

resources in abundance, and the quiet, restful atmosphere that goes with a beautiful urban and rural countryside. I am convinced that if hand in hand with the program and policy which the governments have initiated, there goes a well

devised tourist consciousness on the part of the whole people of these provinces, the next ten years will see a development of a travel industry greater than any that has ever been known on this North American continent.

Coal Mining In The Maritime Provinces

By F. W. GRAY

THE problems of Coal Mining in the Maritimes are not unique, that is to say the industry is affected by the same economic changes that have adversely affected coal consumption in the British Isles, in the United States of America, in Western Canada and in those countries whose currencies are included in the sterling-dollar-franc orbit. While the world consumption of coal is now larger than it was in 1913, the increase comes from Asia and Africa. The export of coal from Great Britain to the Far East has declined, forcing the British exporters to look for other markets. The drop in coal production in the United States has been more drastic than in any country. Both these changes have increased the competitive pressure of American and British coal upon the markets of Canadian producers, specifically upon the markets of Nova Scotia producers.

The reduction in the consumption of coal in Canada and in the United States has been an outstanding economic phenomenon of our times. Canadian consumption dropped from 4 tons per head of population in 1923 to 2 tons per head in 1932, and has only so far recovered to 2½ tons per head.

The causes of reduced coal consumption include the shrinkage of world trade, with consequent lessened use of every form of energy in industry and trans-

portation, accompanied by progressive replacement of coal by petroleum and its products, water-power electricity and remarkable economies in the use of coal itself.

It is probable that the replacement of coal by oil and waterpower electricity has passed the maximum swing away from coal and that the pendulum is swinging back to coal, a tendency that is being assisted by the economies that have been and are still being attained in power generation from coal.

The brake imposed upon world trade by the extreme form of nationalism supervening upon the Great War is without doubt responsible for the extreme downward swing of the trade cycle in the period 1928 to 1937 and the hesitant nature of the partial recovery since occurring. No form of currency or bill of exchange, not even metallic gold itself, is acceptable in commerce as formerly. It is axiomatic that until such exchange becomes once more possible through the return of world-wide business confidence and national conciliation, world trade must remain contracted and the Poverty of Nations reign where once the Wealth of Nations prevailed.

Under these limiting conditions it is significant and hopeful that world coal consumption has increased over the previous peak of 1913. Should trade once more flow through the ancient channels of confidence and national honesty, who can doubt that coal production will once again become a mainstay of world trade exchange, as it was through-

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out the Nineteenth Century and up until 1914?

This is the hopeful aspect of world' coal trade. As this improves the coal trade of the Maritimes, relatively small as it may be, will benefit.

Meantime, however, our coal industry must cope with its chief economic difficulty, namely, relatively high production cost and distance from large consuming centres.

The coal-mining industry in Nova Scotia is very old. It is now almost 113 years since coal production commenced, on a comparatively substantial scale, in 1825.

The coal reserves of Nova Scotia were never really large in extent of recoverable tonnage. Their economic importance is very great, quite fundamentally so in regard to Canadian national independence and economics—more or less synonymous terms—as events of our time are teaching us. This economic importance is, however, chiefly a matter of geography. Our coalfields are some 800 miles from the nearest United States coal deposits, and over 1700 miles from the Western coalfields. The St. Lawrence River permits cargo vessels to reach the large centres of Canadian population. The growth of the Nova Scotia coal trade has been a result of the market afforded by the industrial growth of Montreal and Toronto and their satellite towns, and of water carriage via the St. Lawrence River and Gulf.

The development of the water carriage of coal from Nova Scotia to Montreal has been possible because the coal producers have had access to the world freight-market for chartering of ships. This is a necessary privilege, because the coal-shipping season occupies only six to seven months of the year, and Winter employment must be found for the coal-shipping fleet, otherwise the cost of freighting would rise to prohibitive figures.

There have from time to time been indications that this free maritime status of "The Maritimes" was not fully understood in Canada. The coal transport enterprise of the Maritimes has been

incorrectly visioned as a coasting trade subject to restrictive legislative regulations that do not apply to vessels coming into Canadian waters from overseas.

