

tion of American Geographers and of the retiring vice-president of Section E, will be given, and the remainder of the evening will be spent in a social gathering so that the members may become better acquainted. It is intended to devote one session to a symposium on "Ancient climates" and several afternoons to excursions to the Geophysical Laboratory, the museums, and, if weather conditions are favorable, the field in the vicinity of Washington. One session will be devoted to the problems which the geological and geographical division of the National Research Council is working on.

*The Journal of the American Medical Association* states that the Fonds d'Etudes Roche has been organized by the manufacturing chemists, F. Hoffmann-La Roche and Co., who offer space in their establishment, at Basel, to research workers in experimental medicine and biology, and all facilities for research and a stipend, if desired. Only exceptionally will a longer course than three months be granted. The places are open to medical students, physicians and other scientists. Professor F. de Quervain, Kirchenfeldstrasse 60, Berne, is chairman of the committee, to whom application must be made and credentials presented. The work is entirely independent of regular work in the establishment, and the subject must be approved by the committee, consisting of Professors Cloetta, Zurich; Michaud, Lausanne; Roch, Geneva; Staehelin, Basel, and de Quervain, Berne.

### UNIVERSITY AND EDUCATIONAL NOTES

A GIFT of \$250,000 has been made to the Hampton and Tuskegee Endowment Fund by an anonymous New York banker.

A CONTRIBUTION of £1,000 has been received from Lord Glendyne towards the Jubilee Endowment Fund of the London School of Medicine for Women, which is intended to provide for the endowment of three chairs in the school—*anatomy, physiology and pathology*. The sum of £27,500 has now been raised towards the completion of the proposed £60,000 endowment.

DR. W. J. MILLER, for some years professor of geology in Smith College, has accepted a position as professor of geology and chairman of the department in the University of California, Southern Branch, Los Angeles.

WARREN E. LORING, of the University of Maine, has been appointed assistant professor of mathematics at Colby College, to fill the vacancy caused by the illness of Professor Benjamin Edward Carter.

DR. GEO. F. WEIDA, of Kenyon College, has been

appointed professor of chemistry at Centre College, Kentucky.

AT the Polytechnic Institute, of Brooklyn, N. Y., Dr. Parke B. Fraim, of Lehigh University, has been appointed assistant professor of physics, and Frank D. Carvin, of the University of Pennsylvania, assistant professor of mechanical engineering.

AT Tulane University, Dr. Parry Borgstrom has been appointed assistant professor of industrial chemistry, and A. Lee Dunlap, assistant professor in mechanical engineering, in the place of Ivor O. Mall, who has resigned.

DR. WALTER C. CRAIG, assistant director at the Johns Hopkins Hospital, Baltimore, has resigned to accept a position in the department of surgery at Yale University School of Medicine. Dr. Craig will be succeeded by Dr. John H. Snoke, who until recently was superintendent of St. Luke's Hospital, Shanghai, China.

MRS. LUGAN KEENE has been appointed professor of anatomy at the London School of Medicine for Women.

SIR CUTHBERT WALLACE has been elected dean of the faculty of medicine at the University of London.

PROFESSOR H. H. DIXON, whose appointment to the Regius chair of botany in the University of Glasgow was recently announced, is unable to accept the appointment.

### DISCUSSION AND CORRESPONDENCE A NEW FORMULA FOR THE ELECTRICAL RESISTANCE OF CERTAIN INHOMOGENEOUS SYSTEMS

IN a recent issue of SCIENCE (1924, lix, 403) Dr. F. H. MacDougall proposes a formula for the resistance of living cells suspended in a medium.

$$R = M \left[ \frac{1 + a \left( \frac{S - M}{2S + M} \right)}{1 - 2a \left( \frac{S - M}{2S + M} \right)} \right]$$

In which S is the resistance of the cells, M the resistance of the medium and R the resistance of the suspension of cells in the medium and a the cell volume. This formula is the same as formula 17, page 440, in Clerk Maxwell's "Electricity and Magnetism," third edition, Vol. 1, 1892, provided the algebra is translated into the same form. Maxwell's formula is:

$$R = M \left[ \frac{(2S + M) + a(S - M)}{(2S + M) - 2a(S - M)} \right]$$

By dividing both numerator and denominator of the fraction inside the brackets by (2S + M) we obtain MacDougall's formula.

# Science

## UNIVERSITY AND EDUCATIONAL NOTES

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