

What Happens When a Fire Alarm Box Is "Pulled."

FEW people in Greater New York realize what an important part the little red-painted fire-alarm "telegraph operator" on the street corner plays in the protection of their lives and property from danger and destruction. Fewer still can properly open communication with the fire fighters, by this means, when the services of the latter are urgently needed.

Nearly every person, despite the plainly printed instruction on each fire alarm box, presumes that after he turns the projecting brass handle on the outside, and hears the clanging sound of a strong gong inside, that there is nothing else to do but throw the cheval glass and the feather bed out of the window and wait for the engines to dash galloping up.

This is also true of a great number of policemen, as Fire Chief Croker has disgustedly asserted quite often, when fires have gained much headway through the stupidity of some officer. Yet every policeman is supposed to be fully instructed as to how to turn in an alarm before he is allowed to don a uniform.

Despite the popular belief to the contrary, the fire alarm, when properly turned in, does not sound immediately in the engine houses nearest the location of the fire box and nowhere else. From the Battery to the Harlem, whenever an alarm box is "pulled," many whirring wheels of complicated telegraphing instruments in the central office of the Fire Department Headquarters, in East Sixty-seventh Street, are set a-going. Almost instantaneously, by human and mechanical agency, the alarm is transmitted to the engine companies whose duty it is to respond to alarms in the district in which the fire is situated.

Up to the time of the recent establishment of a branch central office in the Bronx, if the Bureau of Fire Alarm Telegraph in East Sixty-seventh Street should for any reason have become disabled or had to temporarily suspend business the entire city would have been at the mercy of the flames. This was the case during the blizzard thirteen years ago, when the telegraph system of the Fire Department was in a state of paralysis, and mounted firemen were compelled to patrol the streets. Now, if the main central office should cease operations for a time, the branch office in the Bronx would send out the city's alarms.

Superintendent Henry F. Blackwell, Jr., of the Fire Alarm Telegraph Bureau likens New York's fire alarm system to the nervous system of the human body. The red-painted, red-lanterned fire boxes, he declares, are the city's nerve tips, and over the sensory nerve wires connecting each with headquarters, an alarm when turned in by some frightened citizen is instantaneously forwarded to the Fire Department's cerebellum, the Central Office. This is immediately responded thereto by rushing the signal with lightning speed over the motor nerve wires to the horse and snew of the department—the horses, engines, and men.

The outer door of all fire alarm boxes may be opened by any one by turning the protruding brass handle as far as it will go to the accompaniment of a ringing gong. This sound is not the alarm, but a warning to the policeman on the beat that a fire box is being opened. The inner door when thus exposed to view is pierced with a slot, through which a hook projects. This inner door, to which only officers of the Fire Department have keys, has cast upon it the instructions, "Pull the hook down once only and let go."

This having been done, the mechanism of the signal box is set in motion and five rounds of this box's signal number are telegraphed to headquarters. So rapid is the receipt and transmission of this signal that before the fire box has ceased sending in the last tap of the five rounds the men and apparatus due to respond are on their way to the fire. Second and third alarms and the rarely used "two nines," calling out the entire department, are sent out only by officers of the department. These unlock the inner door of the fire boxes, and with the telegraph key inside tap first two taps, with a slight pause, and then two more, signifying a two alarm, following this by the signal number of the box. The preliminary taps indicate the alarm.

The office of fire alarm telegraph in Fire Headquarters is on the fifth floor of the headquarters building, in East Sixty-seventh Street. In the centre is a raised platform, surrounded on three sides with cabinet work containing many hundreds of wires, numbers representing the fire boxes throughout the city, telegraph keys, relays, switches, and much other electrical apparatus to the lay mind quite beyond proper comprehension.

Around the room under stout glass cases are great complicated machines with many wheels and cogs and intricate mechanisms which do almost everything but talk. These are used to send out and receive the alarms and to repeat the box-signal numbers. In addition to telegraphic connection, the department has its own system of telephones. By the invention of a small pocket telephone by Superintendent Blackwell, Battalion Chiefs may also talk to Headquarters from any fire box. To the rear of that containing all the instruments referred to is the battery room, containing nearly 2,000 cells of battery.

