

**RESEARCH, 1952.** "The research picture in Canada is encouraging," the National Research Council reports in a year-end review. "At every level, -- the universities, industry, Government departments, and in the institutions including the National Research Council which are devoted exclusively to research, -- satisfactory progress is being made and standards of work are being maintained at a high level. There is every reason to be optimistic about the future of Canadian research."

After touching on the work of the Chemistry Divisions, the aid rendered industry, and work in the fields of biology, physics, building research, aeronautics and hydraulics, the statement proceeds:

"In addition to its laboratory operations at Ottawa, the National Research Council maintains two regional laboratories. At Saskatoon, Saskatchewan, the Prairie Regional Laboratory is devoted to the study of ways in which science can aid the prairie farmers in finding profitable industrial uses for waste or surplus products.

"An outstanding development was made this year in sugar chemistry, using radioactive tracers, which led to a new synthesis of sugar derivatives. The Maritime Regional Laboratory at Halifax, N.S., was opened last summer. One of the more important investigations in progress, concerns the industrial use of seaweeds, which are found in abundance along the east coast, and are of great economic importance.

"Assistance is also given through grants-in-aid for the promotion of advanced research in Canadian universities, and through scholarships to selected students to aid them in undertaking postgraduate studies.

"In medical research, there is the closest integration of the Council's fellowship and medical research program with the similar programs of the Defence Research Board, the National Cancer Institute, the Canadian Arthritis and Rheumatism Society, and the federal Department of National Health and of Veterans' Affairs.

"A Technical Information Service is maintained at Ottawa to provide needed scientific and technological information to industrial firms throughout Canada. Field representatives in the principal industrial areas in each province, working in co-operation with provincial agencies wherever possible, call on the trade at regular intervals. TIS answers about 400 inquiries each month."

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**PIPED OIL:** Deliveries of oil through Canadian pipe lines in September amounted to 9,453,157 barrels, 725,522 barrels below August, but 1,124,830 barrels higher than in the same month last year. This brought cumulative deliveries for the first nine months of 1952 to 75,923,815 barrels, 17.9 per cent over last year's corresponding total of 64,401,872.

**CNR ECONOMIC PROBLEM:** "Industrial development which, during the past five or six years has done so much to strengthen the Canadian economy, has at the same time created an anomalous situation for Canada's railways. This was evident in 1952 and promises to be just as marked during the coming year," said Mr. Donald Gordon, President, Canadian National Railways, in a year-end review.

Mr. Gordon proceeded, in part:

"The continuing surge of business expansion has been accompanied by an increase in freight tonnage hauled over Canadian lines. Each year since 1946 has seen new records set in gross revenues but net revenues, with the exception of one year, have steadily declined in percentage terms.

"Mounting costs, which have outstripped increased revenues, are of course the reason for this seeming paradox. Between 1945 and 1951 gross revenues rose by 44 per cent while operating costs increased by 64 per cent. Our financial results for 1952 will not be known until the final figures are in and cannot even be estimated until present uncertainties have been resolved, but it is apparent that this trend is continuing....

"Our problem is to obtain a reasonable balance between revenues and expenses, and the current situation in this respect is not a happy one. The C.N.R. is the biggest industrial buyer of materials in the country, and last year we again had to pay substantially higher prices for our supplies. For example, in the first 9 months of the year, the cost of ties climbed 18.36 per cent; rail 7.14 per cent; steel 8.85 per cent, and the general index of railway material prices was up 6.64 per cent...."

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**CENSUS FACTS.** Of the 3,011,322 male and 1,073,829 female wage - or salary-earners in the Canadian labour force at the time of the 1951 Census,

- 16 per cent of the men and 40 per cent of the women earned less than \$1,000 per year;
- 27 per cent of the men and 44 per cent of the women earned between \$1,000 and \$2,000 per year;
- 13 per cent of the women earned in excess of \$2,000 per year;
- 37 per cent of the men earned between \$2,000 and \$3,000 per year;
- 11.5 per cent of the men earned between \$3,000 and \$4,000 per year;
- five per cent of the men earned in excess of \$4,000 per year;
- over three per cent of the men and four per cent of the women failed to report their earnings.

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Canada exports nearly ten times as much macaroni, spaghetti and vermicelli as it imports.