

There is, unfortunately, no direct evidence as to Smith's movements on that morning, and no absolute proof that he did not enter section No. 5 for the purpose of making an inspection before the workmen arrived; but the surrounding circumstances and the ascertainable facts make it morally certain that no inspection of that part of the mine was made that morning. There is no evidence to show how long the firedamp had been issuing from the fall in No. 5 before the explosion occurred. The place had been examined by Deputy Wear three days before the accident, and his report states, and he himself swears, that there were no signs of gas at that time.

At the conclusion of the inquiry, some three weeks subsequent to its opening, Deputy John McGill came forward to say that Mr. Gowans, the acting-manager, and one of the men killed in the explosion, had informed him that on the afternoon preceding the 12th September he (Gowans) had passed bord No. 6 with a naked light without apparently encountering any gas. This evidence, however, throws no additional light upon the matter, for Mr. Gowans made no inspection or examination, and there may have been even then large quantities of gas in the upper part of the bord which he did not detect. This would be more particularly so if he were carrying his lamp in his hand. This evidence, too, is open to the objection that no mention was made at the Coroner's inquest or before this Commission at Huntly of the fact mentioned by Mr. McGill, although it related to a matter of the gravest importance in connection with this inquiry.

The important part played by coaldust in a coal-mine explosion was again brought prominently under notice by the Huntly disaster. Dust was plentiful in the mine, but according to the evidence the quantity was not large compared with that found in some mines in Great Britain. It was, however, sufficiently abundant to compel the Inspector of Mines to call the attention of the manager to it, and to direct him to take steps to mitigate it by watering the travelling-road. Mr. Bernie did this primarily out of consideration for the men who had to use the travelling-way, but he also realized its danger, and in two successive memoranda to the manager directed his attention to the matter.

It is only fair to the Inspector of Mines and to the mine-manager to say that, though as a matter of general knowledge the danger of dust-explosions in a coal-mine was known and recognized, the extraordinarily inflammable nature of the dust in this mine was unsuspected until after the accident. Analyses then made by Professor Harold Baily Dixon, M.A., Ph.D., F.R.S., of the University of Manchester, and Dr. Maclaurin, D.Sc., F.C.S., Dominion Analyst, first revealed its unusual potency in creating a disaster.

In the opinion of your Commissioners, some legislative provision should be made having for its object the prevention or mitigation of the danger arising from the presence of dust in a mine. Much evidence was submitted at the inquiry relative to dust-explosions in coal-mines and their remedy, and the Commissioners were fortunate in hearing the opinion of so prominent an authority as Professor Dixon on the subject. Suggestions as to the best means of guarding against the evil will be made later on in this report.

With respect to the several matters submitted by Your Excellency to us for our inquiry, we beg to report as follows:—

(1.) IN WHAT PART OR PARTS OF THE MINE THE ACCIDENT OCCURRED, AND THE NATURE OF THE SAME.

The point of origin of the disaster was bord No. 6 in the No. 5 district, the nature of the disaster being an explosion of a large accumulation of firedamp, which raised and ignited a cloud of coaldust, and was thereby intensified and carried on. The explosion traversed the main haulage and travelling roads to the top of Ralph's Colliery downcast shaft, and for a considerable distance towards the Taupiri West shaft, with which Ralph's Colliery workings are connected underground. A large area of mine-workings was also traversed by the explosion. Forty-three persons employed by the Taupiri Coal-mines (Limited) lost their lives as a result of this explosion, which occurred about 7.30 a.m. on Saturday, the 12th September, 1914. That being a no-work day for hewers and truckers, only sixty-two men were engaged in the mine at the time of the disaster; under normal conditions the number of persons employed underground would be about one hundred and sixty.