

1351. What kind of plans?—Working-plans of coal mines.

1352. What plans have you checked?—The Brunner Coal Mine, Coal Pit Heath, and Westport.

1353. On what principal were these surveys made? Did you notice anything peculiar in the surveys?—The principle roads or headings are laid down accurately in the plans; but the bords from these headings are not exactly a correct survey of the mine. They are projected on paper and afterwards taken as it may happen.

1354. Have you had anything to do with Mr. Bishop's surveys?—Yes; in connection with the Brunner Mine.

1355. What was your opinion of them?—They were not accurate; they were as I described. The bords were taken out wider than as shown on the plan.

1356. Do you consider him an accurate surveyor?—No; I do not consider him a surveyor at all.

1357. *Mr. Chapman.*] Would you be surprised to hear that Mr. Bishop was recommended to the Shag Point Company by Mr. Binns as a most competent man?—No; not at all. He may be a good colliery manager, although not a surveyor.

1358. His surveys would not grossly distort the actual state of affairs, would they?—No, I cannot say you would call it a misrepresentation; the angles were wrong, and, in place of being in one direction, the plan showed the workings (I am speaking of the Brunner Mine) to be in another.

1359. If Mr. Bishop had made a plan from actual survey, and said that it was approximately correct, would you expect to find it grossly misrepresenting the state of affairs?—The plan was shown to me as an actual survey; and, when I went to make a check-survey, it was not correct according to my survey. My survey corresponded with another one made by Mr. Young, of Westport.

1360. Do you suppose that, when Mr. Bishop generally stated that he had made his plan from actual survey, and that it approximately represented the state of affairs in the mine, you would find a gross misrepresentation?—No; because I think he believed he was doing it correctly.

1361. These mines that you speak of were through gravel, not through shale?—Just so.

1362. And were they naturally wet?—Yes.

1363. And when dried you found them apt to come to pieces?—After two or three days, or perhaps a week.

1364. You have not had experience in coal-mining?—No.

1365. *Mr. Rolleston.*] For purposes of safety, is there any great difference between coal- and gold-mining underground?—Not so far as safety is concerned.

1366. Please look at Mr. Twining's plan: does this represent a safe condition of a mine as to the relation between the bords and pillars?—It would depend on the nature of the strata and the artificial pillars that might be built up.

1367. If there were one or two unsafe places, would it not shake the whole workings?—Yes; it would tend to bring down the roof and crush the pillars that are left.

Dr. HECTOR, cross-examined.

1368. *Mr. Chapman.*] You have said that you approved of Mr. Binns's action in putting in dams?—Yes.

1369. On what ground did you arrive at that conclusion?—To secure the safety of the mine in the event of water percolating from the upper seam through the shaft.

1370. Did you think these dams would guard the shaft against the percolation of water?—Yes: certainly, if properly constructed, and provided the ground was left untouched round the shaft, and precautions taken to preserve enough round it to form shaft-pillars. I am not aware how far such precautions were taken.

1371. Were you aware that the plan of the dams was submitted to Mr. Binns?—Yes; and I suppose he satisfied himself that they were effectual.

1372. If the Commission asked for had been granted, and you had been on it, and on inspection of the workings you found ample pillars left for the support of the roof and the safety of the workings, would you have said that Mr. Binns was right in his action in closing the mine?—I do not think that any Commission could have relieved him of the responsibility of deciding.

1373. That is, assuming the Act to apply to the subject?—I do not know under what power Mr. Binns was acting.

1374. But in your answer you assume that he was acting under the Act?—Yes.

1375. You said in your evidence that you considered, if half the coal were taken out, 15ft. bords and pillars would be a safe method of working?—I think I did say so. It was perhaps owing to the way the question was put, for there is no hard-and-fast rule; it must depend on the nature of the floor and roof, and the varying thickness of the seams. In some cases much more or less could be taken out than in others.

1376. The plan that has been exhibited by Bishop and Taylor shows a larger proportion of pillars than that left; and the evidence given by Mr. Williams and Mr. Denniston confirmed the plan: if that is correct, should you consider that a justification for closing the mine?—I think, from a casual inspection of the plan, that the mine was closed more on account of the shape of the pillars. I pointed out in my evidence that some of the excavations were too large, and I think I particularized one.

1377. You speak of a casual inspection of a plan; you refer to Twining's plan?—Yes.

1378. In your former evidence I see that Mr. Macandrew asked you this question: "Looking at the large interests at stake, public as well as private, do you not consider it would have been wise of Mr. Binns, before taking the action he did, to verify his own opinion by that of another man?" To this you replied, "In his place I should have endeavoured to do so." Are you still of that opinion?—Yes, if he had any doubt. As for closing the mine, he would have to do that on his own responsibility. Whether he would privately talk the matter over with his colleagues or not is a