



Bulletin

Vol. 26, No. 47

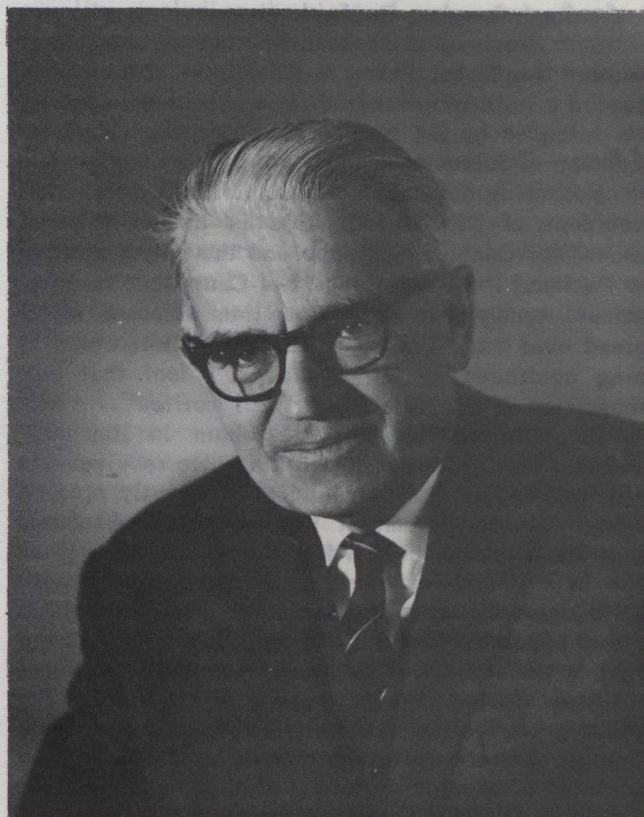
November 24, 1971

NOBEL PRIZE FOR CANADIAN SCIENTIST

November 2 was a proud day for Canada. On that day the Swedish Royal Academy of Sciences in Stockholm announced that Dr. Gerhard Herzberg of the National Research Council of Canada had been awarded the 1971 Nobel Prize for Chemistry – so becoming Canada's first Nobel Prize winner in the natural sciences.

The Nobel Prize was awarded to Dr. Herzberg for his contributions to the knowledge of electronic structure and geometry of molecules, particularly free radicals (molecular fragments in chemical reactions, which help to produce smog).

In making the announcement, the Swedish Royal Academy said that Dr. Herzberg's ideas and discoveries had stimulated the whole modern development of chemistry from chemical kinetics to cosmochemistry. More specifically, his successes in identifying some simple organic chemical radicals, such as methyl, by their spectrographic emission characteristics subsequently allowed astronomers to



Dr. Gerhard Herzberg

identify many of these chemicals in interstellar space.

The Academy said that "under Dr. Herzberg's dynamic leadership his laboratory (at the National Research Council of Canada in Ottawa) had attained a unique position as the foremost centre for molecular spectroscopy in the world. His investigations provide extremely precise information on molecular energies, rotations, vibrations and electronic structures which, in turn, yield data on molecular geometries, that is the distance between the atoms in a molecule. From

CONTENTS

Nobel Prize for Canadian Scientist	1
Iron Ore Travels the Seaway	2
Visit of President Tito and Canada-Yugoslav Relations	3
Animal Disease Research	4
Maple Leaf Winter Stamp	4
Increased Contribution to UNDP	5
Canada Council Cultural Exchanges	5
Where's the Weatherman?	5
Atlantic Research Expands	6
September Trade	6
Monthly Index	7

such investigations many results of fundamental importance for chemical physics and quantum theory were obtained. The work on the hydrogen molecule is especially outstanding”.

FOURTH CANADIAN TO WIN PRIZE

Dr. Herzberg, former Director of NRC's Division of Physics and now a Distinguished Research Scientist at NRC, is the fourth Canadian to be awarded a Nobel Prize. Previous prizes were awarded to former Canadian Prime Minister Lester B. Pearson in 1957 for his effort to bring peace to the Middle East and to Dr. Frederick Banting and Dr. John Macleod for their role in the development of insulin in 1923.

