

Without going so far as to say that the materials and workmanship now in the works are absolutely bad or utterly defective, the Commissioners are clearly of the opinion that they are not of the quality or description warranted by the magnitude and importance of the building, nor are they in conformity with the spirit of the specification, especially of the General Conditions, which provide "that all materials are to be of the very best of their respective kind, and the works executed in the very best, most substantial, and workmanlike manner;" whereas it is shown by the evidence of the Inspector that he was in constant contention with the Contractor as to the proper execution of the work, the method of executing the contract, the quality of the bricks, and many other matters, and he distinctly says that he never was satisfied with the manner in which the contract was performed, and that he considered the latter part of the work (which included the north wing) to be executed in an inferior manner to the first part.

The Commissioners consider that the evidence generally, and the letter-book of the Inspector, show that there was an honest endeavour on his part to insure good work and sound construction, but that he was placed at a great disadvantage owing to the indecisive and inexact wording of the specification that he was called upon to work with; and, although the General Conditions are strict and precise, yet they were never appealed to or acted upon—in fact, they seem by the Contractor and his agents to be treated as so much waste-paper. And in this special matter there seems to have been a most unfortunate misunderstanding, as the Architect provided no general conditions, and he seems to have looked on those provided by the Works Office as no conditions of his, declining to look on the Inspector as his assistant, although he admits that the Inspector could make no alterations, reject work, or order extras without his (the Architect's) approval. It is extremely difficult under these circumstances to understand the Inspector's position, and it cannot be surprising that work was passed that under the usual course of proceeding would not have been permitted.

Another source of weakness in the construction that may be pointed out is this: The specification provides that all stone must be laid on its natural bed, and, as shown by the drawings, all window-jambes are drawn with very long narrow stones, and a short header between. Now, although most probably the short stones may be on their natural beds (of which there is no proof), yet it is very improbable that the long stones should also fulfil this condition; in addition to which an element of unsound construction is introduced, inasmuch as in each tall stone for the two joints belonging to it from eight to sixteen joints of brickwork are made to work in in the height; and it is manifest that in process of natural adjustment within the work itself there must be from four to eight times the settlement in the brickwork to what there is in the stone—a process which would bring an undue pressure on the tall narrow stones, which they are not capable of sustaining; and this is visible in several places, where the jamb-stones are crushed or kicked out with the weight. With respect especially to the two turrets on the main centre gable, there appears to the Commissioners a considerable amount of insecurity. These turrets are placed at the external angles of the main building. The centre of each turret is on the external salient angle, so that there are three-fourths of the circular plan of turret overhanging, and only one-fourth built in on the wall; and this the Commissioners do not think sufficient, more especially considering that these turrets are loaded with a very massive newel-staircase of Port Chalmers stone, and the walls supporting them are less than 2ft. thick. These turrets are sufficient of themselves to try the walls very severely, but when it is found that between the two turrets a tall and heavy gable is carried on an arch of 28ft. span, the thrust of which is in direct accord with the outward pull of the overhanging turrets, it cannot be surprising that some untoward developments should manifest themselves. Accordingly, it will be found that there is a considerable tendency here set up for a sinking of the main gable more than the portico gable, and a continuous fracture can be traced from the side arch of the front portico on both sides, up through the flanks of the main front gable. It is clearly a mistake to endeavour to erect such largely-projecting masses on so slim a wall, and with a large arch assisting to dislocate the building, unless special precautions for tying in the turrets quite across the walls had been provided. These settlements developed themselves tolerably early in the course of the works, and in consequence thereof, and at the request of the Inspector, all other similar turrets throughout the building have been built with a much reduced overhang.

During the inquiry a plan (No. 3) was put in by the Public Works Department, purporting to show the concrete foundations of the north ambulatory walls and north wing as actually constructed. In order to ascertain the facts necessary, numerous pits were sunk at different points in the positions indicated upon the plans. From the results of measurements made by Mr. P. S. Hay, that gentleman endeavoured to prove that the concrete foundations had been so far reduced in size as to very materially affect the stability of the building. Exception was taken to the nature of the measurements made, which only showed the dimensions of the foundations from the outer or one face of the building. As it was considered that further particulars were necessary in order to show accurately the size and quality of that portion of the work, the Commissioners had additional pits sunk upon both sides of the foundations in seven different places, the result of which proved that, though in some cases the dimensions exceeded the sizes intended, in several they were considerably less.

In No. 2 Block (north), where the defects show most extensively, the following particulars are given as the result of the examination:—

		As per Contract Drawing.		As intended and ordered.		As built.
		Ft. in.		Ft. in.		Ft. in.
Front ambulatory wall—						
Cubic feet per foot-run	...	9 6	...	9 0	...	8 1
Bearing-surface in square feet	...	3 3	...	3 0	...	3 0
Middle wall—						
Cubic feet per foot-run	...	3 5½	...	4 0	...	4 0
Bearing-surface in square feet	...	2 9	...	2 0	...	2 0
Back wall—						
Bearing-surface in square feet	...	4 0	...	2 6	...	2 4