SAFEGUARDING THE HOME AGAINST FIRE: BY AGNES ATHOL

I WAS awakened one morning some months ago by the confused sound of many voices and vehicles just outside my house. When I looked out of the window, I was horrified to discover that Mrs. Gifford's house across the street was burned to the ground. The roof of the house next to the burned one was on fire, the engine concentrating its attention on it.

Ours is a little community of twenty or thirty frame houses, lying on the outskirts of the city—not quickly accessible to the fire department. Nevertheless, neither the Giffords nor myself nor any one else to my knowledge, in the entire vicinity, had ever installed any protection against fire. It might easily have been my house that burned while I slept heavily on; the sparks on my neighbor's roof might just as well, with slightly different wind, have alighted on our shingles. Certainly there was nothing but fool's luck to prevent them from doing so.

The owners of the property just destroyed had recently spent several hundred dollars on painting and redecorating their home. Had one-third of this amount been put into fire protective devices, especially in the cellar, where the overheated furnace caused the trouble, the house might have been saved. Their frightened dog rushed upstairs through the smoke and roused them barely in time to get out over the blazing beams; an automatic alarm on the stairway would have warned them of danger many minutes sooner. After the Gifford fire I went to a friend who is connected with the Fire Underwriters and asked what to do to make our house safe.

"Get sprinklers," was the first thing he said. "Everybody ought to put sprinklers in the basement when they build. The fire department is all right, but most people fail to send in an alarm till the fire gets too big to handle."

"But what are sprinklers?" I asked.

"Go into almost any department store or factory and look up at the ceiling: You will see a number of parallel water pipes with little knobs along them at intervals. Those are the automatic sprinkler nozzles. They are sealed by a little plug of metal which is fusible at a low temperature. Suppose you have sprinklers in your cellar and the furnace is accidentally neglected. The unusual heat melts off the plug and the water rushes out and extinguishes the fire. A round disc immediately in front of each nozzle makes the water spray out over about a hundred square feet. The sprinklers act whether anybody is home or not—and you can’t stop them from putting out your fire till the water is turned off at the main."

"I see. If Mr. Gifford had put sprinklers in the cellar the fire would have gotten no further. But do you have to have them all over the house?"

"No," replied Mr. Rhodes, my expert friend. "Not in private dwellings. But if your other neighbor had had an arrangement for wetting down the roof he would not be employing those expensive carpenters to reshingle it. A perforated water pipe along the ridge-pole could be operated by a valve in the attic. Any woman could manage it."

"Doesn’t it cost a lot to install pipes and sprinklers?"

"Not as much as a fire costs," he answered dryly. "Of course any installation—gas, electricity, fireplaces, cupboards—anything, is cheaper at the time a house is under construction. But it is really very easy to connect a sprinkler system with your water pipes in the cellar because they all run through the basement before passing to the different rooms of the house."

"Another good cellar precaution is a sheet of metal—zinc or tin—immediately over the furnace. And of course keep the cellar clean and tidy without accumulations of rubbish. Upstairs there are other ways of checking fires quickly."

"Chemical extinguishers?"

"Sometimes. One kind of dry powder extinguisher is splendid for putting out burning fat or oil in the kitchen—when the oven catches fire, or a lamp is overturned. An extinguisher which forms a blanket of heavy gas is the thing for the electrical fires that result from a frayed light cord or electric iron attachment which has become worn. This type of machine is invaluable in the garage for gasoline flare-ups, which occur so commonly. It is operated quickly and simply by a valve wheel, and comes in a size so small, fitted with brackets, that it can be hung up inside the automobile."
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"I thought chemical extinguishers were liquids," I ventured.

"Many are. The liquid extinguishers are better for fires that are spread out in a room, the dry powder kind for those in a confined space—a fire in a closet or a frying pan. The gas kind, while especially intended for fires caused by volatile oils which are spread by the use of water, are also of all around service. Most liquid extinguishers are really water extinguishers. They are similarly charged but differ in the devices by which the charge is released. Nearly all of them contain inside a solution of bicarbonate of soda in which is suspended a small phial of sulphuric acid. When the machine is turned upside down the sulphuric acid is discharged into the soda and carbonic acid gas is formed—the same gas our soda water contains. This propels the water out with great force and adds to the extinguishing efficiency."

"Wouldn't it be a good thing to have a chemical apparatus on each floor?"

"Yes, indeed, only when you buy an extinguisher, see if it has been approved by the National Board of Fire Underwriters in Chicago. If you are not sure, write and find out. Every good device for firefighting, from non-freezing hydrants to patent glove cleansers, is given our seal of approval and listed so people can be certain. You ought to try all the extinguishers in the house once in a while, marking on a tag when they were refilled and by whom. The awful Iroquois Theater disaster could have been checked if the extinguishers had worked right."

"How about fire pails?"

"Have two or three, by all means. I should set them on a bench or shelf in the upper hall where they would not be emptied or knocked over. The trouble is, fire pails and extinguishers are not enough. Human beings are necessary to make use of them. What people need in addition are the automatic devices which go off before the situation is serious and either put the fire out or give a warning. Take the thermostat, which is an automatic alarm—literally a heat recorder. Some of them operate by a sensitive metal spring and others by compressed air. You can attach them to an electric bell circuit exactly like the door-bell. When any unusual heat rises about them the spring or compressed air expands and acts upon the electric circuit. The bell begins to ring and rouses the family long before the fire is beyond control. I should put thermostats on the ground floor near the stairwell, in the kitchen and the storeroom, and possibly at the top of the basement stairs—all the main fire-danger points of a house. Then before the fire amounted to anything it would actually be ringing for admission!"

As I was thanking Mr. Rhodes another question occurred to me. "We carry fire insurance, of course, but no amount of money could replace some of my old furniture. What is the relation of insurance to fires, anyway? It doesn't really give you back what you lose."

"That's what most people don't understand. Insurance is all right as far as it goes—it is a protection from absolute destitution, but it doesn't replace anything. What is burned is gone—irrevocably wasted. The materials, time and labor expended on what has been burned are absolutely thrown away. Insurance capital is like a reservoir from which temporary assistance flows out to meet the distress of the loser. This reservoir has to be kept full all the time. You pay a little, I pay a little, in direct premium or charge for protection; we pay a great deal more indirectly—higher office rent because the landlord has to insure, higher food and clothing prices because factories and stores have to insure. This will be true as long as preventable fires continue to occur."

"But there is one aspect of insurance that is self-evident. The more remote the fire hazard in your home, the less you have to pay directly in the form of premiums to get financial protection. It's sound business policy, therefore, to reduce one's rate by installing preventive safeguards, isn't it?"

A VERY wise man once admitted that there were three things which were too wonderful for him, yea, four which he knew not: the way of an eagle in the air; the way of a serpent upon a rock; the way of a ship in the midst of the sea; and the way of a man with a maid.

I take it that he was in no way perplexed by three things that are beyond me, yea, four which I could never get the hang of: the way of a setting hen; the way of a cow in the corn; the way of Hannah Belden at a Methodist revival; and the way of a church member with a heifer to sell.—From "The Philosophy of Zarathustra Sims."