method of dealing with the problem has come as a surprise.

AN exhibition organized by the chief scientific board of Russia is soon to be opened at Moscow, which will demonstrate the researches and achievements of the different scientific institutions in Russia. Exhibits will be furnished by the Baring Sea Hydrological Expedition, by the Polar Expedition, by the Timiryazev Research Institute, by the Roentgen Institute, etc. Professor B. M. Zavadovsky will exhibit his experiments on the physiology of the thyroid gland of birds and animals. A number of charts and drawings will be displayed by the Optical and Radio Institutes. New instruments and appliances will be exhibited by the Astrophysical and Geophysical Institutes. There is also to be displayed a variety of objects of ethnographical interest.

THE *Christian Science Monitor* states that King Haakon, of Norway, on January 29 honored the members of the *Maud* expedition by conferring on them the Order of Saint Olav. After eight years' absence, Captain Wisting will remain in Norway a few days, then proceed to Rome to participate in Captain Roald Amundsen's transpolar flight. Dr. Sverdrup, scientific member of the expedition, has been offered a professorship in the University of Oslo.

UNIVERSITY AND EDUCATIONAL NOTES

THE daily papers report that more than $7,000,000 has been pledged to the University of Miami by residents of Greater Miami, in a campaign started to raise $10,000,000 for buildings and equipment. Construction of administration buildings has started and it is planned to open the university in October.

DR. CLARENCE C. LITTLE, president of the University of Michigan and former president of the University of Maine, will direct the summer course in biology at the University of Maine biological station at Bar Harbor this year.

DR. ALBERT DAVIS MEAD, director of the department of biology at Brown University, has been made vice-president of the university to act under the direction of President W. H. P. Faunce.

DR. ELMER P. KOHLER, professor of chemistry at Harvard University, has been appointed acting dean of the graduate school of arts and sciences for the second half of the current academic year, during the absence of Dean George H. Chase.

DR. BARTON WARREN EVERMANN, director of the museum of the California Academy of Sciences and of the Steinhardt Aquarium, has been appointed lecturer in zoology at Stanford University. He has also been reappointed chairman of the section on scientific research of the Commonwealth Club of California, which position he has held for several years.

JAMES ASTON, of Pittsburgh, for the past five years metallurgical engineer in charge of research with the A. M. Byers Company, has been appointed professor of mining and metallurgy and head of the department of mining and metallurgical engineering at the Carnegie Institute of Technology.

DR. S. J. BARNETT, research associate of the Carnegie Institution of Washington, has been appointed lecturer in physics at the University of California Southern Branch, for the second half of the current academic year.

DR. CHARLES L. BONIFIELD has been made director of the gynecologic service in the medical school at the University of Cincinnati to succeed the late Dr. Sigmar Stark.

M. GIGNOUX, professor of geology at the University of Strasbourg, has been appointed professor of geology and mineralogy at the University of Grenoble to take the place of the late Professor Kilian.

DISCUSSION AND CORRESPONDENCE

THE DANGER OF EARTHQUAKES IN NEW ENGLAND

IN the November twentieth number of SCIENCE is an article entitled "Jay Backus Woodworth" in which the statement was made that it was his opinion "that neither human history nor the relevant facts of geology indicate serious danger for the city of Boston from earthquakes."

This is not in accord with his published statements as quoted below:[1]

> The belief is quite general about Boston that this region is now practically exempt from severe earthquakes, and that the occurrences of the 17th and 18th centuries at Plymouth, Newbury, and Boston pertain to an exhausted régime in the earth's conduct. It is well to remember, however, that from the great earthquake of 1638, felt at Plymouth, to the shocks at Newbury in 1727 is an interval of 89 years; and that the interval between the earthquake of 1638 at Plymouth and that of 1755 at Boston is 117 years. The interval between the earthquake of 1755 at Boston and the Charleston earthquake of 1886 is 131 years. These long intervals of repose and minimum seismic action lull suspicions and cause the multitude to regard what has not occurred in their father's and grandfather's days as a possibility too remote to enter into their own lives. Nevertheless it behooves us to remember that the earthquake at Plymouth, Mass., in 1638, at Newbury, Mass., in 1727, at Boston in 1744 and more strikingly in 1755, and yet more impressively at Charleston, South Carolina in 1886, and at San Francisco in 1906, offer phenomena during

