

Conservation

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Accidents in Ontario

Care and Safety Appliances Would Save Many Lives and Costly Disability

The first annual report of the Ontario Workmen's Compensation Board contains interesting data concerning the cost of accidents in that province. Under the Act governing the Board's operations it is compulsory for employers to report all accidents by which employees are prevented from earning full wages. This has had the effect of securing very full reports.

For the year 1915, 17,033 notices of accidents were received by the Board. Of these 9,829 came under the Board's jurisdiction, and 7,600 were finally disposed of. The time lost due to these 7,600 accidents amounted to 170,711 days, or equal to the combined labour of a staff of 569 men for a year.

Only temporary disability resulted from 8,544 accidents, but in 1,033 cases permanent disability followed, and 251 of the accidents resulted fatally.

The value of safety appliances is very strongly emphasized by comparisons between the cost of the necessary safeguards and the monetary cost of the accidents resulting from their absence. For instance, automatic locks on two elevators, at a cost of \$3.50, would have saved two lives and \$6,179 in compensation. Countersinking 21 set-screws on pulleys and fly-wheels, at a cost of \$7.35, would have saved three lives and \$5,619 compensation. The removal of protruding nails, pieces of broken glass and metals, would have saved 126 injuries, while the wearing of goggles, costing \$150, might have saved 38 workmen from permanent injuries to the eyes and \$42,846 in compensation.

The foregoing presents in a striking manner the need of care to prevent accidents. Many of our larger industries are organizing safety associations to further impress upon the employers and workmen the advantage of safety appliances and the use of every precaution in their work; much good has already resulted.

Such a record of accidents,

causing a constant and ceaseless drain upon the productive resources of Canada, is unnecessary. Enlistment is making heavy demands upon the labour of Canada, and there is already a severe shortage in some branches of industry. Yet, in one province alone, in 1915, accidents injured 17,033, permanently disabled 1,033, and killed 251 of our producers.

Wasteful Coke Production

Many Industries Might be Established to Utilize By-products

The coke produced in Western Canada is made almost entirely in beehive ovens. The volatile combustible contents are consumed and all of the valuable constituents of the coal except fixed carbon, which remains as coke, are wasted. These wasted constituents consist of gas, tar and ammonia. In by-product ovens the tar, ammonia and all of the gas, except that used for heating the ovens, are recovered. In the carbonization of coal by the two different classes of ovens mentioned, high temperatures are used. Low temperature carbonization is still only in the early stages of its technical development, but, helped by the war demands for high yields of light oils, it is now being energetically pushed forward in Great Britain and has an assured future as an adjunct of the older systems of high temperature carbonization, especially in view of the growing demand for light oil as motor fuel.

Coal gas residuals form the bases of many industries. Owing to the great development of by-product coke ovens and gas plants in Germany and the application of modern chemistry to the utilization of their by-products, these industries have been controlled largely by that country. In the readjustment of industrial and trade conditions after the war, it is desirable that as many of these industries as possible be established in Canada and in other parts of the British Empire.

There are two large by-product coke ovens in Canada which produce 67 per cent of our coke out-

put. These plants are situated at Sault Ste. Marie, Ont., and at Sydney, N.S. Since the outbreak of war, the latter plant has been installing a benzol recovery plant. While large quantities of tar are recovered from local gas plants, no industries have been established for the refining, separation and use of the products obtainable from it.

Not only is the saving of the by-products from the coking or carbonization of coal a measure of conservation, but the sale of these residuals reduces the cost of production in a degree corresponding to the efficiency of the recovery methods adopted and the market value of the products.—W.J.D.

Game as a National Asset

No Longer a Legitimate Source of Food--Game Preserves Necessary to Protect What Remains

Judging from the rate at which the wild creatures of North America are now being destroyed, fifty years hence there will be no large game left in the United States nor in Canada, outside of rigidly protected game preserves. It is therefore the duty of every good citizen to promote the protection of forests and wild life and the creation of game preserves, while a supply of game remains. Every man who finds pleasure in hunting or fishing should be willing to spend both time and money in active work for the protection of forests, fish and game.

In the settled and civilized regions of North America, there is no real necessity for the consumption of wild game as human food; nor is there any good excuse for the sale of game for food purposes. The operations of market hunters should be prohibited everywhere, under severe penalties.

The highest purpose which the killing of wild game and game fishes can hereafter be made to serve is in furnishing objects to overworked men for tramping and camping trips in the wilds, and the value of wild game as human food should no longer be regarded as an important factor in its pursuit.—*Code of Ethics, Michigan Wild Life League.*

Waste of Fertilizer

Canadian Farmers Do Not Appreciate Value of Manure to Their Land

The survey of 100 farms in each of four counties in Ontario in 1915 revealed a condition of extreme carelessness with a valuable product of the farm. Manure is one of the chief fertilizing elements used on Canadian farms. Few farmers were using chemical fertilizers, the numbers being: Dundas county, 8; Waterloo, 37; Northumberland, 39; Carleton, none.

The percentage making use of farmyard manure was 100; yet, of the 100 per cent, an average of 76.7 per cent admit "exercising no care to prevent waste of manure"; also, of the 400 farmers visited, only two exercise good care to prevent manure waste.

Mgr. Choquette, of the Commission of Conservation, in an address before the last annual meeting, referred to the need of our farmers understanding better the nature of the soil which they till. He instanced the farmers of France, Belgium, Switzerland and Italy, and said: "Several times I have heard Belgian peasants speak of nitrogen, phosphoric acid, potash and lime, as ably as a professor. 'Here,' said one of them to me, 'is a field which needs nitrate; it would grow nothing without that. Over there I shall put, rather, some phosphate with a little potash.' I took an extreme pleasure in their conversation, and I asked myself if our Canadian farmers, even the best educated among them, would be able to show as much knowledge."

This appreciation of the value of fertilizing elements by European farmers stands out in strong contrast with that of Canadian farmers.

When only two out of the 400 farmers visited in the older counties of Ontario exercised good care to prevent waste of manure, and 76.7 per cent admit exercising no care, the situation surely calls for the prompt attention of those interested in promoting better agriculture and the conservation and utilization of farm products.