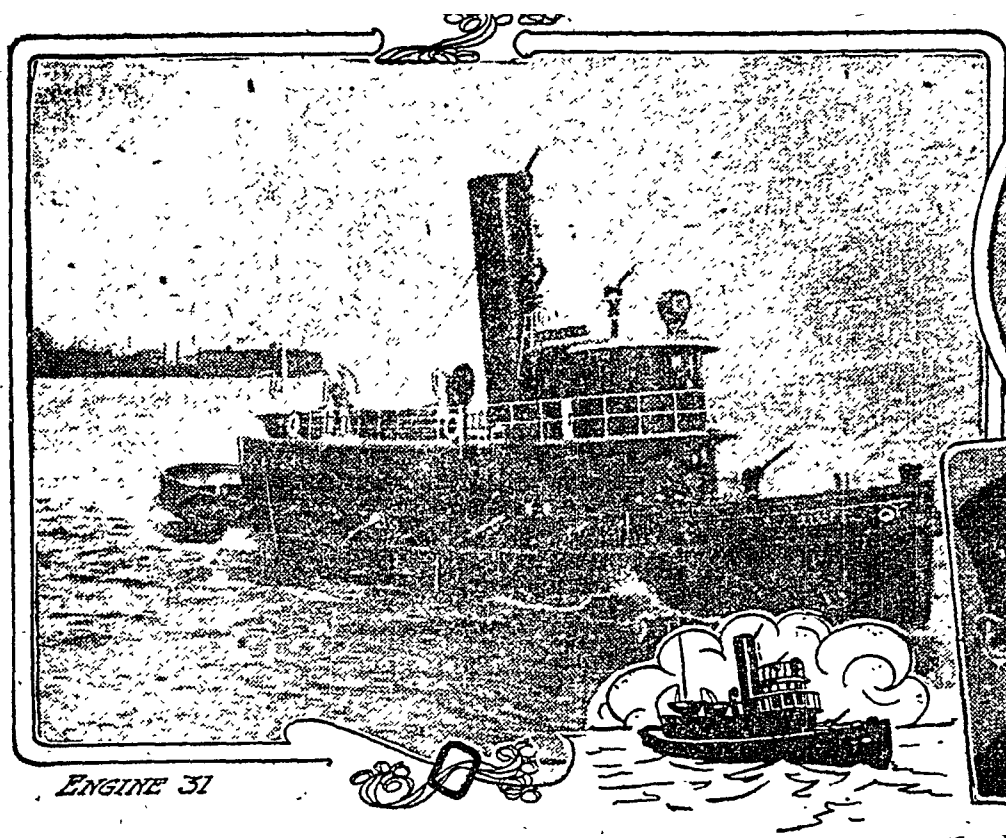


BOSTON MARINE FIRE DISTRICT.

City Has a Water Front of About 18 Miles and the Wharves and Sheds Constitute the Greatest Fire Hazard of the Municipality—Guarded by Three Boats Which Throw Great Streams—District Chief Ritchie Has Sailed Four Times Around the World—How Capt Eaton Was Lowered Into a Ship's Hold Where Four Sailors Had Been Asphyxiated.



THE marine fire district of Boston comprises all buildings or other property, including wharves, bridges, etc., bordering on the water front, beginning at a point on the northerly side of the reserved channel at L-st bridge, South Boston, thence westerly along the harbor line of South Boston to Fort Point channel, thence southerly to Dorchester-av bridge, thence northerly by way of Fort Point channel; thence along and around the city proper harbor line to Charlestown bridge, thence northerly along the water front around the Charlestown district to Mystic river (south side) to Malden bridge or Alfred st; also beginning at Jeffreys point at the head of Marginal st, thence northerly and westerly along the East-Boston water front to Chelsea creek, thence easterly along said creek (south side) to the Grand Junction railroad bridge, and to include all property on the islands of Boston harbor.

Though thus officially outlined, the marine district consists of all property near the water front in the vicinity of Boston, for in case of fire the Boston fireboats would work, whether or not the wharf was Boston property.

Boston has a water front of about 18 miles, and the wharves and sheds constitute the greatest fire hazard that menaces the city. The rapidity with which dock fires spread is inconceivable to those who have never worked at them, and a million-dollar fire may be leaping from one tinder-box shed to another before an alarm can be given. The long piers, piled high with every inflammable substance known to commerce, are ablaze from end to end before a stream can be brought to bear. A dock fire with a strong breeze from the water front is the most difficult proposition the fire-fighters have to face. In such cases work from the land side is purely defensive.

It is for these tremendous fires that the powerful batteries of the fireboats are designed, and no one can form an adequate idea of their efficiency unless

he has actually seen them in operation. The pumping capacity of the smallest fireboat far exceeds that of three first-class land engines, and the streams delivered from the largest nozzles at the closest possible range are the most effective that can be devised. The streams when striking a wharf actually resemble breaking surf.

