the unqualified protagonists of imperialistic holdings and of undesirable regimes all over the world because of fear to assist the Russians.

A final pacification of the two worlds presupposes a mutual recognition of their essential differences and of their respective long-run endeavors. side may have to step down from its pedestal of unadulterated self-righteous-The west may be found sometimes over-emphasizing personal freedom at the expense of social and, particularly of racial justice, and the Soviets may frequently overlook personal freedom in their eagerness to create a new social Both sides should be made to realize that the two worlds could each grant structural concessions that would not be contrary to their basic goals but wouls facilitate a modus vivendi.

Weakness of "Getting Tough" Policy From Long-Run View

At the moment the west has settled a policy of "friendly firmness." of "getting tough" with Russia. attitude is not only likely to increase diplomatic tension all over the globe but it is also prone to accentuate the structural differences between the two worlds. For the time being the Russians will not force any issue but will indulge in dilatory procedures. Yet they will direct their national energies and those of their satellites toward military and technical preparation. Instead of producing consumer commodities and of improving their pitiful standard of living-not to speak of their vast task of reconstruction —they will be pushed into the business

of rearmament, which means in the direction of autarchic totalitarianism. a dismal vision to see mankind preparing for an unprecedented process of industrial and atomic rivalry which in the end may destroy whatever remnants of western civilization are still in existence One of these days the at this time. Soviets will know the secret of nuclear production. If by that time our mutual relations have not very greatly proved we will enter the stage of continuous alarms. We will begin to distrust everybody and everything and the pushbutton psychology may push either side into trying to do what the Japanese failed to achieve at Pearl Harbor. Whether under such circumstances the west will be able to continue with its democratic processes as we know them, may at least be open to question.

The People Want Peace

Mankind is face to face with frightful alternatives. At a time when the world is in need of a genuine and universal federation the states emerge as torch bearers of antagonistic ideologies and thus perpetuate and magnify the age old struggle for positions and for power. But the people of the world want peace. They have to see to it that the states. anachronistic as they are, cannot take a new lease on life by masquerading as Don Quixotes and fighting ideological windmills. Patience and understanding are needed. If the rising bi-polar trend is not curtailed in the near future the statesmen may be unable to reverse the drift and to create a stable, lasting, and universal order.

Canada's Capacity for a Large Housing Program

New Homes—Dream or Reality?

By O. J. FIRESTONE

A RE new homes and the improvement of living conditions for a large section of the Canadian population a dream,

or can such a target be made a reality? That we need new houses, many thousands of them, there is general agreement. The veteran who has returned from overseas is trying to find new living quarters for himself and his family. So is the war

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bride and her children who have joined their husband and father in Canada. A similar task faces the munitions worker and his family, who are trying to establish themselves in the large city or town where they bettered their economic status during the war years. No better off is the young couple that desires to get married to-day. Then there is a comparatively large section of middle class families hoping to build new homes for which they may have saved for a number of years. With all this demand for new houses (for ownership and rental) what hope is there for the low income family which may have been occupying a slum dwelling for years and is now struggling to find better housing accommodation.

Housing Needs

Annual housing needs in Canada for the first five years following the conclusion of World War II have been put at ranging between 50,000 and 100,000 by the Minister of Reconstruction and Supply¹, and between 50,000 and 80,000 by the Sub-Committee on Housing and Community Planning, Advisory Committee on Reconstruction². A similar range is indicated by private estimates, the Canadian Construction Association suggesting an annual housing need of 60,000 units for the first five years after the war3, with the Ontario Association of Architects suggesting a figure exceeding the 100,000 unit mark⁴. Even if we were not to take any account of replacing many of the sub-standard dwellings that exist to-day in Canada, population increase and the stepped-up rate of family formation are themselves important determinants of the size of the housing program for the next five years.

marriage rate in this country is continuing at high levels. The number of marriages for 1946 has been estimated at 105,000. Family dissolution continues at a rate of about 25,000. Net family formation is therefore taking place at the rate of about 80,000, of which perhaps 60 per cent creates a need for new family hous-

Whatever proportion of these needs can be realized during the first five years following V-J Day, there is little doubt that it will require a significant industrial effort to accomplish any of these targets. The highest target exceeds considerably the accomplishment of our best pre-war In 1928, it is estimated that we built some 50,000 units in urban, and about 15,000 in rural areas, a total of 65.000 houses⁵.

