after being laid, were tested to from 500 to 700 lbs. The pipes were provided with extra heavy hubs and 2 lead grooves. These joints have given entire satisfaction.

Hydrants. The hydrants are connected to the mains by 8 inch flanged pips. They are provided with four $4 \frac{1}{2}$ hose nozzles with independent gates. These nozzles are, when required, reduced to $31 / 2$ and $21 / 2$ inches by suitable reducers, $31 / 2$ inch being the largest hose now used.

The hydrant valve is 8 inches in diameter, and is provided with one inch pilot valve to fill the hydrant before opening the main valve against the pressure. Both the valves are operated by the same stem. Each hydrant connection is provided with a gate valve so that the hydrant may be cut out from the system in case of necessity.

