

trates in regions now periodically threatened with famine are expected to go far to avert these calamities, which in the past have not only been a scourge to the afflicted populations but a cause of social and economic disturbances throughout the world.

FUNDAMENTAL DATA OF SCIENCE GATHERED IN NEW VOLUMES

The fundamental facts and figures upon which physical science is built have been brought together and issued for the use of the world in International Critical Tables, the first volume of which has just been issued by the National Research Council and the National Academy of Sciences.

Millions of experiments extending over years of time in the various laboratories of the world were necessary to produce the hundreds of pages of explanations and statistics that will be included in the five volumes of the completed work which are being compiled by the editors with the aid of specialists and experts here and abroad.

The first volume just off the press contains among other valuable information the accumulated data on no less than 9534 different chemical compounds, the new and old facts on radioactivity, and transmutation, astronomical and geodetic data and a comprehensive discussion of the most recent developments in the field of atomic structure, favorite speculative playground of physicists of the present moment.

Along with the international metric system and a listing of the seventy-four countries in which it is now compulsory are the local systems of weights and measures in use in twenty-five still conservative countries. The measures used by the Pharaohs of Egypt and the ancient Chaldeans may likewise be found side by side with their modern equivalent in feet and meters, gallons and liters.

Thousands of dollars and many hours of time will be saved the research workers of the present and the future by the use of this collection of necessary and essential data on a wide variety of allied subjects in one set of volumes.

GOLD CHANGED TO MERCURY BY GERMAN PHYSICIST

A reversal of the dream of the ancient alchemists, the transmutation of gold into a less valuable metal, mercury, is claimed by Dr. A. Gaschler, an associate of Prof. A. Miethe, who in 1924 announced that he had succeeded in turning mercury into gold.

Dr. Gaschler's process consisted in sealing a gold electrode into a vacuum tube and bombarding it with a stream of positive hydrogen atoms, shot through the tube at high velocity. The resulting color display Dr. Gaschler watched through a spectroscope. At first the only light given off was of the color characteristic of glowing hydrogen, but at the end of thirty hours of bombardment the spectrum lines that