The 66-year-old NRC physicist was on a lecture tour in the Soviet Union when the announcement of the award was made in Stockholm. The Academy also announced that the 1971 Nobel Prize for Physics had been awarded to Dr. Dennis Gabor, Professor Emeritus at the Imperial College of Science and Technology, London, England.

Dr. Herzberg first learned that he had been awarded the Nobel Prize in Chemistry after he had boarded a train in Leningrad for a trip to Moscow. He was informed by the Foreign Secretary of the Soviet Academy of Sciences.

Following the announcement, Dr. W.G. Schneider, President of NRC, said “this is indeed a proud moment for Canadian science and the entire staff of the National Research Council of Canada. It is international recognition of a Canadian research effort spread over many years – a research effort which is being continued by Dr. Herzberg. I feel that this recognition of Dr. Herzberg is well merited”.

Dr. Gerhard Herzberg was born in Hamburg, Germany, on Christmas Day in 1904. He received his early training in Hamburg and subsequently studied physics at the Darmstadt Institute of Technology, where he obtained his Dr. Ing. degree in 1928. From 1928 to 1930 he was engaged in postdoctorate work at the Universities of Gottingen and Bristol. In 1930 he was appointed lecturer and senior assistant in the Physics Department of the Darmstadt Institute.

After Hitler came to power in Germany, Dr. Herzberg went to the University of Saskatchewan on a Carnegie guest professorship in 1935. He later was appointed a research professor of physics, a position he held until 1945. From 1945 to 1948, Dr. Herzberg was Professor of Spectroscopy at the Yerkes Observatory of the University of Chicago.

In 1948, Dr. Herzberg joined NRC's Division of Physics. He was appointed Director of the Division in 1949, a position he held until his retirement in 1969. On his retirement he was appointed a Distinguished Research Scientist to permit him to continue his work at NRC.

Dr. Herzberg is the author of more than 200 papers and five books. His three-volume series entitled *Molecular Spectra and Molecular Structures* is considered as the basic reference text in molecular spectroscopy.

IRON ORE TRAVELS THE SEAWAY

Iron ore, the largest single commodity moving on the St. Lawrence Seaway, is an essential raw material in the making of iron and steel products that are consumed largely by the construction, manufacturing and transportation industries. In 1970, iron-ore traffic on the Seaway accounted for 30 per cent of total tonnage on the Montreal-Lake Ontario section and 26 per cent on the Welland section.

Of the 15.1 million tons of ore shipments on the Montreal-Lake Ontario section, in 1970, 98 per cent moved upstream, originating from the Quebec-Labrador mines and destined for U.S. steel-production centres on Lake Erie and Lake Michigan and Canadian steel mills on Lake Ontario. On the Welland section, the iron-ore traffic is more balanced, with 12.5 million tons, or 77 per cent, upbound and 3.6 million tons, or 23 per cent, downbound in 1970. The upstream movement through the Welland is actually the same traffic that transits the St. Lawrence section, excluding the 2.3 million tons dropped off, in 1970, in Hamilton on Lake Ontario. The smaller downstream Welland movement originates on the shores of Lake Superior and is destined for the same consumers on Lake Ontario of the Quebec-Labrador ore.

TYPES OF VESSEL

Iron ore on the Seaway is shipped in large “laker” vessels with a draft of up to 26 feet and capable of transporting up to 30,000 tons of ore. This method of shipping the ore is in sharp contrast to that employed prior to the opening of the Seaway in 1959, when ore moving by way of the old shallow draft canals on the St. Lawrence River had to be trans-shipped above Montreal onto small “canallers” with a carrying capacity of about 2,000 tons.

An important consideration that enhances the competitive position of the Seaway in the transportation of Quebec-Labrador ore is the presence of a backhaul movement; iron-ore shipments upbound from the Quebec-Labrador mines to steel mills on the Great Lakes complement the downbound grain movement from grain-loading ports on the upper Lakes to lower St. Lawrence trans-shipment ports.

Traffic in iron ore to date this year has been sluggish in comparison to 1970 traffic, owing principally to a late start of the navigation season. Totals to the end of August show a decline of 17 per cent on the Montreal-Lake Ontario section and 21 per cent on the Welland section from last year's total for the same period. The extent of these declines, however, is expected to diminish in the latter months of the navigation season as iron-ore consumers begin to build up sufficient inventories to sustain them through the winter.

