

INTERNATIONAL RESEARCH COUNCIL TO VOTE ON GERMANY'S ADMISSION

A special general assembly of the International^{a1} Research Council, at which about thirty nations were represented was held in Brussels on June 29 and following days.

The principal matter given attention at this meeting was that of the admission of Germany to the Council. The Council was organized during the war by representatives of the Allied and neutral nations and the Central European powers have not yet been admitted to the Council.

Dr. Vernon Kellogg, permanent secretary of the American National Research Council, attended the Assembly and voted for the admission of the Central European powers.

ATOM BARRAGE MADE VISIBLE TO HUMAN EYES

A simplified apparatus which makes visible in water vapor the path taken by an alpha-ray has just been perfected after work of many months by Prof. Charles T. Knipp of the University of Illinois.

The device will be of great importance to the scientist studying this phenomenon as well as to the teacher of physics or chemistry who wishes to present his subject in the light of the electron theory.

Theories of the electronic system and conjectures as to the nature of the atomic structure, formulated in the last century by Sir J. J. Thomson and later by Sir Ernest Rutherford, have been substantiated by actual demonstrations with the apparatus of Prof. Knipp.

Although C.T.R. Wilson, working at Cambridge, England, was first able to show the alpha-ray by means of a highly complicated and expensive machine, it remained for Prof. Knipp to construct a device which not only shows the tracks in a more perfect form but which may be constructed for one-tenth the cost of Wilson's.

The construction is comparatively simple and consists of a glass flask containing water and placed side up in a supporting stand. The moistened bottom of the flask serves as one electrode and the surface of the water in the flask is the other. A hand-bulb attached to the neck regulates the pressure within which tungsten wires connected to the electrodes carry the electric current.

A glass tube containing the radium salt, the sources of the ray tracks, is fused into the flask and lies near the flat surface. In order to give a high visibility to the tracks, a properly shaded electric light bulb illuminates the water vapor in the top of the inverted container.

When electrical connections are made and the bulb pressed and then released, tracks made by the alpha-ray coursing through the moisture-laden gas are readily seen. To the untrained eye they appear as fine, thread-like lines which dart at all angles from one point, remain for a moment and then disappear.