are here and there rather poor, and a higher general standard in this respect might easily have been attained.

After a general analysis, so to speak, of dynamos, in which armatures, magnets, &c., are discussed, we come to matters relating to the action of dynamos, such as series, shunt, and compound winding, and sparking and angle of lead of brushes. Then follow descriptions of typical machines, illustrated by folding sheets, and the book closes with chapters on Dynamo-Designing, and the Working and the Management of Dynamos.

We should have liked to have seen dynamo-testing worked out more fully, and a separate chapter on this important subject might easily have been given without burdening the book with matter properly belonging to works on general electrical measurements.

Considering the compass of the book—520 small 8vo pages—the authors have succeeded in placing before their readers a very great amount of valuable information, well arranged and clearly expressed, and their work will no doubt be appreciated by students and workers in practical electricity. A. GRAY.

OUR BOOK SHELF.

Modern Microscopy: a Hand-book for Beginners. In two parts. 1. "The Microscope, and Instructions for its Use." By M. J. Cross. 2. "Microscopic Objects: how Prepared and Mounted." By Martin J. Cole. (London: Baillière, Tindall, and Cox, 1893.)

THIS book, although only extending to 104 pages, is what it professes to be, and will prove thoroughly useful to beginners. The authors understand practically their respective subjects, and this has given the capacity, never otherwise possessed, to tell the beginner accurately and efficiently what it is needful for him at the outset to know.

It is highly to be commended that they have not rendered their pages incompetent by any pretence at an introduction to the optics of the instrument, or concerned themselves with any attempt at exposition of modern optical theory. They have done what affords a more genuine evidence of their appreciation of the importance of these subjects, having presented the results of the study of them in a practical form to the beginner, so that although his earlier efforts are not complicated with mathematical demonstrations and theory, he is nevertheless taught to work, on the highest results reached through these, so far at least as they apply to his initial endeavours.

The danger of extremely elementary books on microscopy is shallowness. They have often been a mere catalogue of two or three chosen instruments, with brief accounts of the apparatus affected by the author, and descriptions of pretty or pleasing objects. The former part of this book is much more than this; it gives the results of a practical knowledge of how to employ the instrument in such a way as to attain the finest results; always remembering that it is beginners that are receiving the instruction.

There are some thoroughly sensible things said on the microscope-stand. We may differ slightly from some of these, but they are written with a knowledge of the subject, and those who follow them will not greatly err.

We can commend also the chapter on "Optical Construction." It is brief, but puts to the beginner exactly what he requires to know. The pages on "Illuminating Apparatus" are specially commendable because thoroughly experimental. In fact, the fifty-five pages devoted to modern microscopy will be a boon to every one of the many who are every year "beginning" with the use of the microscope.

But the practical character of the book is seen even more clearly in the second part of it, by Mr. Martin Cole. He at once introduces the tyro to the art of preparing and mounting his own objects Here again it is not a mere repetition of what has been obtained from other sources that is presented, but Mr. Cole's long experience as a mounter is given to the reader unostentatiously and with pleasant and useful brevity.

There are some who, glancing at this little treatise, will at once conclude that the thirty-six pages devoted to the subject must leave it inefficiently treated even for beginners. We advise such to read the pages; and after some years of practice in most of the departments of mounting referred to and explained, we can only say that they present in a brief but a very efficient manner the facts required to enable the earliest efforts of an earnest amateur to become so successful as almost certainly to secure his interest in the subject, and cause him to intelligently pursue his pleasure and instruction, if not to aim at scientific work directed by more exhaustive treatises. W. H. DALLINGER.

Lectures on Sanitary Law. By A. Wynter Blyth, M.R.C.S., L.S.A. (Macmillan and Co. 1893.)

THIS work presents a general view of the powers and duties of Local Authorities in relation to public health, and since the material has been compiled by one who, while he is a prominent sanitarian is also a barrister-at-law, the fact that the work is good and trustworthy, and leaves but little to be desired, goes without saying. The only point upon which there is any scope for adverse criticism is that the review of sanitary legislation appears to be, in places, a little too cursory, and in consequence some important material is a trifle too hurriedly passed over. To indicate one such instance:—There is some important material contained in the Dairies, Cowsheds, and Milkshops Orders of 1885 and 1886 which is not given, and with which the health-officer is directly concerned. Sections 10, 11, and 12 of the 1885 Order are omitted; and no one will question their right to be fully included within any serviceable abstract of the Order, since they deal specifically with certain well recognised sources of contamination, against which it is necessary to guard the milk in those places where it is stored or kept for sale.

Nothing need be more inclusive or better expressed than the majority of the work, and when in one or two places the information is a little more extended, and the statutes specially dealing with the inspection and examination of food (which are now given *in extenso* in the appendix) are incorporated in, say, another two chapters, the book will be rendered even more acceptable than it is at present to those desirous of obtaining in a readable and concise form a good knowledge of sanitary legislation.

The scope of the book embraces the entire range of public health legislation, and the volume is largely an embodiment of a series of lectures which have frequently been given by the author. The first chapter treats of the constitution of Sanitary Districts and Authorities, and includes the definitions of certain terms employed in the Sanitary Acts. Lecture ii. deals with the statutory provisions regarding nuisances; and the next three lectures are concerned with the legal aspect of sewerage and drainage, water-supply and sanitary appliances; regulations and bye-laws; port sanitary law, canal boats, Metropolitan sanitary law, the Housing of the Working Classes Act, 1890, are all dealt with in subsequent chapters; and the statutory provisions which deal with the prevention of disease are particularly well and clearly mapped out in Lectures vi. and vii. The book comprises nearly 300 well-printed pages, and it is neatly and serviceably bound.

The author must be congratulated upon having presented a rather heavy and unattractive subject in the most concise and readable form—consistent with general usefulness—of any in which it has hitherto appeared.