### Energy problem solved?

Inventor Sidney T. Fisher of Montreal wants to run electric currents into the ground to tap the energy of Western Canada's huge deposits of coal and oil sands by remote control. The unique energy-recovery process makes use of known methods of underground drilling, electronics, petrochemical production, refining and electric power generation.

One of the interesting things about Mr. Fisher's idea is that it makes use of principles of electricity and magnetism that date back to 1831. Yet Mr. Fisher has obtained several U.S. and Canadian patents on his modern proposal for subterranean use of electrical currents—"induction heating of fossil fuels".

#### Method

The plan calls for use of an underground network of huge electric wires (conductors) to set up an electro-magnetic reaction that would heat up 50-foot seams of western coal and vaporize the ground water, valuable gases and oils, which would be piped to the surface and sold.

The coal would then be ignited to produce more hot gases to spin turbines that would run electric generators. The electricity would be transmitted across the prairies to a tar-sands site where a similar underground electric technique would harvest tar-sands energy.

Mr. Fisher, an electrical engineer, businessman and innovator, sees his process as a kind of non-nuclear chain reaction of below-the-earth processes that would glean energy from fossil fuel beds by the "most efficient methods ever devised".

In his view, Western Canada would only be the beginning.

U.S. oil shales, says Mr. Fisher, contain more than three times the energy reserves of Canada's oil sands. And the world coal fields that he has his eye on contain four times as much energy as the U.S. oil shales. Using his process, Canadian coal fields would still last 200 years, he adds.

Mr. Fisher, his two brothers, two consultants each from the University of Toronto, McGill University and the Calgary oil industry, recently completed a three-year study on the Fisher process, and they are now working on some refinements.

The estimated cost of producing crude oil from the U.S. and Canadian coal-oil sands development linkup is about \$3 a

barrel, Mr. Fisher notes. The current price is about \$12 a barrel on the world market.

Mr. Fisher points out that the next stage in his program would be a \$1-million laboratory project.

A commercial 125,000 barrel-a-day operation would cost about \$2 million – \$1 billion for the coal site and \$1 billion for the oil site, Mr. Fisher notes. Such a full-scale recovery operation could be operating as early as 1985, and by the year 2000 such processes "could replace nuclear plants".

If the induction-heating method is adopted "we would be heading into an era of energy abundance", he observes. Current projects such as the Syncrude oil sands effort would be only a drop in the bucket compared to the output possible for his system.

#### World's largest ski marathon

The annual Canadian Ski Marathon, believed to be the world's longest cross-country ski tour, wil take place from Lachute to Cantley, both in Quebec, on February 18-19.

The marathon trail is 160 km (100 miles) long, divided into 16-km (ten-mile) sections.

In addition to entries from every Canadian province and both territories, entries are expected from the United States and Europe.

As in previous years, there will be Coureur de Bois awards; a bronze medal for skiing 160 km; a silver medal for skiing 160 km with a 5.4 kg (12-pound) ruck-sack; and a gold medal for skiing 160 km with a 5.4 kg rucksack and for camping out overnight.

# Accident compensation for former prison inmates

Inmates of federal penitentiaries will soon receive compensation for continuing physical disabilities if injured while working or training while in prison. Payment of compensation benefits will begin after the inmate is released.

The purpose of the program is to help former inmates support themselves and their dependents after release when their earning power may be reduced by the effects of injury.

Inmates will not be entitled to claim

compensation for disabilities arising from self-inflicted injuries or injuries received while participating in riots, disorders or attempted escapes. Nor will injuries resulting from sports or other recreational activities, or which do not cause a continuing disability after discharge, be allowable.

The amount of compensation will be based on the federal minimum wage for adults and payments will vary according to the degree of disability. For accidental death, the program provides an amount for funeral expenses, a lump-sum payment to the widow or widower or common-law spouse, and monthly pensions to dependents

Previously, inmates of federal penitentiaries had no established means of seeking compensation for disabling injuries suffered by accident while in prison. Their only recourse was to seek a judgment in court for damages or compensation on compassionate grounds from the Canadian Penitentiary Service.

## Heintzman grands temporarily silent

Heintzman and Co. of Toronto has reluctantly decided to halt production, for the time being, of its renowned grand piano. The family-owned company, which has been in business for 127 years, will concentrate on meeting the demand for its upright model, whose retail price of from \$2,400 to \$2,900 is considerably cheaper than the grand model's \$9,500.

The high cost of labour and materials, as well as growing competition from Japanese and Korean imports, contributed to the demise of the Heintzman instrument. The hand-crafted piece, with 10,000 moving parts and a top made from 13 layers of hardwood, required about 220 man-hours for completion.

The Heintzman family's attention to detail has won international appreciation — an enchanted Queen Victoria, who first heard the piano at London's Royal Albert Hall in 1866, marvelled that "such beautiful musical instruments could be made in the colonies".

Until Heintzman and Co. re-enter the market for grand pianos, three other Canadian-owned piano manufacturers — Sherwood Manning in Clinton, Ontario, Willis Pianos Ltd. and Lesage Pianos Ltd., both of St. Therese, Quebec — hope to fill the requests in Canada for about 2,000 grands a year.