(about 1,242,000 gallons), but in 1888 the Nihon Sekiyu Kaisha and a few other petroleum companies were established, and the output greatly increased.

The Nihon Sekiyu Kaisha purchased drilling machine from America in 1888, and so gave a great impetus to the development of the oil industry in this country. During the subsequent three years, as many as 200 petroleum companies and corporations were formed.

In 1900, the International Oil Company was established as the first oil company under foreign management in this country. The production of oil steadily increased, and whereas the annual output at the time of the Sino-Japanese War (1894-95, was in the neighbourhood of 151,000 koku (1 koku is 39.7033 gallons), it swelled to 1,187,000 koku in 1940, the year in which the Russo-Japanese War broke out. Thus in 10 years the production increased by 1,036,000 koku; in 1908 the output grew still further to 1,800,000 koku.

But since 1908, the output has gradually decreased, and in 1911 it fell to 1,500,000 koku. The gradual decrease of the output was because the drilling machines were useless in the operation of deep wells.

In 1912, the Nihon Sekiyu Kaisha purchased the rotaries, and commenced new operations by engaging American engineers. On this account the volume has again increased since 1912. During the four years from 1912 to 1917, the annual production swelled to more than 2,000,000 koku, due to the introduction of the rotaries.

The production of oil from the Kurokawa O.1 Field, Akita Prefecture, which was 350,000 kuku in 1915, increased to 860,000 koku in 1916. The rotaries were responsible for the great oil gushes at the Toyokawa Oil Field, Akita Prefecture, and at the Asahi and the Niizu Oil Field, Niigata Prefecture.

But since 1918 the production of oil once more dwindled on account of, first, the scarcity of new wells which could be economically worked, second, the dwindling of the oil resources in Akita and Niigata Prefectures, and third, the steady increase in the importation of kerosene oil.

The production of oil in this country being smaller than the demand, many petroleum companies began to import crude oil from abroad and work on it. The Tozai Sekiyu Kaisha was the first to import crude oil. The company, forme I in August, 1905, established its oil refinery at Hodogaya near Yokohama and its storages at Yokohama in 1909. But the American company which supplied crude oil to the Tozai Sekiyu Kaisha merged with the Standard Oil Company and could not continue the supply of crude oil. On this account the Tozai Sekiyu

Kaisha was amalgamated with the Hoden Sekiyu Kaisha.

About that time the Rising Sun Petroleum Company planned the importation of crude oil from Borneo, and established its refinery and tanks in Kyushu in 1909. But the import duty was imposed on crude oil from April, 1909, and because of this the Rising Sun Petroleum Co. could not realize profits and discontinued the importation of crude oil.

These early plans of working on imported crude oil thus failed, but on account of the decrease in the production of oil since 1918, the low price of foreign crude oil, and the advance in the price of petroleum in Japan, the plan of working on imported crude oil was afterwards revived. In 1921, the Teikoku Sekiyu Kaisha and a few other petroleum companies were established to work on imported crude oil.

The oil producers in Niigata Prefecture commenced the importation of foreign crude oil, and the Asahi Petroleum Company also started the work of refining imported crude oil by hiring the oil plant of the Rising Sun Petroleum Company in Kyushu.

Accordingly the import of crude oil steadily increased. The import of crude oil in 1918 was not more than 25,000 koku, but it increased to 50,000 koku in 1919 and further to 877,000 koku in 1923.

The Nihon Sekiyu Kaisha, which was using only Japanese crude oil for many years, began to work on imported crude oil in 1923.

At first there were many large and small petroleum companies, but by degrees companies were amalgamated into one organization. In 1900, the establishment of the International Oil Company brought about the rapprochment of the Nihon and the Hoden Sekiyu Kaishas, when these two companies conjointly established a company for the sale of the output of both concerns, but that company was dissolved in 1906.

The gradual decrease in the profit of the Nihon Seki-yu Kaisha is due to competition with foreign oil, which is being imported in an ever increasing amount. Since 1926 the production of oil in America has greatly increased, and this caused a heavy fall in the price of oil. Hither to the prices of oil were fixed by an agreement between the Nihon Sekiyu Kaisha, the Standard and the Rising Sun Petroleum Companies, but many foreign companies waged a competition, and in 1925 such foreign companies numbered at least a score. A keen competition is still being waged among the companies.

In 1926, the North Saghalien Petroleum Company was established to work the oil fields in Karafuto (Saghalien), and its activity is being watched with keen interest-

## Mining Industry of Japan

Steady Development of Copper Production

Japan's copper industry enjoyed its boom during the Great European War, as the price of copper abruptly advanced, registering a record price the highest ever reached up until that time in the past, and the output naturally was rapidly increased.

The adverse turn of the situation following the declaration of the armistice has but the copper manufacturers in this country in financial difficulties, and, in addition, the copper producers have had to withold their output in view of the decreased demand from overseas as well as from the domestic markets.

The simultaneous curtailment of the operation of these Japanese copper mines has caused a shortage in the supply of copper in this country and the domestic consumers have thus had to import copper from foreign countries.

The cessation of operation of these copper mines is attributed to the following two major reasons:

The cost of operation could not be met because of the slump in the prices of copper which was world wide while the manufacturing cost, including the wages of ad-