

DR. EDWARD S. ROBINSON, of the department of psychology at the University of Chicago, has been appointed professor of psychology at Yale University.

DR. J. M. D. OLMSTED, assistant professor of physiology at the University of Toronto, has been appointed associate professor of physiology at the University of California.

DR. GEORGE H. KIRBY, director of the New York State Psychiatric Institute and professor of clinical medicine in the department of psychiatry at Cornell University Medical College, has been appointed professor of psychiatry at Columbia University. Dr. Kirby sailed for Europe on April 23 to visit neuro-psychiatric clinics and hospitals.

DR. VIRGIL H. MOON, head of the department of pathology in the Indiana University School of Medicine, has been appointed head of the department of pathology at Jefferson Medical College, Philadelphia, and will assume his duties in June.

## DISCUSSION AND CORRESPONDENCE

### HUMIDITY AND CHRONOMETRY

MANY of those interested in well-regulated time-pieces have doubtless noticed the tendency of watches to run fast in winter and slow in summer. This variation is in the direction to be expected from incomplete temperature compensation, but most watches are kept nearly as warm in winter as in summer. The indoor humidities however vary from about 30 to 80 per cent. from winter to summer. Being interested in adsorbed films it occurred to me to investigate the effect of varying humidities on the amounts of water adsorbed by metals in relation to watch rates.

Through the courtesy of Mr. George P. Luckey, of the Hamilton Watch Company, a dozen balance wheels were obtained for test. These weighed 5.13035 grams after exposure to a saturated atmosphere, 5.1302 at 40 per cent. humidity, 5.1300 at 5 per cent. humidity and 5.1291 grams with the moisture completely removed. The total surface exposed was approximately 8 sq. cm, hence the moisture was adsorbed to a depth of 1.6 microns or about 4,000 molecular diameters. The relative change in mass was as 1:1.00025 for all the adsorbed water and about a tenth as much for the range of indoor humidities ordinarily met with.

A gravity pendulum is of course not affected by such variations in mass since force and mass vary in the same proportion. But in watches and chronometers, the force applied by the activating spring is independent of the mass moved and a variation in that mass produces a first order effect on the rate. Since  $(t_1/t_2)^2 = I_1/I_2 = m_1/m_2$ , a change in rate of 1 second per day would be produced by a change in

mass from 1 to 1.000023. Removal of all the adsorbed moisture from the balance wheel of a watch or ship chronometer would therefore cause it to gain about 10 seconds per day. Variations in humidity from 30 to 80 per cent., other things being equal, would cause changes in rate of 20 to 30 seconds per month. The rating of a ship chronometer in a dry winter land laboratory could not hold for protracted humid conditions.

Since the adsorbed moisture layer decreases rapidly in thickness with rise of temperature, thermal expansion and moisture adsorption tend to compensate each other in chronometers. Control of humidity within the case should not be difficult. The adsorption of the vapors of lubricating oils is relatively much less and this too could be brought under control if necessary.

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## SIXTY-ONE NAMES UNDER CONSIDERATION FOR INCLUSION IN THE OFFICIAL LIST OF GENERIC NAMES

THE secretary of the International Commission on Zoological Nomenclature has the honor to invite attention of the zoological profession to the fact that the following 61 generic names (with genotypes in parentheses) are under consideration for insertion in the Official List of Generic Names.

Announcement of final vote will be delayed until about April 1, 1928, in order to give persons interested in these names opportunity to express their opinions.

PROTOZOA: *Bursaria* (*truncatella*), *Eimeria* (*falciformis*), *Laverania* (*malariae* so. *falcipara*), *Plasmodium* (*malariae*), *Sarcocystis* (*miescheri*).

CESTODA: *Ligula* (*avium*).

NEMATODA: *Filaria* (*martis*), *Heterodera* (*schachtii*), *Rhabditis* (*terricola*), *Strongylus* (*equi* = *equinum*), *Syngamus* (*trachealis* so. *trachea*).

OLIGOCHAETA: *Enchytraeus* (*albidus*).

HIRUDINEA: *Haemadipsa* (*zeylanica*), *Limnatis* (*nilotica*).

CRUSTACEA: *Armadillidium* (*vulgare* so. *armadillo*), *Astacus* (*astacus*), *Cancer* (*pagurus*), *Daphne* (*pulex*), *Diaptomus* (*castor*), *Gammarus* (*pulex*), *Homarus* (*gammarus* = *marinus*), *Nephrops* (*norvegicus*), *Oniscus* (*asellus*), *Pandalus* (*annulicornis*), *Penaeus* (*monodon*), *Porcellio* (*scaber*).

XIPHOSURA: *Limulus* (*polephemus*).

SCORPIONIDEA: *Scorpio* (*europaeus*).

ARANEAE seu ARANEIDA: *Avicularia* (*avicularia*), *Dendryphantus* (*hastatus*), *Dysdera* (*punctoria*), *Latrodectus* (*13-guttatus*), *Segestria* (*florentina*).

ACARINA: *Cheyletus* (*eruditus*), *Chorioptes* (*ca-*