

NEW NORWEGIAN MAPS.

SOME of the newer sheets of the Norwegian topographical map, 1:100,000, contain excellent illustrations of cirques, which believers in glacial erosion would ascribe to ice work. In the Reppefjelde the cirque floors stand below sea level, so that the shore line enters several curiously rounded bays, suggesting that large blocks had been bitten out of the upland. In another example the cirques have encroached so far on an upland that only a skeleton of it remains. Still other sheets exhibit the 'arm-chair' relation of cirques to the large valley upon which they open, this being a special case of the hanging valley problem. Broad trough-like valleys, with divides on their floors and lateral valleys opening on their walls, are repeatedly illustrated. These various forms are of particular interest when compared with those occurring in a well-dissected, non-glaciated mountain district, such as the old Appalachians of North Carolina, whose forms are well shown on the U. S. Geological Survey topographical sheets around Mt. Mitchell.

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BOTANICAL NOTES.

MORE BOOKS ON TREES.

NOTHING could show more certainly the rapidly growing interest in trees and their place in the world than the increase in the number of books on this subject. It is but a short time since two books on some phases of forestry were noticed in *SCIENCE*, and now it is a pleasure to call attention to three more which have appeared within a few weeks. The first is 'The Woodsman's Handbook,' prepared by Professor Graves, of the Yale Forest School, and published as Bulletin 36 of the United States Bureau of Forestry. It is a small book containing 148 pages, each 10 by 16 cm. in size, and so bound and trimmed as to be easily carried in an ordinary pocket. In it the author has attempted to bring together such information in regard to the field work of the forester as he will find necessary to have at hand for use at any moment. It is for the forester what an engineer's 'fieldbook' is to the working engineer. The scope of the

little handbook may be seen from the general headings in the table of contents. Here we find 'Units of Log Measure,' 'Measurements of Sawed Lumber,' 'Measurements of Standing Trees,' 'Methods of Estimating Standing Timber,' 'Forest Working Plans,' 'Special Instruments Useful to a Woodman.' Under the first head no less than forty-five log rules are listed and described or commented upon. The author has made a most useful book, and the Bureau of Forestry is to be commended for giving it prompt publication, and especially for bringing it out in this handy form.

The next book is a 'Handbook of the Trees of New England,' by Lorin L. Dame and Henry Brooks, and published by Ginn & Company. It is a book of 196 pages, 10 by 18 cm., and bound with narrow margins for easy carrying in one's pocket. Eighty-seven species of trees are described and figured, and a few more are noticed but not illustrated. The figures are well done and must prove very helpful. The descriptions are full, and as they follow the same order in all cases, they will be useful not only to the forester, but to many a young botanist as well. Under each species the sequence of description is as follows: 'Habitat and range,' 'habit,' 'bark,' 'winter buds and leaves,' 'inflorescence,' 'fruit,' 'horticultural value,' 'explanation of the plate.' It is to be regretted that the authors followed the older nomenclature so largely, but this is not a sufficiently grave defect to seriously mar its usefulness. We wish that other parts of the country had as good books as this on their native trees.

In the 'Economics of Forestry' (Crowell & Company), by Professor Fernow, of the New York College of Forestry, we have another technical book designed for the use of forestry students. It is a work of 520 pages, 12 by 19 cm., and is bound in the usual style for the library shelf. The titles of the twelve chapters will give an idea of the scope of the work, as follows: 'The Relation of the State to Natural Resources,' 'The Forest as a Resource,' 'The Forest as a Condition,' 'Forest and Forestry Defined,' 'Factors of Forest Production and Business Aspects,' 'Natural His-

tory of the Forest,' 'Methods of Forest Crop Production, Silviculture,' 'Methods of Business Conduct, Forest Economy,' 'Principles and Methods of Forest Policy,' 'Forest Policies of Foreign Nations,' 'Forest Conditions of the United States,' 'The Forestry Movement in the United States.' There is also an appendix of valuable notes and tables. From the titles of the chapters, as well as that of the book, it is seen that it deals with the forestry problem from the standpoint of the political economist, and is in fact a contribution to one phase of this science, as well as to technical forestry. A full and satisfactory index closes this timely book, which we are sure must find its way into general use by all who are interested in the subject of forestry in any of its more general aspects.

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SCIENTIFIC NOTES AND NEWS.

THE Nobel prizes for 1902 were formally awarded on December 10. As we have already announced, the prize in chemistry was awarded to Professor Emil Fischer, of Berlin; the prize in medicine to Professor Ronald Ross, of Liverpool University, and the prize in physics was awarded divided between Professor H. A. Lorentz, of Leiden, and Professor P. Zeeman, of Amsterdam. The value of each of the prizes is about \$40,000.

THE American Philosophical Society elected officers on January 2 as follows: *President*, Edgar F. Smith; *Vice-Presidents*, George F. Barker, Samuel P. Langley, William B. Scott; *Secretaries*, I. Minis Hays, Edwin G. Conklin, Arthur W. Goodspeed, Morris Jastrow, Jr.; *Treasurer*, Henry La Barre Jayne; *Curators*, Charles L. Doolittle, William P. Wilson, Albert H. Smyth; *Councilors*, George R. Morehouse, Patterson Du Bois, Ira Remsen, Isaac J. Wistar.

At the Washington meeting of the Astronomical and Astrophysical Society of America the following officers were elected to serve for the ensuing year:

President—Simon Newcomb.

First Vice-President—George E. Hale.

Second Vice-President—William W. Campbell.

Secretary—George C. Comstock.

Treasurer—C. L. Doolittle.

Councilors—E. C. Pickering, R. S. Woodward, Ormond Stone, W. S. Eichelberger.

The time and place of the next meeting were left for subsequent decision by the council.

THE first appointments to the newly established honorary position of associate of the Harvard University Museum are as follows: Andrew Grey Weeks, Jr., of Boston, in zoology; Herbert Haviland Field, Ph.D., of Zurich, in zoology, and Robert LeMoine Barrett, A.B., of Chicago, in geography. Mr. Weeks is a specialist in Lepidoptera; Dr. Field is the editor of the well-known *Concilium Bibliographicum*; Mr. Barrett is engaged in exploration in Central Asia.

SURGEON GENERAL WYMAN, of the Marine Hospital Service, has returned from California, where he went to investigate the alleged existence of bubonic plague in San Francisco.

THREE members of the scientific departments of Syracuse University have leave of absence for the purpose of study abroad—Dr. Charles W. Hargitt, professor of biology, sails for Naples in January, to be absent one year; Dr. T. C. Hopkins, professor of geology, will study volcanoes and glaciers in Italy, France and Switzerland, and Dr. Harold Pender proposes to repeat his experiments on electricity and magnetism at the University of Paris.

THE state commissioners of education of New South Wales, headed by Dr. G. H. Knibbs, president of the University of Sydney, have come to the United States to study our educational system.

MAJOR RONALD ROSS was given a reception by the Lord Mayor of Liverpool on December 22 in recognition of the award to him of the Nobel prize.

THE curators in the Zoological Museum of the University of Berlin, Dr. Wilhelm Weltner, Dr. Gustav Tornier and Dr. Paul Matschie have been made professors.

WE learn from *Nature* that the First Lord of the Treasury has appointed a committee to inquire and report as to the administration by