

The Report of the Chief Officer of the Metropolitan Fire Brigade on the fires which took place in London last year is of more than usual interest at the present moment. One reason for putting the water supply under public management is that the present arrangements for extinguishing fires are so entirely unworthy of a great city. Captain Shaw reports that on 60 occasions last year the water arrangements were unsatisfactory. In only nine of these cases was there a short supply of water, but in 33 instances the turncocks were late in turning the water on, and in 18 cases no turncock attended at all. It may, however, be fairly said that as compared with other great towns the arrangements for the supply of water at fires were unsatisfactory in London in every case. There were 1,718 actual fires, of which only 159, or 9 per cent. of the whole, were really serious. Captain Shaw does not tell us how far this proportion of serious fires is due to defective water supply, but it is clear that the necessity of sending for a turncock to turn on the water must in all cases give the fire a chance it could scarcely have if the water was always on. It cannot be too strongly pointed out that the necessity of sending for a fire engine, of getting it into action, of turning on the water, drawing out a fire plug, and then pumping it by means of the engine over the fire, are methods only worthy of a village. A steam fire engine is an imposing piece of machinery but it is after all only an improved form of the old pump engine. Every step needed to set it going is a needless delay. Under any proper system of water supply the mains are always charged in every street, and when a fire breaks out the firemen have only to run with a hose, fix it to a hydrant, turn the screw tap, and at once a stream of water is pouring over the flames. The adoption of this system in London will at once double or triple the efficiency of the Fire Brigade. It will allow of the rapid multiplication of stations since instead of each station being supplied with engines and horses, it will only need to be furnished with handbarrows to carry the hose. The wheeled carriage, which is now standing in Ladbroke-square is an illustration of the simple kind of fire station which will be necessary when this great reform has been carried out. There is no need to fear that the greater facility of turning on water will lead to waste. It is more likely to effect an economy of its use, since a gallon will be more useful in the earlier stages of a fire than a thousand gallons when it has got the half hour's grace which our present system nearly always gives it. Even under that system the consumption of water from the street pipes was only about 600,000 gallons, and about 7,000,000 gallons were dumped from the river, or from canals and docks. This is really an immaterial part of the yearly consumption of London. There were 96 fires in which lives were endangered, and 27 in which lives were lost. The number of people thus harmed was 32, and the number rescued was

132. Two fourth-class firemen have been commended for special merit in saving life during the year—Edward Epps, who saved four lives, and Walter Hogwood, who saved two. There seems to be a steady increase in the number of fires, though the proportion of serious losses becomes happily somewhat smaller. Captain Shaw expresses the opinion that the value of property destroyed by fire in London has been less in the year 1879 than in any other year since the formation of the brigade. The reduction in the number of serious fires is probably due to the greater promptitude with which a conflagration is now attacked. We may be almost sure that it will undergo another striking diminution as soon as it is possible to turn on the water with a hose, and the delay in getting up engines, finding turncocks, and digging out the plug has been abolished. If the new Water Commission does not speedily accomplish this reform for the people of London, it will be hardly worth the trouble and cost which will attend its establishment. A Parliamentary inquiry made long since reported that the means for dealing with fires in London were inadequate and its chief reason for advising that the water supply should be put under public management was that its efficiency in this respect should be speedily secured.

NEWARK, Conn., is supplied with water from an artificial pond three and a half miles from the city. It is brought to the city in pipes by gravity pressure. The city is provided with two-way hydrants located no more than two feet apart. A water pressure is obtained at the hydrants equal to 85 lbs. to the square inch, which will throw an effective fire stream over any building in the place. Chief Carrier relies entirely upon the hydrant pressure. He uses four-wheel hose carriages, 600 feet of hose on each reel and twenty men to each Company. He has four Steamers, but they only respond to second alarms, and have not been called out in a year and a half. The Department controls all fires by means of the hydrant streams. This is the cheapest and best Fire Service to be obtained—fire streams direct from hydrants. Cities putting in Water-works should keep this point in view.

NUMBERS of fire alarms at Ottawa, Can., for the month of February, 9; seven public and two still alarms. Loss on buildings, \$660; loss on contents, \$3,270. Total \$4,110. Insurance on buildings, \$5,750; insurance on contents, \$8,000. Total, \$13,750.

THE National Fire Insurance Company of Montreal, has ceased to exist. It has disposed of its business to the Sovereign Fire Insurance Co., of this city, (formerly the Insulated Irish), which Company has assumed all the liability for losses on the existing policies of the Montreal. We understand that a large proportion of the business remaining is of a good class, and we trust the Sovereign has received an ample equivalent for the risk they have assumed.

THE Baltimore *Underwriter* says that the two fires of recent occurrence were occasioned by water. In other words, they resulted from rapid and intense disengagement of heat in slacking time. One of the two referred to was occasioned by a high tide in the East River, at New York, which flooded a pier at the foot of East Ninety-sixth street, where stood a shed containing 14,000 barrels of lime. The powerful affinity of the lime for water, and its instantaneous conversion into a hydrate, was attended with such enormous extrication of heat that the shed, contents, and surroundings were set on fire and destroyed, involving a loss of \$20,000. The firemen were promptly on hand but, as might have been expected, the more water they threw upon the flames short of super-saturation—a point they evidently did not reach—the more brightly the fire burned. In such a case the most effective medium of extinguishment is carbonic acid gas, not, of course, by re-carbonating the lime—so to speak—but by exclusion of the oxygen of the atmosphere. We advert to the matter because combustion as a result of rapid hydration is frequently doubted. Such instances leave no room for doubt.

WET seaboard cities do not utilize salt water for fire extinguishing and sanitary purposes, is one of their contradictions that, as *Dumfries* says, "No fella can find out." The *Journal* has advocated its use for New York city, and not till that is done can we be considered safe from great conflagrations. Gen. Meris, Quarter-Master General of the army, agrees with us in that seaboard cities should thus equip themselves. In a recent letter to the *Galveston News*, he writes as follows:—"Visiting Galveston again recently, after the lapse of ten years, I was struck with the great improvement and increase of the city. I also noticed the evidences of great damage by fire. When I first saw Galveston in 1869 '70 it was struggling to recover from the effects of a great conflagration. Another has since devastated the city, and a severe fire had occurred within a few days of my recent visit. It appears to me that the city would find its advantage in providing special lines of cast-iron pipe, through which sea water could be forced to within a few hundred feet of any point desired. There is no danger from frost bursting such pipes in your climate, and they could therefore be laid at a small depth below the surface of the ground. Stationary steam pumps and boilers, located near the shore, sufficient to deliver very heavy streams of water through hose attached to the iron pipes, in any part of the city, would be less costly in maintenance than portable steam fire engines. The cast-iron pipes would probably not cost so much as a sufficient supply of hose, and if dipped in hot asphalt, before being laid, they would be much more durable than any hose. Such a provision would be effected, and I think it would be found cheaper than any other fire establishment." What is good for Galveston is equally good for other cities.—*Fireman's Journal*.