[1] Harvard Seismographic Station, Seventh Annual Report, including Records 1 January to 31 December, 1915.

more than three centuries, the time of occupation of the middle latitudes of the North American continent by European peoples, of the magnitude of the local play of the seismic force. It is evident that the intervals between epochs of great destructive force in the same locality are to be measured in centuries and fractions of a century. Until science shall have discovered the signs of the return of these alarming and often disastrous earthquakes, we can only bear in mind that as we recede in the steady march of time from the epoch of one of these events we draw nearer, step by step, to the next one in the series.

Also in the Harvard Seismographic Station Fourth Annual Report for the year, 1 August, 1911–31 July, 1912 Professor Woodworth states as follows:

> The importance of engineers and architects taking into account the liability of earthquake shock strong enough to damage buildings in this district is amply shown by the history of earthquakes at Plymouth, Newburyport and Boston in the 17th and 18th centuries. There can be little doubt that the recurrence of such shocks as were felt in Boston in 1755 would produce much damage. While the Atlantic coast of the continent is relatively immune from earthquakes, the case of Charleston in 1886 enforces attention upon the necessity of recognizing the risk of destructive shocks upon this coast at long intervals perhaps of a few centuries only. Sane precaution demands the avoidance of the mistake made at San Francisco of placing a public reservoir upon a fault zone of recent movement, and of the folly of cheap mortar and rubly masonry which together were factors of first importance in the loss of life and property in Charleston in 1886, and in Messina in 1908. We may not be able to avoid building our houses and public edifices upon ground liable to destructive shocks, but we have abundant information as to how these structures should be built in order to reduce the risks of demolition to a minimum.

In many long conferences with me Professor Woodworth frequently expressed the opinions quoted above and went into detail about the great disaster which might befall the less stable sections of the city in an earthquake such as Boston has experienced in the past. To my personal knowledge he held these views up to the time of his final illness.

I feel that on such an important matter his opinions should be correctly stated.

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A PLEA FOR THE RETENTION OF THE TERM "BIOS"

IN the nomenclature of the vitamins suggested by Funk[1] it is proposed to change the name "bios" to vitamin D. Several reasons why the original name for the "substance indispensable for the development of yeast" should be retained occur to one concerned primarily with the "bios problem."

First: The substance which affects the multiplication of yeast cells was reported by Wildiers in 1901, ten years before the vitamins were recognized. The designation suggested at that time was "bios," with the further suggestion that it should be used until the substance could be identified chemically.

Second: No advance towards the chemical identification of "bios" has been made by its classification with the vitamins.

Third: It is questionable whether "bios" is a vitamin in the generally accepted sense of that term.

Fourth: The literature of "bios" has grown to considerable proportions since 1901. A recent review[2] listed 144 papers by more than 80 authors. It is evident that "bios" has a well-established literature of its own which would appear under that subject heading and not under vitamin D.

In view of these facts it would seem most unfortunate and confusing to rename the "bios" of Wildiers until its identity shall have been established.

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A FEW SUGGESTIONS REGARDING REPRINTS

EVERY one must have been perplexed by the difficulty of storing reprints so that they may be readily available. Current specimens range from vest-pocket to large portfolio size, even excluding monographs, which must be omitted from my criticisms for self-evident reasons. This wide range in size makes it difficult to make proper provision for their storage, not only in private but also in public libraries. This can not be accomplished without much loss of space, and one often is distressed by the wear an important reprint has received, largely due to improper storage.

One could, to be sure, classify reprints according to size, but that is inconvenient for other reasons and equally objectionable from the standpoint of space. Some publishers and institutions have already adopted a uniform size, but much remains to be desired for the great variation in size confronts one not only in the storing but also in the binding, even if done in temporary holders, and in the mailing of reprints.

Not infrequently the name, date and volume of the publication from which the reprint is taken are not indicated on it by the publisher. Besides depriving the journal in question of proper credit for the article this omission makes ready reference impossible. Rarely, publishers also use an inferior

[1] SCIENCE, (62), 157, 1925.

[2] Tanner, F. W., *Chemical Review* (1), 397, 1925.