

New England Gas and Coke—in which he said Cape Breton is peculiarly rich in by-products—and they use a lot of it.

Q. Notwithstanding the sulphur, it is very high in by-products?—A. Yes.

Q. Did Mr. Lucas mention the possibility of entirely taking the sulphur out of gas by new methods?

Q. No, he did not. We would be very glad to hear from you on that. I may say that Mr. Blauvelt, who appeared before us, minimized the importance of sulphur and stated that it could be taken out.—A. It can.

Q. Would you tell us more about that?—A. By what they call the liquid purification method the entire elimination of sulphur is quite possible from the gas, not from the coke. The mixture is a weak solution of bicarbonate of soda and water. The gas is passed through that, and the solution is aerated, blown through like a Bessemer furnace, and that takes all the sulphur out of it in the form of sulphate of hydrogen. That can be disposed of either by a high stack or by passing it under boilers and burning it. The fumes, of course, are objectionable.

Q. That has been demonstrated?—A. It is a development of the last year. Also, they are making a lot of progress in taking the sulphur out of coke, by steaming it.

Q. At what stage?—A. They steam it in the oven just before it is drawn, and they can reduce the sulphur quite appreciably.

Q. That has not been tried with you?—A. No. Not only that, but they increase the yield of gas, the yield of volatiles. That has been tried in England.

Q. Those processes are still in the experimental stage?—A. They have proceeded so far that they show considerable promise. In England they are actually increasing the yield of gas by steaming not only in coke ovens, but in gas retorts.

Q. So the figures we have had as to the yield of gas may be increased in volume, and there would not be very much after-purification?—A. Yes.

Q. There is another point. As you know, we are at a disadvantage in meeting American competition in mines which produce coal very much cheaper than ours do?—A. Yes.

Q. There always has been some difference?—A. Yes.

Q. As I remember the figures, that difference is greater now than it was?—A. Yes; at least it is as great.

Q. Have you anything optimistic, which will be borne out by the facts, that we can look forward to in the reduction of that difference?—A. No, I am afraid not. Of course, the old line States—Pennsylvania, Illinois, and Ohio, the cost of mining has gone up pretty much in the same proportion as it has in Nova Scotia. The biggest menace from the coal operators' point of view is West Virginia, where coal can be mined, I suppose, more cheaply than anywhere else in the world. It is a new field, with new seams. I could not say, however, that you are likely to get coal much cheaper in Nova Scotia from the physical point of view. If wages decline, and the cost of material, then you get a little lower price.

Q. There is not much tendency that way yet?—A. No.

Q. But it is a very serious handicap on our mines?—A. Yes, it is quite serious; but we have one advantage, and that is our water transportation.

Q. I do not think there is any place in the world where coal can be put on vessels and carried and discharged cheaper than between Cape Breton and Montreal?—A. No, I think you are right.

Q. When I knew more of it in detail, there was certainly nothing on the seaboard of America or Europe that could equal it.—A. No, we were in advance in those days.