

THE SYSTEM IN NEW YORK.

In New York, the system is being operated on a very large scale, by a Company who have selected and purchased ten sites for steam stations. The first station, (Station B,) at Nos. 172 and 176 Greenwich St., has been built, and consists of a building, 75 feet front by 120 feet in depth and 120 feet high, in which are to be placed 64, Babcock & Wilcox sectional, boilers, of 250 horse-power each, or, in all, 16,000 horse-power, distributed upon four floors, 16 boilers on each floor. The draft for the furnaces of the boilers, will be obtained by two large chimney-stacks, each about 225 feet high, supplemented by a fan blower, on each floor. The walls of the building are 36 inches thick at their base, and those of the chimneys are 4 feet thick. The dimensions of the chimneys are as follows :—Exterior dimensions at the base, $32\frac{1}{2}$ by 20 feet; at bottom of flue, $32\frac{1}{2}$ by 13 feet; interior area, 27 feet 10 inches by 8 feet 4 inches.

The coal supply will be elevated to the upper stories of the building, and delivered through chutes, alongside each boiler, while the ashes will be taken by chutes, from each boiler through the basement of the building.

On the 1st of January, 1884, the Company had five miles of its street steam system in active use, having increased from one mile in use on the 1st June, 1882. The mains, which are from six to ten feet underground, have been all the time under a full pressure of 80 pounds per sq. inch, and no one has been injured.

The mains are made of lap-welded tubes, and are most of them 11, 13, 15 and 16 inches in diameter, some are shortly to be put in 20 and 24 inches in diameter. In place of being screw-coupled, they are flanged and bolted together, the end of the wrought-iron pipe being expanded into the flange, by an enormous tube-expanding machine. The condensed water is returned to the boilers by a pipe about half the size of the mains. The mains and return pipe are laid in a well-drained brick chamber, and packed all round with mineral or slag-wool as a non-conductor. Expansion and contraction is provided for, by using elastic copper ends to the pipes; and the details of the system have been very carefully worked out.