## UNIVERSITY AND EDUCATIONAL NOTES

JULIUS ROSENWALD, a member of the board of trustees of the University of Chicago, has given to the university a million dollars for the campaign fund of $17,500,000 for endowment, for research and for new buildings. At a recent meeting of alumni $500,000 was pledged to the fund.

THE will of the late Artemus Ward, after establishing a trust fund of a million dollars for his son and making various bequests, leaves the residue of his estate to Harvard University.

BY the death of Sir W. Northrup McMillan, formerly a citizen of St. Louis, Washington University will receive more than $1,000,000 for the establishment of a hospital to be known as the "McMillan Eye, Ear, Nose and Throat Hospital." Mr. McMillan's mother, who died in 1914, had provided that Washington University should receive the residue of her half interest in her husband's estate in the event that her son died without issue.

THE University of Michigan receives a fund of $375,000 from the estate of Silas Wright Dunning, who died on May 29 last at the age of eighty-five years. Mr. Dunning was for many years editor and chief owner of *The Railway Age*. The will directed that the fund be used to purchase books and periodicals for the university library.

THE *Journal* of the American Medical Association reports that the widow of Dr. Christian R. Holmes, for many years dean of the University of Cincinnati College of Medicine, had made a gift to the university of $25,000, in addition to the $250,000 previously given to endow the Christian R. Holmes deanship. This gift completes the pledges necessary to insure $700,000 from the General Education Board, and thus completes the $2,000,000 endowment for the College of Medicine, which was pledged in 1919.

DR. ALFRED H. LLOYD, professor of philosophy and dean of the graduate school of the University of Michigan, has been appointed acting president of the University of Michigan, to fill the vacancy caused by the death of President Marion E. Burton.

DR. HUGO MELLA, acting head of the department of neuropathology of the Harvard Medical School, has been appointed associate professor of neuropathology and psychiatry in the University of Colorado, Denver, and associate director of the Colorado Psychopathic Hospital.

J. B. BROWN, formerly research chemist with Swift and Company, Chicago, has accepted the position of assistant professor of physiological chemistry at the Ohio State University.

## DISCUSSION AND CORRESPONDENCE

### METHOD OF MEASURING DEEP SEA TIDES

IN the course of a conversation with William Beebe regarding plans for work to be done on his oceanic expedition, my attention was drawn to the fact that no method had been devised up to the present time for recording the rise and fall of the tides except in comparatively shallow waters. It appeared that the Hydrographic Office was very anxious to have data regarding the tides at localities where the depth of the ocean was measured in miles. The problem looked rather hopeless at first sight, but on thinking about it, the idea occurred to me that if we could make an artificial island, reaching up from the sea floor to within a few feet of the surface, the rest would be easy. Such an island could be made by means of a submerged buoy anchored to the sea bottom by a wire. If the ocean were calm, and there were no currents, this buoy would remain in a fixed vertical position above its cement anchor at a constant distance from the ocean floor. If the buoy contained a self-recording barograph of special design operated by the pressure of the water above the buoy, the periodic rise and fall of the tide would be recorded. Other factors might, and probably would, be present which would cause a variation in the height of the water above the buoy. Ocean currents, by causing the buoy to swing out from the vertical, would depress it, and there would of course be a rapid periodic change due to waves. It seems probable, however, that if the curve drawn on the revolving drum of the barograph was subjected to analysis by passing it through such a machine as Professor Michelson's harmonic analyzer, the tide curve would come out uncontaminated by the variations contributed in other ways. The scheme could be tried out at very small cost. The first experiments could be made in comparatively shallow water (say, three or four hundred feet), and the depth gradually increased. For deep sea work the position of the submerged buoy would have to be marked by a smaller surface buoy. The action of the wind on this would introduce another disturbing factor, which would disappear, however, in the analysis of the curve.

