

of some altered basic rock, with no prevailing direction, that are found more frequently in the sedimentary strata than in the granite, sometimes as intrusive sheets along the bedding planes, elsewhere following joint planes, even at times penetrating quartz veins. These dykes are the source of the tin, which is found only as the binoxide, cassiterite, or "tin-stone," running irregularly through the gangue in fine "stringers" or "leaders," that often swell out into large bunches, or else the ore is finely disseminated throughout the whole mass. As would be expected, more or less "stream tin," from the disintegration of the dykes, has been obtained by washing the alluvial bottoms of the gullies.

In mining, some of the claims have done considerable exploration work, and the ore has generally been found associated with galena, iron pyrites and more or less arsenical pyrites. The ore is concentrated to a form of rich matte, or "black tin," preparatory to shipment to the smelters, by roasting it in large calciners, and from 1884 to 1888, from 4,851.5 tons of ore crushed, the yield of black tin was 352.6 tons.

This Coolgarra tin deposit is interesting and peculiar from the fact that the mineral is found in these dykes of basic rock, while in other parts of the world tin is found for the most part in granite, in "stockworks," or masses traversed by many minute veins which necessitate the working of the whole mass to gain the ore. In Saxony large areas of porphyry have been mined for tin, but we can find no record of tin being found under such conditions as those described above.

It is strange that as yet throughout the world the areas in which tin is found are so few and limited in size, and that on this continent, which has been so prodigal in its production of all other metals, tin in sufficient quantities to be mined profitably is almost unknown. It holds such a strong place in commerce, where it is of such great economic use in tinning iron plates, and for the manufacture of bronze, bell metal, pewter, Britannia metal, etc., that there is a firm and growing demand for it, and any new area reported as productive of this metal immediately receives great attention, though many false alarms have resulted from men mistaking zinc blende, or "Black Jack," for tin stone, or by men manufacturing alluvial tin deposits, or placers, by importing several barrels of ore from Cornwall, and sagaciously scattering it about at some suitable spot, deluding some unsuspecting speculators into buying what they thought was better than a gold mine.

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