

Suggestion 3.—In discussion of type material modern terms indicating its precise nature will be found useful. Examples of these terms are: type (or holotype), allotype, paratype, cotype, lectotype, neotype, etc.

Suggestion 4.—In all cases in the serial treatment of genera or species and where first used in general articles the authority for the species, or genus, should be given; and the name of the authority should not be abbreviated.

Suggestion 5.—Where the title of any publication referred to is not written in full, standard abbreviations should be used.

Suggestion 6.—When a species discussed has been determined by some one other than the author it is important that reference be made to the worker making the identification.

It is believed that nearly all workers will realize the importance of these or similar rules and it is hoped that other periodicals will carefully consider the matter and determine on definite policies. Such a step would be of great help to all workers and would assure a firmer foundation.

Rule 4 covers a subject which is often abused. When we consider that much of the cataloguing and indexing is now done by people with but little experience and knowledge, it is especially important that all communications should be properly signed.

S. A. ROHWER,

Corresponding Secretary-Treasurer

A NEW MARINE TERTIARY HORIZON IN SOUTH AMERICA

IN preparing a monograph on marine Tertiary mollusca from the Lower Amazon region for the Serviço Geológico e Mineralógico do Brazil, we have been astonished to note that we are dealing with a horizon approximately equivalent to the blue marls of the Yaqui valley, Santo Domingo; the Bowden beds of Jamaica; the Gatun formation of the Isthmus of Panama, and the Chipola beds of Florida.

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THE PANAMA CANAL SLIDES THAT WERE

THE big slides that blocked the Panama Canal after its opening were removed suffi-

ciently about April 15, 1916, to permit ships to again use the waterway. The dredges continued at work, however, until they had not only brought the channel to its former size but, by April 1, 1917, had also made the part where maximum sliding occurred more than 200 feet wider than it was before the temporary stoppage of traffic. After January 1, 1917, only a little dredging was done, and by February 1, 1918, it was practically discontinued.

On August 30, 1916, a large boulder slid into the channel and, because of its menacing position, caused navigation to be suspended until it could be blasted out. Because of its great hardness the rock was not completely removed until September 7, 1916. Since this 7-day interruption to navigation in 1916 the canal has given absolutely satisfactory and uninterrupted service.

Now that even dredging in the vicinity of the former slides, except a very little for general maintenance, has been discontinued for several months, it is interesting to recall an article published in the *New York Times* during the latter part of 1915, part of which follows:

That uninterrupted service through the Panama Canal could not be expected for several years was the statement made last night by Professor Benjamin Le Roy Miller, Ph.D., who occupies the chair of geology at Lehigh University.

The article continues, quoting the professor directly:

Before the canal can be said to be completed and permanently opened to traffic, the amount of material that must be taken out will not fall far short of the amount already taken from the Culebra cut.

Transportation companies planning to use the canal should realize that they must not expect uninterrupted service for several years. During the dry season the canal may be opened, but it is certain to be closed during the rainy season when the earth is soaked with water and its movement toward the canal facilitated.

General Goethals, then governor of the Panama Canal, in his annual report for 1916

strongly condemns the professor's wild statements. The committee from the National Academy of Sciences, sent down by President Wilson about the end of 1915, also believed such assertions were not warranted by facts. Now the zephyrs of time have completely cleared away the foundations of fog on which the professor's off-hand, sweeping, and calamitous prophecy was based. One might pardon a professor of poetry for indulging in such dire and generalized prophecy regarding the canal, but that a professor of science should ascend so far into the rarified realms of imagination is surely an anomaly.

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A COUNTRY WITHOUT A NAME

TO THE EDITOR OF SCIENCE: A statement made by one of your correspondents in SCIENCE, June 21, "Canada, which is no part of America," is barely saved by the context, "Canada, which is no part of America, as we wish it to be known, the U. S. A."

Wishes will hardly avail to rule that Canada is no part of America. The united states south of the Rio Grande bear the name Mexico; similarly the united states (provinces) north of the St. Lawrence and the Great Lakes bear the name Canada. Mexico and Canada are both good names, because they are single words and readily afford corresponding adjectives. The geographically intermediate group of states suffers the misfortune of having no name, and a much needed adjective is consequently lacking. All three groups are, of course, "of America"—Mexico being, however, rather more American than the other two.

The awkwardness due to lack of a name has been especially exhibited during the past year or more in such glaring inaccuracies as "American troops," "American supplies," etc., when "United States" is meant. That particular federation of American states which begins with Maine and ends with Washington needs a name more than it needs a national flower.

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SCIENTIFIC BOOKS

An Introduction to the Chemistry of Plant Products. By PAUL HAAS, D.Sc., Ph.D., Lecturer on Chemistry, Royal Gardens, Kew, and in the Medical School of St. Mary's Hospital, London; and T. G. HILL, A.R.C.S., F.L.S., Reader in Vegetable Physiology in the University of London, University College. With diagrams. Second edition. London, New York, Bombay, Calcutta and Madras, Longmans, Green and Company. 1917. \$3.50 net.

The subject of paramount importance in biology is the study of the cell and its constituents. A great deal is known concerning the physical properties and occurrence of nearly all those bodies that possess definite forms under normal conditions. Independent of the biologist a large number of constituents have been isolated and these have been studied as to their chemical properties and in some instances their constitution has been ascertained. The work of the biologist and phytochemist has been usually conducted more or less independently. Up until now this was inevitable on account of the special training required in both these sciences. The time has come, however, when the results of the biologist should be understood by the chemist and the discoveries of the latter interpreted and applied to the study of the constituents of the cell. This work of Haas and Hill aims to supply this deficiency and is likely to be an incentive to the publication of other books covering these subjects.

This work deals essentially with the important plant constituents and includes: (1) Fats, oils and waxes; phosphatides; (2) carbohydrates; (3) glucosides; (4) tannins; (5) pigments; (6) nitrogenous bases; (7) colloids; (8) proteins; (9) enzymes. These various substances are considered as to their occurrence in nature, their physical and chemical properties, microchemical reactions, method of extraction, quantitative estimation and physiological significance. The chemical methods of isolation of the plant products and their chemical reaction are very fully considered and for this rea-