divided equally for use by Dr. L. M. Terman, of Stanford University, and Dr. Frank N. Freeman, professor of educational psychology in the University of Chicago. Dr. Terman will compare foster children and their foster parents and Dr. Freeman will make a comparison between foster children and their brothers and sisters.

MRS. TYNDALL, widow of Professor John Tyndall, has made a donation of £500 to the Royal Society to be used at the discretion of the Tyndall Mining Bequest Committee, as a fund to meet out-of-pocket expenses incurred by the Tyndall Research Student in carrying out his investigations.

THE Japanese government has decided to allot $1,000,000 for the establishment of an Institute for Natural Science in Shanghai. The research work in the institute will include several branches of pathology, anatomy, bacteriology, parasitology, serology and Chinese pharmacology. A yearly grant of $250,000 is to be made. It is hoped that the institute will be completed within three years.

THE Field Museum of Natural History, Chicago, has been given a trust fund of $25,000 by Julius Rosenwald, of Chicago, to be used by the museum without restrictions.

UNIVERSITY AND EDUCATIONAL NOTES

GROUND was broken on November 13 for two buildings at Columbia University to house the departments of physics and chemistry. They will cost $2,150,000.

AN appeal for the Harvard Medical School dormitory among physicians and their friends has resulted in gifts of about $250,000. The university has agreed to invest from permanent funds of the school about $300,000, and there remains about $550,000 to be raised.

POMONA COLLEGE has completed the first stage in its campaign for $3,000,000. More than $800,000 in pledges has been received, assuring the General Education Board gift of $400,000.

GLASGOW UNIVERSITY has received £2,000 from the Bellahouston trustees for the purpose of providing electrical appliances for the department of natural philosophy.

DR. HOMER G. BISHOP, instructor in psychology at Cornell University, has been appointed assistant professor of psychology at Smith College.

DR. GEORGE A. MENGE, retiring chairman of the Chicago section of the American Chemical Society, has been appointed as assistant professor of chemistry at Lafayette College.

DR. ALEXANDER M. BURGESS, of Providence, R. I., has been appointed medical director and assistant professor of biology at Brown University.

PROFESSOR ANDREW ROBERTSON, professor of mechanical engineering in Bristol University, has been appointed principal of Bristol Merchant Venturers' Technical College, in succession to the late Dr. Wertheimer.

Two newly created professorships in the medical faculty of the University of Münster have been filled by the appointment of Dr. Heinrich Többen to the chair of forensic medicine, and of Dr. Hermann Freund, of Heidelberg, to the chair of pharmacology.

DISCUSSION AND CORRESPONDENCE

RELATION BETWEEN THE SURFACE TENSION AND RELATIVE DENSITY OF A LIQUID

MACLEOD has given (Faraday Soc. Trans., 19, pp. 38–41; *Sci. Abs.*, 190, 1924) an empirical relation between the surface tension λ of a liquid, its density ϱ_1 and the density ϱ_2 of the saturated vapor, which is of the form.

$$\lambda = C\,(\varrho_1 - \varrho_2)^4 \qquad (1)$$

where C is a constant which depends only on the nature of the liquid. This relation has attracted some attention, and has been used by Sugden (*Chem. Soc. J.*, 125 pp. 1177–1189, 1924; *Sci. Abs.*, 2391, 1924) in considerations of the molecular volume and constitution of a liquid. May I point out that I have previously obtained the above relation (*Phil. Mag.*, pp. 83–102, Jan., 1911). I have also deduced from theoretical considerations that the constant C is given by

$$C = 32.96\,\frac{(\Sigma\sqrt{m_1})^2}{M^2\varrho_c^2} \qquad (2)$$

where $\Sigma\sqrt{m_1}$ denotes the sum of the square roots of the atomic weights of the atoms of a molecule relative to the hydrogen atom, ϱ_c the critical density, and m the molecular weight relative to the hydrogen atom. For example, the values of C for the substances methyl formate, carbon tetrachloride, benzene and ether, given by equation (1) are 27.53, 3.99, 45.5 and 62.92, respectively, while equation (2) gives the values 26.93, 3.33, 41.76 and 68.77.

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