

Fire Prevention vs. Fire Protection

More Attention Paid to Inspection of Fire Conditions Would Reduce Fire Loss

"Locking the barn-door after the horse has been stolen," is a time-honoured expression; but it applies with peculiar emphasis to many of our supposedly modern municipal governments. Especially is this true in the matter of the fire loss.

While enormous sums are spent annually in the equipment and upkeep of fire departments for the purpose of controlling and extinguishing fires, it is almost a novelty to find a municipality with a department charged with the inspection, and with authority to enforce the correction, of conditions favourable to fires. In some of our larger cities some progress has been made by the fire departments, which have set apart small details of their staffs, charged with inspection work. The result of their work is minimized, however, by the fact that the inspectors have not sufficient authority.

The fire chiefs have it in their power to advance the fire prevention campaign and secure results. If a fire chief's record depended upon his keeping down the number of fires, instead of his ability to handle fires after they have broken out, there would be greater effort at inspection. Fire chiefs should insist upon sufficient men for inspection work; and men should be held responsible for the inspection and correction of dangerous conditions, and, to make their work effective, the inspectors should be clothed with fire marshal authority, in order that any fire breaking out in their inspection districts might be thoroughly investigated and the cause definitely assigned. In this way an inspector's reputation for thoroughness would be at stake, and, with the knowledge that a fire would be investigated by one familiar with the conditions, there would be fewer fires of a suspicious character or due to carelessness.

Municipalities can well afford to make generous appropriations for fire-preventive inspection work. It is an investment which will yield large returns, not only in reduced fire loss but in reduction in the cost of upkeep of fire departments and equipment.

The Canadian Society of Forest Engineers has been incorporated under the laws of the Province of Ontario. This society has had a healthy and steady growth and is increasing in importance and influence. It now numbers forty-eight active, thirty associate, two honorary and two student members.

The conservation of the lives and health of employees is an investment that produces large returns in efficiency and contentment.

Forest Protection

Vigorous Action being taken to Reduce the Loss by Forest Fires

The territory patrolled by the St. Maurice Forest Protective Association now includes an area of 12,332 square miles, or nearly eight million acres, principally on the watershed of the St. Maurice river, Que. This Association has been in existence for four years, and has demonstrated conclusively that, in matters of forest fire protection, both efficiency and economy are facilitated by co-operation between individual timber owners, and with the governmental agencies. A very important feature, absolutely essential to efficiency, is the close supervision of the fire-ranging staff, through the assignment of a number of inspectors, working under the general direction of the manager. In various provincial fire-ranging organizations, efficiency is sacrificed by failure to provide a sufficient number of competent inspectors to supervise the work of the local men.

Material progress has been made by the St. Maurice Association in coping with the evil of settlers' fires. During the past year, the permit system of regulating settlers' burning operations has been put into effect throughout association territory, and a vigorous campaign has been carried on to prosecute violations of the law. Out of eighteen such prosecutions, six convictions were secured, four were lost, and eight cases are still pending. In some cases, the unfavourable condition of local public sentiment still renders it difficult to secure convictions of guilty parties. Nevertheless, the situation has shown great improvement. During 1915, burning permits issued to settlers by St. Maurice Association rangers totalled 628. Not one of the fires governed by the permit system caused any damage. The total number of fires reported as due to settlers burning without permit was 41, a reduction of nearly 50 per cent from 1914, when the number of such fires was 80.

During the past season, rangers of the Association extinguished or helped to extinguish 169 fires. Of these, 49 required extra labour to extinguish, at a cost of \$7,309. The causes of these fires were as follows:—river drivers, 17; settlers, 41; fisherman, 6; construction gangs, 6; lightning, 4; old fire, 4; berry pickers, 7; railways, 35; Indians, 2; campers, 1; dam keepers, 2; hunters, 1; explorers, 1; tent stoves, 2; jobbers, 1; lunch fire, 4; squatter, 1; unknown, 34.

