

Home Safety

THURSDAY MORNING SESSION

October 19, 1939

Joint Session Child Education Section and Home Safety Committee

Presiding, WILLIAM C. KNOELK, chairman, Milwaukee Safety Commission; assistant superintendent of schools, Milwaukee, Wis.

Report of the National Safety Council's Special Committee on Home Safety

By LEW R. PALMER

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National Safety Council.

When our committee was authorized by the Executive Committee of the National Safety Council and our members were selected by President Fennell, the action was response to a growing realization that the fatalities were becoming the major cause of accidental deaths in this country.

The recent sustained success in our National Traffic Safety Contest, resulting in 19 consecutive months' reduction in motor vehicle deaths as compared with the same months of the previous year, seems to indicate to our committee a possible saving of lives through the establishment of a national home safety contest.

The committee realized that if such a contest was to be recommended to the National Safety Council, we must have assurance that accurate records would be made available, and that one of the first steps to be taken was a study of this phase of the problem. We turned to the records of the Council to learn how the problem of obtaining accident records necessary for the establishment of our National Traffic Safety Contest had been handled.

At the Ninth Annual Safety Congress at Milwaukee, Wis., in 1920, the National

Safety Council was authorized to distribute accident report forms among cities of the United States having a population of 25,000 or more, so that a standard method of reporting accidents might be put into effect not later than January 1, 1921, in all these cities.

As a result of this action we have available the annual reports by the National Safety Council's Committee on Public Accident Statistics, a committee of the Public Safety Section. The 1921 edition of these reports covered eight pages; the 1926 edition, 32 pages. The first issue of "Accident Facts" came out as the 1927 edition of the annual reports of this committee. The 1939 edition of "Accident Facts," the most elaborate to date, covered 104 pages.

The 1,200 per cent increase in volume is more than outweighed by the increased value of these records, due to more accurate reporting, and there is still room for improvement.

In the December, 1931, issue of PUBLIC SAFETY was announced the national inter-city traffic safety contest, which was enthusiastically received, and it is generally conceded that this contest has played a

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major part in the reduction in fatalities that has been attained by practically all competing cities.

As has been recorded, the Public Safety Section of the National Safety Council was organized in 1915, and during the years that followed, the records indicate that the development of accident statistics has been one of the principal factors in bringing about increased interest in this field of safety.

Home Safety

While we all admit that home safety is our most difficult problem, and that the home is coming to be recognized as our principal source of accidental deaths, there should be no mistaken idea that nothing has been done to date—the records of the National Safety Council prove quite the contrary.

In the original proceedings of the Milwaukee Congress, on the very day that the National Council for Industrial Safety was established, at the Iron and Steel Session, October 4, 1912, home safety was recorded as a matter of vital importance. The annual proceedings of the Congress, since that time, covering reports of the home safety sessions, contain further evidence that home safety has been given serious consideration in the past and that the National Safety Council has done much to stimulate a greater general interest in this important phase of our life conservation program.

On the other hand, the criticism has been made that, although home hazards have been recorded by the thousands, and discussions have covered hours of constructive suggestions, nobody does anything about it, and that even today, home safety is still the step-child of the safety movement. Furthermore, we have been asked, "Is there a Home Safety Section in the National Safety Council?" There is not! Even though 72 per cent of our home fatalities occur to persons 25 years of age or over, we are still "tied to teacher's apron strings," for today's Congress program states that we are meeting in "a joint session with the Child Education Section."

This is the 28th Congress of the National Safety Council, and it is time we were stepping out a bit in the field of home safety.

Page 56, 1939 edition of "Accident Facts," shows 344,000 home fatalities from 1928 to

1938, inclusive. These home fatalities and their attendant injuries represent an estimated economic waste of more than \$6,500,000. With 33.5 per cent of all accidental deaths occurring within the home during 1938, and 52.2 per cent of the non-fatal injuries, we find that less than 4 per cent of our space in "Accident Facts" was devoted to this vital subject.

In a study of accident costs our committee found from the records of some 35 major life insurance companies that the 1938 accidental death claims in these life companies amounted to \$50,631,590, a ratio of 6.2 per cent to the total death claims paid. Certainly it is to the interest of the policyholders of all insurance companies that these organizations cooperate in our life conservation program.

