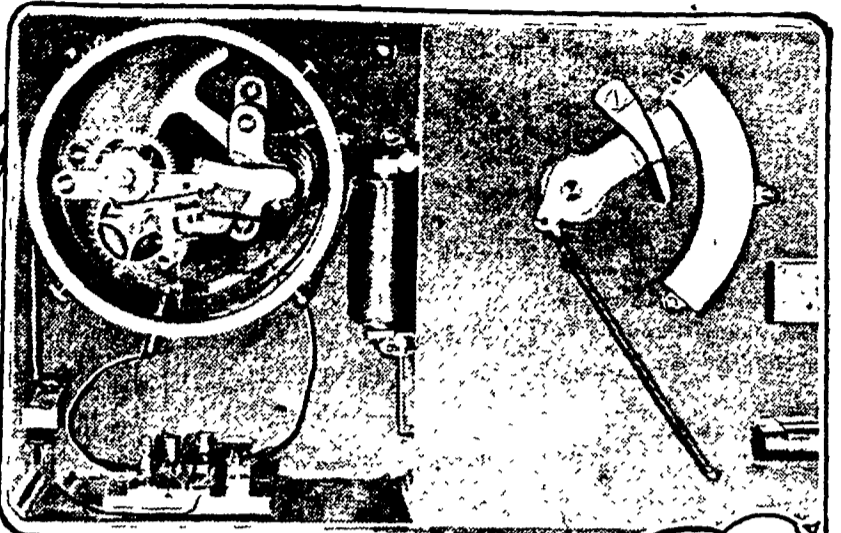


BOSTON'S FIRE ALARM 50 YEARS OLD.

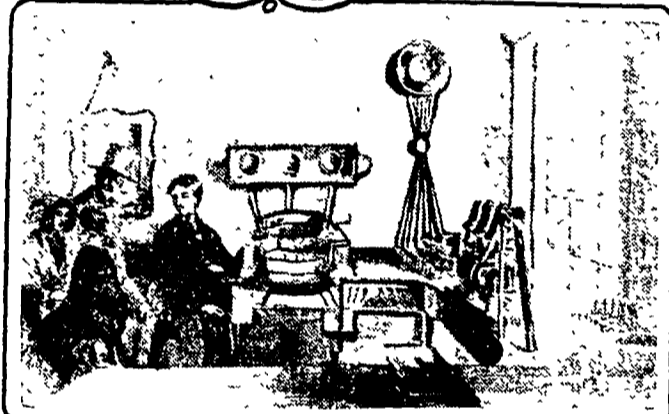
First System in the Country Installed in Boston—John F. Kennard, One of the Oldest of the City Employes, Helped Construct and Operate the First Plant.



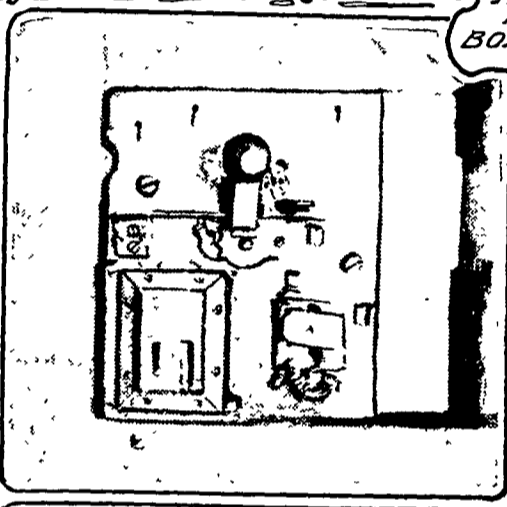
MR. KENNARD.



MODERN FIRE ALARM BOX AS USED TO-DAY.



FIRST FIRE ALARM STATION IN COURT-SQUARE IN 1852, FROM A WOODCUT.



FIRST FIRE ALARM BOX USED IN BOSTON.



