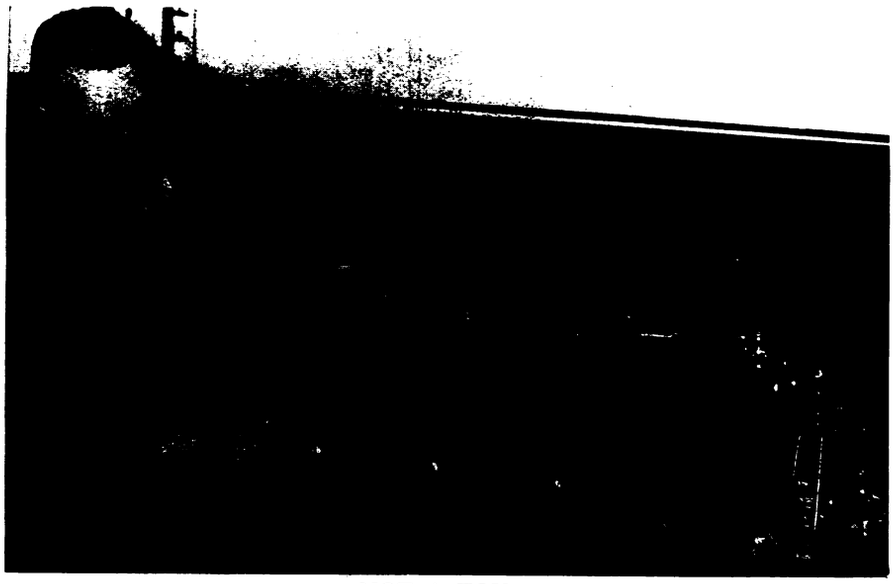

NOT A TOY

ARCHAEOLOGY

Mexico Yields Structure Surpassing Pyramid of Sun

Research Also Reveals New Group of Tombs, Hitherto Unknown Pottery and Child's Grave at Monte Alban

EXISTENCE of a great Mexican pyramid, which outshines in size the famous Pyramid of the Sun near Mexico City, is reported by Alfonso Caso, Mexican archaeologist who is now exploring a little-known region in the Oaxaca mountains.

Mexico's new prehistoric pyramid is at an ancient city known as Tejupan, in the southern part of Mexico associated with the old culture of the Mixtec Indians. The city has been known to exist, but has never before been reached by an archaeologist. Don Esteban Avendano, ranch owner who takes a great interest in archaeological remains in the countryside, explored the great pyramid. He found that it was built in five layers, in the old Mexican fashion of enlarging public structures.

Sr. Caso also announced that he has visited the Hill of the Virgin, an archaeological site brought to his attention recently by Miss Emma Reh, Science Service correspondent. The site is pronounced important because it is a place of Mixtec Indian tombs, about which archaeologists know almost nothing. The tombs, Sr. Caso said, are round and lined with stone, and they ascend like steps, at the same time encircling the cone-shaped Virgin Hill.

Sr. Caso will seek another ancient ruin which Indians described to Miss Reh, and which contains unique pottery decorated with hieroglyphics.

On her recent exploration journey, Miss Reh reached an Indian settlement called Telixtlahuaca, and there heard about the mounds of an "old town" six miles farther on. She pushed on toward the old town, but did not reach it. At an Indian hut, however, she found two pottery bowls dug out of a mound.

The two bowls will be placed in the Mexican National Museum. There are none of like shape in the vast pottery collections in Mexican museums. Each bowl has a small concentric bowl inside it, made as a part of it. The bowls have bases in the form of a two-headed snake.

The bowls are decorated with picture writing, pronounced by Sr. Caso to be of Mixtec Indian type. One bowl has pictures of four individuals, with symbols before their mouths, indicating speech. Other symbols before them represent day-names in the Mixtec calendar. The bowls are thus like pages of picture-writing. (*Turn to Page* 157)

ENGINEERING

Electric Locomotives Modeled for Exhibition

THE WORLD'S most powerful single-unit passenger locomotives have been modeled for the Century of Progress Exhibition which opens in Chicago on June 1.

When plans for the electrification of the Pennsylvania railroad between New York and Washington are completed, 90 of the full-size monsters will be put to work. They are designed to haul trains of 14 steel Pullman cars faster than the economical steam speed.

The model, which was machined with utmost precision to duplicate carefully the original, is only one foot high, eight inches wide, four feet two inches long and weighs seventy pounds. It is exactly one fifteenth the size of the big locomotives and was made in the shops of the Westinghouse Co., one of the concerns engaged in their manufacture.

Because of the density of traffic between New York and Washington, particularly from New York to Philadelphia, this project is attracting widespread attention. It is expected that eventually 136 passenger locomotives, 86 freight locomotives, 98 switching locomotives and 1,637 multiple unit cars will be operated.

The freight locomotives for this electrification are the first steam or electric freight engines to be equipped with roller bearings.

Science News Letter, March 11, 1933

CHEMISTRY

Element 87 Explosion Injures Finnish Chemist

BLINDED completely in one eye, with his other eye weakened, and with his hearing affected, Prof. Gustave Aartovaara of the Helsingfors Technical University, Finland, is a martyr to his search for a missing chemical element. In 1931, while engaged in the chemical concentration of the missing chemical element 87, Prof. Aartovaara was the victim of a laboratory explosion, the effects of which have prevented his continuance of research.

To Prof. Fred Allison of the Alabama Polytechnic Institute, Prof. Aartovaara sent specimens that he believed contained element 87 and Prof. Allison detected this element by his magneto-optical method of analysis.

Science News Letter, March 11, 1933