Having studied the methods employed in developing our National Traffic Safety Contest, our committee seems agreed that the most important step in establishing home safety on an equally effective basis would be the development of a national home safety contest. And then the question arises: Who will pay the bill?

If somewhere, somehow, somebody can be found and sold the idea that human lives are at least on a par with those of our domestic friends, our dogs and cats, we would have ample funds to finance the job, for we are told that the Society for the Prevention of Cruelty to Animals is endowed for more than a million dollars.

Conclusion

We judge the future by the past. In other words, what has been done can be done.

Although we realize that accomplishments are not all that is to be desired, there are some encouraging signs which would seem to indicate that we are in a better position to cope with our home safety problem today than we were in the earlier days, when we were endeavoring to check the alarming increase in motor vehicle deaths.

We have developed a chart to contrast the number of pioneer states that were reporting motor vehicle deaths to the National Safety Council in 1928 as compared to the number of states reporting their home fatalities today. The count stands 24 for home in 1938 compared with only 5 for motor vehicle in 1928.

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This would seem to indicate that public officials are becoming more safety minded.

Local Safety Councils

Our local councils have done their share in home accident prevention, and it is well understood that only the direct contact of local agencies can insure success in any national home safety program.

Some 25 states and the District of Columbia, together with 50 cities, are regularly reporting home fatalities to the National Safety Council. Information is also obtained from the U. S. Bureau of Census. It is felt that hospitals would be a good source of information on all types of injuries, but to date little has been done in this direction.

Activities at Headquarters

Home safety work is divided among several departments at National Safety Council headquarters, the principal responsibility resting in the Public Safety Division, according to a report made to our committee recently by W. H. Cameron, managing director. The statistical work on home safety is handled by the Statistical Bureau; the Library collects and files information; home safety posters are developed in the Poster Division. The work is under the general direction of the National Safety Council Home Safety Advisory Committee, of which Miss Rosamond Losh, of Kansas City, is chairman. The Council publishes each month the Home Safety News Letter and from time to time other pamphlets bearing on the subject. Home safety material also appears in PUBLIC SAFETY, NATIONAL SAFETY NEWS and SAFETY EDUCATION, all magazines published by the National Safety Council.

The local safety councils submit home fatality records or are active in having them sent in by city officials. The local councils work along similar lines in cooperation with schools, clubs and other organizations in which women are interested. Some of the state safety councils also include home safety in their programs.

The Council has had cooperation from the Red Cross, the National Education Association, the Parent-Teacher Associations and other organizations. More is needed. If home safety is to be developed, all cooperating organizations must become

definitely interested and disseminate material. The National Safety Council should take the lead in providing good material, editorial, and otherwise. Opinion should be mobilized so that manufacturers of home equipment would be persuaded to make it safer. Also, we should endeavor to bring to the insurance companies the realization that they stand to benefit from home accident prevention and therefore should support home safety activities.

Safety Services

Supplementing Mr. Cameron's outline, we have a report of the National Safety Council's home safety activities, prepared for our committee by Raymond G. Ross, of the National Safety Council headquarters staff. This report summarizes various home safety services available, a few of which are mentioned here:

1. The Council maintains a speakers' bureau in which the names of thousands of speakers on home safety and other safety subjects are filed. The names of suggested speakers are gladly furnished upon request.

2. The Council's Bureau of Information is always willing to supply home safety data.

3. There are various other services—publications supplying authoritative home safety information, news and suggestions. One of these, the Home Safety News Letter, a monthly publication, is sent regularly to the representatives of practically every type of organization. "Safe at Home," the Council's booklet on home safety, is a complete text on home accidents and their prevention, in which each unit of the home and its surroundings is analyzed separately. "Radiograms," brief but powerful safety talks for daily use, which include a specific home safety message at least once a week, are mailed weekly to all important radio stations in the country. The Council's Safety Calendar also must be given a respected place in the home safety picture. Reaching into almost a million homes each year, the Calendar serves as a year-around safety reminder, containing many useful hints on safe management of the home and first aid.

