

ing at Springhill, and as I also was at Springhill for a number of years "old times" were naturally referred to. Mr. Blue asked how many of my old subscribers, that is, those who subscribed from the start, were still this side of the bar. As a lad he said he remembered becoming a subscriber—(That partly accounts for Mr. Blue's great success as a mine manager)—I told him I thought there were few left, and he added there cannot be more than one or two. On looking at the old list afterwards I found that two or three still living had dropped off the list, while all the others, except perhaps four, had "crossed the bar"—and in, to look back,—so short a time.

On the plea that I had not given intimation of our coming and that therefore no preparation had been made, we were invited to tumble into a coal box. That was all right; a coal box has its advantages. There is no jostling for seats; and squatted in the bottom no matter what the pitch of the seam, there is a brace for ones feet. We are not going at a twenty mile rate; in lowering men the engine moves slowly. The descent took about a quarter of an hour for which I was grateful. Before the rake reached the bottom we had got our "pit een"—that is our eyes had become accustomed to the dark and to the small light which made the surroundings barely visible. There are sixteen lifts or landings in this mine. We got off at the thirteenth for the good reason that we could go no further by rail as the travelling road has not yet been extended, but will soon be—to the bottom. From the thirteenth landing we travelled to the sixteenth when Mr. Blue said "Come and I will show you the lowest part in the mine." We are not at the face, we cannot get to it on account of water and debris but we can see it forty feet distant. From daylight to where we stand the distance is 6,840 feet, and the cover overhead, that is the thickness of the strata to the surface, is in round figures 1900 feet. The weight on the roof is therefore very great and that is made manifest by the appearance of the timbers as one travels the main ways. Some of the booms are bent into the shape of triangles, and are splintered, and yet it is said that these bent and splintered timbers are at their best. They cannot break but must be drawn apart before the roof can settle further. In the lower workings of the mine, where there has been little opening out, the roof acts like sand being soft and powdery. Where a larger amount of coal has been taken out the roof is firmer. The softness in the roof in close places is due to the action of escaping gas. And owing to this action of the gas the coal also is easier to work. When it comes to the time when the bottom coal now left has to be taken out, there will be a solid roof, and, the gas having all escaped, there will be what is known as dead coal, that is coal, without spring in it, and of course harder to work. The system of mining employed is a modification of long wall; it may be called long wall with a step. At the bottom of the slope and in the lowest lift the coal is twenty ft. thick, and looks for the whole height of excellent quality, there being so far as I noticed only two inches of a bastard coal. In the upper lifts the coal is say 13 to 14 feet thick. All of this height is not now being taken out, only the half or about seven feet. The places, levels, balances, bords, are driv-

en 20 ft. wide. Only ten feet of this is taken the full height. A space five feet on each side has only the top coal taken, and on the top of this is built the chucks, of solid timber, as there is no dirt or rock to pack with. Looking at these chucks one can scarcely realize that they ever were six or seven feet high. All that can be seen of them is about three feet, and in some places not over two. The weight has squashed them out of recognition. A stick eight inches round when it was put in is flattened to two or three inches. And the 'squashing' process is going on day by day, and will go on until the packs are almost invisible. Not only does the roof settle, the floor rises. Take the bottom of the main slope. We stood a little way up and were shown what a short time ago was the bottom twenty feet further down, and it was three or four feet higher than where we stood. The weight had raised the floor to that extent. Looking at all the timbers forming the pack, I asked myself aloud "Does it pay." Mr. Blue hearing the question said "You may well ask that, but I suppose we would not be working if at a loss." Well then I asked "If it pays you to pack with timber seven feet high, why not take all the coal out and pack from roof to pavement." The question showed I was not 'up' in long wall. 'If we did that' replied Mr. Blue 'we might have the packs come tumbling over. Indeed as you may notice some of them incline to topple over as it is.'

"And how will you get the bottom coal?"

"That is an after consideration, but by the time we have got to our boundary, and are prepared to retreat, I expect roof, packs, and timber will be all one solid mass, will form a new roof, under which we will work and recover all the coal."

Calling to us at a particular spot Mr. Blue asked us to look at the roof, saying "Look at these and then you will be able to answer those who say that iron booms are a delusion and a snare." We looked and saw several sixty lb. iron rails cut into boom lengths and supporting the roof. They were bent, but stood the burden well, and but for the cost would be preferable to wood.

The Drummond is a clean mine to travel. No mud was encountered and only one pool of water near the landing at the bottom. The bulk of the output is from the fifteenth lift. Here the south level is in 3000 feet. At the extreme end of it I asked Mr. Blue whereabouts we were. He said we were a little south of the Stellarton reservoir. One could scarcely realize this. Mr. Blue is of opinion that the Drummond seam is independent of the seams at Stellarton. He thinks it may continue down under Stellarton and finish on the east side of the East River.

The ride down to the thirteenth landing was not unpleasant, and the walk from there to the sixteenth was not irksome, though a slip was made occasionally, but the walk up to catch the rake was a corker, to one who had not travelled up a slope in many years. The writer set the pace and called a halt twice, and this was not done solely out of commiseration for his companions. As we rested a man ran up past to make certain of not missing the rake. Said one of the three: "He should not do that. The over quick walking or running in the mine is responsible for