schools, provision should be made in every area for teaching these subjects. The subcommittee also transmitted to the Government Committee on Science in the Educational System of Great Britain two recommendations on which it was unanimous; one is that in order to secure teachers able to give inspiring and attractive courses in science adequate salaries should be paid, and the other, that while prime importance must be attached to provision for laboratory work it was essential that there should be instruction also in the romance of scientific discovery and its applications. Every pupil should not only receive training in observational and experimental science, but should be given a view of natural science as a whole, the object being to evoke interest in science in relation to ordinary life, "rather than to impart facts or data of science presented by an examination syllabus, or even to systematize their rediscovery."

## WIRELESS TIME SERVICE IN THE PHILIPPINE ISLANDS

THE progress in the time service of the Philippine Islands is made evident from the fact that since October 1, 1917, the Cavite Radio Station, cooperating with the Bureau of Posts and the Manila Observatory, sends out time signals of the 120th meridian East of Greenwich at 11 A.M. and 10 P.M. every day, Sundays and holidays inclusive. Manila holds an enviable position in the Pacific and the interests of shipping companies making Manila a port of call are too prosperous to be overlooked. Accurate time signals and wise typhoon warnings are of immense value to the units of the United States Asiatic Fleet, to Army transports and in general to oversea shipping.

For the purpose of sending time signals, the transmitting clock of the Manila Observatory is connected with the Cavite wireless station through the Bureau of Posts. Manila Observatory time signals begin at 10:55 A.M. and 9:55 P.M., standard time of the 120th meridian East of Greenwich; and continue for five minutes. During this interval every tick of the clock is transmitted, except the 28th, 29th, 54th, 55th, 56th, 57th, 58th and 59th of each

minute. Experiments made on board the *U. S. Wilmington, Monterey, Sheridan, Merrit* and the commercial steamer *Colombia*, of the Pacific Mail, gave satisfactory results.

## PROFESSOR W. A. NOYES AND THE AMERICAN CHEMICAL SOCIETY

RESOLUTIONS on the services of Professor W. A. Noyes to the American Chemical Society have been passed, as follows:

WHEREAS, Dr. William A. Noyes is soon to terminate his service as editor of the *Journal* of the American Chemical Society, to which for fifteen years he has, with unceasing devotion and conscientious care, given a large portion of his time; and

Whereas, During these years he has by his effective conduct of the *Journal* raised it to a scientific publication of the very first rank, in which is now published by far the greater part of the best chemical research carried on in this country, and

Whereas, He was the leading spirit in the organization and detailed planning of the Abstract Journal of the Society, which has made available to American chemists in an exceptionally comprehensive and satisfactory form the current chemical research of the world; and

WHEREAS, He has thus contributed in a vital way to the phenomenal increase in membership and scientific activity of the Society during the last two decades, in which the success of its journals has been one of the most important factors; now, therefore, be it

Resolved, That the Council of the Society expresses its keen regret that other tasks have compelled the resignation of Dr. Noyes from the editorship of the Journal, and records its high appreciation of his services to the Society, especially of his ardor in developing the Society's journals, which will remain a splendid monument to the success of his work.

(For the Council) Signed by

WILDER D. BANCROFT,
MARSTON T. BOGERT,
JOHN H. LONG,
ARTHUR A. NOYES,
THEODORE W. RICHARDS, Chairman