

LOCAL INTELLIGENCE.

OUR STEAM FIRE ENGINES.

Their Capacity Tested—A Satisfactory Trial—Singular Accident.

Since the fire of last November there has been a general feeling of uneasiness in the minds of Boston people concerning certain matters connected with the extinguishing of fires. The principal point of their anxiety was that the engines in use by the fire department were not able to force a stream to the top of any of the numerous lofty buildings in the business part of the city, in particular. Chief Engineer Damrell very naturally felt a little nettled about this, and resolved that he would silence the murmurs. This he has effectually done, as will be seen below. It was decided that there should be a public test of the engines of the department, one machine to be taken as a representative of each "make."

The steamers selected were as follows: Engine 4, Amoskeag, double reciprocating vertical engine, 7½ inch diameter cylinders, 8 inch stroke, pumps 4¾ inches in diameter, and 8 inch stroke; capable of throwing 7500 gallons of water per minute; weight, with hose carriage and 500 feet of hose, as drawn to fires, 8510 pounds; first put in service on the 7th of November, 1867; Engine 8, Jucket & Freeman, Boston, double reciprocating vertical engine, fitted with 7-inch steam cylinders, having an 8-inch stroke, with 4½-inch pumps, so constructed as to work double or single; weight as drawn to fires with hose, etc., 7200 pounds; first put in service on the 26th of April, 1869. Engine 9, Hunneman & Co., Boston, double reciprocating vertical engine, its steam cylinders being 7¼ inches in diameter, with an 8-inch stroke and 4¾-inch pumps; capable of being worked either double or single; weight as drawn to fires, 9300 pounds; first put into service on the 14th of October, 1872. Engine 12, Bucket make, reciprocating engine, fitted with steam cylinder, 11¼ inches in diameter, 6¾-inch pump, and 9-inch stroke; at a fair working speed discharges sixty gallons of water per minute; weight as drawn to fires, 6800 pounds; engine 20, Jeffers make; one steam cylinder nine inches in diameter; and one double-acting vertical plunger-pump of 5¼ inches diameter, with 7½-inch stroke. At fair working speed, the builder claims, can discharge 400 gallons of water per minute; first put into service in January, 1870, and its weight, as drawn to fire, is 7450 pounds.

The test, as will be seen, was a very severe one, and the behavior of the engines is sufficient to reassure all as to their strength. A line of hose three hundred feet in length was run from the reservoir immediately in the rear of the State House to the cupola of that edifice, where one end was fastened and a pipe with an inch and a half nozzle attached. The engines were called up separately to the test, in the following order: 9, 8, 20, 12, 4. Each engine was run under the ordinary working pressure, one hundred pounds, and the test was to throw a good, steady stream of water through the three hundred feet of hose to the top of the State House and well up and out into the air. This was done in every case in a very satisfactory manner; but the common verdict as to the strength and general excellence of the stream was in favor of Engine 4.

In addition to the test given above, there were several other experiments. The Babcock distinguished itself by throwing a splendid stream through three hundred feet of hose, from the highest story of the State House, under pressure of one hundred and sixty pounds on one tank, and one hundred and thirty on the other. A novel arrangement was also tried, in which electricity was introduced. Every one knows the amount of shouting done at fires, such as "Hold on Steamer" this, or "Play away Hose" that, and the contrivance mentioned is designed to do away with such work. A small copper wire runs through each length of hose, independent in itself, but so made that when the main couplings are brought together these will also unite. In this way the hoseman has direct communication with his engine and can at once stop the water by sending a shock of electricity through the wire, which rings a bell on the machine and thus gives to the engineer the desired intimation. This contrivance was tested yesterday and worked in a most satisfactory manner.

The last test made was that of a self-propelling engine. This machine was constructed by the Amoskeag Company in 1867, is rated second-class, and weighs about 7000 pounds. At that time it was tested, and to the chief engineer the result was satisfactory, though nothing was afterwards done about it until yesterday. Steam was raised at the foot of Mount Vernon street, and the engine, in charge of Gilman Tyng, engineer of Steamer 10, James King, fireman, and William Hudson, hoseman, came up the hill slowly. When it reached the steep part, at Walnut street it was stopped, and, after some time, turned around and guided down hill. After a short time it was again started, and for a while ran very well; but when it reached Louisburg square it stopped entirely. Efforts were made to start it, but without success. Suddenly, in the midst of these, something was heard to snap, and the engine started down hill, its velocity increasing as it went, it being evidently beyond control of the men in charge. These, one by one, jumped from it, or were thrown off, and the machine brought up at the foot of Mount Vernon street, without injury to itself, strange to say. The result, besides the ignominious failure of the machine, was that the fireman, James King, had his right foot run over, and several of the small bones crushed. The cause of the disaster was as follows: A chain band passed over a cogged driving wheel, and this slipped off, taking all control of the machine out of the hands of its drivers. With the exception of this accident, the entire trial, which was witnessed by the Mayor and a majority of the members of the city government, was entirely successful and satisfactory.