

ational attractions in the same mass at different points of the earth's surface. The account of the effect of the flattening of the poles leaves much to be desired, and the effect of centrifugal force is not even mentioned.

Again, on p. 21 we have "unit acceleration as in scientific calculations, usually 1 centimetre per second. In many practical calculations it is 1 foot per second." Whatever may figure in practical calculations, it is certain that neither of these is scientifically an acceleration at all. Also, though we have no wish to be hypercritical, there is something quaint about the equation

$$"150 \times 25 = 3750 \text{ poundals.}"$$

When Mr. Biggs comes to electrical matters he is happier. His descriptions of hydrostatic analogies may help some readers, e.g. the inquiring town councillor, to form an idea of "electrical pressure," though we fear the notion may linger that it is really a kind of pressure.

But when he gets to Ohm's Law, Mr. Biggs says, after arriving at the result $C \propto E/R$, "In the early part of this century, Prof. Ohm proved more than this with steady continuous currents, not only that $C \propto E/R$, but that $C = E/R$, or expressed numerically in practical units, amperes = $\frac{\text{volts}}{\text{ohms}}$." How Prof. Ohm "proved" this Mr.

Biggs has not divulged, and it would be interesting to know. We had thought, innocently, that the equality of C to E/R was an affair of choice of units, and not of proof at all.

The cuts in the book are numerous, but, except a few here and there, are badly printed. The figure, on p. 185, of a long thin gentleman (in a rather modern dress) extended along a rod inside what looks like a stone coffin several sizes too big for him, at first sight startled us. Underneath, in black type, was the legend, "A Stretch of the Imagination"! but this, we found, referred to the following paragraph, which, curiously enough, deals with elastic threads.

The latter and really practical part of Mr. Biggs' book may be of service to some readers. It contains a good deal of useful information, conveyed in Mr. Biggs' genial, if a little conscious, style. But we should counsel a really earnest student, and especially a beginner, to choose a text-book in which a more serious attempt is made to grapple with the real difficulties of the subject.

Medical Diseases of Infancy and Childhood. By Dawson Williams, M.D., F.R.C.P. (Lond.), Physician to the East London Hospital for Children, Shadwell. Pp. xiv + 634. Plates 18; figures 18. (London: Cassell and Co., Ltd., 1898.)

THE book before us, which is correctly described by the author as a handbook, is intended "to act as a guide to clinical study" to young practitioners of medicine, and those who have not previously paid much attention to the subject. After introductory chapters treating of growth, clinical examination and food, the author proceeds to consider the individual diseases of children, and to indicate how the pathological processes, and their accompanying clinical phenomena, are different in children and adults. It would, of course, be impossible in a short notice like the present to give an account of the varied and practical information contained in Dr. Williams's book. Under the heading of diphtheria, the results of the antitoxin treatment, as culled from the statistics of the Metropolitan Asylums Board and the American Pediatric Society, are given, the author rightly observing that the statistical figures are actually less favourable than the reality. The interesting subject of the effect of the antitoxin treatment upon the complications of diphtheria, so often of such importance in children, is also discussed. Cretinism and its treatment by administration of the thyroid gland is considered. Hepatic disease in children, often a subject of considerable difficulty to the practitioner, is well treated. A list of prescriptions, a few

invalid cooking receipts, and a good index conclude the volume. The book will unquestionably be of use to the general practitioner and the student, and, while not capable of replacing the larger text-books on the diseases of children, will form a most valuable supplement to the various treatises on general medicine. F. W. T.

A Text-book of General Botany. By Carlton C. Curtis, A.M., Ph.D., Tutor in Botany in Columbia University. Pp. viii + 359. (New York, London, and Bombay: Longmans, Green, and Co., 1897.)

DR. CURTIS has added another to the existing long list of intermediate botanical text-books. His book is readable, and on the whole a fairly good one, and the number of new illustrations it contains at once impress the reader in its favour. Opening with a general account of anatomy, he devotes the second chapter to physiology. But the great bulk of the book (p. 87-340) is given up to systematic and morphological matters. A very short sketch of palæobotany, together with an index, conclude the work. The general treatment is based on the type system, and Dr. Curtis has done well in showing how this much abused method lends itself in reality very well to a connected exposition of the taxonomic parts of botany. Unfortunately, perhaps inevitably, the text is rather scrappy in many places, although this is partly atoned for by the fulness of the many laboratory exercises which are distributed through the book.

We have noticed a rather considerable number of misprints scattered through the pages; these will doubtless disappear in a future edition, which is almost sure to be called for, since the book, if used as an adjunct to the laboratory in the sense intended by its author, supplies a distinctly felt need for a guide suitable for intermediate students.

Domestic Hygiene. By Arnold W. Williams, M.B. C.M. (Edin.), D.P.H. (Lond.). Pp. 175. (London: George Bell and Sons, 1898.)

The Teacher's Manual of Object Lessons in Domestic Economy. Vol. ii. By Vincent T. Murché. Pp. viii + 334. (London: Macmillan and Co., Ltd., 1898.)

Lessons in Domestic Science. Part ii. By Ethel R. Lush. Pp. 77. (London: Macmillan and Co., Ltd., 1898.)

THESE three volumes all deal worthily with matters included in the science of health, and they will all assist in extending a knowledge of the laws of life. Dr. Williams's manual contains the substance of lectures delivered by the author at many rural and urban districts on the causes and prevention of disease and co-related subjects affecting the public health. The book will be found of service to technical instruction classes and others of a similar kind.

Mr. Murché's book is "adapted to meet the requirements of the Education Department in the Class Subject of Domestic Economy as laid down in the Code for 1898." It contains notes and hints for teachers who have to teach domestic economy to Standards III. and IV. of public elementary schools. In the former standard, the children are expected to know something of the materials used in clothing and the materials used in washing; in the latter standard, they are taught simple facts concerning the use and sources of food, the hygiene of clothes, and laundry-work. Mr. Murché's books have all been received by favour with teachers engaged in elementary schools, and the present volume will doubtless have the same welcome extended to it.

Domestic science is a new subject recently adopted by the Education Department. It differs from domestic economy in the fact that principles rather than processes are dealt with. The parts of the subject included in Miss Lush's booklet refer to the functions and preparation of food, and the dwelling. A course such as it provides educates as well as interests the pupils.