

How the Trail Smelter Has Helped to Win the War

One of the features of the discussion which took place at the Annual Northwest Mining Convention held at Revelstoke, B.C., from July 9 to 12, was Mr. S. G. Blaylock's address on "The Part Played in the War by the Trail Smelter." Because of his position as assistant General Manager of the Consolidated Mining & Smelting Co. and owing to his high standing in British Columbia mining circles his observations were based on an intimate knowledge of his subject and were listened to with profound attention.

He said that no better illustration of the work done for the British Empire by the company could be found than the giving of a rough outline of the zinc industry. The problem to be solved was how to separate the zinc from the lead in ores. Although this matter had received close attention and endless experiments had been made, when the war broke out the company was only making one half ton of zinc a day. To quote Mr. Blaylock:

"The Imperial Munitions Board was in dire need of high grade zinc, which was selling at from 35 to 45 cents a pound, when obtained at all. Besides this, it appeared to be cornered by our enemies. It was on this account that the company agreed to build a plant, based on our experimental work, to make twenty tons of zinc a day, at a price of 15 cents a pound, or less than one-half of the current price. This was rapidly followed by demands for a larger and a still larger production, but at the same price a pound of zinc.

"Before the plant could be designed and orders placed, preliminary quotations on many things were doubled.

"The plant required proved to be more extensive than was originally thought sufficient. Sulphuric acid was prohibitive in price, necessitating the installation of a sulphuric acid plant, and many other difficulties arose and were overcome, till finally the plant was completed and in operation. Hundreds of difficulties were experienced when the big plant started which did not show up in the small experimental unit. These were met and surmounted by the most incessant work of those in charge.

"Some of the main points of the process as carried out are the counter-current leaching, the neutral solution by addition of an excess of ore—in other words, a double leach; the drastic purification of solution; the development of suitable pumps and air lifts for handling solids and solutions; the proper content of the electrolytic tanks to prevent the breaking up of the electrolysis and the formation of hydrogen; and also the keeping down of the volatile and the development of efficient melting furnaces.

"Much work has been done on the residues and we feel that we soon will be in a position to treat these successfully, the trouble to date being to get the zinc in these tails sufficiently low to allow of their profitable treatment for lead and silver.

"The Government aided in financing the company to the extent of lending about 30 per cent. of the money necessary to build the plant. This money, however, was merely a loan and has to be repaid in full. A bounty was also promised and has been extended, which would ensure a price 2 cents a pound better than the price of prime western spelter, unless the price of this grade was 9 cents a pound."

It, therefore, will be seen that the starting of this electrolysis plant at Trail, B.C., together with that

which was established almost simultaneously at Anaconda, Montana, had a strong bearing, and probably was the determining factor, in the bearing of the German hold on high-grade zinc.

Mr. Blaylock, continuing, said that in order to assure the greatest possible output of lead for the Imperial Munitions Board, the company took all the customs ore offered in the country until the Board notified the company that it could handle no more. In order to accommodate this customs ore, which had increased from less than thirty tons a day, when the metal markets were low at the start of the war, to over 200 tons a day, when metals were high immediately prior to the cancellation of their contract by the Munitions Board, it was necessary to curtail shipments from the company's own properties to a minimum, thus losing the advantage of the high price of lead, but contributing greatly to the ultimate winning of the war.

In enumerating some of the calls made on the company during the crisis, Mr. Blaylock said:

"The Consolidated was also requested to build a refinery for the production of copper. While this refinery is comparatively small, its building and operation in conjunction with the necessary converter plant was a large undertaking for a company which had lost so many of its best employees who had answered the country's call for men to go overseas."

GRANBY COMPANY INCREASES WAGES.

The Granby Consolidated Mining & Smelting Co. has advanced wages to all employees at its smelter 25 cents a day as from the 1st of July. The increase was the result of the rise in the price of copper, which went recently from 23½ to 26 cents a pound, and is in accordance with an agreement between the Granby Company and its men. The men now receive \$1.25 a day above the normal wages, which are based on copper at 16 cents. Although copper has been 23½ cents for the past year the company has paid its men on a basis of 24 cent copper.

GRANBY EMPLOYEES ON STRIKE.

About 2,000 men are affected by a strike declared by employees of the Granby Consolidated Mining and Smelting Co. at Anyox, B.C., the mining and smelting centre of that company in British Columbia. An increase of \$1 a day all round is the men's demand. The management of the company, in a statement issued immediately following the trouble, allege that it was fomented by I.W.W. agents. It is maintained that the wages paid are as high, or higher, than are paid anywhere else in America for the same service. Common laborers receive \$4.75 for eight hours, which is claimed to be higher than is given anywhere else in the Province. Ninety per cent of the men, it is stated, are living in the rooming houses and eating at the mess houses, where their living only costs \$7.50 per month more than it did before the war. Their wages have been increased \$50 to \$60 a month. In this respect they are better off than the married men, although the latter, because of the fact that the company is selling supplies through its store at less than retail prices elsewhere, are able to live comparatively cheaply. The foregoing is taken from the company's statement, which adds that the wage increase during the past four years is double the increase in the cost of living. At the time of writing (July 23rd) the men appeared to be determined and were being supported in Vancouver, B.C., where notices had been posted at labor headquarters warning workers to remain away from Anyox during the strike.