

1916

## [Gold and Silver in] Brazil

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*Brazil* (By Benjamin L. Miller and Joseph T. Singewald, Jr.).—  
Although Brazil is not primarily a mining country, as are several of the

other countries of South America, it nevertheless possesses considerable mineral wealth. Of the developed mineral resources gold is of foremost importance and no doubt will retain this position until means are devised for the development of the extensive deposits of iron ore.

Gold has been found in every one of the states of the Republic but it is in Minas Geraes that the greatest amount of mining is carried on. The first gold mining of Brazil was confined to the placers and even after 200 years of more or less continuous gold washing along the streams, the total annual amount recovered from the placers is considerable. Most of this is obtained from the smaller streams where one or two men dig the gravels with shovels and wash them in their *bateas*. Some attempts have been made during the past few years to work the gravels along some of the larger streams by means of dredges but so far with little success. During 1915 two companies, financed by American capital, were engaged in investigations along the Jequitinhonha River with the intention of later constructing dredges if the prospect work yielded favorable results.

The Jacutinga workings, where the gold occurs in fine stringers extending through loose flakes of specular hematite, have all been abandoned. In former times these deposits, worked by hydraulic methods, yielded large quantities of gold.

At present lode mines are the most productive gold mines of Brazil. During 1915 two mines were in operation, the Morro Velho mine of the St. John del Rey Mining Co. located at Villa Nova de Lima and the Passagem mine of the Ouro Preto Gold Mining Co., near Ouro Preto. Both are in the state of Minas Geraes.

The Morro Velho mine has the distinction of being the deepest mine in the world, its present depth being 5826 ft., while plans are being formulated to extend it still further by sinking another 1200-ft. shaft making a total depth of 7026 ft. The tenor of the ore and the width of the ore-body have undergone little change with increased depth and the limits of profitable mining may not be reached for many years. On account of the increasing heat with depth the company plans to install a plant for cooling and drying the air before it is forced into the mine. According to the last report at hand, during the year ending Feb. 28, 1915, there was 199,234 tons of ore mined with an average value of about \$11 a ton. On this the profits were \$700,287.12. At that time the ore reserves amounted to 699,704 tons.

The Passagem mine continues to develop and during 1915 was engaged in the erection of a new hydro-electric plant to supply the additional power needed. The ore averages about \$7 a ton. The total amount mined during 1914 was 80,138 tons and during 1915 it was undoubtedly somewhat greater although the exact figures are not at hand.