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? WHY THE WEATHER ?

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A PRECAUTION AGAINST TORNADOES

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What is true of earthquakes is also true of tornadoes -- these visitations cannot be prevented; neither can they, as yet, be successfully predicted; but their effects can be greatly mitigated through suitable construction methods in the regions where they are likely to occur. The problem of designing buildings to resist tornadoes has been investigated at the Forest Products Laboratory, Madison, Wisconsin. Perhaps the most important fact brought out in these studies is that the well-known explosive effects of tornadoes could be eliminated by an automatic venting system.

When the vortex of a tornado passes over a building, the pressure of the air out of doors is suddenly reduced. The indoor air, being at normal pressure, exerts a sudden thrust on the walls, unless there are openings by which it can readily escape. L. V. Teesdale, who had charge of the investigation mentioned, says:

"If a sufficient number of windows are designed so that they will open outward from internal pressure, the necessary venting can be accomplished. Special windows and frames could be designed, equipped with hardware that would work on the same principle as the "panic bolts" used on exit doors of theatres. Another possibility would be hinged panels in the spaces between windowsills and floors. Such vents should be placed in the more hazardous places, such as side walls of large rooms, stair halls, in all 8-inch brick walls, in walls cut up with numerous openings separated by narrow masonry piers, and in the gables and dormers of all roofs."

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