

disturbances as those of the West Indies are discussed, and the view is expressed 'that a subsidence of the floor of the Caribbean Basin, causing displacements of equilibrium and forcing molten and other material to the surface, was the inciting cause of the Antillean eruption' (p. 50). The later paragraphs are devoted to an inquiry in regard to the source of volcanic steam, and the two theories, the penetration of sea water, and of land water, are discussed. The author concludes with a statement favoring the theory that hydrated rocks and the magma of the earth's interior supply the water from which the steam of volcanoes is derived. Twenty-three excellent half-tone plates of the tower of Pelée, eruptions, etc., complete the volume.

ERNEST HOWE.

THE BELGIAN ANTARCTIC EXPEDITION.

*Resultats du voyage du S. Y. 'Belgica' en 1897-98-99, sous le commandement de A. de Gerlache de Gomery.* Rapports scientifique: Zoologie. Organogénie des Pinnipèdes. I., Les extrémités, par H. LEBOUQC. December, 1904. Pp. 20, pl. I.-II. Botanique. Champignons par Mmes. E. BOMMER et M. ROUSSEAU. April, 1905. Pp. 15, pl. I.-V.

Two more numbers of the fine series of Antarctic reports from the Belgian Expedition have been received. In the first we have a discussion of the nepionic stages of the development of the extremities in the Antarctic seals, *Lobodon carcinophaga* and *Leptonychotes weddelli*, deduced from a series of unborn young. Of these twelve belonged to *Lobodon* and four to *Leptonychotes*. None of the specimens was embryonic, ranging in length from fifteen centimeters upward. Nevertheless, a study of the progressive development or gradual reduction of the phalanges, nails and hair in such a well-preserved series is far from uninteresting, and this is what M. Leboucq offers, together with some comparisons with known data relating to other seals and some cetaceans.

The fungi collected by the *Belgica*, with one exception, were obtained in Tierra del Fuego, where ten species and forms new to science

were obtained. The Antarctic form was found among the culms of the sole Antarctic grass, *Aira antarctica*, in the state of mycelium, which offers analogies with that of *Collybia racemosa*, and it is possible that it belongs to an *Agaric* related to that species. It comes from Danco Land. The Fuegian forms number fifteen and are fully illustrated by admirably executed plates.

W. H. DALL.

SCIENTIFIC JOURNALS AND ARTICLES.

THE December number (volume 12, number 3) of the *Bulletin of the American Mathematical Society* contains the following articles: Report of the October Meeting of the American Mathematical Society, by F. N. Cole; Report of the September Meeting of the San Francisco Section, by G. A. Miller; 'Note on Loxodromes,' by C. A. Noble; 'Stolz and Gmeiner's Function Theory' (Review of Stolz and Gmeiner's *Einleitung in die Functionentheorie*, Abteilung I.), by Oswald Veblen; 'Cesàro-Kowalewski's Algebraic Analysis and Infinitesimal Calculus' (Review of Cesàro's *Elementares Lehrbuch der Algebraischen Analysis und der Infinitesimalrechnung*), by C. L. E. Moore; Shorter Notices; Notes; New Publications.

The January number of the *Bulletin* contains: 'On a Familiar Theorem of the Theory of Functions,' by Edmund Landau; 'Rational Plane Curves Related to Riemann Transformations,' by H. S. White; 'On Lamé's Six Equations Connected with Triply Orthogonal Systems of Surfaces,' by J. E. Wright; 'Certain Surfaces Admitting of Continuous Deformation with Preservation of Conjugate Lines,' by Burke Smith; 'The New Calculus of Variations,' by E. R. Hedrick; 'Granville's Differential and Integral Calculus' (Review), by E. B. Van Vleck; 'The Foundations of Science' (Review of Poincaré's *Science et Hypothèse*), by E. B. Wilson; 'La Mécanique Statistique' (Review of Gibbs's *Statistical Mechanics*), by Jacques Hadamard; Notes; New Publications.

*The American Naturalist* for December contains the following articles: 'Ecology of