

p. 220, and Neisser's statistics (p. 240) are confused by an extraneous "or." In the bibliography a note by Woodhead (*Journ. Path.* 13, 123) on the stability of antitoxin is missing, and papers by two or more authors are catalogued only under the name of the first, an arrangement which is inconvenient for running down vague memories. The index is not full enough, though with the aid of the table of contents it seems possible to discover what one wants. These small defects are not easy to find, and the authors may rest assured that they will have the gratitude of all working bacteriologists for years to come.

A. E. B.

The Timbers of Guiana.

Étude descriptive sur les bois utiles de la Guyane française. Par Herbert Stone. Pp. 416+7 planches. (Marseille: Faculté des Sciences, Musée Colonial, 1923.) n.p.

THIS study of the commercial woods of French Guiana is a sequel to "The Timbers of British Guiana," which was published by the Crown Agents for the Colonies in 1914. In both books Mr. Stone adds considerably to our knowledge of the forest products of South America, as many of the timbers described are also exported from Venezuela and Brazil. In the present work, more than 200 specimens are minutely described, and trustworthy information is supplied concerning the uses, the native names and the physical properties of the woods examined. The scientific names of many of the trees still remain uncertain, in the absence of authentic specimens of foliage and flowers; nevertheless, some outstanding problems of botanical nomenclature have been solved.

The timbers of Guiana are varied in character. Some have earned world-wide reputation for strength and durability, whilst others are esteemed mainly for their beauty; and a third class yield valuable drugs and dyes. The best known is greenheart (*Nectandra Rodiaei*), a hard heavy timber, said to be the strongest known. Its lasting qualities in air and under water are remarkable, and justify its extensive use in the construction of ships, bridges, and wharves. All the gates, piers, and jetties of the Liverpool docks are of greenheart. Nansen's ship, *The Fram*, and the Antarctic ship, *Discovery*, were built of this wood. Other species of *Nectandra* also furnish excellent timber, as that known to the natives as "Cirouaballi," corrupted to "Silverbally," which has been imported into London under the name of "Surinam mahogany." Mora, yielded by a tree of giant size, *Dimorphandra mora*, is rated at Lloyd's as one of the eight first-class timbers for shipbuilding.

It is more durable than teak, and has been used for railway sleepers and street paving. Other Guiana woods are suitable for special uses, thus Tonga bean or Cumaru (*Dipteryx odorata*) is in demand for fishing-rods. Walking-sticks and umbrella handles are often made of letterwood or snakewood, so called because the surface is spotted over with blackish markings, resembling hieroglyphics or the skin of a snake. Its origin has been recently determined as *Piratinera guianensis* (*Journ. Washington Acad. Sciences*, Oct. 1922, p. 393). Partridge wood, used in turnery and for walking-sticks, is regularly imported from Brazil, but also comes from Guiana. In *Science*, March 10, 1922, Prof. Record identifies it with *Cæsalpinia Ebano*.

True mahogany is not met with in Guiana, but substitutes for it are occasionally put on the market, such as crabwood, *Carapa guianensis*. Spanish cedar, *Cedrela odorata*, used for making cigar boxes and racing boats, is confined to the West Indies and French Guiana. Other highly decorative woods occur in the colony, as the class known to the French as *satiné*, of which Mr. Stone described four varieties. One of these, distinguished as *satiné rubanné*, is considered by Prof. Record to be identical with the redwood of Brazil, *Brosimum paraense*. Surinam rosewood, which yields a fragrant essential oil, is derived from a species of Aniba.

The chemical and physical properties of logwood, which is the chief dyewood of commerce, are described in great detail by Mr. Stone. The tree which furnishes this valuable product, *Hæmatoxylon campechianum*, grows fast in Guiana and deserves to be more widely cultivated than it is at present. Quassia wood, famed for its bitter taste and extensively used as a vermifuge and insecticide, is yielded by two distinct trees, *Quassia amara* and *Picræna excelsa*; but only the wood produced by the latter is used in Great Britain. Mr. Stone points out their differences, and also describes an allied species, *Simaruba amara*, the wood of which, although almost tasteless, is sometimes substituted for the true Quassia.

Our Bookshelf.

Faune de France. 5: Polychètes errantes. Par Pierre Fauvel. (Fédération française des Sociétés de Sciences Naturelles: Office Central de Faunistique.) Pp. 488. (Paris: Paul Lechevalier, 1923.) 45 francs.

THERE is no doubt as to the welcome which this volume will receive at the hands of those who have occasion to study and identify specimens of Polychæta from the area in question or from neighbouring coasts. The author has liberally interpreted the limits of the French area, for he has included all the species of Polychæta