



Fig. 23 represents a small standard railway station

When the company took over these mines in 1907, their combined daily output was three hundred tons, and now it is over twenty-six thousand tons. The Fushun mine is the largest open cut in the world. A good view of it is given in Fig. 25. The vein, which is composed of excellent splint coal, is from 80 to 420 feet thick, averaging 130 feet, and covers an area of 23 square miles, the estimated total deposit being over a billion tons. There is no similar coal reserve to equal it anywhere in the world. Nearly one-half of the output is consumed in Manchuria, the remainder going to Korea, China, Japan, the South Seas, and steamers in Manchurian ports.

At the Fushun mine, there are vast deposits of oil-shale directly overlying the coal bed and covering some ten square miles in area, with a maximum thickness of 450 feet. It is estimated to contain over five billion tons of ore, which bears, on the average, six per cent of oil. The company has arranged to set up a shale-oil plant at Fushun with an annual capacity of 70,000 tons of crude oil and by-products, at an expenditure of 8,500,000 yen. In addition, there will be produced per annum some 18,000 tons of ammonium sulphate and 7,000 tons of paraffin.

Iron ore was found in great abundance at Anshan in 1909; and some large-scale preparations for its mining by a Japanese

company were then made; but they were not carried out, because of a sudden drop in the price of pig-iron from 440 yen to 50 yen per ton, due to the world-wide depression after the Great War. Owing to economic studies and the invention of special apparatus by certain Japanese scientists, the annual production has been gradually increased in nine years from 30,000 tons to 200,000 tons; and lately it has been contemplated to build another furnace that would add 100,000 tons per year to the output.

Afforestation

Previous to the Japanese occupation, the Manchurian forests had been ruthlessly sacrificed by both the Chinese and the Russians; but the newcomers immediately began afforestation. They planted over eighty million trees on 143,000 acres in the leased territory; and the railroad company distributed 32,500,000 saplings for afforestation in its zone. From the fine results of tree-planting in Korea by the Japanese, that I saw some eight years ago, I anticipate great success for their Manchurian afforestation venture.

Experimental Farms

The Manchurian methods of farming have changed but little in many centuries, as the native farmers do not select better-than-average seeds, breed up their live stock, improve the ancient methods of manuring, or reclaim virgin lands; but when the Japanese began their work, the