

Fire Hazard—Carbon Tetrachloride

THE GENERAL question of fire prevention in homes is dealt with elsewhere in this issue. Here our attention is directed to a special hazard in the chemical, carbon tetrachloride, sometimes used to put out fires. The following letter came to the Director of Home Economics Service from Mrs. F. Stephens, secretary of Harwood Institute:

"This letter is written as the result of a serious chimney fire locally. Unless anyone has been exposed to the fumes from a fire extinguisher using carbon tetrachloride, she has no idea of just how ill they can make one feel. We had an experience about four years ago, and although the doors were opened in winter weather, and we directed the extinguisher into the lower opening of the pipe at the stove top, the fumes were apparently so heavy that they did not blow out of the kitchen as we had thought they would. There was not a strong odor, yet after a while I began to feel ill, and was sore for nearly a week afterwards, just as though I had inhaled acid fumes. I had thought at the time that it was fright that made me feel so ill, for I was just about petrified. A while later I heard a lady on the radio warning about using the carbon tetrachloride for cleaning in the house, unless there was good circulation of air, and in any case, she advised, it was much wiser to use it outdoors.

"This morning, there was a serious chimney fire in the village, nearly fatal to the house, and I heard later that a neighbor who had rushed in to help because the man was away, was feeling very ill as a result of the fumes from the extinguisher, and also from sulphur, which had been thrown into the stove, I think, in the hope of smothering the fire. Before we have some really serious after effects from these fumes, would it be possible for your staff to plan some way to counteract the apparent ignorance about them? I had heard of several cases since my own experience where people were made ill, but this morning brought it to my attention again.

"I don't propose a short course in fire-fighting, but perhaps by the use of bulletins, in your Home Nursing Hints, on Country Calendar, or by the use of radio, warnings of the danger and effects of these fumes could be given. I am not too bright at solving problems of this kind, but, perhaps it will help if I can just bring them to your attention."

The letter was turned over to Miss Grace E. Hamilton, R.N., in charge of Health Education in the extension service. This is Miss Hamilton's comment:

"After reading Mrs. Stephens' letter I decided to get first hand information regarding the fire extinguisher mentioned, so I visited a near-by fire hall. Captain Corcoran who was in charge, kept shaking his head as he read the letter and even before finishing it, said "Yes, that's the way it acts, but why will they not follow the directions!" I am now going to tell you some of the things he told me.

"Carbon tetrachloride should never be used in a closed area to extinguish a fire. When the acid comes in contact with hot metal or heat of any kind there is a chemical reaction causing fumes which will cause not only the distress mentioned but severe after effects that might even be fatal.

"Captain Corcoran said that if a fire occurred in the motor of a car or on a motorcycle one might use the extinguisher without fear because it was in the open air and the fumes would be carried away, but one should not direct it into the cab of a trailer, truck or front seat of a car, nor should it be directed from either of those places. Why? Because there would be enough fumes even in the partially enclosed space to cause trouble.

"Brooder houses were mentioned. Many people are in the habit of setting up small brooder places in a corner of the barn or hen house. And, if a fire should occur, they would use the type of extinguisher that we are discussing—an unwise thing to do because of the concentration of fumes. It would be fatal for the chicks and when the owner investigated the damage he would lose consciousness and suffer grave injury.

"By now you must be fully aware of the dangers involved in using something that you are not familiar with. But you probably are saying, 'What do we use, then?' The suggestion is that you visit the fire hall in the village or town nearest to you and ask advice. There are several excellent extinguishers on the market that may be used inside without danger to the manipulator. When purchasing though, one must keep in mind the need for an immediate replacement after using. Your fire chief will know the type best suited to your need and where it may be purchased. Do call at the fire station soon.

"Then, may I make a suggestion — learn how to give artificial respiration. It is used for people who have been overcome by gas fumes as well as those who have been taken from the water in an unconscious condition.

"Be wise, read instructions before using any unknown product, and be familiar with what you have in the home or barn."