The Canada Post Office is conducting a market test in the Toronto area to determine public response to a booklet containing 50 cents worth of stamps.

VISIT OF PRESIDENT TITO AND CANADA-YUGOSLAV RELATIONS

President Josip Broz Tito, of the Socialist Federal Republic of Yugoslavia, and Madame Broz paid a state visit to Canada from November 2 to 7, at the invitation of Governor-General Roland Michener. President Tito's visit served both to highlight the significant progress made in Canadian-Yugoslav relations and to further the cause of better understanding and co-operation between the two countries.

President Tito was accompanied by Mr. Kiro Gligorov, Member of the Presidency of the SFRY; Mr. Vidoje Zarkovic, President of the Assembly of the Socialist Republic of Montenegro and Member of the Presidency of the SFRY; Mr. Mirko Tepavac, Federal Secretary for Foreign Affairs, and Madame Tepavac; Mr. Mirjana Krstinic, Member of the Federal Executive Council; and others.

During their stay in Canada, President Tito and his party held official talks in Ottawa and visited Quebec City and Halifax. In Ottawa, Governor-General Roland Michener gave a state dinner in honour of President Tito and Prime Minister Trudeau entertained him at lunch. President Tito was also introduced to Parliament. A group of senior businessmen was presented to the President by the Minister of Industry, Trade and Commerce, Mr. Jean-Luc Pepin. The President and his party visited various scientific, cultural, educational and industrial places of interest. In the Province of Quebec the President and his party toured Quebec City and were entertained at a dinner given by the Prime Minister of Quebec, Mr. Robert Bourassa. In Halifax, President Tito was the guest of honour at a dinner given by the Premier of Nova Scotia, Mr. Gerald Regan, and was the recipient of an honorary degree from Dalhousie University.

President Tito had official talks with Prime Minister Trudeau, while separate discussions were held between Mr. Tepavac, Federal Secretary for Foreign Affairs, and the Secretary of State for External Affairs, Mr. Mitchell Sharp. Mr. Gligorov and Madame Krstinic held discussions with Mr. Edgar Benson, Minister of Finance, as well as with Mr. H.T. Aitken, President of the Export Development Corporation. All these discussions, held in a spirit of frankness, cordiality and mutual understanding, provided an opportunity for a wide-ranging exchange of views on the current state and future prospects of Canadian-Yugoslav relations, as well as on international questions of common interest. Views were also exchanged on the current problems and future development of federal states.

FOREIGN POLICY

The Canadian side outlined the basic aims of Canadian foreign policy, including the aim of working both with allies and other countries for the promotion of international peace, stability and understanding. The Yugoslav side elaborated the orientation of Yugoslavia's foreign policy, based on the principle

of non-alignment. It was noted that the non-aligned countries had a useful role to play, together with all other countries, in promoting peaceful solutions to international problems and in encouraging wider co-operation among all countries, irrespective of differences or similarities.

Both sides affirmed the attachment of Canada and Yugoslavia to the cause of international peace and security and the improvement of relations between states on the basis of the principles of non-interference in internal affairs, renunciation of the use or the threat of force, mutual confidence, reciprocity and the settlement of disputes by peaceful means in accordance with the purposes and principles of the United Nations Charter. They also stated their conviction that peaceful relations between states are possible only in conditions of respect for sovereign equality, including the right of every state freely to choose and develop its political, social and economic systems, for independence and the territorial integrity of states and inviolability of frontiers.

Both sides, bearing in mind the specific features and approaches of the two countries, expressed the conviction that the future development of their relations was in the interest not only of the peoples of Canada and Yugoslavia but also of international co-operation generally. With this in mind they undertook to increase the frequency of consultations at various levels on matters of common interest.

TRADE RELATIONS

The two sides noted the increased volume of commercial exchanges between Yugoslavia and Canada and particularly the increasingly prominent role which finished goods have come to play in this trade. They reviewed current trade relations and announced their intention to renew the present bilateral trade agreement. They will pursue efforts to further develop and facilitate the flow of trade and other commercial exchanges between the two countries. They noted with satisfaction the recent increase in Canadian exports to Yugoslavia and agreed that a similar development of Yugoslav exports to Canada was desirable.

