

THE RESERVOIR.

The following interesting account of that important public work, the Reservoir, appeared in a late number of the *New-York Cabinet*, to the editor of which it was communicated :

The Reservoir.—For the particulars embraced in our account of this building, we are indebted to the politeness of Mr Thomas D. Howe, one of the engineers of the fire department and superintendent of the works connected with the reservoir.

The building represented in our engraving was erected by the corporation of New-York in 1829, for the purpose of supplying the city with water in cases of fire. It stands in the Bowery above 13th street, about two miles from the City Hall. The surface of the ground on which the building stands is 57 feet above tide level. The tank or cistern rests on a foundation of solid stone masonry, forming a circle of 44 feet diameter and 30 feet high. The tank itself, formed by cast iron plates united by screws and cement, is 42 feet diameter by 20 feet 6 inches in height, and holds 2500 hogsheads of water. The whole building rises 75 feet above the ground to the top of the tank and is surmounted by a cupola, making in all 100 feet. It forms a very picturesque object to boats passing through both the East and North rivers.

After breaking ground to obtain water, and penetrating through the earth the distance of 11 feet, the workmen employed in digging the well of the reservoir came to the bed of rock forming the bed of the city, and extending in all probability at various depths to Blackwell's Island and under the waters of the Hudson! Through this rock they bored a well 113 feet deep by 17 feet diameter, with two shafts extending in opposite directions, east and west, 75 feet each way, and another branch from the western shaft northerly 22 feet. The well is calculated to furnish 200 hogsheads of water every 24 hours, which is raised into the tank by a steam engine of 15 horse power.

The bottom of the tank is furnished with a valve communicating with a 24 inch pipe which conveys the water to the main branches in 13th street. Through this street a line of 12 inch pipe proceeds to the 3d avenue, and thence in a straight course to Pearl-street, where it makes a short bend and follows down William to Exchange street. A 6 inch branch leaves this line and proceeds through Stanton street to within 100 feet of the river. Another course of 12 inch pipe passes through 13th street to Broadway, and thence to Canal street; from this a 10 inch branch is thrown off through Houston, Bedford and Christopher streets. All the line of pipe are furnished with hydrants for discharging the water, at intervals of two or three hundred feet, with stop cocks, &c : at each hydrant two engines can be supplied with water, the force of which is so great that in case of emergency it can be thrown to any necessary height by attaching the apparatus of the hydrants to the engine leaders. About seven miles of pipe are already laid and contracts are made for 5 or 6 miles more.

The water obtained here is soft and of the most salubrious quality imaginable, as it filters beds of rock, sparkling in its subterraneous course, says our informant, with the utmost brilliancy. And it is supposed that by extending the excavations somewhat further, sufficient water might be obtained to supply the city for domestic use.

The estimate of expenses already incurred, including the lot of ground on which the building stands, does not exceed \$150,000, which sum it is supposed has been already saved to the city in the facilities afforded the fire department.—An immense amount of property having been hitherto annually destroyed by fires through the difficulty of obtaining a timely and adequate supply of water.