FIRE PROTECTION FOR THE HOME

The porch in the rear is well protected and forms a most admirable feature of the house, offering an excellent outdoor sleeping apartment. The fact that the beautiful garden is in view of this porch shows that the home-builder had in mind all the possibilities of this charming balcony.

The kitchen and pantry walls have been treated in a most practical way—painted; so they are both economical and cleanly. The pantry is provided with large cupboards and a sink. These rooms are well lighted and ventilated. A spacious attic and commodious basement afford ample storerooms and other conveniences.

The manner in which the grounds of this dignified home have been treated is admirable. The lawn is kept unobstructed, with plants and shrubbery growing close against the foundation of the house, relieving the severity of the stone, and making the house and garden seem more closely related, as does also the vine-clad chimney. The beauty of the broad, smooth terrace is greatly enhanced by its background of stately elms, against which is set the rustic summer house, surrounded with a profusion of tall grasses and bushes. The garden wall, of the same stone as that used in the house, seems to establish that complete unity in effect which is so desirable, the relative proportions of the house and gardens forming a well-balanced whole.

Mr. Strassner finds his home very satisfying, and its particular plan in accord with his own ideals.

FIRE PROTECTION FOR THE HOME: BY AGNES ATHOL AND AGNES BLACKWELL RAINNEY

We have a popular and fallacious faith in the efficacy of the word “fireproof.” A furnace is fireproof in the same sense exactly that a building is. Furniture, wood trim, draperies and people are not fireproof. What we really mean when we talk about a fireproof building is one which, because of its construction, material, appliances, will retard fire so that it may be more easily controlled, so that the occupants have a chance of escape, and the damage may be confined to one floor or room.

Each individual naturally feels that he may give play to his own taste and ideas of comfort in his home without interference or direction by the community at large. But there are certain common faults in the construction of the ordinary house. Without realizing the danger, and even while complying literally with all that the law requires, a man may design a house that is a veritable fire-trap; when fire breaks out, all his thought, labor and money have been thrown away for lack of certain slight and simple precautions in the fundamental plan.

The wife, the housekeeper, is so often made the final judge in the matter of arrangement that it becomes particularly necessary to appeal to her common sense above her love of the aesthetic and artistic, to induce her to demand what is best for the family. Furthermore, the woman in the home is in charge of its maintenance, and upon her watchfulness and care rests the responsibility for any disaster by fire.

Next to the faults brought about by too great initial economies in the building, such as poor material and insufficient metal protection in important places, the great mistakes are usually due to the effort to get a favorite effect, regardless of the risks involved in so doing. No one can for an instant deny that a broad, open, sweeping stairway, with imposing newel post and mahogany banisters in full view of the entrance hall is to be preferred from the artistic point of view to a little, straight, boxed stairwell. It is fortunate, however, that in the moderate-priced home where economy must be practiced in materials and safeguards, with attendant hazard, there is seldom room for this effect; for, according to the fire prevention engineer, to build one is the greatest possible mistake.

The first requisite in a safe house is that each floor may be cut off from all the other floors by a door, so that should a fire start it cannot sweep through the house before the firemen arrive. Consequently the stairway that can be closed in is as important to the house as the self-closing doors on an elevator shaft.

Every hollow shaft, such as a dumb-waiter shaft or laundry chute out of the kitchen, is a direct passageway for fire once generated in the region of greatest heat. Whoever feels that she must have these contrivances—it will be readily admitted that they are a convenience—should see that they are properly cut off at top and bottom by self-closing metal doors. If the kitchen range is provided with an ash chute, it should not only be metal lined and empty
under cover into the receiving barrel in the basement, but it should have a secure trap opening, lest fire starting in the cellar be forced by the updraft directly into the main part of the house.

A volume could be written on the evils of hollow or stud partitions in the interior walls of a house. A fire, starting on one floor behind the plaster, eats its way, insidiously feeding on dry lath and exposed floor beams, to every other part of the house. Such a fire may smolder for hours without giving evidence of itself, and suddenly burst out all over the house at once, scarcely permitting the occupants to escape, and leaving nothing for even the best equipped fire department to do.

Any novice, ignorant of the technical side of house construction, ought to be able to give certain definite fire prevention directions when his own house is being erected. It must be insisted upon that at each floor the hollow space behind the plastering shall be absolutely cut off from the floor below; that the space behind each room be walled off from the next one. Again, while it is almost impossible to determine such points after the house is completed, everyone who builds should make sure that the floor beams do not enter the brickwork of the chimney. No reputable builder would support them in that way, but unfortunately all construction is not honest, and it is cheaper to fit the ends of the beams into the brickwork than to furnish proper iron supports for them. Another part of chimney construction which is impossible to alter when once done wrong is the thickness of the chimney walls. Four-inch flues are exceedingly dangerous, as they may cause the adjoining woodwork to become overheated. In bad weather the brick is apt to crack, endangering the house. A chimney upon which this sort of economy has been practiced is unsatisfactory at any time because the draft is bad.

