to be not incompatible, at least with the results of many of the experiments of Rutherford and of those who are so brilliantly cooperating with him to reveal to us the ultimate structure of matter.

J. C. McLENNAN

THE PHYSICAL LABORATORY,
UNIVERSITY OF TORONTO,
DECEMBER 29, 1921

PROGRESS IN METRIC STANDARDIZATION

MARK TWAIN remarked that people talked a great deal about the weather and yet he never heard of anybody doing anything about it. The same observation might also be made in reference to the metric system. As scientists we believe in it and through our organizations such as the American Association for the Advancement of Science, the American Chemical Society, etc., we pass resolutions in favor of its adoption, but we do little towards making its use more general. We use the metric system in certain parts of our work but we continue to purchase our chemicals and supplies on the basis of the so-called English "system." The American Chemical Society has resolved to "do something about it" and the first step is to purchase our chemicals and supplies on a metric basis and thus "clean our own house."

The manufacturers and dealers are entirely willing to cooperate, but they feel that it is absolutely necessary for the consumers to take the initiative. A list of some 40 manufacturers and dealers, who are ready to quote in metric units, has been compiled by the Metric System Committee. *Cf. J. Ind. and Eng. Chem.* 13, 1068 *Nov.* 1921. Several firms already use metric packages and some of them exclusively such as the Eastman Kodak Company, Powers-Weightman-Rosengarten Co., etc.

Users of chemicals are now asked to write their specifications in metric units in order to aid in this movement. Over 300 colleges and universities have already agreed to cooperate in the movement, with only one institution known to be opposed to the change. Over 250 technical firms have agreed to purchase their pure chemicals and chemical supplies in metric packages. Firms have been urged to write to the Committee "even if opposed to the movement." It is significant that less than 3 per cent. of those heard from are opposed, which prompts us to believe that in a short time pure chemicals in America may be packed exclusively in the standard metric packages as recommended by the Committee on Guaranteed Reagents and Standard Apparatus (*cf. J. Ind. Eng. Chem.* May 1921), Dr. W. D. Collins, Chairman.

We now ask that all scientists—physicists, biologists as well as chemists—make a point of ordering chemicals in metric units. It is not practicable to reach by letter all of the teachers of science in our schools and colleges as well as those using chemicals in the industries, hence we are making this general appeal so that the transition period may be made as short as practicable. We have had printed "stickers" stating that "orders must be filled and billed in metric units" which will be sent to any correspondent for the asking.

No scientist would willingly join a movement which would work an injury to American industry. We have considered the question whether the compulsory adoption of the metric system would be injurious to industry and we believe that it would be of distinct benefit not only in world trade but in our intercourse here at home. The DeLaval Separator Company has already changed over to the metric basis in a purely mechanical enterprise and they find that the cost of the change does not even "show up" in the manufacturing costs.

In education the saving by abolishing our out-of-date system would be enormous, estimated by Dr. Wolf to be an aggregate of a million years in a single generation. The promotion of understandings with other nations tends to the promotion of world peace and the cost of not adopting the system used by practically every nation in the world except the English and ourselves may far exceed in a single generation the cost of making the change.

We need local committees to get the metric system properly taught in the schools. Doctors are writing prescriptions in metric units

voluntarily already on a small scale. Systematic effort would doubtless increase their number many fold. The old apothecary weights might be completely abandoned if effort were expended in that direction. Finally, legislation making the use of metric units obligatory would come as a matter of course when the public understood that prejudice and the supposed interest of a few gage manufacturers was keeping us from the only rational system of weights and measures.

EUGENE C. BINGHAM
Chairman, Metric Committee
LAFAYETTE COLLEGE

THE BANDING OF BIRDS

ON the seventeenth of January, 1922, in response to an invitation from Mr. L. B. Fletcher and others interested in the banding of birds, over a hundred ornithologists, licensed bird-banders and candidates for licenses, met at the Boston Society of Natural History Building in Boston and organized a new ornithological society to be known as the New England Bird Banding Association. The meeting was addressed by S. Prentiss Baldwin of Cleveland, Ohio, who, during the last six years, by introducing bird-trapping as a means of banding birds, has done so much to show the scientific possibilities of the work. The Bureau of Biological Survey in Washington was represented by Major E. A. Goldman, who spoke of the bureau's plans in connection with the movement, strongly endorsing the organization of the new association and recommending the formation of other organizations of the same character at appropriate localities in the United States and Canada.

Members of Audubon societies and bird clubs in several states, and of the Nuttall and Essex County Ornithological clubs, and state ornithologists were present at the meeting, as well as a representative of the Canadian game warden service.

At this writing, January 24, 1922, the association has an enrollment of about three hundred members who are scattered over all parts of the territory covered by the organization, namely, New England, Quebec, and the maritime provinces.

The following officers and councilors were elected:

President: Edward H. Forbush, Westboro, Mass.

First vice-president: Dr. Charles W. Townsend, Boston, Mass.

Second vice-president: James MacKaye, Cambridge, Mass.

Corresponding secretary and treasurer: Laurence B. Fletcher, Brookline, Mass.

Recording secretary: Miss Alice B. Harrington, Lincoln, Mass.

Councilors: A. Cleveland Bent, Taunton, Mass.; Dr. John C. Phillips, Wenham, Mass.; John E. Thayer, Lancaster, Mass.; William P. Wharton, Groton, Mass.; Aaron C. Bagg, Holyoke, Mass.; Charles L. Whittle, Cambridge, Mass.

It may be of interest to ornithologists generally to read an outline of the purposes and plans of the new association which has been formed under the stimuli furnished by the national movement, administered by the Bureau of Biological Survey; by the more general appreciation of the scientific aspects of bird banding as shown, in particular, by Mr. Baldwin's recent work; and by the interesting and valuable data already obtained by previous bird-banding operations.

In the beginning it was felt that the somewhat disappointing results secured from bird banding in the United States to date were due to the workers being too scattered and uncoordinated; to a lack of national support of the plan and the too general character of the ornithological problems bird-banding operations were expected to solve.

From a study of the situation we came to believe that we could obtain the best results:

1. By organizing a regional association of bird banders, meaning by this, bringing together a membership from an area possessing one or more migration highways, along which trapping stations could be established to furnish, by intensive attack, fairly speedy answers to certain specific migration problems, thus early demonstrating to members the scientific value of bird banding with the consequent stimulus to continue the work which it is expected will ultimately solve more ornithological riddles, aid in the solution of others and create new problems not now anticipated;

2. By having the members meet together as often as possible to discuss results, methods and