

manufacture of glass in South Manchuria, where the requisite silicious stone and limestone are abundant. These have not been operating many years, but they give promise of worth-while accomplishment.

There are various works for the manufacture of timber and lumber for both home consumption and export, the average production per annum being about 500,000 M. ft. B.M., of which forty per cent is exported. On the other hand, there is an annual importation of about 70,000 M. ft. B.M. of timber.

Waterworks and Sewerage

The company has paid special attention to the building of waterworks for its cities and leading towns, while artesian wells have been driven to meet the needs of the inhabitants of the smaller communities. Modern waterworks have been constructed at Dairen, Mukden, Port Arthur, Liaoyang, Antung, and other leading towns.

An up-to-date system of sewerage, costing some three millions of yen, has been established at Dairen; and smaller ones have been constructed along the zone at all important cities and towns.

Power Plants

The South Manchuria Electric Company, an off-shoot of the South Manchuria Railway Company, owns and operates power and light plants at Dairen, Mukden, Chanchung, and Antung, the total output for the year 1928 being well over 100,000,000 kw.-hr. The company declared an eight-per cent stock dividend for that year upon a paid-up capital of twenty-two million yen. All the Manchuria power plants, as far as I can learn, are operated solely by the combustion of coal.

Harbors and Wharves

The company has built harbors and wharves at Dairen, Yingkon, Antung, Port Arthur, and Shanghai, costing, all told, some sixty million yen, of which fifty-three millions were spent at Dairen. Figs. 16, 17, 18, and 19 afford a good idea of what an excellent piece of construction is the harbor of that city with its various wharves and the breakwater.

It is, throughout, an excellent piece of engineering work, and stands as a lasting monument to Japanese technical ability and constructive skill.

Steamship Lines

The Dairen Steamship Company, another off-shoot of the South Manchuria Railway Company, has an authorized capital stock of ten million yen, about one half of which is paid up. It maintains five lines of navigation, viz., the Dairen - Tsingtao - Shanghai line, the Dairen-Tientsin-Antung line, the Dairen-Hongkong line, the Tsingtao-Shanghai line, and the Dairen-Lungkou (near Chefoo) line. It owns 24 steamers with an aggregate tonnage of some 57,000 tons and charters eight others of some 23,000 tons—a total of over 80,000 tons. Some of these ships are shown in Figs. 17, 18, and 19.

Summer Resorts

The company has established fine summer resorts at Star Beach in the town of Hoshigaura, at several points along the coast between Dairen and Port Arthur where the beach is sandy, and at a number of hot springs, where the temperature of the issuing water is 98 degrees F. It is claimed that the water from these springs is specially good for rheumatism and nervous troubles.

Institutions of Learning

Throughout the entire peninsula, the company has provided excellent schools of all grades, colleges, universities, technical institutes, medical institutions, hospitals, and museums for the education of both Japanese and Chinese, spending money thereon with praiseworthy liberality. The Japanese nation certainly believes in the efficacy of sound and thorough education. It is a fact, not generally recognized, that the percentage of illiteracy in Japan is less than that of any other country in the world—amounting, it is said, to less than one per cent.

The educational system of Manchuria, though fundamentally similar to that of Japan, was modified so as to meet the peculiar conditions that exist in the former country. Grammar schools and high schools are provided separately for Chinese, Koreans, and Japanese, while all