

*Water Reticulation, Pressure, and Supply.*

The proposed new reticulation as laid out on the plan is well designed, and the adoption of hydrants with 3 in. waterways will prove of very great advantage to the brigade in their work. From a fire point of view the weakness in the new water-supply scheme is the available working-pressure. With the head 240 ft. above datum the static pressure will be 104 lb. Deducting loss due to friction, draw off, &c., the available pressure will be approximately about 90 lb. Though this will prove ample in a number of cases, it is not a sufficient pressure for fire-extinction purposes. In consequence, it will be necessary to run the fire-engines to the majority of city calls, and to obtain a good supply for the engines. As an auxiliary in case of a breakdown in the high-pressure system, I would advise that certain of the tanks should be connected with one another by means of pipes, and also connected with the supply to be obtained from the pumps at the Destructor.

The foregoing is a general outline of the scheme that I consider your Board should adopt for the improvement of the fire-protection service in your city.

I have, &c.,

THOMAS T. HUGO,

Inspector of Fire Brigades.

E. J. Righton, Esq., Secretary, Christchurch Fire Board, Christchurch.

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REPORT No. 2. (30th June, 1909.)

I made a second inspection of this brigade and its equipment on the 21st and 22nd June. A false alarm of fire was rung up from the Choral Hall fire-alarm box, a point some 600 yards distant from the Lichfield Street Station, and about the same distance from the Chester Street Station. The call was given at 7.49 p.m. on the 21st. The first response was by the Chester Street chemical engine, which arrived at 7.53.5 (4 minutes 5 seconds from time of call), followed 5 seconds later by the steamer from the same station. The motor from Lichfield Street arrived at 7.53.25 p.m. This response was not as prompt as it should have been. Directions were given for the steamer to be got to work from the river. The pumps were started, and water shown at 7.58 p.m., with the steam-gauge showing only 40 lb. pressure. The engine was stopped, and instructions given not to start again until there was 100 lb. on the gauge; this pressure was obtained at 8.3.20 p.m. This result was not good, seeing that the water is kept warm in the boiler. However, since my previous visit of inspection there have been drastic changes in the *personnel* and working methods of the brigade, and the newly appointed Superintendent has hardly had time as yet to thoroughly drill the men or complete his system of organization; therefore, further criticism will be held over until some later period.

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DUNEDIN.

DUNEDIN FIRE BRIGADE.

Inspections of the Dunedin Fire Brigade and its equipment were made on the 14th and 15th September, and again on the 29th March.

A call was given by telephone at 8.1 p.m. on the 14th September for a supposed fire on the premises of the Union Steamship Company in Water Street. The first hose-and-ladder carriage arrived from the Central Station at 8.4.40 p.m., or 3 minutes 40 seconds from time of call; the second carriage arrived at 8.5.10 p.m.; and the large pair-horsed escape shortly after. This response to the call was satisfactory, and made in good time. Whilst getting the appliances to work, proceedings were interrupted by a genuine alarm of fire; but further drill was carried on at the station after the return of the brigade.

At my second visit on the 29th March, 1909, ordinary drill was carried out at the Central Station, where the first pair-horse hose-and-ladder carriage was turned out in 1 minute 5 seconds, and the second carriage in 2 minutes 7 seconds. Considering the disabilities they are under in comparison with a similar brigade in a station of modern design, with its special facilities, these results are very good, and speak well for the smartness and drill of the men.

SOUTH DUNEDIN VOLUNTEER FIRE BRIGADE.

An inspection of this brigade, which is under the control of the Dunedin Fire Board, was made on the evening of the 16th September. An alarm of fire was given at their station, and two deliveries were got to work in very quick time. The members of this brigade—consisting of a captain and fourteen men, of whom the captain and thirteen men were present at the muster—are well disciplined, drilled, and smart in their movements, but they require further equipment, such as hose, hand-pumps, &c.

CAVERSHAM VOLUNTEER FIRE BRIGADE.

Inspection of this brigade, also under the control of the Dunedin Fire Board—consisting of a captain and fourteen men, of whom the captain and thirteen men were present—was held on the evening of the 17th September. An alarm of fire was given, and two deliveries were got to work in fairly good time; but there is room for improvement in the discipline and drill of this brigade. Further equipment is required here also.