

PHYSICS

**Newest Atom-Smasher
Is Nearing Completion**

See Front Cover

NEWEST in the rapidly growing family of atom-smashers is the eight-million-volt electrostatic generator nearing completion at the University of Notre Dame. Previous generators of this kind, erected at the University of Pennsylvania, the Carnegie Institution of Washington's Department of Terrestrial Magnetism, the Westinghouse Research Laboratories, etc., have been arranged vertically, but this one, planned by Dr. George B. Collins, is horizontal.

The new generator, which will operate under air or gas pressure approximately ten times as great as that of the atmosphere, resembles a railroad "tank car" and an addition to the university's science building was necessary to house the twenty-ton steel container, forty feet long, in which the apparatus is contained. One section is mounted on wheels, so that the generator proper is accessible for inspection or repairs. Freon gas, the same used in many refrigerators, will also be forced into the tank to improve its operation.

The illustration on the cover of this SCIENCE NEWS LETTER shows the interior of the structure. Charged particles will be driven at enormous speeds down the white porcelain tube. The closely placed aluminum rings around each column prevent sparking from taking place along these supports.

Science News Letter, April 5, 1941

A meteorite weighing 320 pounds was set up at a Texas trail junction by Comanche Indians, and offerings of beads, pipes and tobacco were left to the mysterious object by those who passed.

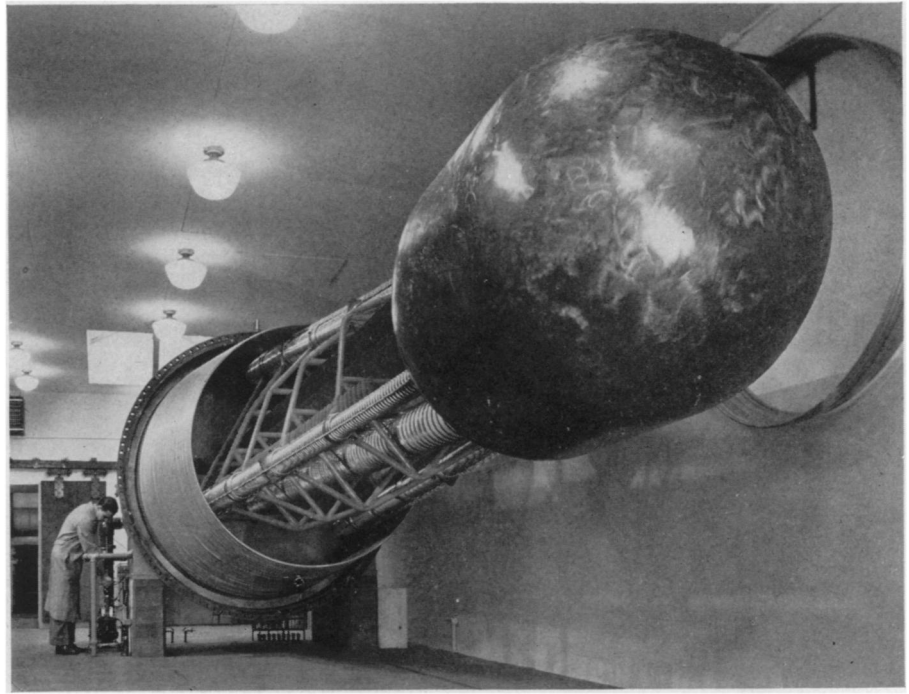
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ATOM SMASHER

When this eight-million-volt generator is completed at the University of Notre Dame, the X-rays from it will be the most penetrating ever produced.

ASTRONOMY

**Astronomy Hampered But
Work Goes on Amid Bombs**

THOUGH astronomical research in Europe, and on this side of the Atlantic as well, has been reduced by the war, some studies are continuing even in the belligerent countries and those now under Nazi domination, says Dr. Bart J. Bok, associate professor of astronomy, at the Harvard Observatory.

In a recent statement, he says that: "In spite of the many advances that have been made during the year 1940 one cannot help but notice the retarding influence of the war on astronomical progress, not only in Europe but also in the United States. The uncertainties and delays connected with the sending of mail across the Atlantic make it difficult to get a clear picture of the present state of astronomical research in war-torn Europe. Until a few months ago British astronomers continued to publish papers at a not-too-much reduced rate. The summer issues of the Monthly Notices of the Royal Astronomical Society contain several articles that must have required thought and concentration. The recent

news of the bombing of the observatories in Greenwich and Edinburgh indicates that our British colleagues are now deeply involved.

"It has been more difficult to get a clear picture of what is happening in Germany. In spite of the war some German observatories appear still to be quite active. The current progress reports of the Observatories at Berlin, Hamburg, Potsdam and Breslau indicate that these

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