In large pumping stations these tanks could be increased in size. The tanks at present in use are galvanized iron, with an inner facing of tar and cement to prevent any galvanic action with zinc on account of concentrated solution of bleaching powder; concrete tanks would be better. At the bottom of each tank is a drain pipe for washing out and cleaning the tank.

When tank "A" is being emptied, stop cock "M" is open and "N" closed. When tank "B" is being emptied *vice versa*. "C" is a five-gallon tank similarly lined. It has a ball valve and acts as a pressure-regulating tank, and always contains a supply of the mixture. The stop cock "D" is for shutting off the supply when one pump only is working. The sketch shows two pumps in action. The stop cocks "E" are "set" so that the required quantity of concentrated solution goes into suction pipe in the required time. Tanks "A" and "B" are used alternately, one being in operation while the other is being filled. The calculated quantity is placed first in a two-gallon petrol tin with the top removed, where it is well mixed with water. The solution is left for thirty minutes, and allowed to mix freely with water entering tank. At the end of thirty minutes the water is allowed to run into regulating tank "C," from which it runs directly into main suction.

The amount of bleaching powder required is calculated as follows: In a particular instance 24,000 gallons of water were pumped per day. As the water needed one scoop, or 30 grains per 110 gallons, the total amount indicated per day of ten hours would be 6,545 grains. This is approximately 1 lb. bleaching powder, which is easily emulsified in fifty gallons of water. If fifty gallons will be delivered into the main in one day of ten hours, then five gallons must be delivered into the main per hour, or one pint in one and a half minutes. The cock "E" by experiment is therefore "set," so that the regulating tank "C" is emptied at the rate of one pint per one and a half minutes.

THE END.