bull is intended for youths who have already had a course of experimental geometry, and is almost entirely devoted to demonstrative geometry. It is divided into four sections, dealing respectively with triangles and quadrilaterals, circles, areas, and with ratio, proportion, and similar figures. Most of the propositions contained in the volume belong to Euclid, but the author has allowed himself that freedom of treatment that is now happily prevalent. The book shows no conspicuous merits such as would render its general use either likely or desirable.

In the volume by the Rev. E. M. Radford, the author has compiled and arranged a hundred test or examination papers, each containing twelve problems: a large number of the latter are stated to be original, and many are taken by permission from published examination papers. The collection is "intended primarily for the use of candidates for mathematical entrance scholarships at Oxford and Cambridge," and the subjects on which problems are set comprise "pure geometry, algebra, trigonometry, analytical conics, and elementary mechanics," with the addition in the last fifty papers of elementary theory of equations and elementary differential calculus. The book will no doubt prove useful to the class of student for whom it is intended, but the problems show no sign whatever of having been influenced by the reform in the teaching of mathematics which is now in progress. The author hopes shortly to publish a volume of solutions, and this will be very acceptable to teachers who may use the work.

## OUR BOOK SHELF.

Handbuch der Laubholzkunde. Charakteristik der in Mitteleuropa heimischen und im Freien angepflanzten angiospermen Gehölz-Arten und Formen mit Ausschluss der Bambuseen und Kakteen. Camillo Karl Schneider. Erste Lieferung, pp. 160; Zweite Lieferung, pp. 161-304. (Jena: Fischer, 1904.) Price 4 marks for each Lieferung.

These two parts form the commencement of a work intended to render possible the identification of the hardy species of angiospermous trees and shrubs indigenous to, or cultivated in, Central Europe. Such a work invites comparison with Koehne's well known book on the same subject rather than with the more comprehensive descriptive works by Koch and Dippel. From the first named it differs in the vastly greater number of illustrations, and in the fuller details given regarding the characters of buds and twigs. These additional details contained in Schneider's book go far towards removing the uncertainty of diagnosis involved in the provisional identification by means of the dichotomous keys employed throughout the work. present Lieferungen, dealing with the Salicaceæ, Myricaceæ, Betulaceæ, Fagaceæ, Ulmaceæ, Moraceæ, Urticaceæ, Santalaceæ, Loranthaceæ, Aristolochiaceæ, Polygonaceæ, Chenopodiaceæ, Phytolaccaceæ, Caryo-phyllaceæ, Trochodendraceæ, Ranunculaceæ, Lardizabalaceæ, and some species of Berberis, nominally include 197 illustrations, but in reality contain quite 2000 figures of buds, twigs, leaves, inflorescences, flowers, fruits, and their parts. In addition, the free use of abbreviations and of small reliable produced possible the analysis of the small state of the small state. print has rendered possible the condensation into small

compass of much information concerning not only diagnostic characters of species, varieties, and forms, but also concerning their nomenclature, distribution, and phenology. To illustrate the method of treatment adopted by the author, *Populus alba* may be selected from the twenty-three species of Populus considered in this work. Three varieties of this tree are sufficiently described as regards their distinctive features; figures are given of resting-buds, twigs and their transverse sections, four forms of leaves, flowers, seed, embryo, and seedling; information is tendered as to the times of flowering, of flushing of the vegetative buds, and of fruiting, also as to the germination, distribution, and age attained by this species; and finally hybrids including this species are noted. In so thorough a work it is exceedingly difficult to avoid making statements not universally applicable, but the solitary one that the reviewer has observed is to the effect that Carpinus Betulus has a trunk with a light grey coating of cork. The work may be strongly recommended to all engaged in the study of dicotyledonous woody plants growing in the open in this PERCY GROOM. country.

The Cancer Problem in a Nutshell. By Robert Bell, M.D. Pp. 39. (London: Baillière, Tindall and Cox, 1904.) Price 1s. net.

Dr. Bell in this pamphlet ascribes the development of malignant disease to a withdrawal of some controlling influence exerted by the thyroid gland upon the cells of the body, caused by some toxic state of the blood. He therefore advocates the administration of thyroid gland or of its active principle in the treatment of the disease, and claims to have obtained successful results. Little or no evidence is given in support of these views, and since malignant disease occasionally, though unfortunately rarely, undergoes spontaneous cure, the apparent success of any form of medical treatment has to be carefully controlled before such a result can be admitted. Dr. Bell's suggestions for the prevention of malignant disease may be of some value.
R. T. H.

Photography on Tour. Pp. 132. (London: Published for the Photogram, Ltd., by Dawbarn and Ward, Ltd., n.d.) Price 1s. net.

In these pages, the sizes of which are only 3\frac{3}{4} inches by 42 inches, we have a number of useful hints and instructions which are well worth an amateur's time to read. When the photographer is away from his base, and has to invent all sorts of makeshifts, he may find many a useful wrinkle given here for which he may later be very thankful. The author seems to have brought into a very small compass a great deal of in-formation covering a wide field, and this pocket book for the touring photographer should serve a useful purpose.

The Story without an End. From the German of Carové. By Sarah Austin. Illustrated by Paul Henry. Pp. vii + 77. (London: Duckworth and Co.) Price 1s. 6d. net.

In this allegory a child is introduced to the beauties of plants, birds, insects, and other forms and aspects of nature. It pleases children to imagine themselves in close communion with inanimate nature, and they have no difficulty in endowing all the objects around them with human attributes. Poetic feelings, and sympathetic interest in plant and animal life, are appealed to by this daintily bound and gracefully illustrated contribution to literature.