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Late news

The National Film Board of Canada won Oscars for two short films — *Sand Castle* and *I'll Find a Way* — at the Hollywood Academy Awards on April 3. Details in a subsequent issue.

Legislative reforms proposed for the criminal justice system

The criminal justice system of Canada is creaking ominously, according to the Law Reform Commission's ninth report to Parliament, which was tabled last month.

The report recommends, in its draft of a proposed statute, legislative reforms which would save time, expense and public convenience for those caught up in the criminal process — whether they be the judge, the accused, witnesses, jurors, counsel, administrative staff or police officers.

The Commission, relating information gathered at a broadly representative conference on pre-trial procedure last spring, points to current backlogs in court hearings; witnesses summoned and then kept waiting or not being heard at all; jurors having to wait through proceedings in which they have no part; and, re-election of mode of trial at a point causing upset, delay and expense, as ample evidence of the need for immediate legislative reform.

Pilot projects have already proved, the Commission argues, that if such changes were legislated they would improve the fairness and efficiency of the entire criminal justice system and lend it added credibility in the public eye. "The discovery project in Montreal avoided the appearance of 35,000 witnesses in 1976, witnesses who would have been otherwise summoned needlessly...the disclosure court in Edmonton during a six-week period in early 1977, demonstrated that over 50 per cent of the witnesses who would have been required for preliminary inquiries did not have to be called...the Pro-Forma Court system in Ottawa, between June 29 and November 30, 1976 obviated the necessity of subpoenaing 2,141 witnesses," the report cites.

Pre-trial changes

Among the major recommendations in this, the first part of a larger treatment of criminal procedure, is one that would give the pre-trial hearing judge the same powers as the trial judge in taking pleas; ruling on fitness of the accused to stand trial; ruling

on the admissibility of evidence, including the holding of a *voir dire* to determine the admissibility of a confession; and, ruling on the jurisdiction of the trial court. This reform would mean that pre-trial rulings could not be challenged by counsel except at the appeal stage. The recommendation is also designed so that local jurisdictional autonomy could be preserved.

Another recommendation would make it possible for many potential witnesses to sign a declaration which could be used as evidence of usually non-contentious facts during the trial. Such a declaration, with all the information needed for that part of the trial contained in it, would eliminate wasted time in court for the witness and aid the court in completing the trial, the report observes. If the defence demanded the presence of such a witness, however, or if the prosecution did not submit the written declaration, then the witness would have to attend.

Choice of trial

A third recommendation concerns the type of trial an accused can, in most instances, opt for: magistrate, judge alone, or judge and jury. The current Criminal Code provides for re-election under certain circumstances.

"It is frequently suggested by critics of the system that the right of re-election is sometimes exerted as a deliberate delaying tactic; and even where that is not the motive, the re-election may — and often does — cause administrative difficulties and delay." The report suggests that, in most circumstances, the accused will know within seven days whether he or she has elected the preferred form of trial. The report recommends that after that period "re-election should be possible only if the accused can show valid cause and, in addition if the Crown and the court of original election both agree".

The last section of the draft statutory provisions is concerned with limiting the length of time between being charged and

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being brought to trial. The report recommends that if an indictable offence case has not gone to court within one year (or, in the case of summary conviction offences, 180 days), the accused should be permitted to apply for a discharge. The report notes that "because of the possibility of (the judge) extending the time periods, discharges in cases of delay may be rare, but the power to discharge would not only be a judicial weapon against injustice, but also a spur to uproot the causes of delay in the criminal justice system".

The Commission plans to have a second part of the Criminal Procedure recommendations, dealing with pre-trial Discovery, ready for tabling by the Minister of Justice in the near future. In the meantime, the Commission recommends that "legislation in conformity with the proposed draft be enacted by Parliament, without delay, as the first step towards a general reform and overhaul of criminal procedures".

"The present system operates at full blast and yet it creaks ominously because it is tied to anachronisms which weight it heavily and dissipate its thrust."

Mr. Hockey 50 years old and still going strong

Gordie Howe, "Mr. Hockey", celebrated his fiftieth birthday two days early on March 29, then played a game with his team mates, the New England Whalers. Only two of them were born in 1946, Howe's first year in major league hockey.

Howe, who expects to become a grandfather next month, adds to his list of records every time he plays: he has the most seasons (30); the most games (2,252); scored the most goals (1,028); the most assists (1,457); the most points (2,483); been given the most penalty minutes (2,297); has the most years in playoffs (23); and has been given the most most-valuable-player awards (7).

Gordie Howe is already talking about playing next season. His sons Mark (22) and Marty (24) also play for the Whalers. "I don't feel 50 years old," he said "...it scares me, I should hurt more after a game these days than I do." Only team mates John McKenzie (41), Dave Keon (38) and Al Smith (33) were alive when Howe scored his first goal in 1946, playing his first game for the Detroit Red Wings of the National Hockey League.

