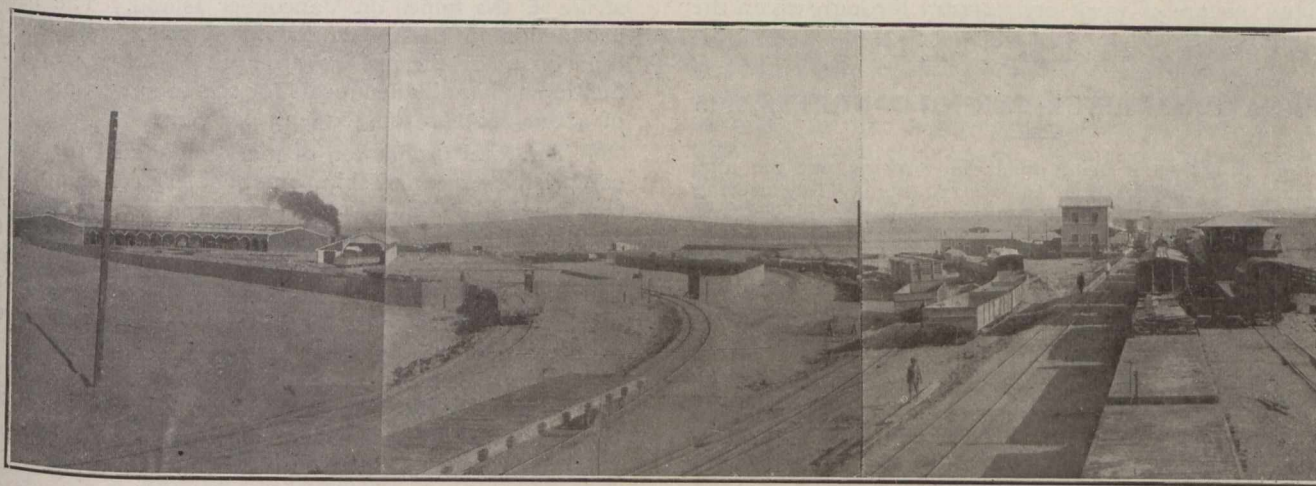


The northern section is built across the great Chilean desert on which for the whole distance of 450 miles one cannot find a blade of grass or a living insect. In fact,

There was only one bridge on the whole line, this being at Quillagua, across the Loa River valley. As it never rains in the country there are no streams to cross.

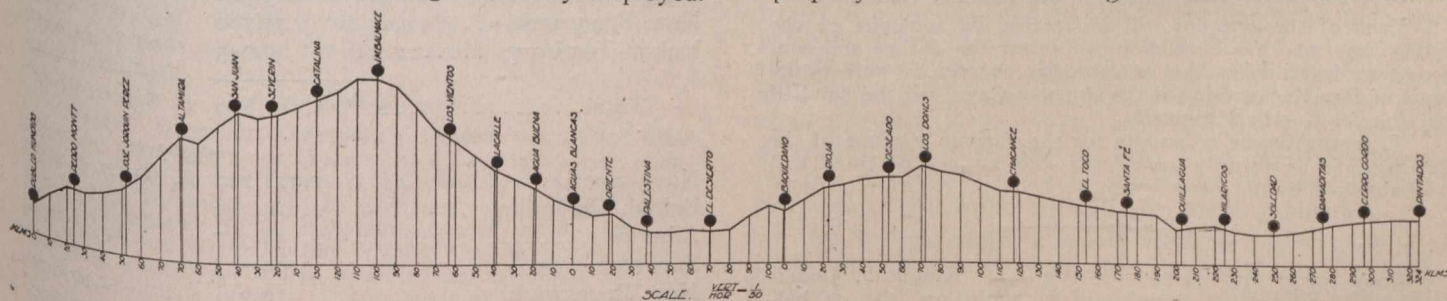
As the sections were accepted by the Government, and the decree issued, the contractors were obliged to operate these accepted sections. Before the final ac-



it is absolutely devoid of life. Darwin, in his travels, which included the Chilian desert, states: "It is the most perfect desert in the world."

In building the line, the water question was one of the most serious problems, but by hard work in drilling the contractors were eventually rewarded, and secured a good supply from wells at different points on the line. In some places it was found necessary to erect condensers as the only water obtainable was salt. These plants yielded a supply of 15,000 gallons per day, and gave excellent satisfaction. At some of the wells, owing to the hardness of the water it was necessary to erect softeners, the water first passing through chemicals then to the tank for engine supply. During construction water was often hauled 60 miles in order to supply the workmen doing the grading. The labor employed was native, and a better class of railroaders would be hard to find, from five to seven thousand being constantly employed.

The whole of the work was under the supervision of the Chief Government Engineer, Sr. Augusto Knudsen, who spared no pains to see that the work was well and properly done. The chief engineer for the concessionaires



As nothing grew in the country, all supplies of every sort and description were imported, the majority of the ties, telegraph poles and timber for stations, etc., were obtained in British Columbia, although a few ties, etc., came from Southern Chili. The stations were constructed with timber frame covered with corrugated iron; matched board partitions. This was the rule with all buildings except the main machine shops at Baquedano which were of steel frame covered with corrugated iron. Tanks and

was Mr. W. B. Leane, A.M.I.C.E., with headquarters at Santiago. The headquarters of the contractors, Messrs. Macdonald, Gibbs and Macdougall, was in Antofagasta, the chief sea port of Northern Chili. Here they employed a large staff, the heads of the different departments being either English or Canadian. The whole work was under the direct control of the general manager. The partners, Messrs. Arthur C. Macdonald, a Nova Scotian by birth and a graduate of the Royal Military