4. There are many miscellaneous home safety materials available at headquarters, among them a selected list of references on the subject, an outline of the organization and activities of the Home Safety Committee, sample check lists for making a sur-

vey of home hazards, sample talks, radio interviews, plays, instruction cards containing succinct home safety information and other publications. Many of the Council's posters, too, of which about 5,000,000 are published annually, are devoted to safety in the home.

The efforts of the Council, coupled with the cooperation of various local and national groups, have brought a more widespread recognition of the seriousness of the home accident problem with a consequent increase in interest. The trend is quite definite. Home safety is receiving more attention in industrial programs and in community and state safety activities. Farm groups, such as the 4-H Clubs, home economists, nurses and other home visitors are becoming more safety minded. Utility companies, manufacturers of household equipment, apartment building managers and architects are coming to realize more and more that safe homes are decidedly to their interest. Magazines are devoting more attention to the subject. And, of course, mention should be made of the continuously expanding work of the schools, women's organizations, the Red Cross, Scouts, the

National Fire Protection Association and some of the insurance companies.

Home safety institutes, Mr. Ross' report says in conclusion, have been held successfully, and more are being planned.

Mr. Arthur Rohweder, of Duluth, president of the Minnesota Safety Council, has been elected as the National Safety Council's first vice-president for home safety. This is a memorable milestone in the history of the Council.

Our survey committee has not outlined any formal plan for an intensified home safety program, believing that any definite suggestions we may have in mind should naturally be submitted to the newly elected vice-president for home safety.

The vice-president for public relations should cooperate with the vice-president for home safety. There are many agencies, all interested and more or less active in the field of home safety, and it is of vital importance that all such organizations should receive full credit for the fine work they are doing. With a cooperative, coordinated program, properly sponsored and financed, we should see the home accident curve brought down.

Home Safety and Education for Homemaking

By MARY L. MATHEWS

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Almost as many persons sustained fatal injuries in the home in 1938 as died in automobile accidents. Home accidents decreased only 2 per cent while traffic accidents decreased 19 per cent.

There are probably two reasons why home accidents cannot be controlled. First, it would be very difficult if not impossible to survey all the homes in America to determine what rules and regulations need to be made to insure safety to all the individuals living in those homes; and, second, even though laws for home safety were passed it would be impossible to enforce them without a safety policeman in every house. It would be possible to make laws requiring that every home be built with handrails on stairways, or without highly polished

floors or that the house be fireproof, but no laws could ever regulate disorder, recklessness or the improper use of equipment unless each home were individually patrolled.

In a survey made of hospitalized cases in Cook County hospital in Chicago it was found that disorder and poor judgment caused the greatest number of accidents. We are told that "medical and hospital bills for the care of home accident victims last year were almost \$2,000,000 a day," a large sum to pay for carelessness, poor judgment, disorder or unsafe conditions in the home.

Since it would be practically impossible to enforce laws or regulations for home safety the approach to the problem must

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through another channel. That channel probably education. Many courses in safety education have been developed and most of these devote some time to home safety. The great need is (1) to develop an attitude of safety consciousness on the part of individuals in the home, (2) to develop standards by which each individual can measure safety practices for the home and (3) to carry out home safety measures through "self-enforcement."

How can an attitude of safety consciousness be developed? Largely through writing, talking and discussing the subject. A panel discussion, arranged by a social science teacher in Atlanta, Georgia for the Parent-Teacher Association, at which home safety was discussed by an architect, an interior decorator, a student, a parent, representatives from the electric and gas companies and the fire department, and the school nurse, is an excellent means of making people conscious of the need for home safety. We need more such meetings organized.

Then there needs to be more written about home safety. The best bibliography on safety comes from the National Education Association. In this list of publications film strips little material on home safety is found. There is need for more posters on home safety—attractive posters which will appeal to children and young people. More radio talks on home safety would help to make people feel that the subject of home safety is an important one. Until more publicity is given to home safety, the subject will not be looked upon as one deserving much attention.