Indexation changes in public service pension plan

The Government proposes to introduce a number of changes to the indexing arrangements applicable to the public service employee-pension program. The proposals concern the indexation of pensions payable under all Federal Government superannuation legislation including the Public Service, Armed Forces, Royal Canadian Mounted Police personnel, Members of Parliament, and other federal superannuation acts.

Under the proposals indexation will be deferred until age 60, although this will be phased in over the next five years and will not affect those retiring in 1978. Nor will it affect widows' and childrens' allowances or disability pensions, (i.e. for an employee reaching age 55 and retiring in 1979, indexation will be deferred to age 56; for a similar situation in 1980, indexation will be deferred to age 57, etc.) In all cases, however, when the required age is reached, indexation will be cumulative from date of retirement, although retroactive payments will not be made.

Beginning in 1979, indexation for first

year following date of retirement, will be pro-rated on the basis of the number of complete months between date of retirement and December 31 of the same year. Indexation on January 1, 1979 will be based on six-twelfths of the amount otherwise indicated. Thus, there will be no indexation on January 1, 1979 for those retiring in December 1978.

The amount of indexation payable will be determined on the basis of available funds, including the pensioner's share of indexation account and the pensioner's share of excess interest (in excess of 4 per cent) credited to the main pension account.

The situation will be reviewed in October 1978 and funds to be available for next three years will be estimated by a chief actuary. If such funds indicate that less than full indexing is possible, the present formula based directly on the consumer price index will be modified, although CPI will still be taken into account. If funds available permit, there will still be full indexing.

The pre-game celebration on March 29 included a huge birthday cake and tributes on the ice from many of Howe's old friends. Sid Abel and Tommy Ivan, old

Detroit colleagues were there, as well as baseball veteran Al Kaline, tennis champion Tony Trabert and track star Jesse Owens.

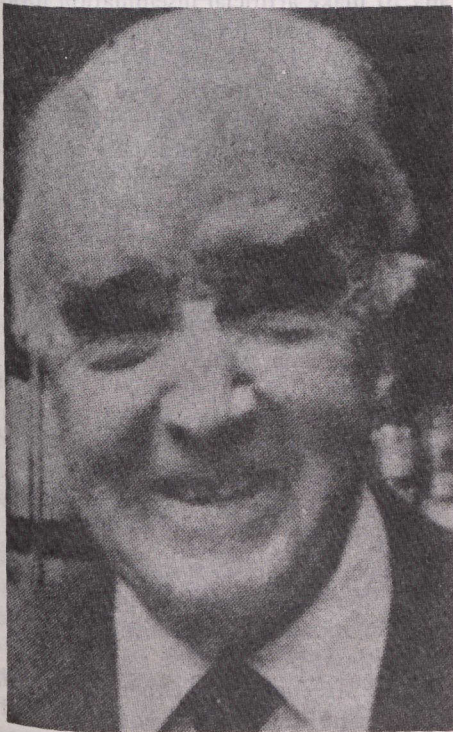


Gordie Howe, with his two sons Mark (left) and Marty rest, after a practice game before the 1974 Canada/U.S.S.R. hockey series.

Co-discoverer of insulin dies

Dr. Charles Herbert Best, co-discoverer of insulin and one of the world's most honoured medical researchers, died in a Toronto hospital on March 31 at the age of 79.

Dr. Best and Dr. Frederick Banting, a surgeon from London, Ontario, who was killed in a plane crash in 1941, discovered and developed insulin to control diabetes in 1921. (Insulin, a substance produced in healthy people by the pancreas, stimulates the body to metabolize sugar. Before the discovery, countless diabetics died, as their bloodstreams filled with unused sugar.)



Dr. Charles Herbert Best

Dr. Banting and Professor J.R. MacLeod (as head of the University of Toronto's physiology department), were awarded the Nobel Prize in 1923. Banting immediately shared his half with Charles Best. MacLeod said later: "I did not win the Nobel Prize for my discovery of insulin, but for my discovery of Best."

Charles Best, who was born in West Pembroke, Maine, U.S.A., of Canadian parents, graduated from the University of Toronto. His ancestors had come to Halifax, Nova Scotia in 1749. He met Frederick Banting shortly after graduation.

It was on May 17, 1921 that Banting outlined his theory to Best that he be-



Experimenting with this dog, Marjorie, Frederick Banting (right) and Charles Best demonstrated that insulin could control diabetes.

lieved something in the pancreas of animals could be used to control diabetes. They began work and, two months later, succeeded in an experiment with dogs. They tied off pancreatic ducts and extracted the accumulation of the partly-degenerated pancreas, which was purified and administered to other dogs. "We were overwhelmed by a multitude of ideas which demanded investigation but we persisted until on 75 occasions, without any failures, we secured a material potent in lowering blood sugar," Best wrote later. It is reported that a moribund diabetic dog, after an injection of insulin suddenly sat up and licked the hands of the men who had saved it.

