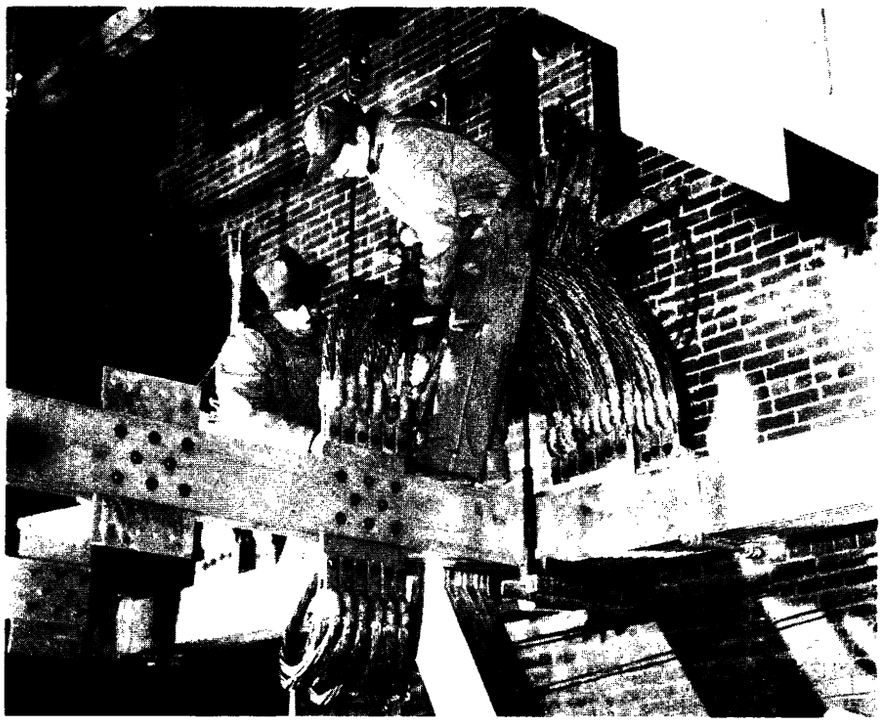

STARTER CABLES—They are leading to the solid silver bus bar now at work in the production of magnesium for the war.

ENGINEERING

Silver Bus Bars

Solid silver used to carry current for magnesium production in new plant "somewhere in Michigan." Almost completely replaces copper.

➤ SOMEWHERE in Michigan electric current flowing through huge bus bars of solid silver brought another great magnesium plant into production as the Dow Magnesium Corporation poured its first metal in the fifth Dow-process plant built by the Austin Company for the Defense Plant Corporation to meet the wartime demand for this lightest of all structural metals.

Washington officials representing the Defense Plant Corporation and the War Production Board looked on as the metal, derived from salt brine, flowed from the first of hundreds of electrolytic furnaces soon to be in service at this plant, "somewhere in Michigan." In full production, it will equal the largest of its kind.

The silver almost completely replaces copper in the power distribution lines required for large scale production of magnesium. It was loaned to the Defense Plant Corporation by the government for this use, to release copper for shells, ordnance equipment and other war needs, in which no substitute will do. The silver is even more efficient than copper as a conductor of electricity but would not normally be used because of its excessive cost.

Designed by Austin engineers with a view to saving critical materials, the plant makes extensive use of wood and plastics where steel and other metals would normally have been used. It includes a rigid frame concrete structure with a double hinged arch of exceptionally wide span, which will house all the alloying operations.

The start of magnesium production anticipates the early beginning of operations at Dow Magnesium's companion plant across the state. There magnesium chloride for use here will be produced from subterranean salt brine by the method inaugurated by Dow at Midland, Mich., over 26 years ago. This cell feed will be transported across the state in covered gondola cars to the eastern plant, which was placed in this new location because of the availability of power required for the processing.

The starting of this plant marks a climax in the Defense Plant Corporation's magnesium production program and opens a concluding chapter in developments which have kept a portion of the Austin organization continuously at work on magnesium plants for a period of more than four years. At times, during the past two years, Austin has had as many as 600 engineers and 15,000 construction workers on the design and erection of magnesium facilities from the Great Lakes to the Gulf.

Science News Letter, April 24, 1943

MEDICINE

Dr. Charles B. Huggins Given First Mayer Award

➤ DISCOVERY that surgical or chemical castration can banish pain, prolong life and restore health, at least temporarily, in men suffering from cancer of the prostate has won for Dr. Charles B. Huggins, University of Chicago professor of surgery, the first Charles L. Mayer Award of $2,000.

The award was announced by the National Science Fund of the National Academy of Sciences which administers it. It was offered for the most outstanding contribution made during 1942 to present day knowledge of factors affecting the growth of animal cells with particular reference to human cancer, and as a new type of prize for the advancement of fundamental scientific research administered under a new type of philanthropic foundation.

Dr. Huggins' discovery is not, he has stated, a cure for cancer, but a helpful method of treatment. Either removal of the male sex glands by surgical operation or the chemical castration method (doses of female sex hormone) reduces the amount of male sex hormone activity. This in turn seriously interferes with the enzyme systems vital to the living processes of the prostate cancer cells.

The advisory committee assisting in the selection of the winner consisted of Nobelist George H. Whipple; Dr. R. R. Williams, discoverer of vitamin B_1; Dr. Alan Gregg, director for the Medical Sciences of the Rockefeller Foundation; and Elihu Root, Jr. A similar award will be given in 1944.

Science News Letter, April 24, 1943