Effective Demand and Adequate Supply

But need for new homes alone is not sufficient to get additional living accommodation built. This need has to be translated into demand effective enough to set the wheels of the economic machinery in motion, and it has to be matched by an adequate supply of manpower, skill, ingenuity, materials, machinery and equipment to produce and build what is The problem then is both a financial one—"Can we afford to build the houses we need?"—and a physical one—"Have we the skill, the men and the materials to build these houses?" A great deal has been written about financing a large housing program⁶, but less has been said about the physical aspect of the problem. The paragraphs that follow are confined to a few specific statements about Canada's capacity to

1943, p. 10.
 Canadian Institute of International Affairs, Homes or Hovels, "Behind the Headlines" series, Toronto, Vol. 3, No. 5, 1943, p. 35.

Manpower and Material Requirements for a Housing Program in Canada, Department of Reconstruction and Supply, Ottawa, 1946, pp. 16-17.
 Final Report of the Sub-Committee on Housing and Community Planning, Advisory Committee on Recon-struction, 1944, p. 151.
 The Role of the Construction Industry in the Post-War Years, Brief by the Canadian Construction Association submitted to the Parliamentary Commit-tee on Reconstruction and Re-establishment Ottawa. tee on Reconstruction and Re-establishment, Ottawa,

Manpower and Material Requirements for a Housin

^{5.} Manpower and Material Requirements for a Housin Program in Canada, op. cit., p. 16.
6. Some examples of Canadian literature on the subject include: Final Report of the Sub-Committee on Housing and Community Planning, op. cit., Part III; A. H. Bruce, Low Rent Housing, Public Affairs, Halifax, Spring Issue, 1938, pp. 91-93; W. O. Clark, The Housing Act and Low Cost Housing, Social Welfare, June-September, 1937, p. 36; Montreal City Planning Department, Post War Program of Housing for Low Wage Earners, Montreal, April, 1942, (mimeo); Vancouver Housing Association, A Survey of the Housing Position in Vancouver, Vancouver, March, 1945, pp. 36-38.

build new homes in sufficient numbers and of good quality to raise significantly the living standard in this country.

Canada's Industrial Capacity

We have heard a lot about Canada's industrial capacity, about the things that we have accomplished during the war years, and about the speed-up of the process of industrialization in this country. To demonstrate: In 1919 agriculture contributed 44 per cent to the net value of production, manufacturing only 33 per cent. By 1939 the position was almost reversed, with manufacturing up to 39 per cent and agriculture down to 22 per cent. At the peak of war production manufacturing had further increased its lead to 54 per cent, and agriculture, in spite of substantially increased production, contributed only 20 To-day, while per cent of the total. manufacturing has declined moderately from its war time peak, it has remained our predominant source of wealth. situation has thus been summed up in a Government Report:

The most striking result of the war in Canada is to be found in the fact that within six years the entire economic and social picture has changed owing to the rapid expansion of productive capacity in manufacturing industry. To-day Canada stands ready and equipped to produce more goods than at any The net value of other previous period. production in manufacturing in the period 1939-1943 increased 167 per cent; the number of employees increased 92 per cent while the payroll rose 160 per cent.7 The war necessitated the establishment of new industries. new factories, shipyards and munitions plants; while many existing industries underwent tremendous expansion. Some industries with relatively small employment before the war attained such war-time development that it was tantamount to the creation of a new industry rather than the expansion of an old one. Great advances were made in the production of finished goods and equipment, some of which were of a type quite new to Canadian industry and had previously been imported from abroad.8

But this development did not stop when the war ended. Technical reconversion, which in some industries had commenced even before V-J Day, took place with speed and comparatively little dislocation. By March, 1946, the economy had reached the middle of the transition. War production was virtually liquidated, most of the demobilization had taken place and firms that could switch readily to peace-time production had effected the change. Reconversion of productive facilities of manufacturing industries formerly engaged on war work was about half complete. By August, 1946, one year after V-J Day reconversion of these industries was approaching the three-quarter mark. reconversion of productive facilities was only one part of the effort of manufacturing industries to gear their facilities for production for peace-time purposes. In addition, industry had prepared programs of modernization and expansion designed to make Canadian industry more efficient, to serve better the domestic consumer and strengthen our position in international trade. of manufacturing industries showed that no less than half of the firms surveyed were embarking on programs of modernization and/or expansion of their productive facilities in the post-war period.9

During the war years some industries made great technical progress while others remained in enforced inactivity. But with a return to peace, this inactivity was transformed into a definite trend to regain lost ground, and to strengthen the industrial structure at all levels. managerial, technical and labour. a comparatively favourable climate for a gradually expanding housing program had been created.

