



The Remains of the Old Church which Contains  
"The Virgin of El Cobre."

## "EL COBRE" MINES

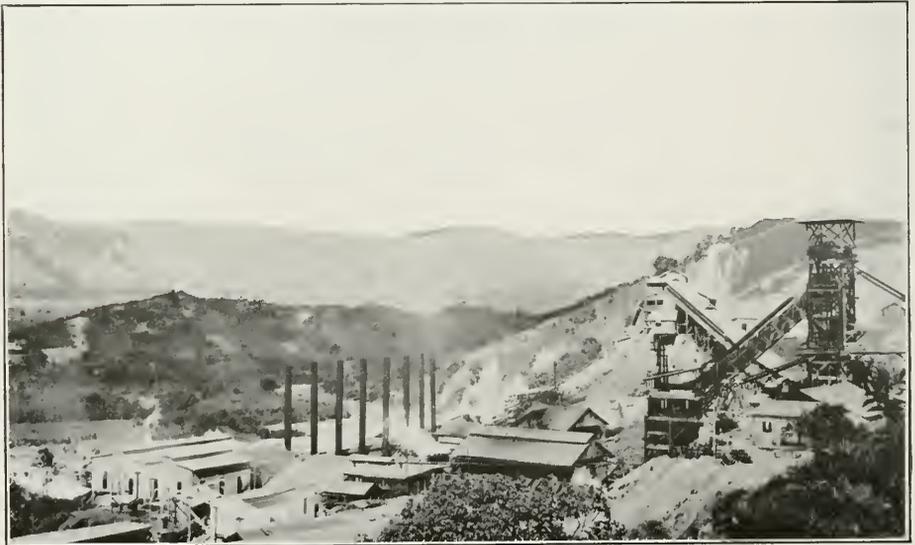
These mines are said to be the oldest copper mines in the Western Hemisphere, located in the mountains west of Santiago, and history says they were first developed in the year 1620, by the Spaniards, who abandoned them to the English in 1837, and were worked until 1865, when they again remained idle until 1903, when the present American holding company started operations. They are best reached from Santiago by boat across the bay to the mining railroad station, from which point five trains operate each day to the town of El Cobre and the mines fifteen miles away. Along the rail route to the mines can be seen evidences of the old abandoned railroad and wrecked bridges used many years ago during the English occupation and as the train nears El Cobre can be seen the old location of the mines with the building apparently intact used by the English Company and now abandoned.

At first sight the town of El Cobre looks the typical mining town and as if it had experienced the usual "mushroom" growth, but it must not be overlooked that this has been a busy and growing community during the past three years, owing to the unprecedented demand for all grades of copper, due to the European war. The place also strikes one as being unbearably hot—situated as it is in the canyon with mountains on all sides—but the inhabitants explain that due to this location they get the pleasant evening breezes which find a way through these canyons or cuts from the sea.

The visitor to El Cobre for the first time is attracted by the most unusual sight of an old church in ruins which can be seen on the summit of one of the distant hills, and wonders how it remains standing in ruins, as it appears, and we are told that it is the wreck of a very old Church



The Town of El Cobre.



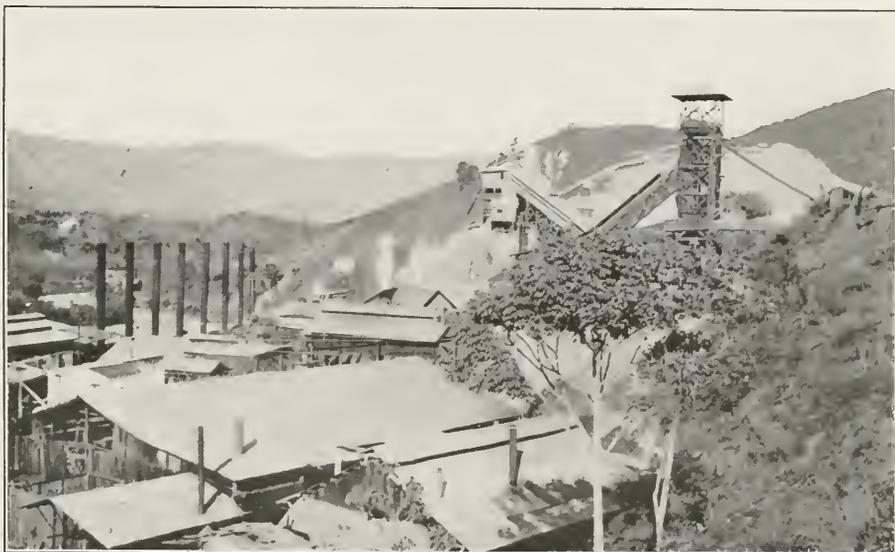
General View of Mines and Plant, El Cobre.

which was erected by an order of Spanish priests and has fallen down due to the many excavations and mining operations throughout the hill underneath. This old chapel is known as the "Virgin of El Cobre" and contains an image of the "Virgin Mary" which has stood unscathed throughout the years.

The mining camp proper consists of offices, power house, laboratory, shops, foundry and concentrators, and in the foundry there are facilities for making many large copper composition castings from the concentrated ore taken from the mines. The plant is in charge of Mr. W. H. Emerson, General Manager, and he is assisted by a staff of Americans and Englishmen. Several hundred men are employed in the mines at present and the mining labor is entirely Spanish from the Gallego province of Spain, and these Gallegos will not work with Mexicans or Spaniards from other sections of Spain, or in fact any other foreign class of labor, on account



Hills Showing Shafts and Mining Operations.



General View of Mines and Plant.

of racial prejudice, and the company considers these Gallegos to be the best class of mining labor owing to their good habits and to the fact that they are contented, and they are employed in preference to others.

The Cuba Copper Company holds many claims for the ore deposits in the hills about El Cobre, and at present four of these locations are being actively worked. The operations are what is known as "shaft and tunnel" work and the greatest depth at which they are now taking out ore is six hundred feet below the surface of the hills. Owing to the pressing demand for copper at the present time, they are working two shifts of men day and night, and are taking out hundreds of tons daily which run from six to eighteen per cent copper. The mines are equipped with elevators and at the bottom of each main shaft is a large pump which is constantly pumping the water out of the mines.

The rock-ore is brought to the surface in a skip and dumped into a chute from which it is fed into a crusher; from the crusher the rock-ore is carried on a broad apron conveyor to the rolls, where it is pulverized. The pulverized ore is then delivered to a series of flotation cells, where it is mixed with compressed air, water and crude oil. After an agitating process this