

CONSERVATION COMMISSION'S ACTIVITIES

The Need for Conservation, Both in Production and Consumption, Was Emphasized by the War

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THE wastrel is a bad citizen. That is the outstanding conservation truth the war has impressed upon the Canadian public. In pre-war days the lavish spender was called a "good fellow" and was infinitely more popular than he who made use of his brains to see what expenditures could be eliminated as unnecessary. The latter was called "close" or a "tight wad" and his economic value as a citizen was not realized. The war has changed our viewpoint entirely, and, notwithstanding nature's bountiful provision of natural wealth, it is doubtful if we can ever again revert to our old way of looking at things.

Moved by the stern necessity of war, the government has limited luxuries and unproductive expenditures on every hand. Even what we used to regard as necessities have not seemed so essential once we began to examine them closely in the light of war's demands. In a thousand and one ways conservation has been thrust upon us and, wonderful to relate, we have discovered we can save millions of dollars' worth of materials without suffering any real hardship.

The war has made us realize that we have been consuming goods wastefully and that we can eliminate that waste without serious inconvenience; extravagance has become unpopular. That is one of the most important economic lessons the war has taught the Canadian people and far-seeing engineers would do well to take cognizance of it.

Conservation in Production

But that is only one aspect of conservation and perhaps the least important, albeit the one the man on the street usually associates with the term. It is even more important that conservation should be urged in the production of goods than in their consumption. What does conservation in production imply? First, let it be said that it does not mean withholding from use resources necessary to the comfort and well-being of the community. The conservationist has constantly to fight against this negative interpretation, that conservation is opposed to development. Nothing is further from the truth.

Conservation, it is true, is the implacable foe of waste in any form, including waste in exploitation, but it is the strongest of advocates of efficient and economical development. It is against exploiting a fishery to such an extent that the breeding stock is depleted and the fishery on the point of exhaustion; it is opposed to using only 20 ft. of the head of a waterpower where 30 ft. could be developed; it does not favor taking everything off and putting nothing back on agricultural lands, for that means soil exhaustion; and it does not favor cutting down forests without making provision for another forest crop. Conservation in production does not imply a dog-in-the-manger policy; efficient utilization is its watchword.

Now, what has been the effect of war upon this important phase of conservation? Have we been producing more wastefully or less wastefully since the battle flag was unfurled? A business man of standing recently said to me: "For the past four years the public mind has been so filled with the necessity of prosecuting the war that, in many quarters, the word 'conservation' has lost its meaning. The war has forced us to postpone our policy of conservation."

With this I take direct issue. Never before in the history of Canada has industry operated with less waste or greater efficiency. While, to some, the word conservation may have lost its meaning, the principles of conservation, call them by what name you will, have been practised as never before. Lands that have lain waste have been brought under the plough; varieties of fish we formerly knew nothing about and which the fisherman threw back into the sea, are now household words, thanks to government advertising; mines that have lain dormant have been opened up and more efficient

methods of mining and smelting have been adopted; water-powers with head only partially developed have been re-developed to utilize every inch of fall; and inefficient, out-of-date machinery has been scrapped to give place to the more efficient. With the single possible exception of public health, there is hardly any branch of our natural resources that has not thrilled with the re-energized principles of conservation. High prices, the patriotic desire to eliminate waste and the insistent pressure of public opinion, have moved us as never before.

Let me mention a single concrete instance to illustrate the stimulating effect of war. Ever since its organization in 1910, the Commission of Conservation has been advocating the use of by-product coke ovens instead of the bee-hive type. In both of these, bituminous coal is burned to produce coke. The by-products, in the case of the by-product oven, are gas, tar and ammonia; in the case of the bee-hive, gas only. The mining engineer of the Commission, W. J. Dick, in his widely distributed report, "Conservation of Coal in Canada," expounded clearly the merits of the by-product oven, even figuring out to a cent the advantage it had over the type in common use. The Commission's monthly publication, "Conservation," kept preaching the advantages of the by-product oven, the press was supplied with articles regarding it and in other ways it was given favourable publicity, but without very encouraging results. The cost of installation was higher than for the bee-hive oven and to those interested the extra initial cost looked big in contrast with the small but regular daily savings of the by-product oven. Even where bee-hive plants were worn out, some executives were so short-sighted as to install new plants of the same type.

Then came the war and business men began to hear of T.N.T. and other explosives and chemicals in the manufacture of which the tar and ammonia by-products were essential. The prices of these began to soar and there were many heartburnings because the merits of the by-product oven had not been more carefully considered when pre-war cost of installation had prevailed. High costs notwithstanding, they were now installed. Two of the largest users of coke in Canada have, during the war, installed large batteries of by-product ovens, costing millions of dollars, and, even considering the high cost of installation, they will make more money under peace conditions than with the wasteful bee-hive type of oven. That is one instance of how the war furthered the practice of conservation, and there are few industries of which similar tales could not be told.

Work of Commission Carried On

During the whole period of the war the patient investigative work of the Commission of Conservation has gone on, subject, of course, to limitations of man-power and financial appropriations. It may not be out of place to cite at this point an illustration to show how useful this work has been, even for war purposes.

Sitka or silver spruce was found to be the ideal wood for use in the manufacture of airplanes. Before the United States entered the war, the greater portion of this wood required by the Allies came from the Pacific Coast of that country, where large and well-known tracts of it existed. When, however, the United States entered the war, she commandeered all this timber for her own aviation service. For a time a serious scarcity of this most essential material loomed up before the Allies. It was known in a general way that British Columbia had some airplane spruce, but definite information about the exact locations, quantities, quality, availability and ownership was not available. The Imperial Munitions Board finally applied to the Commission of Conservation in the autumn of 1917 to see if it had any information about this much-needed resource. Fortunately, the Commission was just then completing a thorough survey of the forest resources of British Columbia, which had taken three years of difficult, painstaking work. Definite information regarding every tract of airplane spruce of importance in British Columbia was on file,—the locations, areas, character of the stands, the quality of the timber, its availability and ownership. This was handed over to the Imperial Munitions Board together with the loan of the services of R. D. Craig, the Assistant Forester of the Commission, employed on the in-