The second need, that of developing standards for home safety, can be a part of education for homemaking taught in the schools. In the survey of current safety practices made by the National Education Association no mention is made of home economics teachers in the list of individuals responsible for safety programs in the schools, although home safety can be more effectively presented by home economics teachers than by any other group. The statement is made that "especially suitable subjects with which safety may be considered naturally correlative are the social studies, the sciences, and the health and physical education studies." Home Economics should have been added to this list if

home safety is to be included in the school curriculum.

Safety discussion directly related to the use of equipment and materials in home economics laboratories should be an important part of any course. For example, the student is taught how to fill and care for a coal oil stove to avoid explosions, how to handle cutlery to avoid injury, or how to operate the sewing machine without running the needle into a finger.

In the practice apartment or home management house there are many opportunities to teach home safety through discussion of equipment; for example, how to operate a washing machine without getting hands caught in the wringer, how to use a step ladder to avoid falling. In the house planning and furnishing classes there is opportunity to discuss safe and unsafe floor finishes and coverings, the means of making a house fireproof, and the individual's responsibility in keeping the house safe from fire hazards. In the foods laboratory classes the students are taught how to light a gas oven safely, how to place kettles or saucepans of hot liquids on the stove so that there will be little danger of upsetting them.

In the home nursing classes a discussion of the safe methods for storing poisons and medicines away from the reach of children and so that adults looking for bottles in the dark will not select the wrong ones. One of the safety slogans used is "Let there be light," and if this exhortation were followed fewer people would fall or select the wrong medicine in the dark.

Even little children can be taught orderliness by encouraging them to put away toys and not leave them in the center of the floor for someone to stumble over. Children in the nursery school like to put their things away because low shelves, boxes and hooks are provided for them, while in the home the child is expected to learn these things but to use grown-up equipment. Through home economics teaching it is hoped that students learn good standards for housekeeping, orderliness, and the proper and safe use of equipment in the home. Too often the student has no opportunity to practice at home the things learned at school because the parents maintain poor standards and perhaps scoff at the ones

taught at school. The home economics teacher has probably not stressed the need for following good practices, but perhaps if she were given more responsibility for teaching home safety she could stress the importance from this angle. More posters or film strips showing safe practices in housekeeping operations need to be made, and perhaps the home economics teacher is the one to do this.

Home safety measures must be carried out through "self enforcement." We all know that certain practices, such as using a small rug on a highly polished floor without fastening it to the floor, is dangerous, yet we continue to do this in many homes. We know that the treads on some of the basement steps are loose, yet we do not fix them. The slogan suggested in one of the U. S. Government publications, "Find it, Fix it," is a timely one, yet we often let repair jobs go until an accident occurs.

We know that houses should be as nearly fireproof as possible especially in towns where they are placed close together, yet we go on building wood houses. We know it is dangerous to flick cigarette ashes into a waste paper basket or to put hot ashes from the furnace into wooden tubs or baskets, yet we continue this practice. We know that gasoline should not be used for dry cleaning, yet we go on doing it.

The publicity given to traffic safety has impressed the general public and made them conscious that something should be done to protect the lives of people driving cars and the lives of those walking or riding bicycles on the streets and highways. We need to give the same publicity to home safety and we need to spend more time on the teaching of home safety, not in separate courses but in any course where home safety practices can appropriately be presented.

What then, are the best methods for teaching home safety in the schools?

First, we need teachers who are fully informed on the subject. Our colleges and universities need to emphasize home safety in their training programs. Separate courses need not be organized, but more emphasis needs to be placed on home safety topics wherever there is an opportunity. Young women going into home economics teaching need to have the subject of home safety presented in every Home Economics course

offered to them during their college or university careers. The subject has not been emphasized as it should have been. Some institutions training teachers have offered courses on safety in which a unit on safety in the home has been presented. A better method of teaching the subject is through integration with other courses, especially with the home economics courses. We need to make home economics teachers safety conscious and interested in doing effective teaching in this field, not teaching that is looked upon as a burden and done only because the law requires it.

