874. Have you them?—No.

Mr. Gore: I produce the quantities, and put them in evidence. [Document put in, and marked "14."]

Witness: These are the quantities as taken, and they are signed by Mr. Brindley.

875. Mr. Gore.] Will you state to the Commissioners what you did when you went to Seacliff? First of all, how long were you up at Seacliff? You went up specially to take measurements of

the foundations?—Yes, I went up specially for that.

876. How long were you there?—I went up on the 5th May, 1882. I was there on the 5th and 6th of May, and on the 11th and 12th; there again on the 7th and 8th of June, and on the 13th and 14th. I was there eight days in May and June; and in 1883, in May and June, I was again there—that was twelve months afterwards. I was there two days in May and one day in June.

877. That is, ten days?—Yes. I took the quantities there and made them up in town, and

then Mr. Brindley and I went over the total quantities; and that is the result.

878. Will you state to the Commissioners what process you went through in taking these quantities, who was with you, and if I interfered in any shape or form?—No, I never saw Mr. Gore on the work at all while taking the quantities, nor Mr. John Gore. Mr. Brindley and myself were the only two interested in taking the quantities.

879. I do not know whether your memory will carry you back to find the dimensions that were taken of the ambulatory-wall on the north side?—Mr. Brindley went over that with me.

880. Can you find the dimensions of the ambulatory-wall, north?—Yes.

881. What is the size of it?—The front wall is 3ft. by 3ft.

882. Mr. Skinner.] That is, under the pillars?—Yes; that is the front wall.
883. Is it a continuous wall under the piers?—It is a continuous wall 106ft. by 3ft. by 3ft.

884. Did you see this foundation yourself?—I saw the upper part; I did not see the lower part. Mr. Brindley, of course, checked them over.

885. That is a section of the ambulatory-wall?—Yes; this is the front wall.

886. What is the depth of the footing shown?—Three feet. 887. What is the depth of the abstract?—I think about 2ft.

888. Then, if this wall was brought up 3ft., to the top of the concrete, in place of having a recess, would that be weaker or stronger than shown on the plan?—Stronger; because 3ft. will bear more strain

Mr. Gore: Mr. Forrest is not able to answer this, but I wish to mention to you that I can show that the concrete was superseded by brick, which will partly account for the difference in

The Chairman: In what wall?

889. Mr. Gore.] In most of the walls? (To witness:) Do you think that the foundation of the wall, 3ft. by 3ft., will carry the weight of superstructure above it?—It is quite sufficient on solid

890. You believe, then, that it is not because of the concrete foundations that the building has cracked?—I cannot see how it can be so, unless the ground was not of the same nature throughout; and if it was not, still, it would bridge itself over for a distance wherever you put the concrete. If there were 3ft. or, say, 2ft. of soft ground, it would bridge itself over. Unless the pier was standing directly on the centre of the 3ft., the concrete ought to bear any weight put upon it.

891. I wish to call your attention to this back wall. You notice on the plan it is 2ft.?—

892. What is the measurement of it?—That is, the central wall?

893. No, the back wall?—Two feet six.

894. It is built, then, 6in. thicker than is shown on the plan. Do you think that 2ft. 6in. of concrete is sufficient to carry two stories above it, one of 14in. and one of 9in.?—Eighteen inches

would be quite sufficient.
895. You would not have any fear yourself of constructing an 18in. foundation to carry the wall?—I never put more. I consider concrete-work equivalent to a quarter more than brickwork. In fact, we are allowed by the building regulations of this town to do so, and you can use a thinner wall of concrete than of brick.

896. I wish to call your attention to this ambulatory-wall. It has been proved in evidence that these piers vary. This first south-end pier of the ambulatory-wall and the seventh pier are level; and the other piers vary to the extent of from in. to in, excepting this wall here at the end of the ambulatory—that is  $\frac{1}{2}$ in. lower than the south end of the ambulatory: would that  $\frac{1}{2}$ in. of settlement in this wall, which is 78ft. long, cause any appreciable cracks in the building—say it is a little over  $\frac{1}{2}$ in., between  $\frac{1}{2}$ in. and  $\frac{5}{8}$ in.?—These remain stationary?

897. Supposing these at the south end remain stationary, and that settles vertically down 1/2 in. or §in., would that make any appreciable cracks in the building?—It would have a tendency

to make a crack up here, on the south end.

898. Supposing it was possible for this settlement of  $\frac{1}{2}$  in. to throw the building over, how much would it throw it over at the top?—What is the height of the building here?

899. Say it is double the height of the length of the ambulatory—38ft.?—A quarter of an inch.

It would just throw it over half the distance of what it is out of level.

900. Then, if this wall is  $4\frac{1}{2}$ in. out of plumb, you would not attribute that to  $\frac{1}{2}$ in. of settlement?—You could not, because it would only throw it over  $\frac{1}{4}$ in. for the distance of the length of this ambulatory-wall. It stands to reason that, if this is only  $\frac{1}{2}$ in. out of the level, this would be ‡in. out of plumb at the top.

901. You have had a great deal of experience in building, and, having told you that the greatest variation of level on any part of this wall is ‡in., would you suppose that is settlement or that the plasterers have finished the cement irregularly?—I could not say.