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Source: *The Scientific Monthly*, Vol. 37, No. 1 (Jul., 1933), pp. 61-64

Published by: [American Association for the Advancement of Science](#)

Stable URL: <http://www.jstor.org/stable/15683>

Accessed: 08/05/2014 09:06

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HOUSEHOLD HEALTH HAZARDS

By Dr. YANDELL HENDERSON

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I AM going to talk over with you some of the dangers that we are all exposed to nowadays. We all realize the hazards to life and health that the automobile has introduced, for many people are killed even in trying to cross the street. But the dangers that we are going to consider now are not so well known. They are quite largely hazards to health and dangers to life that occur in our homes.

Nearly all these dangers have developed rather recently. They are nearly all due to advances in science. You know that the advances in medical science have greatly decreased the deaths and illness from infectious diseases. The applications of medical science have made life much healthier and the average life much longer. A generation ago diseases like typhoid fever and diphtheria caused a heavy death rate, while now in a town or city with a good health department a year may go by with few or no deaths from these diseases. To a large extent this advance has been made by the health departments of our cities, our states and the national government. It is the fashion just now to criticize the government for costing so much and for requiring high taxes to support it. But the truth is that the service that the national, state and local governments render us simply in protecting our health is worth every cent we ever pay in taxes. It would be a disaster, if the effort to decrease the expenses of our

various governments resulted in crippling the public health services.

We know that the police protect our property and our lives from criminals; that the fire departments protect our homes from fire; and that the U. S. Army and Navy protect us from foreign enemies. But we seldom think of the protection that the government gives us in regard to the food that we eat and that it should give us in regard to certain hazards to which our homes are now exposed. The most important protection of this sort is that afforded by the federal pure food law, and similar laws in the states together with the arrangements that the government maintains to see that the pure food laws are obeyed. The Agricultural Experiment Stations in many states are every day analyzing samples of foods that are being sold on the open market and these results are published in the reports of these stations. Impure foods are confiscated and destroyed. You can get one of these reports by writing to your state government.

Before the pure food law was passed any food producer could sell nearly anything that he could persuade the public to buy, no matter how much his product was misrepresented. I remember some strawberry jam that was highly advertised as a superior product, but it was found to consist of apple butter sweetened with corn syrup, flavored with a synthetic chemical flavoring, colored with a coal-tar dye, with artificial

wooden seeds scattered through the jar. The one thing that that jam did not contain was strawberries. It was like the wooden nutmegs that were once said to have been manufactured in Connecticut, where I live. I doubt the story about wooden nutmegs, but until the pure food law was enacted there were sausages made that had almost no sausage meat in them. And then there was the so-called embalmed beef that was alleged to have been supplied by some of the big packing houses to feed the soldiers in the Spanish War. I don't know whether Theodore Roosevelt, when he led the Rough Riders in Cuba back in 1898, ever ate any of that embalmed beef, for our soldiers in that war had very little to eat of any sort. But when he became President one of the measures he got Congress to pass was the pure food law. There was, of course, great opposition from some food producers on the ground of bureaucracy and interference with freedom of trade. But the law was passed and it has really been almost as valuable to producers and merchants as it has to consumers. It has not only prevented many cases of food poisoning and swindling by sale of inferior products; but it has also greatly increased the sale of all sorts of canned goods and foods in packages. So long as there was doubt of the purity and healthfulness of such foods people hesitated to buy them. Now they are sold in immense quantities, for every package of breakfast food, every can of vegetables and every bottle of pickle on the market is now subject to the supervision of the federal and state governments. All food products are required to be free from adulteration, and the label on the can or package must tell the truth about the contents.

Another big step to protect the American home was taken three or four years ago when Congress passed and President Coolidge signed a law called The

Corrosive Poisons Act. This act requires a warning label on various chemicals and cleaning fluids that are used in nearly every home. One of these substances is soda lye that is used to clean the kitchen sink. Every now and then a little child got hold of the can and swallowed some of its contents. The result was fearful injury, lasting sometimes throughout life, even if the child was not killed immediately. All such substances must now bear a warning label, and many accidents are thus prevented.

But this is not yet enough. There are still many substances that are sold and that are very useful but which carry dangers into our homes. And against these substances, some of which are very poisonous, there are as yet no protective measures and no requirement for a warning on the label. A couple of years ago many cases of illness, and perhaps some deaths occurred in hotels, and some may have occurred also in private homes, where the forks and spoons were cleaned with a silver polish containing the deadly poison potassium cyanide. A few grains of this polish between the prongs of a fork were enough to cause serious illness. There was no warning on the label of that silver polish. It has been withdrawn from sale. But it was an excellent polish, and there is nothing now to prevent another manufacturer from putting out a similar polish containing potassium cyanide under a fancy name.

There is now on the market a powder for cockroaches. It contains sodium fluoride and has killed several people who took it by mistake. It is sold in a package that looks like that of salts. It has no warning on the label.