A smoky fireplace may be due to faulty flue construction, failure to give it a metal lining, or frequently because the fireplace itself is too high. There are definite specifications concerning the brickwork around a fireplace, and it would be well for anyone intending to build to inform himself about them, not only for safety against fire, but for ordinary comfort in his home. Wooden mantels are as unsafe as they are often ugly.

Under no circumstances should there be any wooden furring or lathing on a chimney-breast. Metal lath should be used. No joist or stud should be nearer the inside of a smoke flue than eight inches. It is a good plan to arrange the positions of joists or upright wall beams with reference to their use after the plaster goes on, as it is often difficult to find a place to put a nail for a heavy mirror or picture, and the minute you allow the plaster to become broken for this purpose, as it undoubtedly will be, you make an opening where fire can enter.

The disposition of rubbish by the housekeeper is always a problem which greatly concerns fire prevention. When a family is actually building a house, it should be possible to make far better provision for this task than is usually the case. One good way of concealing the garbage pail and at the same time segregating it, is to have made, when the cement walks are laid, a cement lined pit into which it fits, and provided, of course, with a tight cover. In many homes the furnace receives all food refuse that cannot be poured down the drainage; this is a desirable method of handling it. A wire trash burner is an excellent device for the ordinary accumulation of papers and dry rubbish every day. It is a cylindrical stand made of wire, on four wire legs, into which such waste is thrust. It can be placed anywhere in the backyard and its contents burned without scattering.

It is the custom of some builders to make a ventilated closet under a kitchen window for the garbage pail, but it is far better not to have this unpleasant utensil in the house at all. Such a place might, however, be provided for the covered metal pail in which all oily rags and cleaning cloths should be kept. The danger of fire by spontaneous combustion of oily cloths and mops cannot be too greatly emphasized.

The storeroom problem is to be considered by every builder. Fire prevention experts plead for the elimination of home storage of every description, and warn the housekeeper particularly against the attic and cellar. If space can be spared and storage must be managed, a ventilated and cement lined room on the ground floor is the best solution of the difficulty.

The obvious danger of fire starting in the cellar is not alone due to the location of the furnace there, and often the hot and unprotected laundry stove, but also because all the piping and wiring for gas, electricity and bells pass more or less exposed through
the cellar flooring. The cellar is dark and defects, piles of rubbish, rats and mice nests, and other accumulations pass unnoticed. The ignorant helpers—furnace men, gardeners and perhaps the maid of all work—make hurried trips to the basement, but they are seldom supervised or made to take precautions about matches, smoking, oily rags, ashes and cinders.

Every cellar that has not a metal-lined ceiling is a fire menace to the rest of the house. Automatic sprinklers, installed in the basement ceiling when other piping is done, will prove most valuable in checking a fire which may start from one of many causes in the cellar.

Throughout the house chemical extinguishers, thermostats and pails of water should be installed in advantageous positions, ready for the emergency that may occur. The usual failure to provide them can be explained on aesthetic grounds—a conspicuous red extinguisher or ten-quart pail undoubtedly detracts from the carefully studied effect of beautiful woodwork and harmoniously balanced spaces and color schemes.

Shelves or brackets for holding such invaluable apparatus, if planned when the house is building, can be incorporated with the general design so as not to destroy the appearance of the hallways. An angle on a landing may be utilized, or the necessary shelves built into a closet with a lockless door, at a strategic point on the upper landing. Such conveniences and arrangements are infinite in number, and depend largely upon the character of the dwelling and the wise enthusiasm of its occupants.

For draperies, awnings and other inflammable trimmings already in a house, there are some excellent fireproofing solutions which minimize the probability of fire by chance sparks. Commercial sodium tungstate and ammonium sulphate in combination produce the ideal mixture for fireproofing nearly all textiles employed in household decoration. Whitewash is invaluable as a fire-retarding agent, and is an old recognized aid to cleanliness in basement and attic.

In the important matter of actual fireproof building materials, brick, in the estimation of fire prevention authorities, stands first. In the making, brick is vitrified, whereas concrete, when heated and then wet, undergoes a chemical change which causes it to crumble. Wood, which was once the cheapest available building material, has become so expensive and its upkeep for painting, reshingling and weather wear so great, that it is almost as cheap to build a “fireproof” house in the first place. While, as has been pointed out, the contents of a building are inflammable, there is less likelihood of mysterious fires and those from outside sources starting up when the exterior of a house is as incombustible as possible. Those entirely of stone are good, and concrete has many points to recommend it.

