

Eleventh Conference on Weights and Measures

A SMALL GROUP of scientists from all parts of the world met in Paris from October 11-20 to take part in the Eleventh General Conference of the International Bureau of Weights and Measures. Canada has been a member of the International Bureau since 1907, and was represented at this year's Conference by a delegation of two—Dr. L. E. Howlett, Director of the Applied Physics Division of the National Research Council, assisted by Mr. G. Bertrand, Second Secretary at the Canadian Embassy in Paris. As a member of the Bureau's International Committee, Dr. Howlett also attended a session of that body, which met during the week preceding the General Conference.

This year's Conference had set itself a number of significant tasks, not the least of which were the revision of the 85-year old Convention setting up the International Bureau, the establishment of a special laboratory to deal with standards of ionizing radiation, and the introduction and adoption of a new international standard for measuring length. This last task was of marked historical importance, since the new standard of measuring length would replace the platinum-iridium meter bar, defined by a previous Conference of the Bureau 71 years ago and accepted throughout most of the world since that time as the basic standard of length.

The International Bureau

In 1875, 20 nations accepted an invitation of the French Government to send delegates to Paris to attend a diplomatic conference concerning standards of length. A proposal to establish an international standardization bureau had been discussed at an earlier international convention in 1872. Before the adjournment of the convention, such a bureau had been practically created. Its duties had been outlined as the custody and comparison of standards, and financial provision had been made for its operation. When formally established by convention in 1875, the International Bureau of Weights and Measures was, therefore, already practically a *fait accompli*. It has remained ever since, in its pavilion near Sèvres in France, not only a safe depository for international standards but a laboratory for the certification of copies.

First Task

The first task of the International Bureau of Weights and Measures was the construction of new standards for the metre and the kilogram. In addition to the international standards to be kept at Sèvres, standards were also constructed for distribution to the nations supporting the Bureau. Since that time the scope of the work of the Bureau has been considerably broadened, and research has been carried on in the fields of electricity, photometry, thermometry and barometry.