If Home Economics teachers are to do effective work, there must be more materials developed for them to use. There are few text books that deal with home safety; there are very few bulletins or leaflets available, and there are not many magazine articles that are of assistance. There should be more posters designed, more plays on the subject of home safety written, more safety exhibits set up, and more films and slides that adequately depict home safety problems. Many publications and motion pictures have been developed for use with adults and are entirely unsuited for school children. Other materials obviously have been prepared for advertising or selfish propaganda purposes. Furthermore the arrangements are often inadequate for bringing the best of these materials to the attention of school people and for distributing them where they are needed.

It would be a fine thing if some of the state libraries could develop lending libraries so that teachers who have no money to spend on such things could borrow the materials they need. Such a lending library would be very helpful to a teacher in a small town or rural community.

There need to be more courses of study developed in which adequate emphasis is given to home safety and its correlation with other subjects, especially home economics. The research committee of the National Education Association says "Unless educators develop instructional guides for classroom work safety education will tend to crystallize into the patterns now being advocated by non-school groups. There will be courses in 'traffic safety' or 'home safety' instead of an *integrated* program. Safety education consists of constructive reactions to life situations."

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If home safety is to be effectively taught in home economics laboratories then these laboratories need to be safe places in which to work. Just as a factory is made safe for workers so should the school building be made safe for children. For example the foods laboratories should not have leaking gas pipes, broken faucets at the sinks or stoves out of order, nor should there be broken utensils used if home safety is to be effectively demonstrated. Some day perhaps we shall require that all school buildings be fireproof and that all equipment be as safe as it is possible to build.

There need to be more studies made of home accidents, thereby giving information that will help in reducing their number. "It seems fairly certain that home safety will not make much progress until the people of each community are aware of the number and seriousness of home accidents that are occurring in their midst and until they become familiar with the circumstances and causes."

The home as well as the school is responsible for education for homemaking. It is estimated that most people spend a third or more of their time in the home. Therefore the first teaching of home safety is done by the home. When the child is taught why he should stay away from an open fire, and why he should not touch hot pans on top of the stove, and why he must not leave his toys in the middle of the floor, he is being taught home safety.

Children from five to nine years old were victims of more home accidents than those in any other age group, the major

causes being falls and burns. In succeeding age groups home accidents decrease, probably "due in part to differences in the amount of exposure to home accidents and in part to increasing knowledge of home hazards." The child from the well-ordered home develops better habits for home safety than does the child from the home where disorder, recklessness and poor judgment prevail.

Organizations such as the General Federation of Clubs and the National Congress of Parents and Teachers have been active in the cause of home safety. Recently in Indiana the club women held a forum on safety with part of the time devoted to home safety. Women in these organizations are "safety conscious" and while traffic safety has been the major concern up to the present time, other phases of the subject have received some attention. The National Safety Council suggests that at least one meeting a year be devoted to the subject of safety, and perhaps the discussion of home safety should receive the major part of the time in this program.

The women's organizations in a community can do very effective work in promoting interest in home safety through talks, broadcasting or newspaper writing. Members of the organizations should be encouraged to check their own homes for hazards, using some of the check lists that have been developed for this purpose. If home safety is to be effectively promoted there must be cooperation between the lay and school groups since the teaching done in the school cannot be successful without the cooperation of the home.

Fire Safety in the Home

By T. ALFRED FLEMING

Director of Conservation, National Board of Fire Underwriters, New York City

A century ago a very small percentage of fire casualties and loss of life by accidents was registered in homes. In the evolution of the home to its present status and the introduction of modern improvements and labor-saving devices, the home has become

one of the most dangerous places, as shown by statistics of the National Safety Council which indicate more than thirty thousand home accident fatalities in the United States annually. Many of these are the result of fire, as evidenced by the fact that some

three hundred thousand American homes in one year have fires serious enough to warrant calling the fire department.

Statistics released recently by the Casualty Committee of the National Fire Waste Council show that home fires account for nearly two-thirds of the annual loss of life through fire, which totals more than ten thousand persons. Half of these victims are children under ten years of age.

There seems to be a lack of fire consciousness on the part of those responsible for the safety of the family. This results in carelessness, which usually causes tragedy.

This applies particularly to those responsible for the construction of the home itself, as the greater number of tragedies result in death before the fire department is ever called. We have built our homes without proper consideration for the rapid spread of fire and the dangers which result therefrom.