The fireboats are all propellers, and the motive power is furnished by machinery of the ocean-going steamboat type. The pumps are driven by machinery specially designed for the purpose, and altogether separate and different from the main engines. Forced draft can be applied to the boilers when necessary. The boats are handled by steam-steering engines and gear, which can be quickly changed to hand steering gear whenever accident makes it necessary.

Some of Boston's greatest fires have been on the water front. The "grain elevator and Allan shed fire" and the "Hoosac tunnel dock fire" at Charlestown, the "Grand Junction dock fire" at East Boston and the "Albany-st fire" are typical instances of water-front fires.

The great oil wharf fires at East Boston stand in a class by themselves, the exploding barrels and tanks and the fluid fiercely blazing while afloat forming hazards which must be encountered to be understood.

The Boston water front is guarded by three fireboats. The only other cities in the United States which have a stronger force are Chicago and New York.

In addition to dock fires and fires on vessels, the water-front fire fighters also work at big fires ashore, sometimes running their lines of hose far away from the boats, and often supplying land companies with streams during lumber yard and dock fires.

The streams of the fireboats are made effective at a great distance from the boats in the downtown section of Boston by what is known as the "salt water system." This system consists

of one mile of 12-inch piping running from the berth of the fireboat at Central wharf through Exchange and Congress sts, Postoffice sq and Atlantic av. It is a high pressure system, the power to the 12 hydrants being furnished through 12 inlets by the fireboat. The tops of these hydrants are painted red to distinguish them from ordinary hydrants, and each hydrant has three three-inch outlets with independent gates. Three-inch hose is carried on a wagon specially fitted for the purpose. By means of press buttons signals for working the system are transmitted to the fireboat.

When this system was tested a stream was thrown from a 3-inch nozzle (the largest in use), fed by four 3-inch lines stamed to a "Jumbo set," a distance of 27 feet horizontally, and over the Congress building for a height test, a vertical height of 125 feet.

This system is regularly tested, and when not in use fresh water is kept in the pipes at a pressure of 45 pounds to the square inch by the simple hydrostatic expedient of having the system connected by a 1-inch pipe to a tank at the top of the postoffice building.

The fireboats of Boston are officially known as engines 31, 44 and 47.

Engine 31 is the latest and smallest boat and is the fourth to bear that number since it was given to Boston's first fireboat in 1873.

Contrary to general supposition, these boats do not have the right of way when steaming to fires. The fire alarm signal for the water front is given by sounding three long and two short blasts on the steamboat whistles.

Engine 47, moored at the foot of Lewis st, East Boston, is the headquarters house of the chief of the marine district, Robert A. Ritchie.

District Chief Ritchie has spent most of his life on the water, having four times sailed round the world. He learned the trade of boat builder when very young, and later in life entered the merchant marine, serving through all grades to mate in all kinds of vessels, until licensed as pilot of Boston harbor. He was appointed to the fire force May 1, 1883, and made permanent in 1884. Promoted lieutenant May 16, 1891, he served with engines 8, 31 and 33 until promoted captain Oct 16, 1896. He was made acting chief of the third district in 1900 and chief of the marine district when it was made a special district on Oct 14, 1909.

His experiences while fighting fires along the water front have been intensely interesting. Several times he has had vessels sink while he was fighting fire on board, and he has many times successfully hauled out vessels and extinguished the fire on board when it seemed they were doomed. One striking instance was the sinking of the Massasoit while on fire, and a fine case of salvage occurred in saving the Clyde line steamboat Onondaga at the Lewis wharf fire. Firemen, of course, get no salvage money.

Chief Ritchie has many times had difficulty in saving his own boat from the rapid rush of dock fires, in particular at the Cunard dock fire at East Boston, when the machinery of old 31 broke down, and again from the oil blazing on the water and fire sweeping over the wharves during the great Chelsea conflagration.

Lieut Charles A. Winchester of fireboat 47 is a deep-water man of long experience, having been a sailor for ten years, and serving as second and first mate. He has several times been round the world. He entered the department as pilot, May 16, 1894, and after service with engine 23, and chemicals 4 and 5, was promoted lieutenant March 20, 1903, and after service with ladders 5 and 19, was transferred to his present position. He has several times gained commendation from different commissioners.

Chief Engineer "Rufe" Clark of engine 47 is one of the best known engineers along the water front, and, as were nearly all the engineers of the fireboats, was formerly a towboat engineer. His assistant engineers are H. J. Hooper, J. F. Murphy, J. A. Nelson and C. R. MacLaughlin.

The hosemen and pilots of 47 are J. P. Walsh, S. D. Boudreau, F. A. Nugent, W. C. Landry, W. J. Marshall, F. L. Carroll, M. J. McNamara, C. J. Harrington and J. J. Carrington. The last two named men are veterans of the Spanish war.