In addition, a vigorous campaign of public education has been carried on, with excellent results. Much has also been accomplished in the direction of securing better communication, through the con-

struction of lookout stations, telephone lines and trails. To date, 406 miles of telephone line have been constructed, and twenty lookout stations erected. As rapidly as possible, the country is being opened up by the construction of trails. All these lines of work result in greatly increasing the efficiency of the organization in discovering and extinguishing fires.

Exports of Fish Products

In view of the exceptional importance which at present attaches to a favourable balance of trade, the unique position of our fishing industry is worthy of note. No other branch of Canadian industry contributes to our exports so large a proportion of its total output as the fisheries. During 1914-1915, out of a production valued at \$31,000,000 in round numbers, Canada exported fish products valued at more than \$19,000,000, or nearly 63 per cent of the total. As we imported about \$2,000,000 worth of fish products, the net balance in our favour on this branch of trade is about \$17,000,000. The fisheries must, therefore, be regarded as a valuable national asset. But it is scarcely open to question that the fishing industry would be in a much stronger position, and the prosperity of those engaged in it more solidly based, were it rendered less dependent upon foreign markets by the development of the domestic demand to absorb a larger portion of its output.

Electric flat irons, curling tongs and other electric apparatus should not be left with current turned on.

Metals Used in Making Shells

The following figures furnish a comparison between the quantities of the different metals used in the manufacture of the 22,000,000 shells, for which orders have been placed in Canada, with our production of such metals in 1913: Steel used, 400,000 tons. In 1913 it was estimated that the production of iron ore in Canada, 307,634 tons, did not exceed 5 per cent of the country's requirements of iron in that year.

Zinc used, contained in brass, 11,200,000 pounds. No zinc was refined in Canada in 1913 but the exports of metallic zinc in ore shipped amounted to slightly over 7,000,000 pounds.

Copper used, 55,000,000 pounds. The total production in 1913 was about 77,000,000 pounds and all of it was exported for refining.

Lead, 101,760,000 pounds. The production in 1913 was about 37,665,000 pounds, of which over 97 per cent was recovered as refined lead.—W.J.D.

Bookkeeping for Farmers

Public Schools could Assist in Creating Much Needed Interest in This Matter

Farmers take too little interest in farm accounting. During the summer of 1915, four hundred farmers in Ontario were visited by a representative of the Commission of Conservation. Among this number one claimed to keep a systematic set of farm accounts. Several claimed to bookkeep, but the system was far from complete. Many farmers stated that they knew how their business was going without keeping books. These men have only an estimate, and it is impossible to depend on estimates, or to consider any one phase of their business of farming independent of its relations to the rest of it.

In Tazewell Co., Ill., U.S.A., a series of meetings was held in March, 1915, which resolved themselves into farm bookkeeping classes. The County Agent supplied each member of the classes with a booklet especially designed to fit the conditions of the county.

The work is stripped of bookkeeping technicalities and made easy for all who are disposed to carry on the work. It is noteworthy that the classes for studying system in bookkeeping were attended largely by successful farmers, who were bent on making their business still larger and more successful.

This very important subject might well engage the attention of district representatives and college demonstrators when arranging their short course classes for the present winter.

Another way in which systematic farm accounting could be brought into more general practice would be to arrange the arithmetic lessons in the public school in such a way that the keeping of farm accounts would be an easy and simple matter to those who wished to undertake it. If the school work could be projected into the home and detailed records kept by the scholars of time, cost, and income, it would enlist the interest of parents and educate them in the subject, thus affecting the work on farms in the district.—F.C.N.

Tops of furnaces being near the floor above them or the pipes too near the wood of the building, constitute one of the worst and commonest fire dangers common in cellars.

Ashes should not be deposited where they will come in contact with wooden articles, fences or outbuildings. Fresh ashes are likely to cause fire on account of live coals they may contain.