Shortly after, Leonard Thompson, a 14-year-old dying diabetic in the Toronto General Hospital, became the first human to have the disease controlled with insulin. Purification techniques were refined and a centre was established for the production of the serum for export to hospitals and clinics throughout the world.

Banting and Best turned over the patent to the University of Toronto for \$1, with the stipulation that no royalties be charged for the manufacture of insulin.

Charles Best was also honoured for his work later in developing the anti-allergic enzyme histaminase and heparin, which is vital in heart surgery as an anti-blood clotting agent. But it is for his contribution to the discovery of insulin, however,

that Best will be remembered. In a statement issued following his death, the Canadian Diabetic Association said:

"Today all diabetics...will once again realize their great debt to Charles Herbert Best and Frederick Banting.

Their monument survives in the lives of thousands."

Canada and U.S. co-operate in agriculture research

Canada and the United States have agreed on expanded co-operation in agricultural research, including crop-forecasting from data supplied by space satellites.

Agriculture Minister Eugene Whelan and U.S. Secretary of Agriculture Bob Bergland signed a memorandum of understanding on March 14 under which Canada and the United States would exchange crop-forecasting strategies, methods and "on-site" crop information. The technology involved will include data from the U.S. Large Area Crop Inventory Experiment (LACIE), as well as jointly-conducted research.

In addition, they agreed on an expanded effort in more traditional research, which will involve the exchange of research managers and senior scientists between the two countries and exchange of information on the evaluation of pesticides.

The co-operative efforts will extend to research on land-use, soil salinity, waste-disposal, energy, atmospheric pollution, and soil-reclamation. Bilateral research meetings are also planned on integrated pest-management and the control of wild oats, golden nematode and biting flies.

The U.S. agencies taking part are the Department of Agriculture, the National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration. The Canadian agencies concerned are Agriculture Canada and the Department of Energy, Mines and Resources.

The new agreement continues work begun under a 1971 agreement. The U.S. and Canada have co-operated in developing techniques to estimate acreage, yield and vigour of crop-growth using satellite imagery, current weather information and ground observations from test-sites in both countries. Since 1975, the U.S. has used ground observation from Canadian test-sites in the LACIE project.

New senators

Prime Minister Pierre Trudeau announced the names of seven new appointees to the Senate on March 23, including Minister of National Revenue J.-P. Guay, who will retain his portfolio.

Former Premier of Manitoba, Duff Roblin, who resigned in 1967 after 18 years in the provincial Legislature — nine as premier — is one of the seven new senators, as well as Florence Bird, who was appointed Chairman of the Royal Commission on the Status of Women in 1967.

Dr. Stanley Haidasz, former Minister of State for Multiculturalism, Jack Marshall, Progressive Conservative Member of Parliament, Derek Lewis, former Treasurer and Secretary of the Liberal Party, and Margaret Anderson, who was President of the New Brunswick Liberal Women's Association, were also named.

International payments — fourth quarter 1977

In the final quarter of 1977, the seasonally-adjusted current-account deficit fell to \$692 million from \$1,220 million in the previous quarter. There was a balance-of-payments deficit, measured by net official monetary movements, of \$291 million, which, with a net capital inflow of \$443 million, financed a current-account deficit, unadjusted for seasonal variations, of \$734 million.

The main quarterly movements were:

- a faster rise in seasonally-adjusted merchandise exports than in imports, which led to a \$528-million increase in the surplus on merchandise trade to \$1,154 million;
- within the seasonally-adjusted non-merchandise data, some easing in travel payments abroad but sharp increases in interest and dividend payments to non-residents;
- an \$800-million reduction in new Canadian security issues sold abroad to \$1,107 million — the lowest level since the third quarter of 1975, reflecting generally lower bond-market financing by Canadian borrowers and a narrowing of long-term interest-rate differentials between Canada and major capital markets abroad;
- a continued inflow of non-resident funds into Canadian money-market instruments amounting to some \$221 million

as hedged interest-rate differentials, while narrowing slightly, were still attractive to non-residents, particularly United States investors;

- a reduction in the chartered banks' net foreign-currency position with non-residents, which led to a capital inflow of \$723 million, a swing of over \$1 billion from the previous quarter's outflow.

The Canadian dollar dipped below 90 cents (U.S.) in October and again in November. To reduce speculative activity on foreign-exchange markets, the Government announced in October the establishment of a line of credit for \$1.5 billion (U.S.) with the Canadian chartered banks.

