

Big Debit for National Balance Sheet

Epidemic of Forest Fires—Proposed Re-organization of Ontario Ranging Service

The large number of forest fires in Eastern Canada during the dry weather of July and August demonstrate conclusively that public sentiment has not yet been sufficiently educated with regard to this vital matter.

While the fires in the East were for the most part in old slashings or on the site of previous burns, nevertheless a considerable amount of green timber was destroyed, as well as much private property. The damage to soil and young growth by fires in old slashings and on old burns, is also a very serious matter in many cases. Young growth is in especial need of adequate protection, but all too often this protection is lacking and fires are reported as "doing no damage."

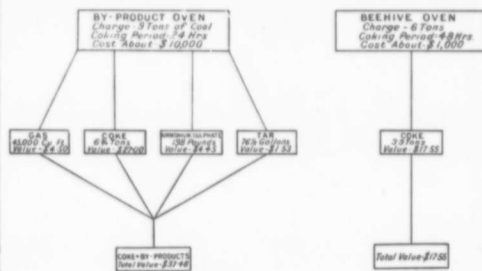
While some of these fires were undoubtedly caused by railways, a very large number were caused by carelessness of settlers in burning debris from land-clearing operations. The railways appear as a rule to have done exceedingly well in fighting not only their own fires, but also those from the outside, for which they were not primarily responsible. In too many sections little or no attention is paid to fires by the general public until the fires actually threaten private property, when they have passed the incipient stage and it is often too late to stop them.

The fire situation has been particularly bad in Ontario, so much so that the Minister of Lands has arranged for a special investigation of the situation, with a view to the reorganization of the fire-ranging service. This action will undoubtedly result in greatly increased efficiency in the future.—C. L.

THE COAL RESOURCES OF THE WORLD.

A comprehensive monograph with the above title has been recently issued under the auspices of the XIth Geological Congress. The work was prepared under the direction of D. B. Dowling and Wm. McInnes, and comprises three large volumes of reading matter and an Atlas. It contains authoritative articles contributed by leading coal-mining experts in the various countries, and makes a valuable and authoritative contribution to geological science. *Conservation* is glad to see Canada thus adding her quota to the world's stock of knowledge. Before one starts to conserve anything, it is important to know what there is to conserve, and an inventory of natural resources must be regarded as a necessary preliminary to making the most economic use of them.

COMPARISON OF YIELDS FROM BY-PRODUCT AND BEEHIVE COKE OVENS



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Uses of By-Products

Coke—Coke may be used for metallurgical and domestic purposes.

Gas—Coke oven gas is an ideal fuel and may be used for burning under boilers, driving gas engines, for domestic purposes and illumination.

Ammonia—The ammonia may be recovered as ammonium sulphate or ammoniacal liquor. In the former case it is used as a fertilizer, while in the latter it can be used for making many chemical pro-

ducts, also as the freezing agent for refrigeration purposes.

Tar—The tar may be used in the manufacture of various kinds of roofing, for covering pipes, etc. It can be distilled, yielding pitch, creosote, light oils, carbolic acid, etc. Creosote is especially useful as a wood preservative. Pitch is used for road-making and as a binder for the manufacture of coal briquettes.

Fecundity

"The fifth generation of descendants from a single female oyster would make more than eight worlds as large as the earth, even if each female only laid one brood of eggs."

The above startling quotation from W. K. Brooks, a great American biologist, appears at first sight incredible. It is merely a matter of mathematical computation, however, and is fairly conservative. Brooks estimated the average number of eggs spawned by a single oyster to be 16,000,000. Other investigators have given higher figures. Assuming half of these to be females, the number of oysters in the fifth generation would be 8,000,000. A moment's attempt at imagining this inconceivable sum will show that Brooks' surprising statement is not far wide of the truth.

This marvellous fecundity of the oyster and other living things is a great natural force that man should turn to account. Its primal purpose is to balance the enormous mortality among the lower orders of organized beings. If man betters the chances of survival of useful animals and plants, propagation will immediately increase in response to the improved environment. It is as though, in some great machine, one were to reduce the friction and devote the energy, previously devoted to overcoming

it, to increasing the efficiency of the engine. As much force is liberated in any case, but, by wise regulation, a greater proportion may be profitably utilized.—P.M.B.

THREATENED EXTERMINATION OF YUKON FOXES.

A newspaper at Whitehorse comments on the continued capture of young foxes in Yukon, as follows: "Fox farming is becoming so popular and profitable that there is danger of the source of supply being depleted. The wholesale capture of young foxes that is being practiced in the Yukon at present will, if allowed to continue, soon destroy the fox industry in the territory. All colours and grades are being taken, regardless of value; otherwise there will be no foxes to take within a very few years. November, December, January, February and March should constitute the open season for foxes, and the balance of the year they should be immune from capture. The fox industry in this Territory is a big one, but it will not last long if the young ones are captured before they are two months old." (U. S. Consular Report.)

In the best German forests the annual expense is \$13 an acre, but the gross returns are as much as \$24; thus they yield a net return of \$11 an acre each year.

Housing of Immigrants

Lack of foresight now shown—Some problems for Canadian cities

Canada is inviting to her shores a vast army of industrial workers for whom she makes no adequate provision by wise housing, city-planning and sanitary legislation. This was the keynote of an address by Mr. B. M. Stewart at the first meeting of the Canadian Political Science Association, held in Ottawa recently. In support of this position, he presented an array of facts, collected by social survey workers in Vancouver, Port William, Port Arthur and Sydney, showing abominable conditions of congestion and of inadequate sanitary conveniences, existing in these typical cities. The system, or lack of system, of garbage removal, was frequently complained of. Particular stress was laid on the fact that the building of "shack towns" on the outskirts of young, rapidly growing cities, was laying the foundation for pestiferous slums later on.

In the discussion which followed Mr. Stewart's paper, it was pointed out that, in their haste to become important centres of population, Canadian cities are attracting large numbers of foreign workers and are growing so rapidly that the extension of sewerage systems, of properly paved streets, of municipal water supply and other civic conveniences, can not keep pace with the expansion. In other words, we are allowing the immigrants to be exploited in order that a few men may become rich over night. This is a crime for which we shall pay dearly by repeating in this new land the evils of older civilizations.

The high death rate from tuberculosis in the tenement-house districts of Montreal was referred to by one speaker, who mentioned a case which had come under his observation, of an Irish woman who had had thirteen children, every one of whom had died. Statistics showed that, while exceptional, this was not an isolated case.

Prof. Mavor, of Toronto University, said that not infrequently, in coming to Canada, European immigrants made their condition worse, rather than better. In Finland, for example, there was no over-crowding in the houses, and in Moscow, although the congestion was indeed frightful, the sanitation system was well-nigh perfect. The fact that in some of our largest Canadian cities, the tap water was not fit to drink, he characterized as evidence of "the grossest municipal incompetence."

Certain it is that the businesslike conduct of our civic affairs in the interests of the people at large is one of the most necessary reforms needed in this country. We are not only morally bound to care for the foreigners whom we have invited to our country, but for our own and our children's protection we must see to it that they have decent living conditions.