Few of us realize that more than one-half of the people who burn to death are never touched by flame on the outside. They breathe superheated air, which passes through the house within a few minutes of the origin of the fire, and although the house may be saved by the fire department, the tragedy of loss of life has occurred.

More than one-half of the fires in dwellings originate in the basement. Most homes are constructed without the benefit of fire-stopping of the walls and partitions, and no care has been taken for the escape of dangerous gases from the basement to the upper section of the house through stairways, dumbwaiters, clothes chutes, and other openings which lead to the main section of the dwelling.

Within five minutes of the origin of any fire, superheated air can reach temperatures of 400 and 500 degrees. This air immediately passes upward through all these avenues, and no one can breathe it and live. Within a period of seven to ten minutes, superheated air up to 800 and 1,000 degrees is easily produced, and when it rises and concentrates in the upper sections of the home, it causes curtains, draperies, bedding, lath and partitions and all woodwork to break into flame spontaneously. Thus the entire home is involved, frequently before the fire department arrives, and all because we have not constructed the building in an

effort to protect against the quick spread of fire.

Common sense in the construction of homes would dictate that the basement area be built as a complete unit, not only with firestopping in walls but with a good metal lath and cement plaster ceiling; with tight fitting doors on all clothes chutes, ventilating and air conditioning systems; and with proper protection for the stairway leading to the main section of the home. A fire detector should be placed there so that any increase of temperature would sound an alarm loud enough to arouse the occupants and give the fire department a chance not only to save life but also property.

Many attic and partition fires start from faulty chimneys, poorly built, without flue lining, or with disintegrating mortar.

If the features of proper construction were heeded by the adult members of the family, three-fourths of our home fire casualties would be eliminated.

Of course, a good householder will always see that the ordinary causes of fire are obviated: rubbish conditions removed, heating plant carefully inspected, chimney kept clean and in good condition.

A discussion of home hazards would not be complete without reference to the danger in the use of flammable liquids. Thousands of families are still using kerosene either for starting or for quickening fires, even when they know of the explosive hazard involved. The same is true of gasoline. You would not think of keeping a few sticks of dynamite around the home, and gasoline is even more treacherous than dynamite or TNT. It vaporizes so easily. Its vapors are heavier than air and therefore are frequently undetected. Even though a fire may not be present, there is always the hazard from a static spark or from friction.

For instance, an Iowa woman poured gasoline into her electric washing machine. When she turned on the switch, it caused a spark. The explosion killed her and wrecked the home.

Two teachers in Philadelphia were planning a vacation in Europe. They were anxious to protect their home furnishings from moths during their absence, and so they sprayed gasoline over the carpets and upholstery and in closets. After they had started for the street car it was found that

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He had forgotten her purse. On re-entering the house they turned on the light, and the spark from the switch exploded the fumes from the gasoline, killing both teachers and entirely demolishing their residence.

A woman was washing her gloves in gasoline outside of the house. Having them on her hands and wishing to dry them more rapidly, she put her hands into a lighted oven, and if she were alive, she would advise all women never to duplicate that act.

While gasoline is perfectly safe when used in a car, it is wise to leave it there and use an Underwriters' Laboratories tested cleaner for household purposes.

In the use of electricity and the labor-saving machines which come with it we often fail to realize the hazards involved or the importance of understanding the theory of electrical construction or the usage of the current. Electricity is 99 per cent safe in a home if we know how to use it, but tampering with the system by the uninformed may make it 99 per cent dangerous.

The usual circuit is supposed to carry an electric load of 1320 watts. When it is installed, the wiring expert plans less than that for every circuit and fuses each one with a 15 ampere fuse, which is the safety valve of that circuit.

The addition of a vacuum cleaner, toaster or percolator when the regular lights are being used will frequently overload the circuit and burn out the fuse. This is the danger signal which indicates that an electrical expert ought to investigate the cause. But instead, someone may become unusually "wise" and either place a penny back of the fuse or install wires around it to obtain immediate light. It is true that the light will come, but a fire is likely to follow. When the extra electrical overload is carried after the fuse has been removed, the wires in the partitions become red hot and soon white hot, spattering and throwing fire in every direction. Lath in partitions and studding burns slowly because of lack of oxygen and generally burns through to the main part of the house between two and four o'clock in the morning, when occupants are least able to take care of themselves.