In a rented house one puts up with conditions as they are found. But as long as there are very definite laws regarding what may and may not pass the fire department's requirements, anyone finding a violation of them in a rented house should not hesitate to force the landlord to rectify the matter. If the furnace comes within eighteen inches of the cellar ceiling it must be protected from overheating the next floor by sheets of metal on the overhead floor beams. If this is not done, your insurance policy, as well as that of the owner, is rightly invalidated. If the electric wiring is improperly installed, you can and should make your landlord have it fixed and passed upon.

The matter of fire safety is not an individual but a common problem; in it is involved not alone the prevention of material loss, but the far greater effort to make lives secure. The total fire cost in this country is five times as much per capita as in any country in Europe. The per capita losses of the six leading European countries in 1970 amounted to thirty-three cents, or about one-eighth of the per capita loss sustained in the United States. The fire departments of other nations compare unfavorably with ours, and the United States has not been negligent in the matter of appropriation for sufficient water supplies. One cause for the astounding difference in loss is a climatic one; not only do our hot summers make everything as dry as tinder, but our cold winters necessitate artificial heat, and heating apparatus alone is responsible for a large number of fires. A still more fundamental difference lies, however, in the temperament of the American people and the conditions of life in this country. In our eagerness to get results in a new country we have not had the patience to build carefully. So plentiful was lumber that it was easier to build and burn and build again than to build sub-
EDUCATION FROM COUNTRY FAIRS

stantially at first. Besides that, conditions have changed so rapidly that often buildings must be torn down in a few years, that their places may be taken by others more suited to changed conditions. Then, explain it as you will, the intensity of life is far greater in this country than in Europe, more living is crowded into the same space of time. You cannot accelerate processes without increasing hazard, whether it be in respect to a race or a machine. We have no time even to make sure that matches are out. The fire loss is only one indication of our wastefulness. We have wasted our forests, our soil, our mines, our water.

We are coming, however, to a time when we must stop this prodigality. The drain upon our resources is beginning to be manifest in the increased cost of living. In the case of fire loss, the matter can largely be controlled by intelligent prevention. If civic consciousness means anything at all, it means a united effort for the general good, and a united recognition of the common preventable loss. It means attention to safe building, to individual safeguarding and removal of fire-breeding materials, acquiescence in a strict municipal surveillance for protection and prevention.

It means that the stamping out of fire should be undertaken as enthusiastically, earnestly and continuously as the stamping out of disease. Fire, like disease, has its origin in many sources, but records show that these causes are often preventable and well known, and that they are chiefly the result of wilful heedlessness. In many States the importance of the subject of fire prevention has been recognized by having a Fire Prevention Day observed. In those States even the school children are taught respect for the danger of fire, and at the same time an inner civic sense of duty toward their fellows. On the day of annual celebration, every means is taken to keep the subject alive and interesting, to get work done that will benefit everybody, and to stir up public indignation against carelessness and indifference.

Provision for fire protection can never receive too much attention. In addition to securing the most efficient fire departments, citizens of every town and city and also country dwellers, should give personal attention to safety for themselves and the community by building and maintaining their houses in such manner as to prevent fire; this is better than being sure of expert services when the alarm must be given. It would seem to be a good plan to organize neighborhood clubs at which fire prevention could be discussed and possibly careless householders made to think of the many risks they take in allowing certain dangerous conditions as regards fire to obtain in their homes. But a moment's consideration of our gigantic loss by fire should certainly serve to awaken new interest in the saving of this awful waste, not alone of wealth, but of human life.

EDUCATIONAL OPPORTUNITIES IN COUNTRY FAIRS

In the promotion of town and county fairs, and to insure their being of a sort that will give practical educational demonstrations and be an incentive to local interest and effort, the Extension Department of the College of Agriculture, Ithaca, N. Y., has offered to cooperate with as many of these fairs as is practicable. Educational exhibits with one or two specialists in charge will be sent to societies wanting them, and these instructors will explain the exhibits and discuss with visitors any questions that may arise. Each exhibit will require 10 to 14 feet frontage, with room for counters and wall space for exhibit material.

Some of the available exhibits are: dairy, relating to the care and handling of milk, dairy utensils, butter and cheese making, and milk testing; animal husbandry, including feeds, feeding for milk production, importance of breeding, and related matters; poultry, treating of feeds, feeding for egg production, poultry-house appliances, and egg testing and grading; plant pathology, taking up diseases injurious to fruits and farm crops, with methods of control; entomology, dealing with the economical insect pests of fruit and farm crops, and methods of combating them; soils, including drainage, lime, conservation of manure, crop rotations and soil management; forestry, comprised of photographs, wood specimens, samples of trees for planting, and methods of managing the farm woodlot; plant-breeding, showing charts, specimens of improved strains of seeds, and plans of improving farm crops; agricultural chemistry, dealing with commercial fertilizers and fertility questions; farm crops, showing specimens of types of cereals and other crops, and charts of production.