be carried out to strengthen the cultural ties between the peoples of this hemisphere:

- 1. Societies in a position to do so might well follow the example of others which in the last few months have invited Latin American colleagues to become members.
- 2. In order to partly compensate for certain wide differences in exchange, societies in a strong position might establish membership or subscription rates in the various currencies of Latin American republics.
- 3. Societies might arrange with similar organizations in Latin America for a certain number of exchange memberships. In such memberships international remittances would be unnecessary; exchange-society members would pay larger dues and be allotted a second copy of a journal to be mailed to an exchange member in Latin America (who would be doing similarly). The main point in this suggestion is that no money would change hands, i.e., differences in exchange would not be a problem.
- 4. Societies might well turn their attention toward the election of corresponding members from Latin America; wherever possible, at least one from each country.
- 5. Wherever the number of subscriptions for particular journals warrants, (certainly none at present) Spanish or Portuguese abstracts might appear at the ends of all articles. This would be costly, however, unless translations could be arranged on a volunteer basis. It would be equally desirable to a great many United States scientists to have abstracts in English for articles in journals published in Spanish or Portuguese.

The foregoing and other ideas can be successful only if worked out on a reciprocal basis. A "big brother" movement is unlikely to be greeted kindly, however cordially it is intended. During the previous World War, one of our generous-minded scientific institutions sent a large number of subscriptions to Latin America, and continued them without charge for a period of years. Less than 10 now remain on their paid circulation list. Possibly this represents the number of scientists who find the journals useful. In any case, it is clear that whatever is done along the line of scientific cooperation, must be done on a basis of equality: no handouts given, and none asked, but always a willingness and a desire for full cooperation.

Our aim ought to be to place our journals in the hands of all our Latin American colleagues who want them and who might profit by them; it is equally important that we have access to such of their journals as in turn would be of value to us. Working out the means for such collaboration is necessarily up to scientific societies and others interested. Such groups can, if they wish, lead the way in strengthening cultural ties between countries of the Western Hemisphere.

And to what organizations shall we turn for leadership?

GEORGE S. AVERY, JR.3

CONNECTICUT COLLEGE

THE DISTRIBUTION OF AMERICAN ASTRO-NOMICAL LITERATURE ABROAD

THE Committee for the Distribution of American Astronomical Literature Abroad was formed in September, 1940, by action of the council of the American Astronomical Society. Because of the risk of loss in passage most ordinary mailings of printed matter from the United States to Europe have ceased. Our committee is therefore sending to European countries one or two copies of each current American publication by whatever seems the safest method and the most promising route.

We have established contacts with a number of European astronomers, who have offered to act as circulation managers for their countries. Dr. Oort in Leiden is circulation manager for Holland, Dr. Delporte for Belgium, Dr. Abetti for Italy, Dr. Kopff and Dr. ten Bruggencate for Germany, Austria, Poland and Czecho-Slovakia, and Dr. Lindblad for Scandinavia. We are not yet mailing regularly to Dr. Lindblad, since the Scandinavian astronomers are apparently still receiving American publications. We have so far been unable to establish contacts with France. An attempt to work through Dr. Mineur failed, and we are now trying to get in touch with the director of the Paris Observatory. The astronomers in Holland and Germany are helping us establish contacts with France and we are certain that before long we shall be able to include France in our scheme. All items are now being sent by second-class registered mail. The losses in transit have so far been small.

In return Dr. Oort, Dr. Abetti and Dr. ten Bruggencate have promised to send by airmail abstracts of all astronomical articles that can not be sent directly to the United States. The committee proposes to mimeograph these abstracts for distribution among American astronomers. The first bulletin with a series of abstracts sent by Dr. Abetti is now being issued. If it should become impossible to send any printed matter to Europe, the committee proposes to prepare similar abstracts of American papers for distribution to Europe.

Most astronomical publications are still being mailed to the British Isles. The committee has, however, begun to send to the secretary of the Royal Astronomical Society one or more copies of those papers that are not being mailed generally to Great Britain. The secretary of the Royal Astronomical Society will also receive at least one copy of every publication from continental Europe that can be spared in the United

³ Formerly secretary of the Botanical Society of America.