This year marks the 50th anniversary of the installation of a system of electric fire alarms, in Boston, for that matter in the world, for the system originated in this city, and the first alarm by electricity was sounded within her gates.

It seems almost incredible that men now in active business life had to do with the construction and operation of the pioneer plant. Such, however, is fact, and Mr John F. Kennard, custodian of the old state house, has the honor.

Mr Kennard became connected with the service in 1855 as a substitute operator. It will be remembered that it was not until June, 1845, that the idea of utilizing the telegraph for giving alarm of fire was thought of. At that date it was first made known by Dr William F. Channing, a gentleman well known in medical and scientific circles of Boston.

It appears that to his medical training is due the first suggestion of the thought of his plans, and which he expressed in an address delivered before the Smithsonian Institute, Washington shortly after the successful introduction of the system in Boston.

As may be expected, Dr Channing met with many obstacles in placing his ideas on a practical basis, and had not Moses G. Farmer come to his assistance and by his practical knowledge of electrical science developed the plan, he no doubt, would have failed. By this cooperation it became known as the Channing & Farmer system, and they were allowed patents on their inventions May 19, 1857. The public looked upon the whole matter as visionary and impractical. Fortunately for the inventors as well as for the citizens of Boston, the elder Josiah Quincy was at the head of municipal affairs, and he urged upon the city council to investigate the merits of the new system, which resulted in the passage of an order for the construction of two machines for the striking of the city bells from a distant point.

These bells were constructed under the supervision of Mr Farmer, and one of them was placed in the belfry of the old city hall, and was connected with a line of telegraph wires extending to New York city. When the operator, following his instructions, opened and closed the circuit by means of his key, a series of blows was struck on the bells in this city, which, according to the papers of that day, "caused a false alarm of fire."

That ended the matter until 1851, when the city appropriated \$10,000 to be expended in the equipment of an electric fire alarm system

The entire construction of the system was intrusted to Mr Farmer, and the plant, consisting of 40 miles of wire, 45 signal boxes or stations and 16 alarm bells, was formally accepted by the city at noon, April 23, 1852.

Mr Farmer was appointed superintendent of the service, with four assistants, their first duty dating from April 29, or the day after the system was completed, when an alarm of fire was given from district 1, station 7, located on Cooper-st church.

The alarm was sent in by J. H. Goodale at 8.25 p m and was received at headquarters in the building which is now police station 2, in Court sq, by Charles Carlton Coffin, afterward famous as war correspondent and author of war stories and histories. By Mr Coffin it was sent to the tower bells throughout Boston, and for months the people talked of the wonders of the new system.

This alarm was sent in by turning a crank in the signal box six times. The entry in the record book at fire alarm headquarters, which tells of this alarm, says that it came in too fast, and those who remember it say that the operator was slightly confused by the manner in which it came in. As a matter of fact, as was proved by experiments later on, the crank should have been turned many times more than it was.

Printed instructions were afterward posted in each box that read, "Turn the crank 25 times."

The first box had an open circuit. This box, together with the improved closed circuit box invented in 1853, are in the possession of the department and are the only specimens of this type in existence.

The original box was a crude affair, operated by a crank which was turned fast or slow, backward or forward, but this objection was soon remedied and the next box was made so that the crank could be turned only in one direction. A double set of wires were used; one for the signal boxes on which to receive the alarm, the other with which to strike the bells.

Each of these stations had a set of characters—the city being divided into five districts—and only the district number was struck on the bells and the station number on the small bells inside the signal boxes. When there was an alarm the district number would be struck three times on the alarm bells, followed by 25 or 30 blows in rapid succession, and then the district number three times. The entire fire department consisted of "all men," men who followed various lines of industry, and the boxes were affixed to engine houses.

When the alarm was given on the bells the firemen rushed to the nearest box and listened while the little bell struck

the number of the box. They would then cry the number through the streets and if not too far away, would make the apparatus and hasten to the fire.