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### OBSERVATIONS OF SHADOW BANDS

ON account of the snow which covered the ground on the day of the total eclipse of the sun of January 24, 1925, observations of shadow bands were made

by more people than ever before in the history of eclipses. Since the discussion of shadow bands is a meteorological problem rather than an astronomical one, the Committee on Eclipses of the American Astronomical Society has requested the cooperation of the chief of the U. S. Weather Bureau. This has been readily granted, with the result that the shadow band observations are to be discussed by Dr. W. J. Humphreys, meteorological physicist of the U. S. Weather Bureau, who is also a member of the eclipse committee.

A request is hereby made that observations of shadow bands be sent to the Chief of the U. S. Weather Bureau, Washington, D. C.

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## THE SEGREGATION OF PHYSICAL GEOGRAPHY

WITHIN recent years there has been a tendency to segregate physical geography from the field of geography. There is voluminous literature available which emphasizes the position of physical geography as being geologic rather than geographic. In a few cases departments of earth sciences have reorganized since the wave of geographic interest with the result that physical geography is classified as a phase of geology.

Worthy reasons are undoubtedly responsible for these efforts and actions and it is not the intention of the writer to infer that they are not in part justifiable. The establishment of a department of geography separate from that of geology bears favorable comments, but the weaning of physical geography from geography, the mother of all sciences, is open to criticism.

The subject-matter of physical geography permits adaptation to both geography and geology. It may be referred to as a medium which merges into geography in one direction and into geology in the other direction. It is unquestionably the primary structure of the foundation of geography. Without its support geography is set adrift, which in many cases seems to be the state of affairs. The attempt to place greater emphasis on economics, history and political sciences as a substitute for physical geography has proven unsuccessful.

Every student of geography should be required to complete successfully either a separate course in physical geography or a fundamental course in geography in which emphasis is primarily placed on physical geography and climatology. These sciences serve with equal importance. If this statement is true, and it is accepted that there is no objection to climatology as a course in geography, why should there be a tendency to set physical geography aside? If it is essential to consider the cause and effect of atmospheric changes, why is it not equally important to consider the cause and effect of the changes of the earth's surface? This same lack of continuity in geography courses appears in comparing physical geography and economic geography if the former is not considered a phase of geography.

There seems to be but one solution and that is not to segregate physical geography but to accept it as a distinct part of geography.

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## MICROSPORIDIA[1]

IN a biological and taxonomic study of Microsporidia,[2] I recently included three genera and a family which had previously been established by Léger and Hesse[3] and which have recently been found to be invalid by Dr. T. D. A. Cockerell, of the University of Colorado, who kindly called my attention to the matter.

In the present note, I propose, according to the Article 34 of the International Rules of Zoological Nomenclature, renaming these three genera and one family of the Microsporidia.

Genus *Coccospora* nom. nov. for *Cocconema* Léger et Hesse (1921 : 1419), not *Cocconema* Ehrenberg, 1829, in Polygastrica.

Genus *Spirospora* nom. nov. for *Spironema* Léger et Hesse (1922 : 328), not *Spironema* Meeks 1864, in Mollusca nor *Spironema* Klebs 1892, in Protozoa, nor *Spironema* Vuillemin 1905, in Protozoa.

Genus *Toxospora* nom. nov. for *Toxonema* Léger et Hesse (1922 : 328), not *Toxonema* Boehm 1895, in Mollusca.

The change in the generic name necessitates a similar modification in the family name as follows:

Family *Coccosporidae* nom. nov. for *Cocconemidae* Léger et Hesse (1922).

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[1] Contributions from the Zoological Laboratory of the University of Illinois, No. 255.

[2] Kudo, R., 1924, "A biologic and taxonomic study of the Microsporidia." Illinois Biological Monographs, Vol. IX, pp. 83–268.

[3] Léger, L. et E. Hesse, 1921, Microsporidies à spores sphériques. C. R. acad. sci., t. 173, pp. 1419–1421. 1922, Microsporidies bactériformis et essai de systématique du groupe. *Ibid.*, t. 174, pp. 327–330.