would have been able to write on paper. It can be put on the slide as soon as the paraffin ribbon has been mounted. If the slide was clean when the label was written, water, alcohol and xylol may be applied to it freely without any danger of injury. Ordinary abrasion such as the slide frequently encounters in use will not in any wise affect the permanency of these labels. They can, however, be scratched off easily with a dull knife (or scrubbed off with scouring soap). A white paper label pasted on the *back* of the slide will make it even more conspicuous.

LANCE BURLINGAME
STANFORD UNIVERSITY, CALIFORNIA,
January 14, 1914

A NEW NAME FOR THE MARMOT OF THE CANADIAN ROCKIES

MR. ARTHUR H. HOWELL has called my attention to the fact that the name applied by me to the large marmot from the Moose Pass branch of the Smoky River, Alberta, *Marmota sibila*,[1] is preoccupied by *Arctomys sibila* Wolf.[2] The marmot of the Moose Pass region may be called *Marmota oxytona*.

N. HOLLISTER
U. S. NATIONAL MUSEUM,
November 5, 1913

SCIENTIFIC BOOKS

Mathematical Monographs. Edited by MANSFIELD MERRIMAN and ROBERT S. WOODWARD. No. 12. *The Theory of Relativity.* By ROBERT D. CARMICHAEL. New York, John Wiley & Sons. 1913. Pp. 74.

Unlike most presentations of the theory of relativity, which contain a considerable amount of technical mathematical physics, Carmichael's is non-technical and logical in the same way that the discussion of the foundation principles of geometry or mechanics or chemistry might be made non-technical and logical. The book may, therefore, be read with ease by the mathematician who has little or no knowledge of modern physics or by the physicist who is unacquainted with mathematical analysis; it might be read by the engineer or, for the most part, by the philosopher. The work is in no sense a mere compilation from the investigations of previous authors, but represents a considerable amount of independent investigation of which the major part has appeared in contributions to the *Physical Review.*

The strongest and most satisfactory part of the book is that dealing with the statement of the postulates upon which the theory is built and with the direct consequences of the postulates. Less final and satisfactory are those parts where the physical theories (as distinguished from the results of physical experiments) which might conceivably underlie the theory are mentioned. This lack of finality and satisfaction is, however, quite unavoidable in these latter days when so many phenomena apparently subversive of long-accepted notions are constantly being unveiled. One has only to read the report on "La Théorie du Rayonnement et les Quanta,"[1] of the colloquium held at Brussels in 1911 to see in what a state of partial bewilderment and contradiction are the leading physicists of our time. The riot of new hypothesis and theory in the last volume (No. 26) of the *Philosophical Magazine* is a similar indication.

The author abstains from electromagnetic theory and confines his attention to the relation of the theory of relativity to the concepts of length and time, of mass and energy; he has, however, to mention that fundamental unit of electricity, the electron. He does well to emphasize the independence of the theory of any hypothesis as to the existence or non-existence of the ether, even though he subsequently finds it useful to make use of the ether in discussing the physical nature of mass. He could profitably have gone a little more into detail with regard to the relation between the ether and relativity.

Once we admit the existence of a stagnant ether, we have at hand at least a logical fixed system of reference; we may logically speak of

[1] Smithsonian Miscellaneous Collections, Vol. 56, No. 35, p. 1, February 7, 1912.

[2] Linne's "Natursystem," Vol. 2, p. 481, 1808.

[1] Langevin and Broglie, Gauthier-Villars, 1912.