Fireboat 47 is a light draft wooden hull boat, designed for quick work. She easily maintains a speed of 13 knots an hour. The main engines are of the vertical inverted, compound type, the high pressure cylinder 17 inches in diameter, the low pressure cylinder 36 inches. The stroke for both pistons is 24 inches. The engines are fitted with steam reversing gear.

The two fire pumps are of the vertical, tandem, compound type, with steam cylinders 12 and 22 inches in diameter. The water cylinders are 10 inches in diameter. Stroke of all 11 inches. Capacity 6000 gallons per minute at 175 pounds pressure to the square inch. She has the additional machinery and pumps for condensing engines, and an electric generating plant of sufficient capacity to light the boat throughout, and to furnish current for a powerful searchlight. She has 12 outlets for 3/4-inch hose for fighting fires at a distance from the water front, and 6 swivel nozzles, 2 forward, one on pilot house,

one on main deckhouse and one on top of smokestack.

These boats carry about 5000 feet of hose ranging from the largest to the small special hose for boat work, and carry pomplier, roof and straight ladders.

Fireboat 31 is also quartered at this station until the house now being built at the North End paving yard wharf is ready for the men.

The crew of each boat live and sleep in quarters on the wharf, so arranged that they can jump aboard the boat the minute an alarm sounds. Steam is constantly at the blowing-off point, and the engines ready to start instantly.

A novel feature of the East Boston station is the private wireless outfit rigged up by the men.

Fireboat 31, the new boat of the fleet, recently commissioned, by Commissioner Daly, is specially designed for shallow water. Her wooden hull is 95 feet over all. Her deckhouses are of steel. Her displacement is 100 tons. Her draft is seven feet. She is twin screw and driven by a pair of compound engines. Cylinders 10 1/2 inches for high pressure, 22 inches for low. Length of stroke 16 inches. Speed about 12 knots. Steam cylinder of water pump 18 inches. Water cylinder nine inches. Stroke 10 inches. Capacity 3000 gallons per minute. Water tube boiler. Four swivel guns, one on smokestack and eight outlets for hose connections. Lighted by electricity and carries searchlight.

Engine 31 is under the command of Capt Charles S. Moran. Capt Moran is well qualified for his present berth by previous experience around the water front, as he was a pilot for several towboat concerns before entering the fire service. He has been steamboating since he was 18 years of age and holds mate's and master's licenses and first-class pilot's license for Boston harbor and Massachusetts bay.

He was appointed to the fire department as marine pilot to engine 44 April 17, 1903. Promoted lieutenant in charge of engine 47 Oct 14, 1909. Promoted captain of engine 31 March 31, 1911. His record for advancement is probably without parallel in the Boston fire department of recent years.

"Steve" O'Brien is the chief engineer of engine 31 and was formerly well known as a towboat engineer. His assistant engineers are D. J. Gibbons, George Layhe, W. H. Connors, W. L. Foster. The pilots and hosemen are W. L. Slauenwhite, W. F. Bryan, M. F. Hulberg, J. L. Langan, E. M. Sennoit, T. Driscoll, H. L. Jenkins, H. M. Dolbear, J. J. Quinn.

Engine 44, berthed at Central wharf, is the oldest boat in service, having been commissioned in 1895, and has given great satisfaction. Her high pressure cylinder is 12 1/2 inches, and her low pressure cylinder 10 inches in diameter. Stroke for both 11 inches. Her two sets of pumps have a combined capacity of 6000 gallons a minute.

This boat is under the command of Capt Walter S. Eaton, who takes charge of the marine district in the absence of Chief Ritchie. He entered the department July 31, 1891, and having, previously been a towboat man, was promoted lieutenant of engine 44 in 1899, and has since remained with this boat of which he was promoted captain Oct 14, 1909.

Capt Eaton has had many peculiar experiences while fighting fire on shipboard. On one occasion he had to go where four sailors had been asphyxiated in the hold. He was lowered by a rope into the deadly gas. He has many other times performed work of a similar kind, and has several times been overcome in the holds of ships.

Lieut Robert A. Nugent of this boat has risen exceptionally fast in the service. He was appointed June 23, 1903, and promoted lieutenant of engine 44 Dec 13, 1909.

The chief engineer of engine 44 is Sylvester J. Wynter and his assistants are H. D. Marsh, J. W. Smith, S. McGinley, M. A. Daley.

The pilots and hosemen are H. E. Smith, J. F. Murphy, J. H. O'Leary, J. W. Haskins, F. G. Avery, T. R. O'Brien, J. J. Walsh, G. F. Moore and F. L. Hynes.

For engineers and pilots the fireboat fleet offers better prospects of promotion than any other branch of the fire service, and for most of the officers advancement has been exceptionally fast.