

All the remedies mentioned should be ordered by the City Council and faithfully applied. If the suggestions made were strictly carried out at once I have no hesitation in saying that when the pressure at the hydrants is taken in March, 1893, the result will show the works to be in as good condition as in 1882. If this course is not followed we must resort to the most expensive remedy additional supply.

Construction of Reservoir.

The most economical method of increasing the supply would be the construction of a reservoir in some central position within the city limits. It was a part of the original design for the works and has been repeatedly recommended by the City Engineer during the past three years. The advantages are generally, that while the effective head and consequently the discharge is diminished by the friction on the sides of the pipes and the various curves and bends in long mains, the reservoir collects near the centre of distribution a large quantity of water at nearly the full elevation of the source of supply, and by a system of stop cocks exert the force due to that elevation upon the service pipes and hydrants. In case of accident to the main or during cleaning operations the city is supplied for a time proportionate to the capacity of the reservoir, independent of the lakes. The water discharged into the reservoir during the night or while the consumption is lightest during the day, is fed out to the overworked main during the time of greatest consumption when the draught becomes too great for the capacity of the pipe. In some cities, however, the amount of water drawn from the distributing reservoir during the night often far exceeds the average used in the day time. Under the present condition of the service a similar occurrence would be noticed in Halifax. In winter, on the highest parts of the High and Low Service the pressure is at times 5 pounds less during the night than in the day time. Such being the case I would hesitate to recommend the adoption of a reservoir as a solution of the difficulty. While it might be very bene-