

the University of California medical school. For the year ending June 30, 1917, the University of California will expend \$321,200 on its medical work, the principal items being as follows: salaries, \$87,450; budgets, \$49,750; for the maintenance of the University of California Hospital (the new 216-bed teaching hospital, under the complete ownership and management of the university), \$134,000, of which \$35,000 will come from receipts from patients and the balance from the income on endowment and from the general fund of the university; for the maintenance of the George Williams Hooper Foundation for Medical Research, \$50,000.

A NEW separate department of biochemistry and pharmacology has been established in the University of California Medical School. It will be headed by Dr. T. Brailsford Robertson as professor of biochemistry.

PERCY R. CARPENTER, of Amherst College, has resigned his position as associate professor of hygiene and physical education to accept the post of professor in the Worcester Polytechnic Institute.

WILLIAM J. ROBBINS, Ph.D. (Cornell, '15), has been appointed professor of botany in the Alabama Polytechnic Institute, Auburn, Ala.

DR. H. L. HOLLINGWORTH has been promoted to be associate professor of psychology in Barnard College, Columbia University.

THE executive committee of the City and Guilds of London Institute has appointed Professor G. T. Morgan, F.R.S., of the Royal College of Science, Dublin, to the chair of chemistry at the Institute's Technical College, Finsbury, vacant by the death of Professor Meldola.

DISCUSSION AND CORRESPONDENCE

PUBLIC HEALTH WORK

TO THE EDITOR OF SCIENCE: I have previously¹ called attention to what, for a lack for a better designation, may be termed a type of medical fallacy in public health. In Dr. C. R. Bardeen's article, "Aims, Methods and Results in Medical Education," there again ap-

pears in your columns another type of medical fallacy in public health. On page 377 of your issue of March 17, he states:

No sharp line can be drawn between preventive medicine, on the one hand, and curative medicine, on the other hand. Public health officers can not do thoroughly effective work if they can not apply remedies to diseased individuals as well as to other sources of danger to the public health. By far the most effective public service in this country to-day is the United States Public Health Service and here treatment of individuals and treatment of environment are carried on hand in hand.

These sentences define a fallacy which is the outgrowth of medical training and viewpoint, in which emphasis is placed on treatment and not on prevention. Medical education is a training to enable a man to derive an income through the practise of a profession. In our present organization of society, the members of the medical profession obtain their income by the cure of diseases that exist, and do not receive compensation for disease which is prevented. The matter having a financial basis, the emphasis must be placed on cure, not on prevention.

He speaks of "treatment of individuals and treatment of environment" in the same breath, as if they are, or could be, in any way similar. Apparently the vast differences in personal rights and property rights before the law are completely ignored.

With reference to his first sentence, a line of demarcation can, and must be, drawn between preventive medicine and curative medicine in public health work. Under our form of government, it is not possible for public health officers to apply by compulsion remedies to diseased citizens. Such would be totally repugnant to our institutions and our ideals of government.

Dr. Bardeen states that in the United States Public Health Service "treatment of individuals and treatment of environment are carried on hand in hand." A high-school boy would at once recognize this as an error of statement. The constitution, neither directly nor by implication, gives to the federal government, or to any of its bureaus or depart-

¹ SCIENCE, August 20, 1915, p. 243.

ments, the right to apply medical treatment to individuals. The functions of the Public Health Service are limited to interstate or foreign regulation, except in such cases where the state itself invites and authorizes the Public Health Service to perform specific functions within its territory. Neither may treatment, if it may be called such, be applied to environment or property except by due process of law, in such a manner as to duly conserve property rights.

Fallacies of this type are due to the fact that, while the medical profession is much engaged in public health work because its members have in the past come nearest to having the qualifications necessary for such work, physicians are apparently too greatly limited in their understanding of government to realize that, while public health has medical aspects of the greatest importance, nevertheless public health is a function of community life, founded upon law and our form of government. Until such time as all people will learn that the ideals of a single profession, no matter how excellent, can not be applied to people in the mass, except as such ideals are founded on the law, and are in strict accord with fundamental rights of individuals and well-defined principles of government, we may expect to find fallacies such as this continually appearing.

HAROLD F. GRAY

THE CENTIGRADE THERMOMETER

"No man that has any regard for his reputation will care to say that the irrational, inconvenient Fahrenheit scale ought to be maintained," is the modest and diplomatic way in which Representative Johnson, editor of a country newspaper, passes judgment on some two hundred millions of people who never knew it. As for being irrational, any heat scale is arbitrary; if inconvenient, it could never have been generally accepted. Nine tenths, probably, of the use of a thermometer is for the weather; and practically the F. degree is a convenient one, while the C. degree, being about twice as coarse, would involve fractions. Some people perhaps think that

a centigrade scale has something to do with grams and liters; but I never could see any special convenience in 15.°5 C. as a temperature reading in density determinations. A scale is convenient if you find it so; it is rational if its divisions are such that the quantities commonly used can be expressed in units.

In all English-speaking countries all technical and manufacturing work uses the F. scale; and all the common people are familiar with it. Unless there is some reason for change it should be let alone. The fact that I and a few hundred other people in this country are familiar with the thermometer used in France and Germany is no adequate reason why a hundred millions of our fellow-citizens should be put to a great inconvenience which will never benefit them or their descendants in the least. Perhaps a rose by any other name would smell as sweet; but why not keep on calling it a rose?

A. H. SABIN

FLUSHING, N. Y.,
March 11, 1916

SCIENTIFIC BOOKS

Transactions of the International Union for Cooperation in Solar Research. Vol. IV. (Fifth Conference), Manchester, At the University Press. 1914. Price \$3.25 net.

This tri-lingual volume (English, French, German), representing the high water mark of friendly cooperation in scientific research, comes as an almost painful reminder of conditions shattered by war, of friendships replaced by enmity, of constructive science replaced by destructive art.

The Solar Union, not quite adequately described by its title, was organized, largely under American auspices, as a common meeting ground for the most distinguished students of astrophysics throughout the world. From the beginning its cosmopolitan character has been served through holding stated meetings in divers lands. The present volume contains an account of the fifth of these meetings, which was held at Bonn in the summer of 1913. In addition to reports upon the progress of mat-