States. We have asked the European circulation managers to provide us for this purpose with extra copies of articles published in their countries. A complete series of recent numbers of the *Bulletin* of the Astronomical Instituts of the Netherlands has already been mailed to England; another set has gone to Canada.

The council of the Royal Astronomical Society has accepted the offer of our committee to send on to the circulation managers in continental Europe copies of current British publications. Eight copies of a recent issue of the *Monthly Notices* of the Royal Astronomical Society and some of the Publications of the Dominion Astrophysical Observatory have already been sent on in this way.

Directors of observatories and editors of astronomical journals are urged to send to the committee a dozen copies of every publication for distribution abroad. The committee is already receiving the generous cooperation of the editors of the Astrophysical Journal, the Publications of the Astronomical Society of the Pacific, Popular Astronomy and the Telescope. A small grant from the American Astronomical Society is paying for the current costs of mailing, but the committee will have to ask for further support if it is to continue its work beyond the summer.

B. J. Bok, Chairman H. R. Morgan J. Stokley

SCIENTIFIC BOOKS

VITAMINS

What Are the Vitamins? By Walter H. Eddy. iii + 247 pp., with six illustrations. New York: Reinhold Publishing Corp. 1941. \$2.50.

WITH the tremendous increase in our knowledge of and interest in vitamins a large number of books on this subject are appearing. Most of these books may be grouped into two large classes: those which give a very complete and detailed picture of one vitamin, such as Williams and Spies on Vitamin B₁ and Reed, Struck and Stick on Vitamin D, and those which contain only the significant facts about all the vitamins. "What Are the Vitamins?" by Eddy falls into the latter class and, as the author states, it is the result of his personal effort to condense the subject of vitamins without sacrificing accuracy. With the exception of a few minor errors the author has accomplished the task he set for himself.

After two introductory chapters, which contain an excellent list of the known vitamins and a brief outline of the relation of vitamins to enzymes, each individual vitamin is discussed. In each case a complete description is given of the various symptoms which one may expect to find during a deficiency of the vitamin in question. Some attention is given to the daily human requirements for each of the vitamins, but the survey of the experimental evidence upon which these figures are based is not extensive. A fairly complete table of vitamin values of foods is given in the appendix.

There is some repetition in the book since chemical formulae for the same vitamin appear in several different parts of the book. Each chapter contains a fairly complete bibliography, although in a few cases papers referred to do not appear in the references. The author seems to have some difficulty in getting the structural formulae exactly correct. On page 66 a CH₂ group is omitted from the thiamin molecule and on

page 119 the formula for the hydroxy acid part of pantothenic acid is somewhat deformed.

Any one interested in obtaining the latest information about vitamins in the shortest time possible will do well to consult this book.

C. A. ELVEHJEM

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COMMERCIAL TIMBERS

Commercial Timbers of the United States, Their Structure, Identification, Properties, and Uses. By H. P. Brown, professor of wood technology, New York State College of Forestry, and A. J. Panshin, assistant professor of forestry, Michigan State College. First edition. 554 pages, 387 figures. New York: McGraw-Hill Book Company. 1940.

This book, which supersedes the "Identification of the Commercial Timbers of the United States" by the same authors, is another addition to the growing list of the American Forestry Series of books which are prepared under the guidance of Professor Walter Mulford, University of California, as consulting editor. It is intended, as the authors say, for use by students in forestry and plant anatomy and also by others who wish to become thoroughly conversant with wood.

It covers the anatomy of wood beginning with the grosser features visible with the unaided eye, such as sapwood and heartwood, annual rings, pores, resin canals, grain and texture, and leading the student into the finer structure visible only with a microscope, such as the shape, size and configuration of the different types of cells found in wood, and briefly into the ultramicroscopic conceptions of the cell wall as determined by x-ray diffraction. The general discussion of wood anatomy is not limited to native species but has universal application.

In addition to the discussion on anatomy, ten pages