

THURSDAY, MARCH 11, 1915.

A TEXT-BOOK OF FORESTRY.

*Elements of Forestry.* By Prof. F. F. Moon and Prof. N. C. Brown. Pp. xvii+391. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1914.) Price 8s. 6d. net.

THE progress of forestry in the United States is remarkable. It is barely twenty years since the first forest reserve was set aside by the Government at Washington, which to-day controls with a trained staff of foresters about 186,000,000 acres of national forests. Forestry is now a matter of great public interest, and is taught in universities, colleges, and schools, there being no fewer than twenty-three institutions giving degrees in the subject. In addition to numerous bulletins and reports issued by the U.S. Bureau of Forestry, there now appear two professional journals, the *Forest Quarterly* and the Proceedings of the Society of American Foresters. Various text-books on special branches of forestry have been published, but no general handbook suitable to students in America has hitherto appeared.

The "Elements of Forestry," by Moon and Brown, is an attempt to supply this need, and it is very satisfactory as an elementary text-book. It will serve as a good introductory work for professional students of forestry, and covers about as much of the subject as is necessary for students in agriculture. The book is clearly printed and well-illustrated. All the usual divisions of the science and art of forestry are taken up in a series of simple and attractive chapters, at the end of each of which is a short and useful bibliography. Of chapters i. to xiv., which are of universal application, those devoted to the utilisation, technology, and preservation of wood are of special interest; and much praise must be given to the chapter on forest finance, in which the gist of this important matter is expounded in sixteen pages. The attention of landowners and practical foresters may be directed to the example on p. 265, which illustrates the most common problem in forestry finance in England, namely, the estimate of the cost of raising a crop of trees to any given number of years of age, and incidentally determining whether a plantation is a profitable investment or not.

Chapters xv.-xxii., entitled "Regional Studies," deal with the conditions of the forests of the United States, which are divided into seven regions. The description, silviculture, protection, and utilisation of the forests of each region are briefly but adequately dealt with. At the end of

NO. 2367, VOL. 95]

the book, in addition to a glossary, there is a collection of useful tables and statistics. The average rate of growth of the important species of trees in the various regions is given in Tables VII.-XI. From this it appears that the most vigorous conifers in each region are as follows, the figures being for average trees 100 years old and grown under forest conditions.

| Region             | Species                | Height in feet | Diameter in inches at 4½ feet up |
|--------------------|------------------------|----------------|----------------------------------|
| Pacific Coast..... | Douglas Fir            | 138            | 20·5                             |
|                    | Western Hemlock        | 110            | 15·2                             |
| Rocky Mountains    | Douglas Fir            | 86             | 21·1                             |
|                    | <i>Pinus Murrayana</i> | 73             | 11·2                             |
| Northern .....     | <i>Pinus resinosa</i>  | 95             | 17·6                             |
|                    | <i>Pinus Strobus</i>   | 92             | 20·0                             |
| Southern.....      | <i>Pinus Taeda</i>     | 111            | 24·5                             |

THE LANGUAGES OF SOUTHERN NIGERIA.

*Specimens of Languages from Southern Nigeria.* By N. W. Thomas. Pp. 143. (London: Harrison and Sons, 1914.) Price 4s. net.

MR. NORTHCOTE THOMAS has given us an exceedingly interesting piece of work in African philology by publishing for a reasonable price what might be called a sketch of the languages of Southern Nigeria between the frontier of the Bantu Cameroons on the east, and the Yoruba country on the west. The same ground was covered in 1888 by the writer of this review, but his work, which would be of interest in comparison with, and supplementary to, that of Mr. Northcote Thomas, was only privately printed by the Foreign Office. Perhaps some day it may be disinterred from a confidential blue-book and produced with other linguistic studies.

Mr. Thomas's specimens (prominent nouns, numerals, pronouns, and such syntax as can be illustrated by a variety of sentences) include nearly the entire range of the Ibô dialects, the languages of the Calabar and Cross River district; the Ijô of the actual Niger mouths, Yoruba of the Lagos vicinity, Sôbô and Kukurúku of the Bini-Edo group, Ibibio of the region between the Calabar estuary and Opôbô, and a number of very interesting semi-Bantu languages on the verge of the Cameroons frontier. Mr. Thomas does not attempt much in the way of classification, but would seem to indicate that he finds a connection more or less close between the semi-Bantu Yala, which lies far to the north of the upper Cross River, and the Edo or Bini group in the western part of Southern Nigeria. No evidence of very close affinity, or of affinity at all, is to

C