in the sand. The insoluble residue remaining after repeated and alternated fusions with sodium bisulfate and caustic soda was labeled "New Oxide" in 1918. Its properties and mode of occurrence indicated that it was an oxide of the titanium-zirconium group, and that it was the oxide of the missing element, of which the atomic number is 72. Some of its properties showed a resemblance to tantalum, its next neighbor, with the atomic number 73; but all traces of this element would be removed by the repeated fusions with caustic soda. As none of the ordinary salts were available for the purpose of determining the atomic weight, recourse was had to the double fluoride with potassium, which closely resembles those of titanium and zirconium. The rough determinations with material imperfectly purified for such a purpose indicated that the atomic weight of the element was between one and one half and two times that of zirconium (90.6). The oxide resulting from these determinations was of a cinnamon-brown color, not white as was expected. We understand that Dr. Scott wrote on January 28 to Drs. Coster and Hevesey offering to send them specimens of his separated material to compare with their own, and received a reply from them on Saturday night last (February 3) saying they would be very glad to do so. On Monday Dr. Scott sent to them practically all his purified material, and not only he, but also all scientific men, must await with keen interest the result of the searching examination by means of the powerful appliances in their hands for spectral analysis by X-rays. In view of the source of his oxide and its association with much titanium oxide, Dr. Scott has suggested, as Oceanus was one of the Titans, that "Oceanium" would be a suitable name for the element. This name would also recall that the sand came from Oceania, of which New Zealand is one of the component parts.

GEODETIC AND TIDAL SURVEYS

A CONFERENCE was held in Ottawa on January 2, 3 and 4, at which officers of the United States service discussed with Canadian officials problems common to the two countries. The visitors were Dr. William Bowie, chief of the Division of Geodesy of the United States Coast and Geodetic Survey, who conferred on geodetic work with Dr. E. Deville, director general of surveys, and Mr. Noel Ogilvie, director of the Geodetic Survey of Canada, and Mr. G. T. Rude, chief of the Division of Tides and Currents, who met Dr. Bell Dawson, superintendent of the Tides and Current Surveys of Canada, and discussed tidal data.

The cooperative geodetic plan includes primary or precise triangulation along the international boundary from Lake Superior to the Pacific coast, and extension of triangulation in Idaho, Oregon and Washington to the Canadian boundary. On the Pacific coast similar cooperative work is being carried on from northern Washington through British Columbia to the Yukon territory and Alaska. The plan also includes several lines of precise leveling for strengthening the precise level nets of both countries.

The triangulation and precise leveling will be available to both countries for all classes of work needing precise control. The result will be coordination in the surveys of the two countries, and the geographical positions of boundary monuments will be the same on the maps of each. Accurate maps are possible only after the precise establishment of geodetic control points, and on accurate maps the development and prosperity of any country largely depend. Accurate maps have also an important influence in promoting cordial international relations.

Referring in one of his public addresses in Ottawa to cooperative geodetic work, Dr. Bowie stated that, as far as triangulation and precise leveling were concerned, there was one geographical unit for Canada, the United States and Mexico. He added that North America was the only continent that could boast of this uniformity, and that Europe for years had been struggling, so far unsuccessfully, to obtain the same result. Geodetic cooperation between Canada and the United States was most conspicuous and most happy.

Mr. Rude spoke of the importance of accurate charts and of a thorough investigation of facts relating to tides and currents. He referred also to the cooperation that existed between Great Britain, Canada and the United States in regard to the interchange of such knowledge.

COLLOID CHEMISTRY

WITH the assistance of prominent specialists the world over, I am preparing a comprehensive book on Colloid Chemistry, Theoretical