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[Sulphur in] Chile

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FOREIGN SULPHUR INDUSTRY

Chile.—(By Benjamin L. Miller and Joseph T. Singewald, Jr.). During 1915 the sulphur industry of Chile exhibited unusual activity and the production was much in excess of any previous year. Plans for still further increasing the output were formulated, and if carried out, will require the companies to look about for new markets for their product. At present the vineyards of south-central Chile consume practically the entire production.

Chile, and also Peru, contains a number of undeveloped sulphur deposits which, as yet, have received little attention. The sulphur is of volcanic origin and is found high up on the flanks of the recent extinct volcanoes that are such prominent features in the western range of the Andes. Many of these mountains still have active fumaroles and the sulphur is continually being formed from the sulphurous gases in the interstices of the rocks.

The greatest obstacle in the working of the deposits is due to the elevations at which they occur. Few of them are less than 14,000 feet above sea-level and some of the best are about 20,000 feet. The difficulties of working these highest deposits are so great that no efforts have been made to operate them. So far as known the highest deposist now worked are on the top of Mt. Olca at an elevation of 18,500 feet and on Mt. Chupiquina at about 19,000 feet.

The difficulties of transportation have hindered the development of the sulphur industry of the country and now, with two railroads crossing the belt, this has been in part remedied, but the greater number of deposits still remain untouched.

The active regions are two in number, the Ollague district along the line of the Antofogasta-La Paz Railroad and the Tacora district through which the Arica-La Paz railroad passes.

The Ollague workings are on the steep south slopes of Mt. Ollague a short distance below the great active fumarole that is continually emitting sulphurous gases and steam visible twenty miles away. There is a large quantity of practically pure sulphur, which alone is taken, while the rich sulphur rock or caliche, is discarded. The sulphur is taken to the railroad station at Ollague on the backs of llamas or burros.

On Mt. Olca which lies about 8 miles east of Yuma, a station on the Collahuasi branch railroad, and through the summit of which the Chilean-Bolivian boundary line passes, there are two companies engaged in mining sulphur. Here also only the pieces of practically pure sulphur are sacked for hauling to the railroad.

In the Tacora district four companies were in operation during 1915. Here the caliche is of lower grade and all of it is refined by volatilization before shipment. One company, Muecke and Co., have an aerial tram from their deposits high up on Mt. Chupiquina to Chislluma, about 5 kilometers away, where their oficina and refining retorts are located. Another company, Espada Hermanos, was engaged during the year in the construction of a narrow gauge steam railroad 22 kilometers in length to haul the caliche from the mines on Mt. Tacora to their oficina located along the Arica-La Paz railway between Ancora and Humapalca.

The Tacora district contains an abundance of yareta, a moss-like plant that forms thick compact masses on the rocks and contains much resinous material which makes it an excellent fuel. Without this useful plant growth the sulphur could not be refined in the district with profit