DEVELOPMENT LOANS

Both sides noted the important role of the Canadian Export Development Corporation in the growth of economic co-operation between Canada and Yugoslavia. It was noted that the value to date of the Export Development Corporation loans to Yugoslavia amount to some \$20 million and that complete agreement had been reached on a new loan of about \$40 million for the sale of locomotives, which will be signed in the near future. In addition, negotiations are underway between the Export Development Corporation and five major Yugoslav enterprises representing loans amounting to some \$100 million for projects

in the chemical, aircraft, mining, transportation and tourist industries. They agreed to examine the possibility of concluding a framework agreement relating to the guarantee by the Export Development Corporation of Canadian private investment in Yugoslavia.

In keeping with the mutual desire to develop bilateral relations, an exchange of letters took place between Canada and the Socialist Federal Republic of Yugoslavia regarding the encouragement of further contacts and exchanges in science and technology as well as in the industrial application of science and technology.

ENCOURAGEMENT FOR TOURISM

Welcoming the increase in travel by citizens of one country to the other, particularly tourists, and recognizing the role of tourism in the development of mutual knowledge and understanding, Canada and Yugoslavia agreed that negotiations for a civil aviation agreement should begin soon.

Both sides recognized the desirability of regulating their consular relations and accordingly it was agreed to negotiate a consular understanding.

Further, Canadian ministers stated that, upon completion of the necessary administrative arrangements, non-immigrant visas for Yugoslav nationals visiting Canada would no longer be required and that, under certain conditions, multi-entry visas, valid for one year, would be made available to Yugoslav non-official commercial representatives on posting to Canada. The Yugoslav delegation expressed its satisfaction and confirmed its intention to reciprocate in accordance with its established policy.

It was noted with satisfaction that Canadian immigration regulations and procedures now provide for the acceptance of independent applicants from Yugoslavia, in addition to sponsored dependents and nominated relatives.

The discussions also included such subjects as the quadripartite agreement on Berlin; the hope of a conference on security and co-operation in Europe; arms control and disarmament; nuclear testing and the need for a comprehensive test ban; chemical and bacteriological warfare; the situation in India and Pakistan; the seating of the People's Republic of China in the United Nations; strengthening the UN; and the disparities between the developed and developing nations.

ANIMAL DISEASE RESEARCH

The Minister of Agriculture, Mr. H.A. (Bud) Olson, has expressed pleasure on the recent announcement that construction would begin immediately on a new \$11,520,600-laboratory for animal-disease research. The laboratory is the main structure in an Animal Diseases Research Institute complex that has been under development for several years.

The announcement that the laboratory would be built in the Greenbelt Farm south of Ottawa for the Animal Pathology Division, Health of Animals Branch, Canada Department of Agriculture, was made by Mr. Arthur Laing, the Minister of Public Works.

"The livestock industry is one of Canada's largest, worth about \$1.4 billion in annual sales," Mr. Olson said. "The success of the industry depends to a very large degree on the health of our livestock population, and that, in turn, depends on our research effort.

"Through the efforts of our scientists and the development of national policies and programs to control and eradicate disease, we have been able to develop one of the world's healthiest livestock populations.

"We will be able to maintain this record only if we exercise constant vigilance and if we support our research effort through the provision of adequate facilities," the Minister concluded.

The laboratory will house equipment and staff currently located in crowded quarters in the capital area. It will also serve as the administrative headquarters for the Animal Pathology Division.

The new building will be the largest of eight similar research and diagnostic laboratories located across Canada, which conduct research into the diseases currently infecting Canadian livestock and foreign diseases which could attack animals. The research is aimed at the control or eradication of the diseases now in Canada and at preventing the entry of new diseases. The laboratories are also disease-diagnosis centres.

MAPLE LEAF WINTER STAMP

Twenty-six million stamps depicting the maple leaf in winter were issued by the Canada Post Office on November 19. The seven-cent stamp, 24 mm by 40 mm, is printed in a process of five-colour lithography by Ashton-Potter Limited of Toronto.

This is the fourth and final issue of the special stamps designed by Miss Alma Duncan of Galetta, Ontario, for the "Maple Leaf in Four Seasons" series. The stamp's design shows two maple leaves, brown and slightly furled, against the contrasting whiteness of freshly fallen snow.



