

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-