

98th meridian would, combined with the measurement of the 39th parallel already completed, make an epoch in our knowledge of the earth's figure and size, and would furnish data which could probably never be improved upon, so far as the North American continent is concerned. See fig. 2.

In suggesting this co-operation in a great international work, it seems fitting to call attention to the history of the International Geodetic Association for the measurement of the earth. The first plan for co-operation in geodetic measurements on a large scale seems to have come from General Bayer. In 1861 he wrote to the Prussian Minister of War recommending that the nations of middle Europe should combine forces, and devote themselves to the solution of this problem; and calling attention to the fact that France had undertaken the work on a large scale in the eighteenth century, England and Russia in the nineteenth, and that the eastern and western parts of the continent were much farther advanced in this work than his own country. At this time only three arcs of the meridian had been measured in Europe, and the anomalies in the deflection of the plumb line had not been explained. The first and most natural proposition was that these anomalies were due to the attraction of the mountains, but when deflections of the plumb line were found on extended plains, and when, as they then supposed, the great Himilayas exercised no appreciable effect, they were led to suppose great changes of density in the earth's surface. Perhaps this phase of the question stimulated, as much as anything else, the co-operation of the different Governments; and in October, 1864, there was effected an organization for the measurement of arcs in middle Europe. Nineteen States gave support to the project. This general plan remained unchanged until 1887, when the middle European association was merged into an international one, and nations from all parts of the world became parties to the convention. The organization was continued for a period of ten years. In 1896 new powers were assumed by the organization, and a new convention to last for ten years, or until 1906, was drawn up. The following countries have joined this convention:

Germany,	Spain,	Japan,	Roumania,
Austria-Hungary,	United States,	Mexico,	Russia,
Belgium,	France,	Norway,	Servia.
Chile,	Greece,	Holland,	Sweden,
Denmark,	Italy,	Portugal,	Switzerland,

It is with very great pleasure that I am able to add that, within the last month, Great Britain has also given her adherence to this convention, and has named as delegate and representative on the permanent committee Professor George Darwin.

This is, in brief, the origin and growth of the present inter-