

Binns provides in his correspondence for lower seam being wrought, which shows an inconsistency; 150 feet in one instance over upper seam, and only 80 feet of measures between flooded workings of upper seam and that of the lower seam, which, to any one acquainted with the measures, is unaccountable how he could arrive at same.

394. Mr. Binns proceeded on the assumption that the lower workings might continue, and Mr. Williams pointed out that that was impossible?—Yes.

395. Do you not see that Mr. Cox takes that view?—Yes; you can read it that way. His report is a riddle.

396. *Mr. Macandrew.*] Did I understand it as your opinion of a public Government department that, in their own opinion, they can do no wrong, and that there is a sort of *esprit de corps* to bear out that idea?—Yes; that is the general opinion. If you take Mr. Binns, I dare say he would be of opinion that he is conferring a great favour on the Government of New Zealand by giving his services as Inspector.

397. *Mr. Chapman.*] Do you know what Mr. Twining's employment is?—I think he is employed by the Nightcaps, and, at time of survey, employed by the Kaitangata Coal Company.

397A. Was he employed by the company when he made this survey?—I expect so. He lost the Kaitangata works through some misdeeds of his own.

398. *The Chairman.*] Can you give us the date when you examined this mine?—In the early part of July.

399. Speaking of Mr. Cox's report, do I understand you to say that if you were the head of a professional department, holding a professional status such as Mr. Cox did, you would allow your feeling for your subordinates to override your professional opinion upon any matter that came before you?—He was not the head of a department.

400. He was at any rate a superior: do I understand you to mean that you would do that?—If I was in the same office I would certainly do all I could to save a brother officer.

WEDNESDAY, 2ND OCTOBER, 1884.

Mr. J. H. DERHOM, examined on oath.

401. *Mr. Chapman.*] What are you, Mr. Derhom?—A civil and mining engineer.

402. Where do you reside and practice?—In Wellington.

403. Have you had any experience in coal-mining?—Yes.

404. Where and when?—Twenty years' experience in the Old Country.

405. And any in this country?—Very little in this country. I have visited some collieries and reported on them; but my experience is almost solely in the Old Country.

406. Where have you visited collieries in this country: any in Otago?—No.

407. Have you had any experience of the action of water on shales in coal mines?—Yes.

408. And what has been your experience?—My experience has always been among shales. I had five years' experience working nothing else but shales in the Old Country, and I always found that water softened and swelled and disintegrated them.

409. I suppose that would apply whether it was the roof or the floor?—Yes.

410. Supposing in a coal mine you had to uphold a shale roof, what steps would you take supposing it appeared to be falling?—If it was at all dangerous, the first step would be to pack it as tight as possible; and, if I could spare it, build wooden pillars.

411. Pack it, what with?—Anything to fill it; but I would depend more on the wooden pillars.

412. Would you, under any circumstances, let water accumulate in your mine?—Not if I could avoid it.

413. Would you rely on hydrostatic pressure to uphold the roof?—It would assist in upholding a roof like that of solid sandstone, where there was nothing to wash away.

414. Where it would have no disintegrating effect?—Yes.

415. Under what conditions would you resort to hydrostatic support?—It is a thing I do not much believe in at all. In all mining matters, as far as ever I knew, it was the practice to try to keep out what water we could. We always considered water as an enemy.

416. With reference to that sequence: supposing you had to support a roof above the upper seam, would you in any case resort to water?—I would not under any circumstances if I could avoid it.

417. *Mr. Reid.*] What do you say you are acting as now?—As a civil and mining engineer.

418. Practising?—Yes.

419. Have you had any experience of submarine workings?—Yes.

420. Where?—Scotland.

421. Have you had anything to do with a drowned mine at any time?—Yes. I was in a mine that was drowned out.

422. What cover was there in the case of the drowned mine you refer to?—I saw one drowned out: between thirty to forty fathoms of water.

423. Was that submarine?—Yes.

424. How many feet do you make that?—Two hundred and forty feet.

425. What proportion of coal was left there?—A very small portion, because they were taking it all out.

426. What was the cover like there?—It was pretty good; but they tried to excavate the whole thing on the "longwall" principle, that is, excavating everything as they go; and then it took a break.

427. From your experience as an engineer at Home, do you not know that it is generally considered that water has a sustaining power: that the hydrostatic pressure of water will sustain to a certain extent the roof overhead?—Under certain circumstances.