

---

 WORKS TO COMPLETE.
 

---

The original design for the Library of Parliament contemplated the construction of a groined roof, the ribs being of stone, and the spaces between them filled in with hollow brick; the ribs to be supported by marble columns, resting on corbels of the same material. The groin to be 42 feet in height, and the springing line 40 feet over the floor. In the centre of the vaulted space is an opening of fully 30 feet in diameter, the main ribs being so arranged as to touch its circumference and continue in a vertical plane between the springers. Over this opening is a groined lantern, 42 feet high, the top of which is 124 feet over the level of the floor.

The Library is to be circular inside, and 90 feet diameter. The main wall is about 4 feet thick, and its exterior face forms a polygon of 16 sides, at each angle of which is a flying buttress, spanning the roof of the lean-to and joining the main wall at a height calculated to resist the thrust of the vaulted roof. This thrust is thrown in the direction of the greatest resistance, and every precaution apparently adopted to render the vaulting secure. The design, as a whole, is bold, and, if carried out in its entirety, would doubtless, be very effective.

It is, however, to be feared from the large span and the great weight of material in the vault, together with that in the high lantern over it (the central portion being open), that any imperfection in the works might lead to serious consequences. But, without expressing a decided opinion as to the advisability of adopting the present design or otherwise, it might be well to consider whether the same object could not be effected with a greater degree of certainty by the construction of an iron roof, especially as stone of the required dimensions for a vaulted roof of this span could only be obtained (if at all) at great labor and expense. Indeed, a dome-shaped ceiling and lantern of wood might possibly be built, which would answer the purpose, as its great height over the floor would place it out of the reach of fire from the interior, whilst the outside roof (required in any case) being covered with slate and galvanized iron, or lead, would afford protection to the exterior of the building.

The roof of the main tower has not yet been commenced; it is proposed to be of wood, covered with tin or galvanized iron, octagonal in plan, and tapering to the deck on top, which is 52 feet 6 inches above the pinnacles at the angles, and about 208 feet above the level of the terrace. Upon this a wrought-iron terminal is to be placed, the dimensions of which have not been determined.

The cost of these works is approximately estimated at \$185,000.00.

Nothing has yet been done towards the permanent fencing, or the ornamentation of the grounds; nor have the roads been extended as far as necessary.

The outlay for this will, of course, depend upon the character of the works undertaken; but, it is presumed, that a proper fence will be made alongside of Wellington street, a distance of 1,750 feet. This might be formed of a wall about three feet 6 inches over the level of the street, of a good class of masonry, coped with cut stone, and having an ornamental iron railing on top, with gates at the several entrances. The higher portions of the grounds along this street ought to be dressed to a slope, terminating at the rear of the wall, where a proper drain should be constructed. A similar fence and drain might be continued along the east side of Bank street, to the brow of the hill. It would also be desirable that a fence should be carried round the edge of the cliff, so as to complete the enclosure of the grounds.

The square only has been graded, the other portions are as yet untouched, whilst the surface being in many places irregular, it is important that steps should be taken at least to reduce it to some degree of uniformity. For this purpose it would be well that a general plan were agreed upon before the works are commenced.

The question of establishing an efficient system of general management for all the Buildings under one competent head, has frequently been brought under the notice of the Department. This has been urged for the reason, that buildings of this extent and character, will require a considerable annual outlay for maintenance, which could be more