Prize winning inventions

A group of first-year applied science students from the University of Sherbrooke in Quebec have developed a device that promises to end the occasionally long wait for restoration of power to damaged hydro lines in the province. The inventors, who won first prize in the "engineering projects" competition held recently at the university, have produced a "gradulec", a device for domestic use that consists of an electric circuit installed on a control panel which is activated whenever there is a failure.

The device restores power gradually, but more quickly and evenly in a given area than is now possible. It de-activates all the circuit breakers when there is a power failure and later controls the stage-by-stage restoration of power in order of priority. A rotary system is used for electrically heated homes.

Other winners

A combination haversack and tent, called a "havertent", weighs less than the conventional tent in its collapsed form, and offers more space than many when erected. The team submitting this invention was awarded second prize in the competition.

Third prize went to the group that designed a greenhouse for use in Povungnituk, an Inuit community 2,250 kilometres north of Montreal. Permafrost, cold temperatures, winds and unpredictability of sunny periods were some of the obstacles taken into account by the designers.

Fourth prize was awarded to the team which developed a safe system of anchoring hockey nets to ice, to reduce the risk of injury to players. A "log feed" system for fireplaces took fifth prize.

The students carried out their projects under the supervision of four professors and several technicians from the faculty's specialized mechanics section. Professor Peter Jones feels the course, which enables students to work as a team for an entire term, fulfils a specific need and offers experience in submitting oral and written reports frequently demanded of graduate engineers.

First prize (\$150) was offered by Dominion Textile and second prize (\$100) by Alcan. Three other prizes, of \$50 each, were paid by the university's research and scholarship office.



In the event of a power failure, the "gradulec" restores power gradually.

Emergency relief through Red Cross

Canada is making grants of \$360,000 to the League of Red Cross Societies (LRCS) and to the International Committee of the Red Cross (ICRC). The grants will assist Zairois refugees in Angola, alleviate some of the more pressing problems of the inhabitants of the Ogadan region of Ethiopia and help the ICRC to continue in its traditional role as provider of humanitarian services.

The LRCS is receiving \$200,000 to help the some 150,000 Katangans of Zaire's Shaba Province who are now living in Angola. Shaba has long been the scene of widespread civil conflict, which has caused many of its civilians to seek refuge in Angola where they have tribal affinities. The LRCS estimates that at least 50,000 of the refugee Katangans are destitute.

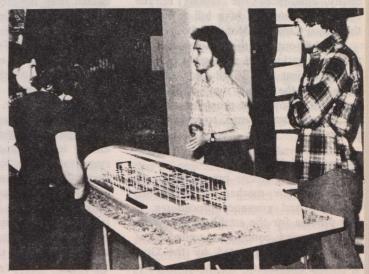
Canada is granting the ICRC \$50,000 for use in the Horn of Africa, where recent military events have caused some 300,000 Somali inhabitants of Ethiopia's Ogadan to leave the towns and to seek refuge in the countryside. The grant brings Canada's total donations to the area to \$250,000.

The ICRC is also receiving a \$110,000-grant to help bolster its traditional role as protector of prisoners-of-war and political detainees and as provider of assistance to their families. The needs in this area have increased greatly as a result of the growth of liberation movements.

The Canadian Red Cross, distributor of the funds, has donated \$10,000 to the relief efforts in the Ogadan.



When the fire dies down, a log is released from a semicylinder onto the ramp and down to the fireplace grate.



The "closed" greenhouse is designed to enable the inhabitants of a village in northern Quebec to grow vegetables all year round.