INCREASED CONTRIBUTION TO UNDP

The Secretary of State for External Affairs, Mr. Mitchell Sharp, announced on November 1 that the Canadian Government had decided to raise its contribution to the United Nations Development Program (UNDP) to \$18 million (U.S.) for 1972. This contribution, which is subject to approval by Parliament, represents an increase of \$2 million (U.S.), or 12.5 per cent, over the 1971 figure.

In communicating this decision to the United Nations, Mr. Paul St-Pierre, the Parliamentary Secretary to the Secretary of State for External Affairs, made the following remarks before the plenary session of the United Nations General Assembly:

It is a pleasure to affirm once again that the Canadian Government strongly supports the United Nations Development Program.

We know of course that not all the consensus guidelines for improving the capacity of this program have been implemented. Some important issues remain to be resolved. We need sustained dedication to the cause, we need co-operative effort by all member governments of the United Nations, particularly those represented on the Governing Council, the management of the UNDP and other UN organizations.

In accordance with those beliefs, it is our intention to increase our contribution this year by \$2 million. My delegation is pleased to announce that subject to the approval of the Canadian Parliament, Canada will contribute \$18 million (U.S.) to the United Nations Development Program in 1972.

CANADA COUNCIL CULTURAL EXCHANGES

Besides sending many Canadians abroad to study or do research under its own aid programs the Canada Council is involved in the administration of exchange programs arising from cultural agreements between the Government of Canada and a number of foreign countries.

For the fiscal year 1970-71, the Department of External Affairs allotted \$910,000 to the Council for the purpose of administering the program of cultural exchanges with Belgium, the Federal Republic of Germany, France, Italy, the Netherlands and Switzerland.

In this program, grants are available to Canadian universities and cultural organizations that wish to invite university professors, distinguished scholars or artists from the countries concerned. In addition, a number of fellowships are made available to citizens of these countries for graduate or post-graduate studies or research in Canada. Grants totalling \$120,000 offered to Canadian universities enabled them to invite 58 European scholars and writers: 11 from Belgium, 38 from France, three from Germany, two from Italy, two from the Netherlands and two from Switzerland. Canadian cultural organizations also received \$19,150 in grants for visiting artists, nine of whom came from France, two from Belgium,

one from West Germany and two from Switzerland. In addition, 178 fellowships and scholarships were awarded to individuals, including ten in Belgium, 121 in France, 13 in Germany, 12 in Italy, ten in the Netherlands and 12 in Switzerland. Also, the cultural agreement between the Government of Canada and the Government of France provides, as of January 1970, for exchanges of scientists and researchers and for various forms of co-operation between scholars and scientific institutions in the two countries, in such areas as information and access to scientific papers. Such provisions existed under the old agreement, but applied only to the natural sciences; they have now been extended to the humanities and social sciences. In these fields, responsibility for implementing the agreement on the Canadian side is entrusted to the Canada Council, the cost being borne by the Department of External Affairs out of the amount mentioned above. Under this new category, eight French research scholars came to Canada and six Canadians went to France.

CANADIAN CULTURAL INSTITUTE IN ROME

The Canadian Cultural Institute in Rome was created by the Government of Canada in 1966 for the purpose of promoting exchanges and strengthening cultural ties between Canada and Italy. Its work is financed by the income of a fund worth some \$500,000 in Italian securities. Its program is developed and implemented in close co-operation with the Canada Council.

In 1970, the Institute offered senior fellowships worth \$18,000 each to three eminent Canadian scholars to enable them to spend a full year in Italy. The awards were made to Professors Abraham Rogatnick of the University of British Columbia, E. Togo Salmon, McMaster University, and Norman P. Zacour, University of Toronto.

WHERE'S THE WEATHERMAN?

Canadians have registered a quick concern that their local weatherman might disappear behind some unfamiliar terminology.

It all started when the Department of the Environment announced that the century-old Canadian Meteorological Service had been absorbed into the new Atmospheric Environment Service. The new name was adopted to reflect the expanded role of meteorology in such environmental matters as air-pollution monitoring and control.

Numerous callers to weather offices across the country protested that they could not remember the new title and would therefore lose contact with the weather forecaster. Somebody even conferred the title "atmospheric environmentalists" on employees of the weather office.

