Canadian miners must be prepared for any emergency. Here a mine rescue team at the Frood-Stobie mine at Copper Cliff, Ontario, receives instructions during a regular training period



 Iron mines at Steep Rock, Ontario. This new Steep Rock development involved the draining of a 15-mile long lake and the drilling of a 2,000-foot tunnel through solid rock deposits of coal. The Selkirks are known for base metals, and the great Sullivan Mine of the Kootenay district is one of the largest lead-zinc producers in operation. The most spectacular new project has been the establishment of an aluminum industry at Kitimat on the Pacific Coast. Here, an immense hydroelectric potential was exploited by tunnelling through the Coastal Mountains and tapping the water storage of the interior. This may give British Columbia its third largest city and the success of the project will undoubtedly encourage other electrometallurgical industries to move farther north.

The Canadian Shield, sweeping in an enormous arc around Hudson Bay, covering parts of six Canadian provinces, most of the Northwest Territories, and roughly half the country, is now recognized as the treasure chest of Canada. Its southern borders are outlined by a series of boom towns, each dependent on one of the varied resources of this bleak rockland. The Shield produces ninetyfive per cent of Canada's copper, eighty-four per cent of its iron, seventy-five per cent of its pulp and paper, and all its nickel, cobalt, platinum, titanium, and uranium.

Some of the Shield's resources, such as gold, nickel, lead, silver, zinc, pulp and paper, and hydro-electric power, have been known and exploited for years. Others, such as iron, titanium, and uranium, have only recently been developed.

The Shield's pulp and paper production provides Canada with its greatest industry, accounting for thirty-four per cent of the value of its exports. Most of it is concentrated in the Provinces of Ontario and Quebec.

Two recent iron discoveries, one at Steep Rock, Ontario, the other on the Quebec-Labrador border, are expected to affect greatly the Canadian economy of the future. The Quebec-Labrador iron development was made possible by the investment of \$235 millions, much of which went to build a 360-mile railroad across the Shield north from the St. Lawrence River. The Steep Rock development involved the draining of a fifteen-mile-long lake and the drilling of a two-thousand-foot tunnel through solid rock.

The rivers that pour down from the Shield can yield millions of horsepower. Some, such as the Ottawa, the St. Maurice and the Saguenay, have already been developed and support large industries. The harnessing of the Bersimis in Quebec is expected ultimately to produce approximately a million and a half kilowatts. Even more spectacular is the Hamilton River in Labrador whose Grand Falls, like the Yukon River, may ultimately produce three million kilowatts of hydro-electric power.

But great sections of the Shield are still only imperfectly explored and developed and much of the future of the nation may rest in resources still undiscovered in this vast area.