What, if anything, will stand up under the H-bomb is a question for the future.

For several years now the Department of Defense and the Atomic Energy Commission have been compiling a handbook on atomic weapons. Part of it is this study on atomic explosion damage. It admits that fixing up old buildings to resist the air blast of an atom bomb is "a much more difficult problem" than building new buildings for safety. Just as earthquake experts do not like cornices and trim that may fall on the heads of passersby, the atomic damage experts suggest the removal of such dangerous decorations.

Reinforced concrete or steel frame buildings are favored, and they should be designed for a horizontal push from the wind blast of 90 pounds per square foot and a push downward of 70 pounds per square foot to protect them from collapse. In case of an atomic explosion there is a sudden inward pressure, then about two seconds later a suction or pressure in the other direction not quite so strong.

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nesses can be discarded so easily, then all history would have to be rewritten in the light of later assumptions."

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● R A D I O

February 25, 1950, 3:15 p. m., EST

"Adventures in Science" with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Joseph E. Smadel, Chief, Department of Virus and Rickettsial Diseases, Army Medical Department Research and Graduate School, Army Medical Center, will talk on "Chloromycetin, Conqueror of Disease".

POPULATION

Density of Ancient Mexico

➤ CENTRAL Mexico is now credited with having a greater population density at the time of its conquest by Cortez than the most populous modern American states have today.

A study by two University of California professors indicates that Central Mexico in 1519 had a native population of 11,000,000. This is in sharp contrast with the 4,000,000 to 4,500,000 estimates of most modern scholars. The population of the area today is about 13,000,000.

Dr. Sherburne F. Cook, professor of physiology, and Dr. Lesley B. Simpson, professor of Spanish, said the average density of population in 1519 for the whole area was about 60 to 70 per square mile. This is about the same population as modern Michigan and Indiana have.

More populous local areas were the Valley of Mexico, the seat of the Indian cultures, which had about three times as many people per square mile as did Rhode Island in 1940. In that year Rhode Island had 674 persons per square mile, the densest population of any of the states. Tlaxcala, a province of about the same size as Rhode Island, had in the sixteenth century about the same density of population as that state had in 1940.

Some of the data come from unpublished Spanish archives which were made available to the two professors. They identified more than 1600 Indian communities of importance existing at the time of the conquest. These communities contained about 90% of the population.

Their figures come from three sources. First, they gathered contemporary clerical data, including baptisms. Second, they used estimates of Cortez and his associates on the sizes of native armies. Third, they selected representative towns for which reliable data were available both for 1519 and 1565, established a ratio between these periods and then applied these ratios to the whole of Central Mexico. The results of all three methods were in good agreement.

The differences between their figures and those of other modern scholars is explained by Drs. Cook and Simpson as follows:

"This violent discrepancy arises from the conviction among most scholars that the ancient observers were not to be trusted —a conviction which we do not share— and from their resultant habit of dividing early estimates by some arbitrary factor, ranging from two to five. It seems to us that if the testimony of respectable wit-

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Question Box

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