

**Coal.**—The mapping of the northward extension of the coal bearing strata of the Crownsnest coal field was continued in 1918. It was carried as far as the headwaters of Oldman and Livingstone rivers within the Rocky mountains and of Willow creek and tributaries in the foothills. According to BRUCE ROSE (1) coal similar to that mined in the Crownsnest Pass is found but is not mined. It is not possible to give measured sections nor to correlate the seams with those that are mined to the south, but seams ranging in thickness from sixteen feet to five feet, or less, were observed. In a report by J. S. STEWART (1) on the "Geology of the disturbed belt of southwestern Alberta" attention is directed to the coal seams of the Belly River and St. Mary River formations of the area. These have been opened by tunnels to supply the local demand for domestic fuel.

The results of investigations carried on in the southern part of the Sydney coal field were presented by A. O. HAYES (1), who also reported on work done in the Chimney Corner and Ste. Rose coal areas of Inverness county, in the New Campbellton area, Victoria county, and the Kemptown area, Colchester county, Nova Scotia.

**Cobalt.**—A report on cobalt written by C. W. DRURY (3) gives notes on the various cobalt minerals, their occurrence throughout the world and more particularly in Ontario, the metallurgical processes by which the metal is recovered, its chemistry and uses. An interesting occurrence of cobalt associated with gold-bearing arsenopyrite and molybdenite in a vein eighteen inches to four feet wide on a claim adjacent to the Rocher De Boule properties of Hazelton district, British Columbia, is described by J. J. O'NEILL (1). In the first eight-five feet of a tunnel driven on this vein four to eighteen inches of solid sulphides were exposed, which were said to average \$80 in gold and two and one-half to five per cent of cobalt.

**Copper.**—With the exception of a paper in the Canadian Mining Journal by R. E. HORE on the Huntingdon copper mine of Quebec, and a description by A. L. PARSONS (3) of copper deposits of northwestern Ontario, nearly all the reports of 1919 dealing with copper deposits of Canada are those descriptive of ore bodies in British Columbia. The reports of the Resident Engineers (5) of the Mineral Survey districts of British Columbia contain considerable matter of interest to geologists, in addition to the usual information regarding development work at the various mines.

The Rocher De Boule mine is the most important copper mine of the Hazelton district. J. J. O'NEILL (1) states that the country rock was subjected to fissuring at two different periods. Brecciation of the rock occurred on certain zones along the line of the first fissuring. The brecciated material suffered a certain degree of alteration and the fissure was then filled with a siliceous cement. A second fissuring in the same plane then followed. Ore-bearing solutions entered these fissures and deposition took place mainly in the brecciated zone. Chalcopyrite and hornblende constitute ninety per cent of the vein material.