gold-arsenic, pyrite, chalcopyrite, sphalerite, iron and titaniferous ores, corundum, apatite, mica, molybdenite, feldspar, graphite, all associated with granitic rocks or their differentiates. The most important period of mineralization was the period of granitic intrusion preceding the deposition of the Huronian rocks, though the later, or Killarney, granite intruded in Keweenawan time may, in part, be responsible for some of the deposits. (3) Nickel, copper, gold, and silver ores, and deposits of barite, associated with dykes, sills, and other intrusive masses of gabbro, and norite of late Precambrian age. (4) Ores of lead and zinc and deposits of barite, fluorite, and celestite in veins cutting Precambrian rocks for the most part, but also in places cutting Ordovician sediments along the margin of the Shield and hence deposited in post-Ordivician time.

The general succession of rock formations in the better known geological sub-provinces of the Canadian Shield is indicated in the following tables. The main mineral occurrences are shown opposite the country rock in which they are more commonly found. It must be emphasized, however, that a deposit is not necessarily confined to any one formation or rock type. For example, where granite is the source of the solutions that produced a deposit any of the older rocks that it intrudes may be mineralized.

1.—Economic Geology of the Canadian Shield.

Region and Geological Formation.	Mineral Deposits.	
	Minerals Present.	Geological Habit.
Timiskaming Region and James Bay Slope.		
PRECAMBRIAN—		
Keweenawan—		
Olivine diabase	—	
Killarney granite	—	
Diabase, norite	Copper, nickel	Differentiates of norite.
Conglomerate, sandstone	Silica, cobalt, arsenic	In veins genetically related to the diabase.
Whitewater series—		
Conglomerate, tuff, slate, sandstone	Zinc	Veins in tuff.
Cobalt series—		
Quartzite, conglomerate	Silica	Upper part of Lorraine quartzite.
Bruce series—	Silver, cobalt	In veins related to diabase.
Quartzite, limestone, conglomerate (Granite intrusions)	—	
Timiskaming series—		
(Windegokan, Pontiac, etc.) conglomerate, greywacke, arkose.	Gold	In veins related to intrusive granite.
Schist-complex—		
Volcanics and derived schists	Gold, copper, arsenic	In veins.
	Copper, gold, zinc, pyrite	Replacements related to granite.
	Iron	Iron formation.
Northwestern Ontario.		
PRECAMBRIAN—		
Killarney granite	—	
Diabase	Silver, lead, zinc, barite	In veins related to the diabase.
Kaministikwian—		
Osler, conglomerate, sandstone, tuff	Copper	Veins and amygdules.
Sibley sandstone, shale, tuff	Silver	In veins.
Animikie, shale, iron formation	Iron	In beds.
Algoman granite	Lithium	In pegmatite dykes.
Steeprock series—		
Conglomerate, sandstone, limestone, slate, volcanics.	Iron	In beds.
Laurentian granite	Gold	In veins.
Keewatin, volcanics	Gold, copper	In veins.
	Iron	In beds.
	Copper, nickel, platinum	Replacements derived from the crystallizing magma of the intrusive granites.
Couchiching, mica-schists, garnet-gneisses	—	