Last year

For 1977 as a whole, there was a small increase in the current-account deficit to \$4,238 million. Owing to a \$1.9-billion reduction from the previous year in the net capital inflow to \$2,817 million, financing to meet the deficit was also required through a reduction in official reserves of \$1,421 million.

The main features in the year were:

- a virtual tripling of the merchandise-trade surplus to \$2,907 million, which was more than offset by a \$2.0-billion increase in the deficit on non-merchandise transactions;
- within the non-merchandise account, jumps of \$900 million and about \$500 million, respectively, in net payments of interest and dividends and on travel account;
- new Canadian issues sold abroad of \$5,778 million, \$3.3 billion below the record 1976 level;
- a return to a net inflow for foreign long-term direct investment in Canada, amounting to \$410 million;
- a net outflow of \$780 million for Canadian direct investment abroad, an increase of over 40 per cent from that of 1976;
- a twofold increase to \$532 million in the outflow to expand export credits granted directly or indirectly at the risk of the Government of Canada;
- a sharp reduction to \$422 million in the net inflow from non-residents for the acquisition of Canadian money-market instruments;
- an inflow of \$1,384 million as chartered banks reduced their net foreign-currency position abroad, a turnaround of over \$2.3 billion from the outflow in 1976;
- a doubling of the net outflow to \$497 million for the acquisition of non-bank

holdings of short-term funds abroad;

- a decline of \$1,236 million (U.S.) in the level of official international reserves to \$4,607 million (U.S.) at the end of the year;
- a depreciation of the Canadian dollar *vis-à-vis* the United States dollar and a weighted average of the currencies of Canada's major trading partners of 7.8 per cent and 9.4 per cent respectively, as the Canadian dollar fell even more sharply in relation to overseas currencies than in relation to the United States dollar.

Bionic cattle

A 'bionic cow' is being developed in Canada to make artificial insemination more feasible in beef production. (In 1976, more than 53 per cent of the national dairy herd was artificially bred, compared to only 5.4 per cent of the beef herd.)

While dairy herds are usually confined to the barn or nearby pasture where cows can be closely observed for estrus, beef cattle, on the other hand, may range over hundreds of acres. Checking for estrus is time consuming and the amount of labour involved often makes artificial insemination economically unfeasible.

Scientists at Agriculture Canada's Lethbridge, Alberta, Research Station, who are studying estrus and ovulation in cattle, hope to use this knowledge to develop an electronic method for detecting estrus.

Glenn Coulter, a reproductive physiologist there, says this would permit cattlemen to monitor their herds 24 hours a day without close contact.

"We are conducting experiments with small radio transmitters equipped with sensory probes. These are either placed surgically deep in the body to measure temperature changes in reproductive organs, or attached to the ear with a sensory probe running into the ear canal to measure brain temperature," he says.

The sensory probes can measure the slightest temperature change and this information is transmitted continuously by radio signals to the laboratory at the research station.

"From this data we expect to be able to identify temperature changes that are specific to estrus and ovulation," Dr. Coulter says.

"Research is still at a very early stage, but radio-equipped 'bionic cows' may become common," he concludes.

Winter on the Prairie: Lower Fort Garry, 1859

The following article has been reprinted from Conservation Canada *Winter 1978*.

Every year more than 100,000 persons briefly revisit part of Canada's past at Lower Fort Garry, Selkirk, Manitoba, 30 kilometres from Winnipeg, on the shores of the historic Red River.

To step through the stone walls into the spacious grounds and walk among the buildings of this expertly restored fur-trading post is to glimpse life as it was on the frontiers of civilization 125 years ago.

The furnishings, costumes and fittings of a nineteenth-century Hudson's Bay Company post have been retrieved or copied to evoke the atmosphere of a period when the Canadian West was still very young and relatively little known.

One of the best accounts of life at Lower Fort Garry occurs in a memoir *Father of St. Kilda*, by Roderick Campbell, published in 1901.

Its subtitle *Twenty years in isolation in the sub-arctic territory of the Hudson's Bay Company*, indicates the extent to which that area was then considered remote and undeveloped. The following extracts from the book describe everyday life at the Fort:

"Lower Fort Garry, as I found it in 1859, certainly showed outward signs of future prosperity, however misty its past history might have been.

"As I climbed to the top of the high river bank I found before me the Stone Fort, so called because its houses and loopholed wall were actually built of stone, and in this were unique in my company's vast domain. Its buildings were shops and stores, with dwelling-houses for the company's officers and servants.

"The whole fort was arranged in the form of a parallelogram surrounded by a wall 12 feet high. At each of the four corners was a bastion pierced for guns, like the turrets of the old Scottish embattled castles.

"At that time the fort was the station at which, during the summer, boat brigades were outfitted for Fort York or other posts inland. Besides, a very large farm had been brought under cultivation in the immediate vicinity. The task of surveying this farm in acres was my test service for the company.

