Reducing Incendiary Fire Losses

Necessity for Revision of Laws Respecting Arson

At the last annual meeting of the Dominion Association of Fire Chiefs, held at Windsor, in August, 1916, the Committee on Fire Prevention took up the question of reducing incendiary fire losses, and urged, among other recommendations, that the Dominion Government should adopt laws permitting a moderation of the proof required to establish incendiarism. The report of the Committee in this connection reads, in part, as follows:

"Under present status, a man can be hanged for murder on purely circumstantial evidence, and yet, in case of arson, the criminal must either have been seen setting fire or confess his guilt to be condemned. Every year in New York people are convicted of arson on circumstantial evidence and condemned to long terms in penitentiary, to 20 years' imprisonment in some cases. And yet, here in Canada, fire fiends escape with very little difficulty or are given light sentences. No wonder, then, that we have so many fires and we are morally convinced that large percentage of the fires in this country are criminally set. In the course of their investigations, the Fire Commissioners of Montreal noticed that in fully one-half of the cases the amount of insurance carried enormously exceeded the value of the property insured. Therefore nobody ought to be astonished that so many fires have a criminal origin.

"Lack of individual responsibility for loss by fire is the keynote of the problem. In France, for instance, a man who has a fire is considered a public offender. He is responsible for any loss, damage or injury caused by his own carelessness or negligence. He is responsible for a fire on his premises unless he can prove that the fire was caused by something beyond his control, by some fault in building, or that the fire was communicated by a neighbouring building. If there are a number of tenants, all are alike responsible unless they can prove that the fire caught in the apartment occupied by one of them, in which case he alone is responsible, or unless some of them prove that the fire did not begin in their apartment, in which case they are not responsible. It is therefore obvious that the people of these countries take due precaution to avoid fire. Of course the buildings of old Europe are so constructed that fire seldom spreads beyond the place in which it originates. The individual liability, though sufficient to constitute a lasting lesson, is not heavy in most cases. These laws could not be applied in America, at least as long as building regulations are not improved because the individual responsibility would be too great."

Do not allow Christmas trees to remain in buildings after the holidays. The tree itself ignites readily when the needles are dry. Numerous fires occur in January from this cause.

Municipal Fire Survey

Knowledge of Conditions Helpful in Fire Fighting

Many fire chiefs have instituted municipal surveys so that those responsible for fire protection of our towns and cities may be better fitted to cope with any outbreaks of fire. Excellent results have been

Cut 149 A Dangerous Practice

Ashes deposited against a wooden fence in a school yard

Care With Ashes

Many Fires Caused by Storing them in Unsafe Places

During the winter months the disposal of ashes from stoves and furnaces demands attention. Though many fires are caused by the disposition of hot ashes against frame buildings, wooden fences, etc., the practice is still continued.

Too much care cannot be given to the disposal of ashes. Either metal containers should be used or the ashes should be placed at a safe distance from anything combustible.

The illustration herewith shows how ashes are stored in the grounds of a large city school. The fence is a high close-board structure, and the playgrounds are surrounded by many frame buildings. Within a few feet of this ash-pile is an apartment block with wooden balconies. Apart from the dangerous practice itself, this instance constitutes a very bad example to the hundreds of scholars attending the school.

TAX ON MATCHES

On Sept. 19, a tax of two hellers (0.406 cent) was imposed on each box of matches sold within the Austrian empire.

Dr. Frank D. Adams, at the last annual meeting of the Conservation Commission, stated that, at a meeting in Montreal which he was addressing, a lady made a very rational suggestion; she said that she had lived in France, and one reason for the rarity of fires there was that people were more careful with matches because the heavy tax on them gave them a distinct value.

secured, from the standpoint of both the public and the fire departments. The inspections revealed many dangerous fire conditions, which the lay mind had passed unnoticed. The majority of cases required only that the attention of the owner or occupant of the building be called to the unnecessary risk to secure its removal.

Fire Chief James Smart, of Calgary, has recently undertaken a fire survey of that city, and apparently with great success, as is shown by his report of progress. Chief Smart says:

"The survey of fire conditions in Calgary is about completed and I have every reason to feel that much has been accomplished in reducing the fire hazard.

"Our method of procedure was to have every building and premises inspected by the captain of the fire station covering the district. Instructions were given to note special information that might be helpful in preventing or putting out fire, to note conditions of chimneys and pipes, method of heating, fuel used, disposal of ashes and especially accumulation of inflammable rubbish in basements or yards. In addition, of course, the names of owner and occupant and short description of each building with its street and number.

"As the survey proceeded notices were sent to premises where conditions were reported dangerous, and where the captain had pointed out the required remedy. I am glad to say that in every instance so far the citizens have heartily co-operated in the work.

"An added value of the survey is that each captain is more familiar with the lay out of the premises in which he may be called upon to combat fire."

Importance of Water Powers

Application to Industry Covers a Continuously Widening Field

The rapid development in the uses of hydro-electric energy clearly indicates that, in the immediate future, the industrial progress of Canada will involve and depend largely upon the utilization of our hydraulic resources. The many points of superiority which electricity has as a source of heat are not always properly appreciated. With the possible exception of its higher cost, electricity has advantages over all known fuels. Electric energy may be transformed directly into heat energy at one hundred per cent efficiency. Its use presents no such difficult problems as are inherent in the utilization of fuel. It does not vitiate the atmosphere. It is clean, safe and sanitary. Greater quantities and more intense heat can be produced in a given space electrically than by any other means. It produces heat directly where it is to be applied. It can be measured and controlled, both as to temperature and quantity, more readily than can any other form of heat energy.

The electric furnace is now being used in numerous and varied industrial processes. Its application has made it possible to manufacture substances that would otherwise not be available for commercial purposes, if combustion methods were the sole means of production. Such well known substances as carborundum, aluminum, and calcium carbide can only be manufactured in the electric furnace. As the rapidly depleting natural nitrate deposits become exhausted, increasing supplies of nitrogen for soil fertilization will be drawn from the air by means of the electric furnace.

In addition to the processes mentioned, many special applications of the electric furnace are in practical use. These include the production of ferro-alloys, melting and refining of steel and in many electro-chemical industries.

While not so apparent as in the case of the special processes using large quantities of electric energy, the use of electric heat also plays an important part in the manufacture of many other products and some 35 or 40 industries could be enumerated where it has become extensively used in such applications as electric welding, melting tanks, soldering devices, oil tempering baths, annealing furnaces, and various types of self-heated tools.—L.G.D.