Current House Building Activity

In 1945 we built some 47,000 housing units in Canada. Present indications are that the number of houses completed

^{7.} Part of the increase in value of output and payrolls was due to a rise in prices and wages and salaries.

^{8.} Location and Effects of War-time Industrial Expansion in Canada, 1939-1944, Department of Reconstruction, Ottawa, 1945, pp. 14-15.

Reconversion, Modernization and Expansion, Progress and Programs in Selected Canadian Manufacturing Industries, 1945-1947, Department of Reconstruc-tion and Supply, Ottawa, August, 1946, pp. 7-8.

during 1946 will exceed this figure, though the increase is likely to be moderate¹⁰ in the light of extensive demands on building materials and labour from other than residential types of construction industrial, commercial and institutional.

In these two years we have been building houses under the most trying Through two-thirds of circumstances. 1945 the war was still on. Then followed a period of readjustment from war to peace which, in spite of the accomplishments, was marked by supply bottlenecks and shortages. As the situation improved somewhat towards the summer of 1946, a wave of strikes lasting late into the fall set back housing progress by several months. As a result production of some items declined materially. e.g. output of nails in September was down to 29 per cent of June production; in the same period production of steel pipes, tubes and fittings was down to 71 per cent. Production in some lines stopped completely, as in the case of copper wire.

Only in the last quarter of 1946 was labour peace restored, at least temporarily, and the outlook for the next six months has become brighter. complishments during 1945-46 come close to the high levels of house building activity in Canada in the late 'twenties, when the number of units built was estimated to vary between 50,000 and 65,000 dwellings. If we were able to do as well as we did during the reconversion period, the question arises as to whether we can do better in the years to follow-assuming the demand for new houses at a reasonably high level can be made effective and maintained—when supply conditions improve, bottlenecks disapefficiency increases—though this may be only moderate in the beginning —and a continuous flow of newly-trained building mechanics swells the ranks of construction labour. Let us examine this question in the light of supply and

demand for building materials and manpower.

Building Materials—Can Supply Match Demand?

In 1945, when building material production of most of the significant items was substantially below pre-war production (see Table 1), the material requirements for the construction of 50,000 houses¹¹ did not by any means tax our full productive capacity.

Nevertheless shortages were great. There were many reasons for it. Industrial. commercial and institutional construction activity was expanding, competing with residential construction for the limited supply of building materials. mand abroad for some building material items, particularly lumber, continued to be high. Canada felt committed to help European reconstruction and large shipments were devoted to this purpose. For these and other reasons only a portion, and in some of the important items a comparatively small portion, of total production of building materials went into housing construction as can be seen Fig. 1 and Table 1 last column. Take, for example, sawn lumber—the most important building material used in house building in Canada, where four out of five houses are of wood frame construction. We produced an estimated 4.9 million feet board measure. We exported some 2.000 million feet board measure. or 40 per cent, but we used only 760 million feet board measure, or 16 per cent, for housing. In the case of cement, total production amounted to 8.1 million barrels (of 350 pounds), but only million barrels were needed for house building. 12 There remained then about three-fifths of total supplies for important industrial and commercial uses. example is steel pipes, tubes and fittings, and nails. We have been critically short of both items for the last two years.

blocks.

Housing in Canada, A Factual Summary, Central Mortgage and Housing Corporation, Ottawa, October, 1496, p. 10.

^{11.} Actually the volume of building materials required in 1945 was a little smaller than indicated above because we built only about 47,700 units, some of which were not up to the standard assumed here.

12. Including an allowance for cement used in cement

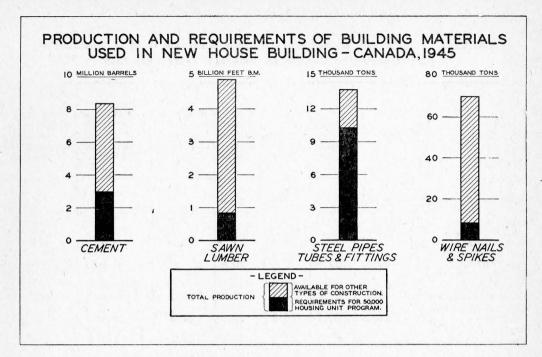


FIGURE 1

the first case, residential construction did not require more than 7 per cent of total output, and in the second case the proportion, with 12 per cent, was only moderately higher. As indicated previously, the demand for these types of building materials was greater than the available supply because of the large backlog accumulated during the war years of other types of construction, particularly industrial and commercial projects. ¹³

There is another group of building materials, the entire output of which could have been used in residential construction if it had been available for this purpose. Bricks are a classic example. More people intended to build brick houses in 1945 than the production of bricks permitted. As a result of shortages some prospective owners postponed

building, while others who did build used cement blocks or alternative materials. Another example is warm air furnaces. If every owner of a building constructed in 1945 had insisted on having a warm air furnace installed, there would not have been a sufficient number available to meet all the demand. A solution was found in the use of heating boilers by some and in the use of stoves by others, particularly in rural areas.