"The experiment in agriculture proved most encouraging, and the harvest was

everything that could be desired. The golden-tinted wheat, the plump round barley, the capital potatoes and turnips, soon showed the fertile capabilities of the Red River Valley.

"The residents in the fort formed a very lively community by themselves. They had regular hours for the dispatch of business, and afterwards, to beguile the tedium of the long sub-Arctic nights, they met together for a few hours' jollification, when old Scottish songs were sung in voices cracked and sharpened by the cold northern blasts.

* * * *

"On the whole, I soon made up my mind that the place was but a bit of the ruder civilisation thrown haphazard into the wilds.

"Its population consisted of four principal elements: first, the descendants of the early French traders, or voyageurs, who intermarried with the Indians and were the progenitors of the Métis or Bois-brûlés....

"The second element, akin to the first, was provided by the descendants of the company's servants, mostly Scotsmen from Orkney and the other islands who also had married native wives....

"The third element was the Sutherland, Kildonan and Selkirk colony, who lived in the parish of that name, and were in easy circumstances. The warm, hospitable instincts of their race still lingered



in their Scottish bosoms.

"The fourth group were the Swampy Indians, who had somehow managed to make their way up from the Bay, and settle between Lower Fort Garry and Lake Winnipeg. They too were polite and kind in disposition.

"I might have included as a fifth element a native Indian population of two or three thousand. There were two distinct groups of these, the Ojibway and the Salteaux, ruled over by five chiefs....

"To save us all, red and white alike, from ourselves, there were no less than ten Roman Catholic, eight Church of England, and four Presbyterian places of worship within the legally defined limits of the colony.

"Our officials, when they wished to become Benedicts, often married Indian girls. Many, however, did not care to do so, and would petition the company to select wives for them and send them out by the next boat. Their wishes were, as a rule, complied with, and the selection was nearly always satisfactory. Among the archives of the company are found receipts from factors running thus: 'Received per Lapwing, Jane Goody, as per invoice, in good trim' and 'Received per Osprey, Matilda Timpins, returned per Lapwing as not being in accordance with description contained in invoice.'

* * * *

"After some skirmishes between autumn and winter, snow and frost laid hold of the ground sufficiently to enable the annual northern packet to leave the fort for the northern districts. The first stretch was 350 miles over the ice on Lake Winnipeg to Norway House.

"The party set out on December 10, and the means of transit were in the first place sledges, drawn by splendid dogs, and in the second snowshoes. These sledges (of Indian design) were drawn by four dogs to each, and carried a burden of 600 to 700 pounds. With such a load they travelled 40 miles a day.

"They traversed the frozen lake in eight days, running at a quick jogtrot from long before daybreak until dusk, when a frozen whitefish, about two pounds in weight, was thrown to each dog.

"At the end of this stage the packet was overhauled and repacked, one portion for the Saskatchewan and the far-off Mackenzie districts. For this, new sets of packet-bearers travelled eastward, westward and northward."

Law of the Sea Conference

Canada's delegation to the seventh session of the Third United Nations Law of the Sea Conference, being held in Geneva from March 28 to May 19, is headed by Secretary of State for External Affairs Don Jamieson, with the assistance of Ron Basford, Minister of Justice and Attorney-General of Canada, and Roméo LeBlanc, Minister of Fisheries and the Environment. J. Alan Beesley, Canada's High Commissioner to Australia, is deputy head of the delegation.

This session is crucial in preparing a new convention of the seas. Although the last session produced more results than previous ones, many sensitive and contentious matters have still not been settled, and some major disagreements remain on the issue of the international seabed.

The sixth session, however, enabled discussions to take place on most of the unresolved issues and, in certain major areas, the conference was closer than ever to reaching a consensus. These discussions resulted in the drafting of a new Informal Composite Negotiating Text. This document reflects Canada's objectives in several areas: the 12-mile territorial sea is universally accepted, the special anti-pollution measures in the Arctic are receiving increased international support, special measures have been taken with regard to salmon conservation, and a consensus is emerging around the idea of the 200-mile economic zone, which supports Canada in establishing the 200-mile exclusive fishing zone.

This progress, however, must be laid out in a universally-accepted convention and the conference will not be able to adopt such an instrument until it has solved the more difficult issues, particularly those pertaining to seabed mining. Canada has taken part in several informal meetings to advance negotiations on this.

Discussions on this topic at the seventh session are nevertheless expected to be difficult as well as in certain other areas, such as access of land-locked and geographically disadvantaged countries to the living resources of coastal states, the provisions for settlement of disputes pertaining to the sovereignty of coastal states over resources, the definition of the continental shelf and the related issue of revenue-sharing and the delimitation of the maritime boundaries between adjacent or opposite states.

