plants. This showed me at once that in order to propagate my white-fruited berries I could not rely upon seed. Experiments are still in progress and the results will be reported later.

WILLIAM A. MURRILL

## UNIVERSITY OF FLORIDA

INSTIGATOR OF THE WEATHER BUREAU I WISH to add some evidence to the article by Edward P. Alexander in SCIENCE for March 31, 1944, showing that Increase A. Lapham was the father of our present system of forecasting the weather. The question of originality is of long standing. It is mentioned in a memorial to Lapham written by Dr. P. R. Hoy in 1876.<sup>1</sup> On page 234 of this volume is to be found the following letter: SMITHSONIAN INSTITUTE, WASHINGTON, Feb. 3, 1876.

DR. P. R. Hov, Racine, Wis.:

*Dear Sir*: Your letter was received during a great pressure of business, and I now embrace the first opportunity to give it a reply.

The action of Congress in regard to the signal service was due to the immediate exertions of Mr. Lapham through the member of Congress from his district, General Payne, in setting forth the advantages of the system to the commercial interests of the great lakes.

Yours very truly,

Joseph Henry.

Secretary.

A. W. SCHORGER

MADISON, WIS.

## SCIENTIFIC BOOKS

## CIVILIZATION AND DISEASE

Civilization and Disease. By HENRY E. SIGERIST. xi+255 pp. Cornell University Press. 1944. \$3.75.

THIS volume of approximately two hundred and fifty pages is based on the Messenger Lectures delivered by Sigerist in 1941 at Cornell University. In scope, these lectures represent the attempt to correlate medicine with the processes of the humanization of man in society. The method by which Sigerist seeks to attain his end lies in the linkages between civilization as a whole and disease and the more detailed relationships between disease, economics, sociology, law, history, religion, philosophy, science, literature and art. This constitutes a fairly large order which must needs have failed had its fulfilment been undertaken by any other than such an intellectual amphibian as Dr. Sigerist.

The first chapter which lays down the thesis that the broad, general processes of civilization necessarily involve the incidence of disease, because social progress along the path of man's ascent is bound up with proper food supply, avoidance of physical hazard, protection against the elements and the general safeguarding of body functions. This in turn means, by and large, the preservation of function or the sacrifice of it to disease. Sigerist, in common with all the other well-known historians, starts his story with primitive man. Indeed he starts back farther than that, with the transition from paleolithic to neolithic man. I have been waiting for years for some medical historian to go even farther back than that and show what primitive man himself learned from animals, by way

1 Trans. Wis. Academy of Sciences, Arts, and Letters, Vol. 3, 1876, p. 265.

of mutual aid and self-cure. It can be done. Prince Peter Alexander Kropotkin has well defended the thesis that mutual aid has been a greater factor in evolution than has conflict in the struggle to survive. Sigerist himself hints at this fact in his chapter on "Disease and Law," in which he comments on the social life among animals.

Throughout the entire volume there is clearly manifest the author's profound interest in the sociological problems of health. This slant, however, is most clearly manifest in the first chapter in which malnutrition, maldistribution of goods and wealth and the consequent evils are pictured. The effect of clothing and climate, personal hygiene, housing, lighting and heating of homes, sewage disposal and water supply is discussed in their historic relation to disease. Even gluttony is not overlooked.

These considerations lead logically to the chapter on "Disease and Economics," in which is laid down with broad and sure strokes the author's picture of the influence of economics on disease. Starting with the basic concept that work is a powerful factor in health, he travels along the road of occupational health hazards, documenting his views with citations from the literature dating as far back as Ulrich Ellenbog's 1473 treatise on toxic fumes and coming as far into recent times as Falk's 1936 work on "Security Against Sickness." He relies on McCready to support the thesis that no small part of the ill health of Americans is due to the struggle after wealth, and he quotes the founder of experimental hygiene, von Pettenkofer, in support of the truth that the economic loss due to disease is enormous.

No bridge is necessary to cross the gap from economics to social life in relation to disease. Sigerist slides smoothly into this topic with the opening sen-