In 1946 the supply situation improved somewhat, except in those industries which were affected severely by industrial disputes. Production in some of the important items not affected by strikes increased between one-quarter and one-third above the 1945 level. At the same time demand for building materials in 1946 increased substantially above that prevailing in the previous year. A large proportion of the available supply of materials went into non-residential construction. In spite of this, sufficient quantities

^{13.} The problem was further complicated by the need of filling the pipe-line from producers to distributors, which had been drained considerably during the war years, and the hoarding and marketing of some building material items at higher than prescribed prices.

TABLE 1. Supply and Demand of Building Materials Used in Residential Construction in Canada for Selected Years, 1929.1945

Item	Unit	Pro- duction during 1929	Pro- duction during 1939	Pro- duction during 1945	Available Supply for Domestic Consump- tion ¹ 1945	Require- ments for a 50,000 Unit Housing Program of Desirable Standard	Requirements as a Percentage of the 1945 Production
Cement Building Brick Sawn Lumber Asphalt Shingles Window Glass Cast Iron Soil Pipe and Fittings	No.—mill. Ft. B.M.mill. Sqs.—thous. Sq. ft.—mill. Tons—thous.	$ \begin{array}{c} 12.3 \\ 459.6^{3} \\ 4.7 \\ ^{6} \\ 51.4^{7} \\ 21.4 \end{array} $	5.7 165.0^{3} 4.0 493.8 48.8^{7} 16.5	7.8 183.9 4.9 1,433.0 39.8 20.8	7.6 181.7 3.0 ⁶ 39.8 ⁸	3.0^{2} 215.7 0.8 593.0 9.6 20.7	38 4 16 41 24
Steel Pipes, Tubes and Fittings Warm Air Furnaces Wire Nails and Spikes Paints, Varnishes and Lacquers	Tons—thous. No.—thous. Tons—thous.	157.1 34.6 61.7 27.1	$90.5 \\ 25.1 \\ 66.5 \\ 25.9$	139.0^{5} 35.2 70.0 46.5	35.5 69.3 51.2	10.3 43.0 8.4 4.2	7 12 9

Source: Data on production, imports and exports from Dominion Bureau of Statistics, data on requirements for a housing program of desirable standards from "Manpower and Material Requirements for a Housing Program in Canada," Department of Reconstruction and Supply, Ottawa, 1946.

 Available supply is computed by subtracting exports from the sum total of production and imports.

(2) Includes cement required for cement blocks.

(3) Factory sales.

(4) In these cases requirements of a housing program of desirable standards exceeded production. Consequently, where possible, substitute products were used.

(5) Preliminary estimate.

(6) Not available.

(7) Imports—no information on production is available as window glass is produced in Canada by a single manufacturer.

(8) Imports less exports of window glass of foreign origin.

of materials appear to have become available to reach the 50,000 unit mark in 1946. In some cases, e.g. bricks, we are at present behind pre-war peaks reached in the 'twenties. But there is no reason why Canada in one or two years from now, with some $2\frac{1}{2}$ million more people, and a greatly expanded productive capacity, should not be able to top production accomplishments of twenty years ago. But if we can exceed pre-war levels of output of building materials, there is no

physical reason why we could not exceed the number of houses built in this country during the prosperous 'twenties. Even if we were to build only as many houses as we did in 1928, and maintain that level over a longer period, much could be done to improve the housing standard in Canada. It is almost certain that lack of building materials will not be the reason for not building an adequate number of houses in 1948 and the years that follow.

Building Labour and Total Labour Force

The building of 50,000 houses will provide jobs for 75,000 persons in the construction industry for one year, that is, about 30 per cent of the total labour force working in this field (see Table 2). Or if we were to take all the people who contribute to the completion of a house, from the lumberiack and miner, the factory worker and the truck driver, to the construction craftsman actually engaged in building the house, the completion of 50,000 units would provide 162,000 persons with annual employment. This figure is only about 3 per cent of the total labour force in Canada. If we were to increase the proportion of people contributing to the completion of a house by only one per cent, this alone would mean the building of an additional 15,000 houses. Or if we had 5 per cent of our labour force working on house building we could build some 80,000 units a year.

training of workers, increased mobility of labour, better labour-management relations, and improved placement facilities to match men and jobs. But let us not forget that in 1933 two out of every three construction workers were out of work. It does not require much imagination to visualize the thousands of houses which could have been built by the men who were looking for jobs utilizing the machines that stood idle, and the materials that had to be stock piled owing to the lack of demand for them.