Postage rates rise

Three new stamps were issued by Canada Post last month in preparation for an increase in postage rates effective April 1.

Two of the new stamps, both 14 cents for domestic first class mail, carry the same designs as the former first class regular issue stamps — the Parliament Buildings and a bas-relief portrait of Queen Elizabeth. The only change in their appearance is in the colour, with the blue of the former 12-cent stamps being replaced by crimson in the new ones.

The other stamp in the trio, a 30-cent value, the new international airmail rate (up from 25 cents), features the foliage of the red oak tree.

The oak design continues in the theme introduced for low-value definitives in 1977, with the trembling aspen, the Douglas fir, and the sugar maple.

Occupational health centre

Labour Minister John Munro introduced into Parliament on March 20 a bill to establish a Canadian Centre for Occupational Health and Safety. He said that "in Canada we need new and effective methods of reducing or eliminating health and safety hazards at the work-place". The proposed Centre, he said, would help meet this requirement.

The bill, endorsed by Minister of National Health and Welfare Monique Bégin, has been the subject of intensive consultation with provincial authorities, labour and management groups, safety specialists and others and, in principle, has won wide support.

The Centre will be a self-governing body whose purpose is to promote the fundamental right of all Canadians to a healthy, safe working environment. Among its main functions will be the establishment of an integrated information system on all aspects of occupational health and safety, dissemination of authoritative information and the stimulation of research in this vital area.

Cost of operating the Centre the first year will be \$1 million, subsequently increasing to about \$8-9 million a year. The latter figure represents 1 per cent of the \$800 million now being paid out each year by workmen's compensation boards in Canada as a result of injuries and illnesses on the job.

The Centre, initially to be financed by the Federal Government but with provision for support in the future by provincial governments, labour, business and other groups, will facilitate collaboration among all public authorities, both federal and provincial. While it will have no regulatory powers it will serve all interests and co-operate with all existing jurisdictions.

Mr. Munro points out: "Existing legislation in Canada relating to the work environment is massive and complex. There are 220 provincial and federal laws and 400 sets of regulations administered by 90 different departments and agencies. Yet each year the number of Canadians injured or made ill as a direct result of their work increases — over one million in 1976, and the cost to the economy grows — over \$800 million in known, direct costs. Obviously regulation alone is not a sufficient answer."

To ensure the Centre remains both independent and non-biased, its governing council will be multipartite. It will have representatives nominated by the lieutenant-governors in council of each province, the governments of the two territories, the Federal Government, labour and management, and the professional scientific and academic communities.

Great Lakes water quality

Canadian and U.S. representatives at the second round of negotiations to revise the 1972 Great Lakes Water Quality Agreement in Ottawa on March 30, agreed that the agreement had functioned well and provided a sound basis upon which to construct a more effective accord.

Both sides conducted extensive reviews of the present pact and public hearings have been held in both countries. Based on these reviews and hearings, each side prepared revised draft texts which were exchanged prior to the March meeting.

Substantial agreement was reached on a number of areas including: a more comprehensive approach to pollution control in the Great Lakes system; the continued need for the abatement control and prevention of pollution from municipal and industrial sources; revised objectives including the need for further reducing phosphorus loadings; new limits on radioactivity; the control of persistent toxic substances; and control of pollution from indirect sources such as land use and airborne pollutants.