Cartoons were published by several newspapers suggesting the impact on Canada's language of the term. Among them was a new version of the song

Stormy Weather, which came out *Stormy Atmospheric Environment*, and a castaway who wondered if he could "atmospheric environment" the storm.

Meteorologists from the Toronto headquarters of the AES say they hate to decline all the lexicographic aid but the word "weather" has not been taken out of service.

Telephone listings and other references to public weather services will be unchanged. And the local meteorologist in his weather office will retain his unofficial but popular weatherman label as he dispenses information on the weather.

ATLANTIC RESEARCH EXPANDS ⁽¹⁾

A \$205,000-grant is to be made by the National Research Council of Canada to the Huntsman Marine Laboratory at Brandy Cove, St. Andrews, New Brunswick. This subsidy will forward the development of marine research in Eastern Canada. The grant will be made over a three-year period. Subject to the availability of funds, the Huntsman Marine Laboratory will receive \$75,000 in 1971-72, \$70,000 in 1972-73 and \$60,000 in 1973-74.

The Laboratory, which was officially opened one year ago, was formed to provide a unique marine-science research centre for both university students and marine scientists. Through the Huntsman Laboratory, all Eastern Canadian educational institutions are able to work in a marine environment. Some 75,000 students and 6,000 university scientists are in a position to benefit from its facilities.

Research carried out at the Huntsman Marine Laboratory will complement the programs carried on at St. John's, Newfoundland, and in the Bedford-Dartmouth-Halifax area of Nova Scotia.

The advantages of the St. Andrews site are inter-tidal flats in an unpolluted area, great diversity of marine life, proximity to and an excellent working relation with the adjacent Biological Station of the Fisheries Research Board. In addition, St. Andrews is an important link in a chain of marine biological stations, each having unique aspects, that extend along the Atlantic from the Canadian Arctic to the tropical waters of the West Indies.

CONSORTIUM OPERATED

The Huntsman Marine Laboratory is operated by a consortium of 19 Canadian universities in Ontario, Quebec, Newfoundland, New Brunswick and Nova Scotia, together with the University of Maine, the Fisheries Research Board of Canada, the Department of Fisheries and Environment of New Brunswick, and the International Atlantic Salmon Foundation.

(1) See also Canadian Weekly Bulletin dated September 8, 1971, Page 5, item entitled "Pacific Marine Studies".

The expertise now associated with the Huntsman Marine Laboratory and the adjacent Fisheries Research Board Biological Station has meant the development of closer ties between the Federal Government, universities and industry. Already the International Atlantic Salmon Foundation has announced that it will locate its headquarters on the Huntsman site. In addition, New Brunswick has provided a grant for the purchase of additional land and buildings - one of which has been turned into a 55-bed residence - through a Central Mortgage and Housing Corporation loan.

SEPTEMBER TRADE

At \$1,807 million, the trade balance for the first three quarters of 1971 was down almost \$150 million, or 8 per cent, from last year's record level. Imports rose 6.8 per cent over last year's to reach \$11,290 million, while exports were up 4.6 per cent at \$13,097 million.

September imports increased 9.4 per cent over those of a year earlier, led by purchases from the United States, which rose \$80 million. Increases of \$14 million occurred in imports from each of Japan, the EEC and other Commonwealth and preferential countries.

Import growth in September was broadly distributed among commodity groups, as purchases only of chemicals and of aircraft and parts showed significant decreases. Metal ores and concentrates recovered from last year's low levels, while import of iron and steel products, tractors and computers continued the increases established in earlier months. Purchases of industrial machinery were virtually unchanged from September 1970.

Motor vehicles and parts again dominated trade with the United States. Passenger-vehicle imports were up \$21 million, while those of trucks and other vehicles grew by \$16 million or almost two-thirds over those of September 1970. Imports of engines were also up substantially, and all other vehicle-part purchases increased moderately. Imports of most other commodities from the United States were above last year's levels, led by tractors, office machines and computers.

On a seasonally-adjusted basis, September imports, at \$1,278 million, indicated a slight decline from high levels established during the summer months. However, total imports for the third quarter reached \$3,986 million, continuing the growth rate of about 4 per cent established in the first two quarters. With exports previously reported at \$4,504 million, the third quarter trade balance was \$518 million, a decline of \$695 million from the first quarter and \$604 million from the second.