Outlook

The number of houses built during 1945 and 1946, while in no way meeting the present housing needs, is, considering the trying circumstances under which it was accomplished, a creditable performance of the construction industry, and testifies to the industry's ingenuity, skill and imagination. For the immediate future production trends of building materials continue in an upward direction

TABLE 2. Supply of Manpower compared with requirements of 50,000 unit Housing Program, Canada, 1945.

Item	Number of Gainfully Occupied Persons	Number of Persons Working on 50,000 Unit Housing Program	Proportion of Person Working on a 50,000 Unit Housing Program of Total Number of Gainfully Occupied %
Construction Industry Total Labour Force	$250,000 \\ 5,100,000^{14}$	75,000 162,000	30 3

Source: Data on gainfully occupied persons in the construction industry is an approximae tion based on the 1941 Population Census. (The Census indicated a total labour force in the construction industry of 236,300 persons. To these have to be added some 15,200 men in the armed forces who formerly worked in the construction industry, and most of whom are likely to have returned to their former occupations.) Estimate of number of persons working on a 50,000 unit housing program taken from Manpower and Materials . . . op. cit., p. 44. Estimate of total labour force based on White Paper on Employment and Income, with Special Reference to the Initial Period of Reconstruction. Ottawa, 0945, pp. 2-3.

Of course the problem of actually accomplishing such a shift is a complex one. It requires a great deal of patient

and, excepting new management-labour disputes, accomplishments during 1947 and 1948 are likely to top achievements in most fields during 1945 and 1946, if total demand is maintained over the

^{14.} Due to withdrawals from the labour force, this figure would likely be lower by about 5 per cent in 1946.

period. Similarly, the outlook for an increase in the number of trained building mechanics is improving, as a small though continuous stream of men at present in training and apprenticeship schools will be joining the labour force. While the problem in 1947 will still be one of material and manpower shortages,

the problem in 1948 and the years to follow will not be so much one of supply as one of making demand effective. Perhaps the answer to both the supply problem in the transition period and the demand problem in the long term future can be summed up in one brief statement:

—"Where there is a will, there is a way."

The Role of Documentary Films in Canada

By KATHLEEN M. GREENWOOD

THE growth of Canadian culture has long been handicapped by the inaccessibility of the ingredients of culture. Not only have the art, music and literature of the world been available to only a comparative few in Canada but our own very real Canadian contributions to the world's culture have flourished in relatively isolated pockets until recent years. The outstanding characteristic of Canada's national culture has been its regionalism.

This picture is rapidly changing. The unifying influences of radio and film are revealing a new pattern for the future. The separate achievements of the many arts of the country are now being assembled and related to a new whole. This is a development with which the National Film Board is actively concerned. By means of not only film but all the graphic media it is engaged in telling the dramatic story of our national growth. Our national culture is part of this story.

Unifying the Nation

Film has shown that its greatest potential contribution is in its ability to break down the barriers of distance and bring Canadians of every region within range of each other by the visual presentation of their efforts and achievements. During the war the film makers of the National Film Board realized that an effective war-time information

programme was incomplete without reference to the things we were fighting to preserve as well as those we were fighting They took time to produce three beautiful little films in kodachrome devoted to some of Canada's outstanding painters. West Wind relived the dramatic story of Tom Thomson; Canadian Landscape related the work of A. Y. Jackson to the vivid north country he loves so well; and Painters of Quebec wove into a brilliant pattern the work of seven leading artists who are portraying French Canada on canvas. When Canadian Landscape was shown to a group of Canadians soldiers fighting in the mud and snow of the Italian campaign there was not a dry eye in the audience.

But painting is only one form of Canadian art that the National Film Board is bringing to a wider public. Listen to the Prairies, a film on the Winnipeg Music Festival, has been enthusiastically received in all parts of the Dominion, particularly those in which the festival tradition is taking root. phase of the growth of our urban culture has been the development of symphony orchestras in several Canadian cities. The sight of Sir Ernest MacMillan conducting the Toronto Symphony Orchestra is no longer a privilege limited to people within commuting distance of Toronto, thanks to the Canada Carries On film devoted to this leading musical organiza-Music in the Wind, which brought to the screen the story of how organs are manufactured by the Casavant Freres of Ste. Hyacinthe, fascinated thousands

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