News of the arts

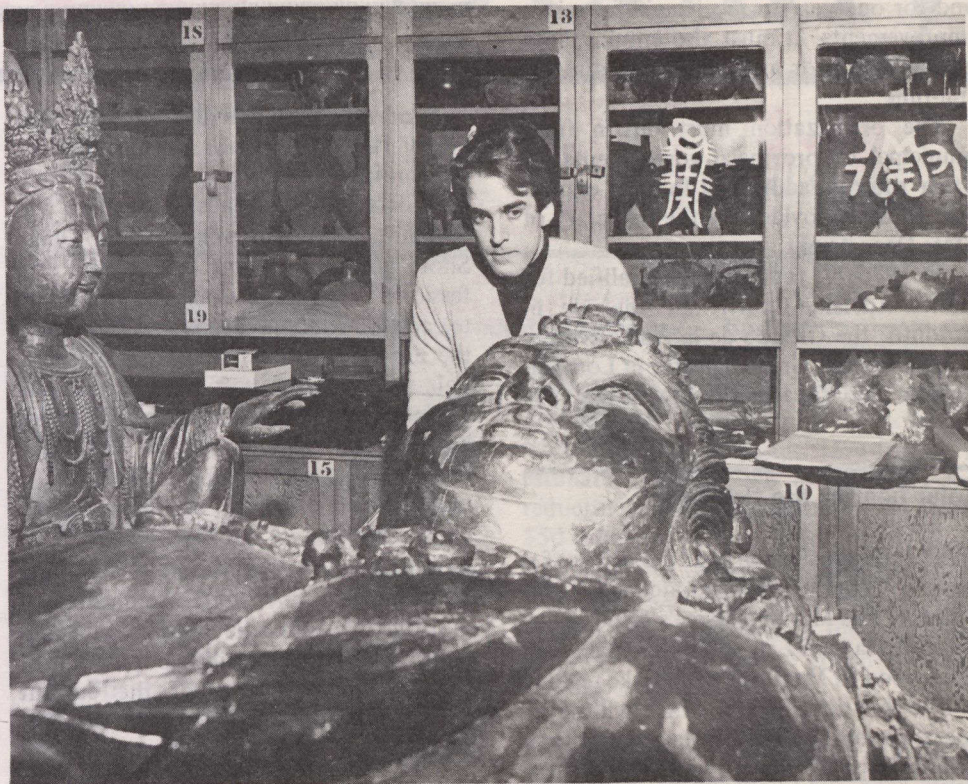
Canada lends Chinese art to Japan

Three massive carved figures and a small bronze Buddha are back in the Far East for the first time since the Royal Ontario Museum of Toronto acquired them in the early twentieth century. The objects sent to the Nara National Museum in Japan for an exhibition, constitute one of the most important loans in the history of the ROM.

They will be displayed as part of an extensive exhibition opening on April 29 which traces the development of the art associated with Buddhism in Japan and shows how foreign influences affected the evolving art style.

Dr. Bunsaka Kurata, Director of the Nara National Museum, first approached the ROM's Far Eastern Department to discuss the possibility of the loan last autumn. The objects he sought were all from China, of outstanding quality, which would help provide comparative material for the Japanese exhibition.

Thomas Quirk, Acting Head of the Far Eastern Department, says: "We agreed to the loan only when we were assured that we could transport these large, heavy and fragile pieces in absolute safety. We investigated the packing technology used to ship the Pieta to New York in 1964 and we have modified the Pieta packing tech-



Thomas Quirk, Acting Head of the Royal Ontario Museum's Far Eastern Department ponders the shipment of this ten-foot tall Buddhist figure. The piece, dating from the fourteenth century A.D., is one of four from the ROM's Far Eastern collection on loan to the Nara National Museum, Japan.

niques to suit our own loan."

Quirk points out, "This loan is tremendously important because it affords the ROM with an opportunity to present its Far Eastern collections to the world and for international view in a way that's not been possible before. The loan reflects not only on the Royal Ontario Museum but on Canada as well."

One of the loan objects is a carved marble figure of a monk, dated to the twelfth century A.D., which stands approximately five feet six inches. Two massive carved and painted wooden figures were also sent. One of them, Kuan-

Yin, a richly attired Buddhist figure representing the quality of mercy, is considered by Dr. Kurata to be one of the largest surviving examples of its type. The fourth piece is a six-inch high gilt bronze Buddha, which was originally an altar piece in a household shrine.

Barbara Stephen, Associate Director of the Royal Ontario Museum, stated: "The ROM has been asked to approve the reproduction of one of the ROM loan pieces for souvenir tickets for the Kintetsu Railway line which services Nara." Dr. James E. Cruise, ROM Director, has approved this commemorative gesture.



A carved wooden figure receives some restoration to its polychromed surface by Gillian Moir of the Royal Ontario Museum. The twelfth-century figure represents a Bodhisattva, or divine attendant of the Buddha, and is one of four major art objects on loan to the Nara National Museum in Japan.

Theatres receive facelift

Some 35 Canadian theatres have received grants totalling \$11.5 million under the Secretary of State Department's theatre capital-grants program in the past five years.

The money has gone towards purchasing, renovation and construction of facilities and equipment, with emphasis put as far as possible on upgrading of auditoriums, security facilities, rehearsal

and audition halls, and facilities for the public.

Eligibility

To be eligible for a grant, a theatre must be a non-profit company performing music, drama, pantomime, ballet, opera or a related discipline. The company must have been operating successfully for three years in order to receive aid for major improvements to existing facilities or for construction of new or additional ones,

and for one year to receive aid for minor improvements. It must also employ both an administrator and an artistic director full-time.

The organization must obtain from municipal or provincial governments, or other sources, additional funding equivalent to that provided by the Secretary of State Department.

In 1976-77, four theatres qualified for grants: Adelaide Court/Cour Adelaide, in Toronto; the Groupe de la Place Royale, in Ottawa; the Grand Theatre in London, Ontario; and Theatre 3 in Edmonton.

Solar heat at the fish farm

Solar energy will soon heat the water of a Federal Government fish hatchery at the Fisheries and Marine Service's Experimental Fish Hatchery in the municipality of Rockwood in Manitoba's Interlake region.

