscope in the Past and in the Future" is an abridgment of the Cantor Lectures of Mr. John Mayall, Jun., delivered in 1885. The chapter headed "The Microscopist's Library" is an incomplete list of periodicals and books not always up to date.

Notwithstanding the fact that the work before us is rather too sumptuous and bulky for everyday use by the student, it will doubtless prove a welcome addition to the library of the scientific amateur, and will perform a useful part in the promotion of interest in the instrument of which it treats.

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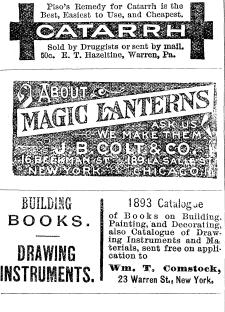
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