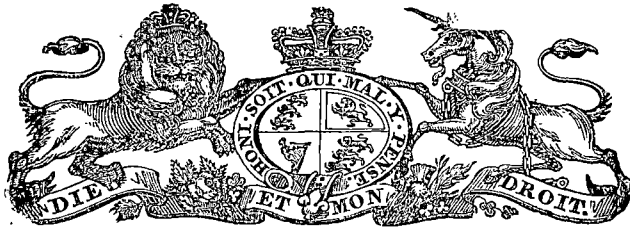


(No. 19.)



1889.

PARLIAMENT OF TASMANIA.

DRAINAGE OF NEW BUILDINGS AT HOSPITAL
FOR INSANE, NEW NORFOLK :

R E P O R T.

Presented to both Houses of Parliament by His Excellency's Command.



THE DRAINAGE OF THE NEW BUILDINGS AT THE HOSPITAL FOR THE INSANE, NEW NORFOLK.

The Honourable the President and the Members of the Central Board of Health.

GENTLEMEN,

IN accordance with your instructions, given at the instance of the Official Visitors of the Hospital for the Insane at New Norfolk, I have visited and inspected the newly built wards for acute cases among women and for idiots, and, as far as practicable, have examined the works constructed for the drainage of these buildings, and have the honour to report to you thereupon as follows:—

1. The new ward for women is drained by a nine-inch pipe sewer in connexion with the brick barrel drain described in my Report, dated 30th November last, on the drainage of the Hospital (§ 1). I did not see the junction, which is at a considerable depth, but it was described to me by Mr. Maddison, the Clerk of the Works of the new buildings, as having been made by inserting the nine-inch pipe into the hole broken through the crown of the brick culvert. A reference to the accompanying plan will show that the pipes are laid thence in a straight line to the fence that is to separate the grounds of the wards from the recreation ground, where a 9" x 9" T junction pipe is inserted to receive the drainage from the proposed extension of the building. The curve beyond this junction and the curve further on are constructed with straight pipes. Beyond this second curve a portion of the drain leading to the down-spouts of the shelter-shed was uncovered at the time of my visit. This portion of the drain consisted of four-inch pipes with cemented joints. The trench for the drain had been badly cut, and the pipes were not truly laid, either in respect of horizontal or vertical direction. The junctions were, in especial, very improperly constructed. No junction pipe had been provided in the nine-inch drain, but a hole knocked into one of the pipes and the four-inch pipe inserted very nearly at right angles, and the rest of the hole plugged up with cement. The junction on the four-inch pipe to receive the drain from the first of the down-spouts is a T pipe, and the joint exactly reproduces what is described in § 2 of my former Report and shewn at A on the plan accompanying it. There are no special means adopted for ventilating the drains, and reliance is placed on water-traps to keep any foul air generated in the sewers out of the rooms. The arrangement of the grated cesspits for receiving outside drainage is peculiarly unfortunate and ill-advised. All, or nearly all, are placed immediately under and at a very few inches from the large openings admitting air into the wards at the floor level. As just mentioned, these cesspits have only water-traps, which are notoriously untrustworthy, so the whole arrangement is expressly calculated to vitiate the air supply of the rooms. Such of the down-spouts of the buildings as are connected with the drains open too near to windows to be capable of safe use as ventilators.

2. The new ward for idiots is also drained by a nine-inch pipe sewer with a similar connexion with the brick barrel sewer. One of the bad features of this drain is that it runs under the building, and in its course through the building receives directly drainage from the bath-room, &c. Such of the junctions of this drain as I had uncovered were V junctions. All that is above stated in regard to ventilation, position of cesspits, &c. in connexion with the women's ward, holds good in relation to the idiot wards. Under the covered gangway between the main building and the attendants' cottage there is a small brick cesspit that collects, for discharge by the drain, the drainage from the kitchen sink, a water-tap in the yard, and two down-spouts. This arrangement is always unsatisfactory.

3. From the above descriptions it is evident that the drainage arrangements of the new buildings are very imperfect, and in some respects very bad. I have therefore no hesitation in recommending that they be re-constructed in connexion with the system set forth in my Report of the 30th Nov., 1888; and I have to request that the 8th, 10th, 11th, 12th, and 13th Sections of that Report may be taken as forming part of this present Report, and indicating the nature of the works I have shewn on the Plan attached hereto.

4. A further recurrence of typhoid fever in the Hospital points out the urgency of taking immediate steps to secure its proper drainage. This urgency is further shewn by a fortuitous incident connected with my last visit. Under the Superintendent and Medical Officer's office is an old disused cellar, the existence of which had not previously been mentioned to me. The only entrance to it is by a trap-door in the floor. On account of the unpleasant odour in the office, the carpet had been taken up and the trap opened, with the result of finding about six inches of stagnant water in the cellar. The level of the cellar floor is from two to three feet below that of the adjoining ground outside the building, as that ground is sloping. The level of the water is doubtless that of the "ground water" under the whole building; and when it is considered that this is the level in a dry season, in all probability it is much nearer the surface in wet weather. Nothing can be more unwholesome in connexion with a hospital or house than that it should be placed on such an undrained site, especially when the ground water is polluted by the infiltration from unpaved back-yards. In draining this cellar in connexion with the new system of sewers, attention must be paid to the fifth direction given in Section 10 of the Report of the 30th November. A small area should be made outside the cellar, of a greater depth than the cellar floor, so that the drainage might be delivered into the open air of the area and taken thence by a cesspit trapped as described in the above-mentioned direction.

