obtained; that power is not to be had. All of these statements are rank pessimism.

As to a market for the product, provided it were produced, this is small at present, but can be extended when industries are established. Following the cessation of the war, there will be for a time a shortage of tonnage to handle all products; but Australia, Japan and New Zealand are building ships, England has never ceased, and now British Columbia is getting into the game. One year after the close of the war, he predicted that there will be plenty of ships on the Pacific to take British Columbia iron wherever it is needed. In the meantime the province should prepare for the vast wave of opportunity which is even now forming.

As to the coke situation he firmly believed that there are certain seams of coal in the Vancouver Island series which will produce a superior quality of metallurgical coke. For this purpose the fine coal is used, and coke can be made at a cost not to exceed $6 per ton, and if the by-products of the coal are saved, this cost can be cut down by $2 or $2.50.

Undoubtedly, local conditions as to labor are adverse, but by judicious management and using efficiency in all departments, this handicap can be overcome.

On the coast the ores are principally magnetite, the hematite ores occurring in the interior. Magnetite is not considered by many to be a desirable iron ore, although it is used successfully in Norway and Sweden. Mixed with hematite on an equal basis, it is easily treated, and processes are now being perfected whereby it may become the most valuable of the iron ores. The sulphur contents may not be a detriment as in the past.

There are many known deposits of magnetite ore along the coast which are very high in their iron contents, and low in both sulphur and phosphorus. It is easy in British Columbia to obtain ores which run 60 per cent. iron, and which contain as well other values. He shipped, three years from Tassoo harbor, 1,100 pounds of magnetite ore to the Tacoma smelter which carried 62 per cent. iron, 1.8 per cent. copper, $40 gold, and .4 of an ounce in silver. A little copper in the iron is not a detriment.

He was satisfied that there are large bodies of both magnetite and hematite ores in the province available, as well as lime, and coal for coking purposes.

So far as blast furnaces are concerned, their success will depend on the cheapness of available power, but there is a plethora of water power in this province which has not been developed.

He figured that it costs more in Pittsburg, where efficiency has been brought down to the "nth" stage, to produce a ton of pig iron than it would cost in British Columbia today if a plant were started.

Manufacture of Pig Iron.

Following Mr. Hedley's address, an interesting paper, contributed by Mr. M. W. Garman, of Nanaimo, was read. The two papers were discussed together, those taking part being Messrs. Nicol Thompson, E. A. Haggen, R. C. Campbell-Johnson, Professor Davidson, and others. Professor Davidson dealt with the question of producing coking coal and charcoal and in connection with the matter of government assistance to help the mining industry, he stated that representations should be made that would have the effect of placing the industry on a paying basis and he was certain that that assistance would be given.

New Pulmotor Explained.

Mr. H. H. Sanderson, mine safety engineer, of Seattle, Wash., demonstrated the use of the new "B" type pulmotor which weighs only 12½ pounds, and the operation of which is entirely in the hands of the man who stands at the victim's face, giving greater efficiency than can be obtained by the old style machines, which weigh 58 pounds. The new device is simple in operation, and can be carried on the run by anyone who is in a hurry to arrive at the scene of an accident. Incidentally he mentioned that a pulmotor was recently used in Fernie with success upon a man who had been overcome with ammonia fumes.

Short Course in Mining.

At the request of the chairman, a statement was made by Prof. J. M. Turnbull of the British Columbia University, regarding the number of students who had attended the lectures on mineralogy that had been given during the winter. They had on their roll at the lectures twenty-eight students and it was their intention to extend that series and to have the lectures given in various centres throughout the province.

Five Years' Progress in Metallurgy.

The secretary read a paper on "Five Years' Progress in Metallurgy," prepared by Prof. F. A. Thomson, head of the department of mining engineering at the State College of Washington, Pullman, Washington, which was prepared for the Northwest Mining Convention, held in Spokane, Washington, in February. In this Professor Thomson dealt with flotation concentration, methods of ore treatment, electrolytic process, ore dressing and copper metallurgy, which he concluded with a general resume of the advance in the methods of ore treatment in the last five years.

In summarizing, he stated: "It has been found that momentous progress has been made in the field of ore dressing through the development of flotation in zinc ore treatment by leaching and electrolysis, in the leaching of copper ores and in the improvement of copper smelting practice. The significant feature of the progress is that practically all has occurred west of the Rocky Mountains and under the direction of American and Canadian engineers and metallurgists."

Before adjournment until evening, the secretary mentioned the recent death of the late Mr. Wm. Blackmore, of Victoria, a charter member of the Institute. He also asked for a resolution of remembrance to be sent to members of the Institute on active service, among whom there were about thirty members of the Western Branch. The following resolution was afterward prepared by Messrs. C. A. Cartwright and A. G. Langley, and unanimously adopted:

"That those present at this meeting send cordial greeting to, and express their deep appreciation of, the splendid services of those members of the Canadian Mining Institute who are now serving their country and her allies. May they be spared to participate in a glorious peace with victory, and that at an early date."

Thursday Evening Session.

There was also a large attendance at the evening session, which was opened by Mr. Geo. Ritchie, of the Taylor Engineering Co., giving a description of a cement gun, emphasizing its effectiveness for certain work underground in mines, especially in coal mines.

Dr. E. T. Hodge, professor of geology and mining at the University of British Columbia, gave an address, in which he dealt with the future of the iron industry in British Columbia, and urging the need for a fuller determination of the extent of the iron-ore resources of the province before the expenditure of much capital on iron smelting and auxiliary works.

Technical Education in the High Schools.

Mr. John Kyle, provincial organizer of technical