ENGINEERING

Attacks 1,000 Homes Daily

Fire Prevention Week is designed to focus attention on the seriousness of fire losses and the simple precautionary measures to prevent them.

➤ EVERY DAY in the United States 1,800 fires take 28 lives. Fire, practically always caused by carelessness, daily attacks 1,000 homes, 130 stores, 100 factories, eight schools, seven churches and three hospitals.

In the last 12 months property destroyed by fire in the United States exceeded the damage done in England during the first two years of the German blitz.

Fire loss in the United States is the highest in the world, averaging $4 per capita, compared with a normal loss in England of less than $1, and less than 50 cents in Germany.

During the last decade in the United States a hundred thousand persons have burned to death. A hundred and seventy thousand have been burned and disfigured by fire. Three billion dollars worth of property has gone up in smoke. Six million fires have occurred.

At the present rate, the U. S. fire loss in 1945 will exceed $450,000,000, plus a human toll of some 10,000 lives. Fire Prevention Week, Oct. 7 to 13, is designated by proclamation of President Truman and the state governors to focus public attention on the seriousness of fire losses and the simple precautionary measures to prevent fires.

Fully 50% of all home fires could be prevented if proper construction and fire-resistant materials were placed at strategic points in the building of new homes or remodelling of old ones, estimates Percy Bugbee, general manager of the National Fire Protection Association of Boston, which for 50 years has been crusading to reduce the tragic yearly loss in the United States from fires.

With the tremendous volume of remodelling and new construction soon to begin, there are eight principal features of fire-safe construction which builders and home-planners should consider:

The heating plant should be properly constructed and installed, with adequate safeguards in the use of fire-resistant coverings on pipes, walls and ceilings of the room in which the heating plant is located.

Wiring must be safe and adequate, properly installed in the walls, and have sufficient outlets. The wiring circuit should be heavy enough to carry the electric load needed in modern homes.

Use fire-resistant roofing material such as asphalt shingles or similar protective covering which will resist wind-blown sparks and firebrands. Sparks falling on flammable wood roofs stand third among the major causes of home fires, and roof-communicated fires from sparks is the principal cause of conflagrations.

Be sure the chimney is properly constructed of sound masonry or brick, with the foundation of the chimney on the ground and not suspended on timbers. This is especially important in farm homes and low-cost housing, where chimneys frequently rest on timbers.

Adequate fire-stops should be built in concealed space within sidewalls and interior partitions, especially on the first floor. These fire-stops will keep the walls from becoming flues through which a fire starting in the basement or first floor can be sucked up through the whole house. The deep recess of closets under stairways also should be completely finished off to prevent a blaze spreading rapidly and engulfing the stairs, thus trapping people on the second floor of a burning building.

Place a strong door at the entrance from the basement into the house to serve as a fire-stop if a blaze starts in the basement or furnace room.

Basement ceiling should be plastered or covered with a fire-retardant material, and not left with joists and the underside of flooring exposed.

Use non-combustible, fire-retardant materials on the interior walls rather than combustible material that is easily set afire. In the opinion of the National Fire Protection Association, one of the most serious hazards in home construction is the use of combustible interior finish.

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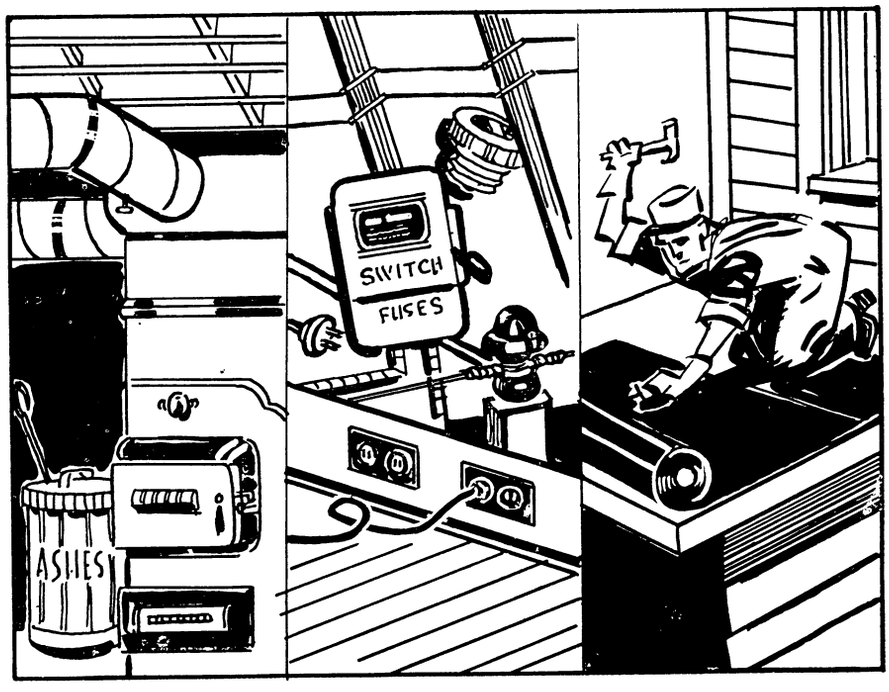
The grub of the *Japanese beetle* consumes grass roots as its principal food; the adult beetle feeds on a wide variety of plants, including certain fruits, ornamentals and vegetables.

A *blue frog* on exhibit in the Philadelphia zoo belongs to a family of green frogs, and is blue because, by a freak of nature, it lacks yellow pigment cells in its skin; the yellow and blue together would give green.



PREVENT FIRES—Home fires could be halved in number if properly constructed and fire-resistant materials were placed at strategic points in the building. Important among the features for fire-safe construction are the heating plant, wiring, and fire-resistant roofing material.