No reconsideration of provincial and federal relations in Canada should ever overlook that the Maritime seaports depend upon world-trade and access to world shipping. Our free maritime status in trading from a Maritime port to Canadian inland waters should be most jealously guarded.

It is a matter almost of ironic interest that the crude nepotism of the days of the Georges should have resulted in public ownership of Nova Scotia's coal resources, and while this is not the place to recount the surprising outcome of the Duke of York's grant, it is interesting to note that Nova Scotia has since 1857 controlled the leasing of coal areas in a rather more thorough manner than the British Government is at this time endeavoring to achieve by purchase of the privately-owned coal-seams in Great Britain.

Whatever benefit may accrue to coal-mining in Great Britain by state control of leasing and ownership of coal royalty rights, has accrued to the Province of Nova Scotia since 1857. At one time the main source of the revenues of Nova Scotia came from the coal royalties. Not so very long ago the amusement taxes and gasolene tax began to overshadow the importance of the coal royalties as a source of government income, a development that might form a text for moralising!

A factual discussion of the operating economics of the several separated coal districts of the Maritimes is not possible within the space allotted to this essay. Costs of production vary not only with districts but by seams, and these are overshadowed by the accident of location. It is possible that a colliery with poor physical conditions of coal occurrence and quality, and consequent high cost of production, may be profitably operated if it has a convenient and cheaply reached local market; whereas a colliery with much better conditions may be unable to operate if situated in a district which contains

other collieries having still better conditions. For these reasons wage rates and steadiness of employment will vary with localities.

The one factor that has been outstanding in fostering the Maritime coal-trade since 1928, and saved it from disaster in 1932-1933, is the Federal coal transportation subvention.

In Canada the coalfields are at either end of our vast country. The railways and the population are in between. The central portion of Canada has the greatest density of population and the bulk of coal-consuming industries, but is furthest removed from the western and eastern coalfields, an elementary fact with an important bearing on our national economy. If we want to use Canadian coal and give work to Canadian miners, the transportation costs must be minimised,

which is the *raison d'être* of the coal transportation subventions. So far as Nova Scotia is concerned all that is required is the apportionment, out of 12 million tons of bituminous coal imported annually into Central Canada, of two million tons to the Nova Scotia collieries which will secure the soundness and permanence of the Nova Scotia coal-mining industry.

In 1936 the Maritime Provinces contributed 46 per cent of the total Canadian coal output of that year, but this is equivalent to less than one-quarter of the consumption of coal in Canada.

The measure of the importance of the coal production of the Maritimes in respect to our national fuel independence is so great as to require no emphasis beyond the citation of these figures.

How To Build Cheaply And Efficiently

By S. D. RITCHIE

TO build cheaply yet efficiently is no mean accomplishment, because the two rarely go together. Cheapness usually means the reverse of efficiency. The problem is complicated and involved.

Everyone about to build wants to have a comfortable and attractive looking house. To achieve this, the house must be warm in winter, cool in summer, dry at all times and having as convenient an arrangement of rooms as possible.

The kitchen should be fitted with labor saving equipment and be well planned, so that steps can be saved in the preparation of food.

The following is an attempt to describe the design and construction of such a house.

Certain designs and plans of houses can be built at less cost than others of equal size. This is owing to the fact that the house has a type of construction

familiar to the builders and a straightforward clean cut plan free from costly shapes, corners, etc., and where partitions on one floor are placed over the partitions on the floor below.

A house that has well proportioned doors, windows, wall surfaces, roofs, etc., and therefore looks well and attractive can be built at less cost than one badly designed and having unnecessary features to achieve interest.

Color and texture are vital to the appearance of a low cost house. Fortunately these two do not add to the cost in proportion to their contribution. For example, whitewashed common brick or sound cull bricks look well in houses of good design. These bricks are of uneven shape which adds to their desirability for whitewash finish.

Houses of decided charm can be built with the help of very inexpensive materials providing they are incorporated into the building with understanding and skill.

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