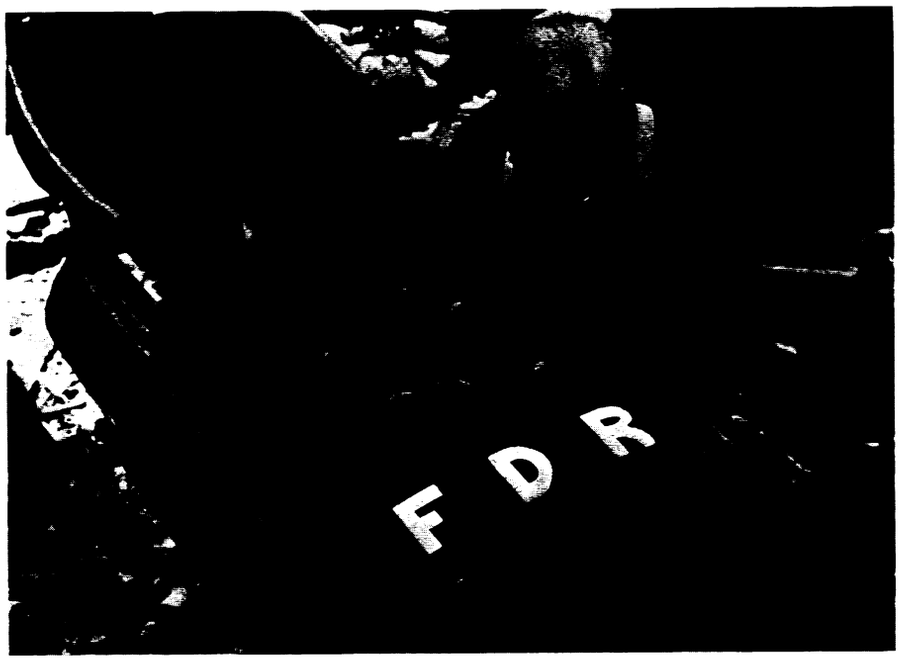

TOTEM HONORS FOR THE PRESIDENT

Maybe it doesn't exactly resemble the Great White Father in Washington, but Charlie Edwards, 83, patriarchal totem carver for the Swinomish Indians, says it is a likeness of President Roosevelt, and so it must be. The bust will appear near the top of a 61-foot totem pole to be erected on a recreation field developed by WPA workers on the Swinomish Indian Reservation at La Conner, Washington.

and cellulose acetate film. Photographs alone cover 100 years of our wars, our efforts to explore the earth and other doings that look important to us. The film is protected by putting it into glass tubes in an atmosphere of helium and a judicious amount of moisture, and the tubes are sealed.

The document storing is being done for the benefit of the people alive in Georgia in 8113 A. D. A warning sign on the crypt will forbid opening it sooner.

"Why 8113?" everybody wants to know.

Dr. Thornwell Jacobs, president of Oglethorpe, chose that date because, when he started the project in 1936, 8113 was just as far in the future as the total number of years man has recorded events in the past. Check the arithmetic if you like. He figures from the date Egypt's calendar presumably started, and that is 4241 B. C.

To be sure, we are not the first people to take concern for the permanent recording of our achievements. Ancient rulers had the same idea when they ordered their conquests chiseled on enduring stuff.

When Persian King Darius laid the cornerstone of his palace in Persepolis, 2,450 years ago, the cornerstone box was made of limestone and in it were solid gold and silver plaques suitably inscribed. Soviet scientists seem to be taking a leaf from King Darius' notebook, by putting valued records reduced in size on thin platinum, enclosed between glass slabs and boxed in basalt.

Science News Letter, September 17, 1938

ENGINEERING

Buildings Shaken To Fix Their Vibration Period

NO matter how sturdy they may seem, buildings, like people, have a pulse. Of course the pulse can not be the ebbing and flowing of a blood stream, as in man, but buildings do have characteristic, pulsating vibrations that sometimes need engineering analysis and correction.

Many things in, or around, a building may cause annoying, tiny vibrations. Sometimes unbalanced machinery in the structure will cause the trouble. Or it may be wind gusts, nearby subway or street traffic or even the elevators.

In one Atlantic City, N. J., hotel annoying vibrations were analyzed and finally traced to the machinery of a power plant in the vicinity.

Vibrations of the plant's equipment, transmitted through the wet sandy soil, were synchronous with one of the dominant periods of vibration of the hotel structure. In this condition of vibration resonance the annoying oscillations, while very small, were passed on to the hotel's guests.

Engineers study building pulses with shaking machines which rotate and, because they are intentionally put out of balance, transmit vibration directly to the rigid members of a building's frame. As the frequency and size of the intentional vibrations are changed, engineers can find certain ones to which the building responds as a whole.

Science News Letter, September 17, 1938

ECONOMICS

World is House of Plenty; Nationalism Erects Bars

IF THE world were a single economic unit, without national barriers and with problems of distribution solved, it would be able to answer all possible demands upon it for raw material.

Food materials are likely to be adequate for a world population at least three or four times that of today. Although the future of some of the base metals is obscure, the world as a whole need fear no shortage for an indefinite period of raw materials for clothing, shelter, heat, power and the principal necessities and luxuries of life. For the few natural resources that are definitely exhaustible, nature has made abundant provision of possible substitutes.

Data compiled by Dr. Frank E. Lathe, of the Canadian National Research Council, show that for a world of competing nations the prospect is very different indeed. Complete economic self-sufficiency is impossible. Even the self-sufficiency for which many great powers today are striving can be attained only by a major sacrifice of the standards of living.

Take the matter of major minerals: Coal, iron, copper, lead, zinc, nickel, tin, asbestos, petroleum. Only the United States and the British Empire are in a happy position. Dr. Lathe finds the British Empire deficient in petroleum and the U. S. A. lacking in nickel, tin and asbestos. Canada and the United States taken together lack only tin, for large supplies of nickel and asbestos are just over the northern border of eastern United States.

In contrast, three militaristically rampant nations have notable national insufficiencies. Germany is self-sufficient only in coal and lead, and partially sufficient in iron and zinc. Italy is partially sufficient only in coal, copper and zinc. They lack all the other major minerals.

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