The new installation, which will be in operation by the end of May, is the first practical application of solar energy in a Federal Government facility. It is expected to supply 70 per cent of the annual heating needs of the hatchery, which raises fish for research purposes. Usually, ground water at a constant temperature is pumped into the hatchery and then heated electrically to accelerate growth rates of the fish.

An attractive feature of the project is that the life-cycle costs of the new system are expected to be lower than those of a conventional heating system.

A second experiment to save heating costs at present under way at the hatchery involves recycling water previously heated for use in the fish-rearing tanks. A system has been designed to remove toxic substances produced by trout so that 90 per cent of the water can be re-used.

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Algunos números de esta publicación aparecen también en español bajo el título Noticiero de Canadá.

Ähnliche Ausgaben dieses Informationsblatts erscheinen auch in deutscher Sprache unter dem Titel Profil Kanada.

News briefs

Sandra Post of Oakville, Ontario, beat Penny Pulz of Australia at Palm Springs, California, U.S.A., April 2, on the second hole of a "sudden-death" playoff to win \$36,000, the first prize in the Dinah Shore golf tournament. The Ladies Professional Golfers Association tourney, telecast to millions of viewers, ended on the par-4, 378-yard sixteenth hole. Penny Pulz forced the playoff when she sank an 18-foot putt on the finishing hole, giving her 71 for the day and a 283 total. Sandra Post, who had led all the way, missed a putt of 15 feet on the eighteenth hole, giving her 72 and a score of 283.

Canada is contributing \$1 million through the International Committee of the Red Cross for the purpose of emergency relief to the civilian population of Lebanon in the wake of the current hostilities in that country.

The retail sales tax in Newfoundland will be raised to 11 per cent from 10. Newfoundlanders will pay more to smoke and for some alcoholic beverages, and income tax for small business will be reduced, the province's budget reveals.

The Alberta budget has removed the excise tax on gasoline and other motor fuels for most uses to give Albertans the tangible benefits of the province's petroleum wealth.

Quebec Finance Minister Jacques Parizeau says the province's estimated budget for the coming fiscal year will be \$12.76 billion, up 10.9 per cent from that of the current year, and he hinted that Quebecers could expect a tax cut when the budget is presented next month.

The Federal Government has agreed to provide \$16.5 million as half the estimated costs of a pre-investment design study of a possible \$3-billion tidal power project in the Bay of Fundy. The investment is conditional on the Nova Scotia and New Brunswick governments providing the other half.

Massey-Ferguson Ltd. is withdrawing from the heavy construction machinery business in North America.

Negotiation of an income tax treaty between Canada and Cyprus will begin in May. The Federal Government wishes to obtain information on difficulties encountered by Canadians under the tax systems of other countries that should be taken into account in preparing for negotiations.

Gulf Minerals Canada Ltd. has made another uranium discovery at Collins Bay in Saskatchewan.

Canadian farmers had cash receipts of \$1.2 billion in January, down 0.9 per cent from those of a year earlier.

U.S. visitors to Ontario — already enjoying a premium of almost 12 per cent on their dollar — will be further favoured with the suspension until the end of 1979 of the full 7 percent retail tax on accommodation. "The removal applies not only to hotel and motel rooms and housekeeping units but also to the price of hospitality services sold as packages under the American Plan," says John Rhodes, Ontario's industry and tourism minister. The concession should provide a total tax saving for travellers and tourists in Ontario of about \$30 million in 1978-79.

The National Research Council of Canada recently awarded 83 strategic grants, valued at \$2,400,000 over the first year, for university research on energy, environmental toxicology and oceanography.

Intermetco, a Hamilton, Ontario metal recycling company has developed a new process for recovering non-ferrous metals from shredded obsolete cars. In one eight-hour shift, the shredded material from up to 1,000 automobiles can be processed, leading to the recovery of zinc, aluminum, copper and stainless steel. These metals were previously discarded.

McMaster University's medical school in Hamilton, Ontario, has no exams, no marks and no admission tests. Candidates need a B average in at least three years of any university-level program. It is not, however, an easy place to get into. Applicants must send a detailed autobiographical letter, and those who pass are interviewed by a physician, a layman, a medical student and an administrator. Half of the school's 300 students are women.

Backed by a loan of \$3.1 million from the Export Development Corporation and the Bank of Montreal, a Canadian firm is selling \$3.875-million worth of mining services and equipment to Brazil. Patrick Harrison and Company Limited of Toronto has obtained a contract to sink a 675-metre circular shaft for a copper-mine in the state of Bahia in Eastern Brazil. The sale, which represents about 80 man-years of employment for Canadians, involves eight or so major suppliers and up to 25 sub-suppliers.