It is always a poor practice to connect appliances such as electric irons, sweepers, toasters, and so forth to ordinary lamp sockets. These sockets are intended for

lights and are not considered sufficiently well constructed to carry a load of 500 to 800 watts required by appliances. Appliances should be connected to wall sockets installed for that purpose.

Next in importance comes the maltreatment of the average extension cord. Cords are sometimes trampled under rugs; hung over nails; disconnected by jerking on the wire, instead of gripping the plug; bent, twisted and tangled in knots. It is a real tribute to the manufacturers that these wires stand up as well as they do. Under such treatment insulation is bound to wear. Small wires making up the current carriers break, pierce the insulation and short-circuit, and the tragedy follows.

The wide increase in smoking in recent years has resulted in thousands of fires from the careless handling of matches or discarded cigarettes and cigars. Flammable clothing and numerous accessories, some of which burn with a flash, constitute an ever-present hazard.

A few months ago a woman was attending a New York theater with her husband. They retired to the lobby during the intermission. A spark from a lighted cigarette or a match set her dress on fire, and it was with the greatest difficulty that the fire was extinguished and a panic prevented. The woman and several who assisted in extinguishing the fire were burned severely.

A woman in the Middle West struck a match on her shoe to light a cigarette, and in an instant her dress was on fire. In spite of the heroic efforts of those present, she was so badly burned that she died two hours afterward.

Since most new homes and apartments are provided with incinerators, it may be wise for us to review some hazards which are common in their use. A woman in New York, after emptying her vacuum cleaner, carelessly threw the contents of the bag into the incinerator. A serious explosion took place, and she was badly burned. In another instance a cook threw a small quantity of refuse flour into the incinerator and wrecked five apartments.

We have always associated dust explosions with flour mills and grain elevators and have failed to realize that practically any dust when thrown into suspension will explode if a spark is present. Therefore, it is a wise plan to wrap any such material

into a solid mass before committing it to the flames to be burned.

Another common cause of home fires that is attributable to the housekeeper is the mysterious phenomenon called spontaneous ignition. This process is nothing more or less than the oxidation of certain oils which happen to be on combustible materials exposed to the air. The oil consumes oxygen from the air, and this activity raises the temperature of the oil until it is hot enough to ignite combustible substances.

We have known of cases of spontaneous combustion from oily rags and mops, cloths used by painters, old discarded mattresses, and from a general accumulation of material frequently stored in attics and cellars. Everyone should use common sense in storing polishing cloths, oily mops and, in fact, all substances in any way saturated with oil. Such articles are best kept in standard metal containers. Another thing to watch for is a dust-laying preparation commonly used in sweeping. Many of these compounds are nothing but oil and sawdust. A dustpanful dumped into a trash basket or a bag has burned down many a home.

A wise housekeeper will organize a fire drill in her home. Parents, after making a careful survey of apparent hazards, should discuss with each other how best to eliminate those hazards and then, in case of fire, how they would be able to get out of the building safely. They should know how to turn in a fire alarm; how to save life if

clothing is ignited; how to extinguish fires that frequently occur around the kitchen stove; and, above all, how to act so that not a moment will be lost when an emergency comes. A dipper of water or the ever present garden hose, and a ladder long enough to reach the second story, have saved many a life. Every house should have two means of egress so that if one is cut off the other will be available. In case of fire, before opening the door into any hallway one should feel the panels carefully for heat. If they are hot, the door should not be opened, but exit should be made through the window.

Two small boys were found dead in a one-and-a-half-story house. They had opened the door to the hallway, had breathed superheated air and were found just two feet from the window which led out over the front porch and was a perfect avenue of safety. If a fire drill had been planned by the family, that feature would have been emphasized by the parents and the two boys probably would have been able to save their lives.

These are only a few of the hazards found in homes. New ones are developing constantly as new appliances are introduced in home operation.

What is needed most is the application of thought and good ordinary common sense. A panic and the loss of life may be easily averted by a frank discussion of this important subject by the family.

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