

THE INSURANCE CHRONICLE

MODERN FATAL DISEASES.

Two striking facts, in the domain of medical care or cure, were placed in opposition at a medical gathering in Detroit some days ago. One was that mortality from apoplexy and diseases of the kidneys, heart and blood vessels has doubled since 1880. The other is that there has been a marked decrease in the mortality from consumption and typhoid since 1880. The latter blessing is due largely to the education of the public and the adoption of preventive measures, and the general death rate has fallen. While this is the case, other diseases, preventable, such as are first mentioned above, have been neglected by officials and by individuals.

Careful attention to those much-dreaded diseases of modern life, kidney disease and heart trouble, is surely one of the most important duties of the day, for the toll of human life which they have laid upon the commercial and financial world in particular has been extremely heavy. The subject of an address in Detroit by a New York insurance man, Mr. George H. Cunningham, was "The Enormous Waste of Human Life." The speaker advocated free medical examinations by life assurance doctors at regular intervals on the theory that an ounce of prevention is worth a pound of cure. The lecture was followed by a free discussion by some of the leading physicians in Detroit, in which the views expressed by Mr. Cunningham were generally endorsed. One of them expressed this truism, that the future of medicine is the prevention of disease. In other words, the doctor will be remembered for keeping people in health rather than for helping them when they are down.

DEFECTIVE SPRINKLER SYSTEMS

Discussed by Mr. Szeliski—Toronto Insurance Men Hear Further Information—Advice to the Insured.

That a poorly erected sprinkler system often causes considerable damage from water leakage is a statement made by Mr. Szeliski, before the Toronto Insurance Society, in discussing a paper previously read by Mr. Donaldson on accident damage to property caused by defective sprinkler systems.

Mr. Szeliski further stated that a complete sprinkler equipment not only discovers and extinguishes the fire automatically by the fusing of the link and consequent opening up of the sprinkler head, but also starts an electrical alarm gong going. This is effected without the attention of anyone on the premises by the closing of an electric circuit by means of the water flow through the system. Furthermore, it throws water only where actually needed, at the very seat and point of origin of the fire. When the fire is extinguished by the sprinklers or other additional aid, the water should be temporarily shut off the system by parties familiar with it, to make possible the replacement of the sprinkler heads which have opened and operated.

Before turning off the water it should be ascertained that the fire has been actually extinguished. Numerous cases have occurred where the fire again broke out with such force as to pass finally beyond control. This applies particularly to fire in cotton in a picker room and with goods of a filmy texture, containing in themselves the necessary air, i.e., oxygen for combustion.

Even Distribution Wanted.

In modern installations eight-inch risers are seldom used now. Fire insurance engineers have found that by breaking up the system into small sections, smaller risers may be used. Not only is the initial cost of the installation smaller, but a better distribution is obtained. The object of all rules made by underwriters for sprinkler installations is to effect an even distribution; to get the water to the outlets or sprinkler heads with the least loss of pressure. Such loss may be caused either by friction, or by the water having to pass sprinkler heads which have already operated. The aim is to have only a limited number of sprinkler heads on one line, so as not to unduly increase the pipe sizes and thereby the cost of the system. The efficiency and cost of system will depend upon the experience of the sprinkler expert preparing the lay-out, and in spite of all rules laid down by the underwriters, sprinkler installations

may vary in efficiency, if laid out by inexperienced mechanics. **Experts Should Prepare Plans.**

True, the printed rules of the National Board of Fire Underwriters for sprinkler equipments are supplied to anyone applying for same, and home-made plans submitted to the sprinkler department of the various rating organizations may be finally approved, after having been two or three times altered by just coming within the range of the rules laid down; but they would have been better if prepared in the first place by a regular sprinkler expert. Although the best construction companies may also have careless workmen, their experience in this class of work should be a great factor of safety.

With regard to the tapered thread, both the male and female thread are cut to a taper, so that by screwing up of the two tapered pipe ends a tight joint is effected. The fault here consists either in not cutting the threads long enough or cutting them too long. An experienced workman knows by his touch or feeling not to screw up the joint either too loose or too tight, in which latter case the threads might be strained. **To Obtain Sufficient Pressure.**

In regard to water pressure there are few systems which have a pump only. In the smaller towns there is usually a stand pipe which keeps up a gravity pressure, although the pump forces water direct into the system. This stand pipe or tank does away, to a certain extent, with the fluctuation of pressure from the pump and from the occasional lessening of pressure arising from the sudden and simultaneous use of large quantities of water by heavy consumers. The pressure asked for by underwriters, at the highest point of discharge, is usually 15 pounds. This can be obtained, when there is temporarily not sufficient pressure from the public or town supply, by placing the sprinkler tank at least 20 feet over the highest point of discharge of sprinkler heads.

The statistics given regarding alarm valves out of order show that this part of the sprinkler system does not work satisfactorily, there being room for improvement. Trouble in cities is arising from variable pressure above referred to, as it causes the clapper of the check or alarm valves to flap up and down, making thereby an annoying noise, sufficiently strong to be a disturbing factor in carrying on business.

System Requires Supervision.

The defects of most alarm valves emphasizes the need of proper care and supervision over a sprinkler system. The manufacturer should not expect a sprinkler system to remain in proper working order without care and supervision, as, if neglected, it may become the cause of damage to property and life. There should always be a controlling valve to the tank supply at the top of the building, so that if there is a break in the system, the water in the tank can be shut off.

In connection with the danger from frost, not only the degree of same, but also the strength of the wind is an important factor in bringing about a reduction of temperature of rooms to below freezing point.

It is now generally recognized that the assured should store his goods, if his business will permit, in such a manner that those most liable to water damage are stored in the upper storeys; also that any poisonous or coloring substances should be kept on lower floors only, or in cut-off one-storey sections. An instance occurred in Toronto where a large portion of a fruit stock proved a total loss because the water thrown by the fire department dissolved aniline dyes kept on an upper floor and discolored and poisoned and thus made unfit for consumption fruit stored on the lower floors, which were not damaged by the fire and would otherwise have suffered only a partial damage by clean water.

Are Fireproof Buildings Waterproof?

The prevailing opinion is that most floors in modern mill constructed buildings, or fireproof buildings, are waterproof. This is far from being the case in Canada, as in fireproof buildings the openings for pipe, etc., passing through floors are seldom curbed and thus offer a free passage of water from heavily flooded floors to the floors below.

and find its way through the porous fireproof floors. Floor timbers in mill constructed buildings will shrink more or less and the nails used in nailing the seven-eighths-inch top flooring to the heavy mill floor will, by the prevailing method of laying, invariably pierce and tear the waterproof paper put between the two floors. Even where the floors are fairly water-tight, the scuppers are usually too small to carry away the water quickly enough, but will allow same to accumulate and find its way through the porous fireproof floors.

A peculiar case was reported from Indianapolis in which the floor timbers and insulation of a cold storage warehouse expanded laterally by water to such an extent as to injure seriously the walls of the building.

The assured should always see that he is covered not only against leakage from sprinkler heads, but also leaks from any part of the system and against loss caused by break resulting from freezing, also against damage by the collapse of tanks.