I have the honour to remain,
Gentlemen,
Your faithful Servant,

A. MAULT.

Hobart, 30th March, 1889.

Humphrey - Street.

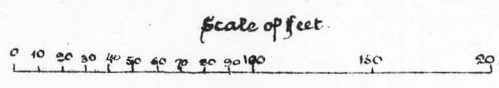
NEW WARDS FOR WOMEN.

IDIOTS' YARDS.

Recreation - Ground.

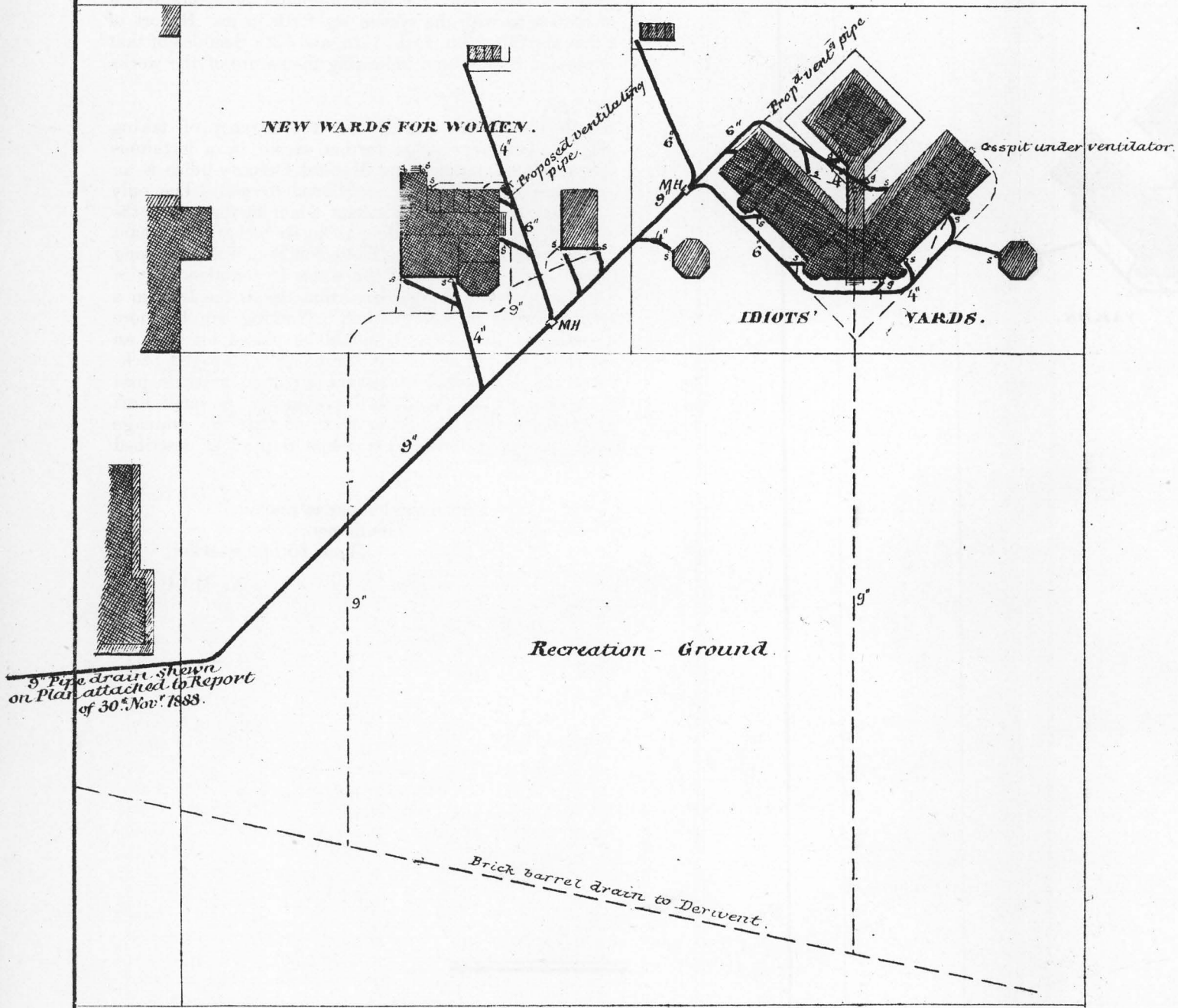
Burnett - Street.

Sketch Plan of New Buildings at New Norfolk Hospital for the Insane.



for Explanatory Note see Plan attached to Report on the drainage of the Hospital, dated 30th Nov. 1888.

To accompany Report: - A. Maule, 30th March, 1889.



3" Pipe drain shown on Plan attached to Report of 30th Nov. 1888.

Brick barrel drain to Derwent.