MONTHLY INDEX

(November 1971, Volume 26)

- Agriculture *see* Science
- Arts (*see also* Post Office)
Archivist at Stratford, No. 44, P. 5
Collection to External Affairs, No. 45, P. 5
Eskimo sculpture on world tour, No. 44, P. 3
Film on U.S.S.R. at Royal Ontario Museum,
No. 44, P. 5
O'Keefe Centre 11 years old, No. 46, P. 3
- Aviation *see* Pollution
- Bilingualism *see* Culture
- Canada Council *see* Culture
- Commonwealth
Medical conference, No. 46, P. 5
- Communications (*see also* Post Office)
First telephone office, No. 46, P. 4
- Construction
Building science seminar, No. 44, P. 6
- Culture
Canada Council cultural exchanges, No. 47, P. 5
Multiculturalism in a bilingual framework
(address by the Prime Minister), No. 45, P. 3
- Economy *see* Labour
- Eskimos *see* Art
- External Affairs (*see also* Arts and Visits)
Canada-Malaysia insurance pact, No. 45, P. 5
Claims pact with Poland, No. 45, P. 5
- External Aid
Contribution to UNDP, No. 47, P. 5
- Films *see* Arts
- Germany *see* National Defence
- Grants and Awards
Marine research, No. 47, P. 6
Nobel Prize for Canadian scientist, No. 47, P. 1
NRC trace-analysis grant, No. 45, P. 4
- Health and Welfare (*see also* Commonwealth)
Drinking-driver safety study, No. 46, P. 5
- History *see* Communications
- Industry (*see also* Trade)
Wool fabric inquiry, No. 44, P. 6
- Labour
Federal boost for employment and economy,
No. 44, P. 1
Labour force, No. 45, P. 6
- Law
National conference, No. 44, P. 5
Penal reforms, No. 43, P. 1
- Malaysia *see* External Affairs
- Meteorology
Where's the weatherman?, No. 47, P. 5
- Museums (*see also* Arts)
Spy tools to, No. 45, P. 5
- National Defence
German army may train in Canada, No. 45, P. 4
Regulars celebrate centenary, No. 46, P. 5
- National Research Council *see* Grants and Awards
- Northern Affairs *see* Transportation
- Poland *see* External Affairs
- Pollution
Smokeless aircraft, No. 45, P. 5
- Post Office
Maple leaf winter stamp, No. 47, P. 4
- Science (*see also* Construction, Grants and Awards
and Meteorology)
Animal disease research, No. 47, P. 4
Longer life for flowers, No. 45, P. 4
- Seaway *see* Transportation
- Trade
September trade, No. 47, P. 6
- Transportation
Iron ore travels the Seaway, No. 47, P. 2
Shipping oil from the Arctic, No. 46, P. 1
Toronto's giant crane, No. 44, P. 6
- Trudeau, Pierre Elliott *see* Culture
- United Nations *see* External Aid
- U.S.S.R. *see* Arts and Visits
- Visits
Premier Kosygin of the Soviet Union,
No. 45, P. 1

MONTHLY...
...the most significant...
...the most significant...
...the most significant...

Labour force, No. 45, P. 6
...the most significant...
...the most significant...

Law
National conference, No. 44, P. 5
...the most significant...
...the most significant...

National Defence
...the most significant...
...the most significant...

Regulation
...the most significant...
...the most significant...

Science (see also Construction, Grants and Awards)
...the most significant...
...the most significant...

Trade
September trade, No. 47, P. 6
...the most significant...
...the most significant...

Transportation
...the most significant...
...the most significant...

U.S.R. see Arts and Visits
Premier Kossygin of the Soviet Union
No. 45, P. 1

Collection to External Affairs, No. 45, P. 5
...the most significant...
...the most significant...

Canada Council
...the most significant...
...the most significant...

Construction
...the most significant...
...the most significant...

External Affairs
...the most significant...
...the most significant...

External Affairs
...the most significant...
...the most significant...

External Affairs
...the most significant...
...the most significant...

External Affairs
...the most significant...
...the most significant...

External Affairs
...the most significant...
...the most significant...

External Affairs
...the most significant...
...the most significant...