

FRAME HOUSES SAFEST FROM TORNADOES

Brick and tile buildings are more susceptible to damage in tornadoes and cyclones than well built frame structures, Prof. C. C. Williams, head of the department of civil engineering at the University of Illinois, has learned, following a series of investigations.

Rooms of large size without the support of substantial interior walls are most readily collapsed in wind storms, he reports. Such large shell-like rooms to be safest from wind destruction should be located on the north and east sides of buildings. A structure, in order to withstand storms, should have resistance to torsion and should be made of material having high tensile strength.

In a report of his investigations he concludes:

"Frame and stucco dwellings with masonry basements may be built to sustain tornadoes at an additional cost of a small fraction of one per cent.

"Properly designed structures of brick, concrete, or steel may be expected to withstand terrific wind.

"Brick walls as ordinarily constructed are not stable against tornadoes because of their lack of tensile strength. The prevailing practice in the construction of brick buildings is not adequate to withstand severe storms.

"Large rooms in brick buildings should have steel roof trusses carried on independent steel columns.

"Corridors in school buildings should be built with solid construction walls up through the building and certain transverse walls should be made continuous as bracing for the building. Comparatively small square rooms with strong construction carried up through the building would act as "towers of strength" against such a storm.

"Reinforced concrete chimneys and bins ordinarily withstand tornadoes.

INDUSTRIES COOPERATE IN GOVERNMENT RESEARCH

Sixty-one research scientists, representing 36 organizations most of which are national in scope, are at work at the U. S. Bureau of Standards, helping to solve industrial problems.

The purpose of this cooperation, according to Dr. George K. Burgess, director of that bureau, is to make well-equipped laboratories available for the mutual benefit of government and governed, to bind the bureau and industry more closely together, to encourage the application of science to industry, and to add government prestige to research results.

This is a further development of the purpose for which the Bureau of Standards was created by Congress, Dr. Burgess said. Cooperation between industry and

government research is also stored by staff meetings, conventions, and national and international society meetings.

As the direct result of this closer union of science and industry, more than \$150,000,000 have been saved in the automotive industry alone, in brake linings, tires and motor fuels. The steel industry is studying methods of treating and working iron and steel with gratifying results. The hosiery industry is one of those who maintain an associate research worker at the Bureau of Standards with a saving already of 28 millions.

FACE POWDER TWO THOUSAND YEARS OLD FOUND IN KOREA

The eternal flapper has existed in the Chinese Empire since the Christian era began. Two powder boxes dating back to the Han dynasty which held sway over China and Korea from 200 B. C. to 220 A. D. have just come to light in a grave near the city of Pheng-yang in northeast Korea.

The archaeological remains found in the three graves at this site, according to reports received at the Peking National University, are expected to shed further light on the civilization of this period. The box which proved to be the most interesting of the objects unearthed was about a foot wide and contained a variety of smaller boxes and a curiously shaped flat cup whose function is unknown. There was however, no doubt about the vanity cases. There was the powder still in them and still white in spite of the passage of centuries.

PIE AND CAKE HAVE SCIENTIFIC APPROVAL

Pie is not so bad for the digestion. Authority no less profound than the editors of the Journal of the American Medical Association sponsor this idea quoting "food specialists" to back up the contention.

Cake is coming into its own likewise, and bears the stamp of dietary approval as a real food. To refute the notion that it is "too rich" it is pointed out that it has only 25 per cent. more calories than bread, while a slice of the latter spread with butter is almost twice as rich in fat as the corresponding amount of chocolate cake.

A spider of tropical Asia glows like a firefly when alarmed.

Over 80 per cent. of the surface rocks in Yellowstone Park are volcanic.