The largest group of poisonous substances that now go into our homes without any warning of their dangers are various volatile liquids and new chemical substances that are each year

invented by chemists, and put on the market and sold to the public, before any test has been made as to whether they are poisonous or not. For such substances there is as yet no requirement that the label shall give warning of danger. One of these substances that is very useful for cleaning purposes is carbon tetrachloride. Now let me say at once that carbon tetrachloride has certainly saved more lives and health than it has destroyed or injured. It is very much safer to remove grease spots with this liquid than it is with gasoline or naphtha, for carbon tetrachloride does not catch fire. It will not burn; but many a woman has been badly or even fatally burned by gasoline. On the other hand, carbon tetrachloride has a vapor that is distinctly poisonous. The substance should be used only in well-aired places so that the user does not inhale the fumes. In Switzerland carbon tetrachloride has been used as the solvent for a floor wax in a school. It caused serious illness. There is now no law or regulation in America to prevent carbon tetrachloride and similar new substances being used in floor polish. It can cause serious illness in children playing on a floor polished with such substances. There is no requirement now for a warning in the label on the can. It is not sold to the general public as carbon tetrachloride but under a fancy name. The next time you buy a bottle or can of cleaning fluid ask what it really is. In fact, when you buy any chemical for use in your home always find out what the constituents really are.

I do not want to give you the impression that American manufacturers wish to poison those who buy their products. They do not. They are humane men, and deaths or illness caused by their products react against selling their goods. The harm comes from the fact that when a new substance is invented

by chemists and is found to be useful for some purpose, it is manufactured and sold without any investigation of whether its use involves hazards to health and life. Chemists had been looking for a substance that would prevent automobile engines from knocking; that is, from premature explosions in the cylinders and loss of power. At last an effective substance was found to be tetraethyl lead; and the manufacturers were about to distribute it all over the country to be added to gasoline at filling stations. Fortunately, scientific men who knew that tetraethyl lead is a powerful poison were able to warn the manufacturers in time. As a result the substance, instead of being distributed in concentrated form, is now mixed with the gasoline at petroleum refineries and distributed as "ethyl gas," which is relatively safe. Warnings are also put on the pumps at filling stations. There have been few or no cases of poisoning since these precautions were put into effect; but without these precautions there would almost certainly have been hundreds of cases of poisoning.

Another substance, methyl chloride, has, however, caused a number of deaths. This liquid or gas is used in some makes of automatic refrigerators. These refrigerators are certainly a great convenience as compared with the old-fashioned ice refrigerators. They are also quite safe if they are made in single units. Methyl chloride in a single unit refrigerator is perhaps safer even than most of the other gases that are used. But, unfortunately and unwisely, multiple systems of refrigerators were allowed to be installed in big apartment houses in some cities. Such an installation involves a big storage tank or cylinder of the refrigerant in the basement connected to many refrigerators in the various apartments. If any one of the refrigerators in any one

of the apartments develops a leak the whole of this large amount of gas from the cylinder and from all the other refrigerators in the building escapes into that one apartment. This occurred in some apartment houses in Chicago and caused a number of deaths a year or two ago. Large multiple refrigerator systems are dangerous. Single units are safe.

I could easily tell of other examples of the household hazards that modern scientific conveniences have introduced into our homes. The electric light fixtures in a bathroom should always be so arranged that no one can make contact with a live wire with one hand when his other hand is in a wash basin or his feet

in a bath tub. Cases of death by electrocution by the house current have occurred under such conditions.

There are also the dangers from the city gas that we cook with nowadays. Old and defective rubber tubes leading to gas stoves are liable to break and to allow the gas to escape. Deaths from this cause are common. Water heaters, if badly arranged, may also produce carbon monoxide. Every gas heater should be connected with a chimney to prevent this danger. Another common danger nowadays is that from carbon monoxide in automobile exhaust gas. Never start the engine of your car, no matter how cold the weather, until you have opened the garage doors.

TRANSPLANTING OUR MINDS

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I FEEL impelled to apologize for the title of my talk to you this afternoon, after having recently seen a motion picture in which personalities were transplanted. By means of electrified belts worn by each of two persons, the personality of the one could be transferred to the other with consequences that were most amusing. It is not such transplantation of the mind that I am thinking of, nor is it the interchange of the brains of two individuals about which I have recently read in an exciting bit of fiction. It is the far less spectacular process of imagining yourself in the other fellow's place.

In the days when successful men of business and industry were wont to explain their success in the popular magazines—how long ago it seems since there were such successful business men!—there was one trait that always received a fair share of the credit. That was the knack of getting along with other

people. It was attributed to the ability to project oneself into the other person's circumstances, to step into his shoes, to see problems through his eyes. Whatever expressions might be used to describe this magic operation, they all boiled down to this knack of imagining oneself in the other person's circumstances and thinking what one would do in his case. Of all the explanations suggested for the present economic disaster, I have never heard any one attribute it to the practise of transplanting minds, as I have defined it. On the contrary, every interpretation that I have studied would acknowledge the failure to transplant minds, in the sense in which I have used this expression, as an essential element of the problem.

The rapid changes in social and economic conditions which are occurring throughout the world have not affected all people in like manner or to a like degree. As a consequence, there never