imbibition, and solution, are discussed, first in the abstract, and then applied, so far as possible, to the explanation of the formation of membranes, protoplasmic movement, cell division, molecular structure, turgor, the movement of water, etc. They form a useful summary, naturally not quite up to date, of facts and theories which it is essential for the student of physiology to command. It is doubtful if elsewhere they can be found more conveniently arranged and effectively presented. All of them have for some years found a place in the writer's lectures on plant physics.—C. R. B.

North American Flora.—The first part of volume IX has just appeared, being the sixth part published. It contains a part of the Polyporaceae, by W. A. MURRILL, 33 genera being presented, the following being new: *Hydnoporia*, *Fuscoporia* (9 spp., 2 new), *Fuscoporella* (6 spp., 5 new), *Fomitiporia* (17 spp., 16 new), *Fomitiporella* (9 spp., 7 new), *Tinctoporia* (1 new), *Melanoporella*, and *Melanoporia*. The large genera are Coriolus (40 spp., 13 new), Polyporus (35 spp., 2 new), Tyromyces (25 spp., 6 new), and Hexagona (19 spp., 5 new). In other genera 9 new species are described.—J. M. C.

Icones Plantarum.[7]—The species illustrated in the twenty-five plates of this part include 11 new species by HEMSLEY, one of which represents a new Chinese genus (*Sinofranchetia*) of Lardizabalaceae. Five additional new species are described, but not illustrated. These 16 new species are all oriental, chiefly Chinese, and belong to the following families: Sabiaceae, Hamamelidaceae (8), Lardizabalaceae (6), and Triuridaceae.—J. M. C.

Pflanzenfamilien.[8]—Part 229 contains the completion of Hookeriaceae, the Hypopterygiaceae, Helicophyllaceae, Rhacopilaceae, and most of Leskeaceae, by V. F. BROTHERUS. Part 230 contains the completion of Ascolichenes and the beginning of Hymenolichenes, by A. ZAHLBRUCKNER. The fourth part concludes the second supplement (1899–1904) and includes the title-page and index.—J. M. C.

Das Pflanzenreich.[9]—Part 32 contains the tribe Coelogyninae of Orchidaceae by PFITZER and KRÄNZLIN. Of the 15 genera recognized, the following are described as new: *Ptychogyne*, *Hologyne*, *Sigmatogyne*, *Chelonistele*, and *Camelostalix*. The species number 246, the large genera being Coelogyne (103), Dendrochilum (74), and Pholidota (31).—J. M. C.

Eucalyptus.—The ninth part of MAIDEN'S revision of Eucalyptus[10] contains the description, synonymy, range, and affinities of eight species. This series, begun in 1903, now includes thirty-one species.—J. M. C.

[7] HOOKER'S Icones Plantarum. IV. 9[2]: *pls. 2826–2850.* 1907.

[8] ENGLER, A., und PRANTL, K., Die natürlichen Pflanzenfamilien. Lief. 229 und 228 und Ergänzungsheft II, Lief. 4. Leipzig: Wilhelm Engelmann. 1907.

[9] ENGLER, A., Das Pflanzenreich. Heft. 32. Orchidaceae-Monandrae-Coelogyninae von E. PFITZER und FR. KRÄNZLIN. pp. 169. *figs. 54* (294). Leipzig: Wilhelm Engelmann. 1907. *M*8.40.

[10] MAIDEN, J. H., A critical revision of the genus Eucalyptus. Part IX, pp. 259–294. *pls. 41–44.* Sydney: Published by the State of New South Wales. 1907. *2s. 6d.*