When it was proposed to improve this method by striking the box number direct on the bells and omit the district a cry of protests went up from those interested, as they thought it was impossible to indicate so many numbers.

Mr Joseph B. Stearns succeeded Mr Farmer Oct 8, 1853, and among other improvements he made was that of giving a number to each box.

Interpretation cards, on which, added to the old box and district numbers were printed the new box numbers, and these cards were distributed to firemen and other interested parties. The system of receiving the alarm remained the same, but instead of striking on the bells the box and the district number only the new box number was given.

Mr Stearns did away with the double circuit system and placed the alarm bells on a single circuit, so that the alarms were given and received on the same circuit.

The original device for sending out an alarm consisted of a board in which were inserted a number of push buttons. The electric force necessary to operate the plant consisted of a Grove battery for the signal circuits, and a large magneto-electric machine turned by water power, and later by hand, for the bell circuits. A dial was substituted for the direct keyboard in 1856 and these dials were increased as the city grew and the boxes increased in number.

These dials facilitated the striking of boxes with more than one figure, as for instance for box 1 the hand in the right hand dial is set at the figure 1 and the lever pressed; if 12, then the middle dial is set at 1 and the right at 2; if 123, the left hand dial is set at 1, the center, at 2, and the right at 3. The operator when sending out an alarm would work at these dials holding his watch in one hand and count off the seconds that must elapse between the sending of each number and after the number, the "ound."

Some time later Mr Edwin Rogers of Boston, who had been connected with the old system since 1853, invented the automatic auxiliary repeater, which made it possible to add the automatic arrangements used in connection with the system today, and do away with the laborate central office system.

Nearly all of these changes were made during Mr Kennard's connection with the department. He had acted as substitute operator but a short time when he was appointed a regular operator, and remained in that position until 1857. In February, 1867 Mr Kennard was appointed superintendent of fire alarms in the city of Boston, succeeding Mr Stearns.

It required but 40 miles of wire to reach the 48 signal boxes. Roxbury, Dorchester and Charlestown were not annexed to the city at the time. East Boston had no fire alarm connection until Sept 30, 1883, at which time a cable was run under the harbor. Previous to that time the signal box for East Boston was attached to the ferry house on the Boston side.

After annexation the boxes were numbered, those in Boston being given numbers under 100 Roxbury under 200, Dorchester under 300, and Charlestown under 400. The pull box, an invention of Moses G. Crane of Boston, was substituted for the old-fashioned crank boxes during Mr Kennard's administration, and this type is in use today.

The growth of the city by annexation and otherwise necessitated a large increase in circuits and apparatus, and these were added from time to time. A committee, composed of two aldermen and three members of the common council called the committee on fire alarms, looked after this branch of the government, and it was separate and distinct from all other departments, the only connection between the fire-alarm department and the fire department being that one of the aldermen on its committee was also a member of the committee of the fire department. Mr Kennard was invested with full powers to make contracts for his department, buy all supplies and employ assistants. He believed in having plenty of supplies on hand in case of an emergency.

The wisdom of this arrangement proved itself during the great fire of 1872, when nearly all the wire and signal boxes were destroyed. At the time he had 30 miles of wire, brackets, etc., stored in the basement of city hall, and within 24 hours after the fire was extinguished he had the entire circuit in working order.

During 1874 the fire department was reorganized and a board of fire commissioners established. Mr Kennard held his office under this commission until 1880 when he was succeeded by Brown S. Flanders, the present incumbent. After leaving the fire alarm department he was employed by the city to look after the telephones of the street and the health departments of the city, a position he held until the office was abolished.

After a few years in the employ of a private firm he was appointed custodian of the building used for a temporary court house at 30 Pemberton sq, where he remained until the new court-house was completed, and a few months later was given his present position in the old state house.

Mr Kennard has been in the employ of the city a longer period than any other man, except Mr John Colby, who is engaged in the city clerk's office.