

## ABSTRACTS

**The Geology of the East Pool Mine.** By MALCOLM MACLAREN. Mining Magazine, London, Vol. XVII., p. 245, 1917.

The oldest rocks are slates (killas) of Ordovician age, intruded by sills of greenstone (probably of Carboniferous age). This series is intruded by a tourmaline-muscovite-biotite-granite along which the slates show evidence of contact-metamorphism and this granite is regarded as of post-Carboniferous age. There are also dikes of granite-porphyr (elvans) in the slates. Latest of all are mineral-bearing lodes, which are regarded as the product of emanations from the granite magma. These lodes are not definitely described as to their petrographic character. A plan map and vertical section of the lodes is given, showing a complex of nine lodes dipping northerly at angles of from 29° to 75° and four lodes dipping southerly at angles from 70° to 80°. The deepest working is on the New North lode, depth 2,058 ft.

The most important economic minerals of the East Pool lodes are as follows: Cassiterite, wolframite, chalcopyrite, arsenopyrite, bismuthinite, azurite, stannite, scheelite, fluorite and some cobalt ore.

The downward succession of the metals is roughly: (1) Copper ores from the surface to 840 ft.; (2) tungsten ores from 840 to 1,200 ft.; (3) tin ores from 840 to 2,040 ft. in the south-dipping lodes and possibly to 2,700 ft. in the north-dipping lodes.

Maclaren thinks that there may have been a blende-galena zone now eroded above the copper zone. He also notes that on the 1,176-ft. level of the Rogers lode, scheelite occurs in wolframite along cleavage cracks and as veinlets.

In the new Rogers lode, which was discovered underground, the average content of tin and tungsten ore per ton was as follows:

	Lbs. per Ton.	Length of Shoot on Level, Feet.
960-ft. level	25.4	391
1,140-ft. "	83.7	729
1,272-ft. "	110.9	625
1,440-ft. "	61.0	472

H. W. TURNER.