

the contract-plans, as in his evidence he stated that the Inspector acted under his orders entirely, and that he (the Architect) was prepared to accept the full responsibility.

The Inspector in his evidence stated that he was left with a large amount of discretion—more so than would be the case with an ordinary clerk of works—and that he was satisfied with the dimensions of the concrete foundations, and that they were strong enough to carry the super-structure. The Architect appears to have accepted the Inspector's opinion in the matter, and to have taken no steps to make himself personally acquainted with the nature of the ground, or to have suggested that any special care should be exercised beyond making repeated applications to the Public Works Department to drain the foundations.

As an example of the incompleteness of the plans attached to the contract, the Commissioners would point out that upon the ground-plan of the building the back and cross walls of the ambulatories are denoted by dotted lines, which are stated by the Architect to indicate that they were not to be taken down to the same foundation-level as the middle and front walls. At the same time the cross-sections of the building at various points clearly show that the intention was to build the whole of the three walls up from the same foundation-level. This was the view taken by the Inspector, who held that the back wall was included in the contract, and refused to include the measurement of that wall below the first-floor in his quantities of extra work. He was, however, overruled, and subsequently yielded to the Architect's views and interpretation, and then signed or initialled the sheets of quantities which were treated as extras to the contract, and paid for as such.

The Architect's intention is stated by himself to have been that the back wall should be founded at a higher level than the middle and front walls, though in reading the plans together the Commissioners fail to see that such intention was clearly expressed therein, but, that all three walls being shown on the cross-sections as having their foundations at the same level, they are of opinion that the whole were included in the contract, and that the back and cross walls on the basement-floor should not have been treated as an extra. The Architect has throughout this inquiry made no objections to any of the deviations from the plans that were from time to time made at the instigation of the Inspector; consequently it is held as proof that such deviations were all made with his full consent and approval.

8. With respect to measures for placing the damaged portion of the building in a satisfactory condition, they may be arranged under two heads—first, thorough and efficient drainage of the grounds; second, reinstatement and strengthening of the injured parts of north Block 2.

As a preliminary to the first proposal, seeing that the question has been raised of an eastward movement of the entire north wing, and the complete absence of any fixed stations from which to determine the truth or otherwise of the movement, the Commissioners recommend that permanent points of observation shall at once be fixed, carefully selected at a sufficient distance to be beyond the range of local disturbance, and that there shall be a series of intermediate stations or marks on the suspected ground; and that at regular intervals—say, not less than once a month—careful observations shall be taken from the permanent stations, and the result recorded. As it is most probable that, if there is any movement, it will take place during the winter or spring, it will be expedient that these points and stations should at once be selected and established.

The Commissioners recommend that before the winter sets in a comprehensive system of surface-drainage shall be done to relieve the foundations from the water which they found. The footings, especially at the north end, were filled up to within a short distance of the surface. From whatever source this water may arise, it is very injurious, as it keeps the base of the walls constantly wet, and, by continually saturating the clay, tends to increase the present damage and to risk its extension. A systematic inspection of all air-gratings near the ground should be made, as at present many of them are partially or wholly below the ground-level, and are bound to admit surface-water below the floors of the building. All gratings liable to the above defects should be raised above the ground-level, or, if this cannot be done, they should be built up and cemented over. In connection with this part of the drainage, the whole of the traps or inlets at the foot of rain-water pipes require to be raised round their margins, made watertight, and provided with gratings at least of one-fourth larger area than that of the pipes discharging into them. At several places the Commissioners noted that a large portion of the water from the downpipes must pass under the floor of the building, owing, firstly, to the inadequate inlets in the cess-traps, and, secondly, that the air-gratings seemed purposely put to receive the overflow from the downpipes and convey it under the floor. A board was taken up in the floor of the north wing, and the ground was found to be in a wet state; in fact, it appeared to the Commissioners that the whole of the ground at this north wing is completely saturated, and that unless a thorough draining and drying of the ground is effected more damage from settlement is very probable. The Commissioners also recommend that the isolating-drain advocated by Sir James Hector in 1880, and also repeatedly asked for by the Architect, shall be put in so soon as the result of the observations previously recommended indicate the slightest forward movement in any part of the building. Pending the result of these observations, they consider the drainage scheme already constructed by the Public Works Department will be found sufficient to intercept all water flowing from the high ground at the back of the building; but the result of the observations before recommended may demonstrate that there will be no necessity to construct this extensive work. It is also recommended that all air-gratings below ground-floor line, where closed, shall (if the configuration of the ground allows) be opened out. The Commissioners also recommend that all the rain-water outlet-pipes at present connected with the soil-pipes shall be disconnected and carried to the outlets independently, as the present trap-arrangement cannot be depended upon to exclude sewer-gas. It is also recommended that additional rain-water downpipes shall be fixed where required, as at present the number and capacity are not sufficient to carry off the water from certain portions of the roofs.

Referring to the second part—namely, the reinstatement and repairs—the Commissioners,