The trained ears of the operators constantly on duty immediately detect—even when a box is "pulled" in the midst of the incessant sounding of "trouble taps"—the first preliminary "buzz" of an alarm, as the "register" begins to click off the number of the station. At the same time the alarm begins to strike on the bells of two of the instruments and is also printed on an endless tape, much as stock quotations are printed on the ticker tape.

At the first stroke of the alarm, explains Superintendent Blackwell, one of the two operators always on duty takes from a cabinet in the centre of the room a small metal disk with the number of the station "pulled" thereon. In this cabinet are disks corresponding to the number of every alarm box in the city. Beneath this metal

disk on the peg on which it rests are two cardboard disks having on them, in addition to the box numbers, rows of figures, which indicate the wire circuits over which the alarm is not to be sent. There are sixty of these circuits of wires in the department connecting all apparatus houses.

Handing the metal disk to the second operator, the first steps over to a corner of the inclosure, where there are a number of telegraph keys, one for each circuit, pushes down a lever to obtain a greater electrical current, and then pulls out a number of knobs like organ stops. These have numbers on them corresponding to the circuit numbers, and when pulled out prevent the alarm being sent over any but the wires of the desired circuit.

The operator then slowly telegraphs the box number of the alarm turned in to the engine houses, with the telegraph key. The box number is telegraphed four times by this operator. When he has sent out two rounds the second operator places the brass disk he holds on to the projecting shaft of one of the instruments known as a repeater, and presses a push button.

By means of this instrument two rounds of the station number are sounded on a large brass gong in all engine houses on the desired circuit. The first taps sent out by the first operator strike on a smaller gong in the engine houses, and the first tap of this gong automatically releases the horses from their restraining straps, and they immediately "run to the pole."

The alarm sounds on the small gong four times, but long before it ceases striking the men have come sliding down the red from their quarters, the horses are harnessed, fires are started, and in an incredibly short time after the fire-box is "pulled," and while the alarm still strikes, the firemen are on their way to the fire ready for action.

Revolutionary Pellets.

Two old cannon balls with Revolutionary reminiscences clinging to the rust with which they are covered have recently been added to the little collection of curiosities possessed by the Sons of the Revolution. They occupy a place of honor on the Secretary's desk in the Broadway office of the society, and have been handled with reverential care by many members of Revolutionary ancestry. The larger of the two weighs twenty-seven pounds, and is the most formidable "pill" ever fired from a gun that the society owns. It was found a short time ago at Spuyten Duyvil, six feet below the surface, in one of the excavations made for the Spuyten Duyvil Parkway. Possibly it is one of the relics left behind by Baron Knyphausen and his Hessians, who occupied that locality for some time after the battle of Long Island. The other cannon ball is much smaller, and was picked up recently on the farm of Jordan Frost at Yorktown, N. Y., back of Peekskill. The Duke de Lauzan, commanding a force of French troops, was encamped in that vicinity toward the close of the Revolution, and the ball is evidently a reminder of the French aid given to our troops in their struggle for independence.

"Paddy Shea," "Belle," and "Dick."

Three of the very few to lose their positions through the passing of the Broadway cable, and whose disappearance from public view will be regretted by many thousands of acquaintances, are "Paddy Shea," "Belle," and "Dick."

For six years Paddy and Belle faithfully served the Metropolitan Company with very few nights off on account of illness or indisposition, until last Saturday night, when they switched the last cable car, No. 78, that passed over the road, at Houston Street, and found their occupation gone.

"Paddy Shea," and Belle," and "Dick," who took either's place when there was any necessity for doing so or when there was a rush on the road, were the three great white horses stationed at Houston Street to switch the cable cars, whose down-town trip ended at this point, across the connecting tracks and on to the up-town track. Each was a powerful, intelligent beast, quite able to draw the heavy cars along with scarcely any exertion.

Paddy and Belle needed no word from their driver, when there was work to be done. They could tell a car bound for "Houston Street only" by its little white and black metal sign just as well as anybody. When the passengers climbed out, Paddy or Belle, whichever turn it might be, would trot without a word from the driver over to the empty car, wait until the click of the hook attached to the harness was heard in the car coupler, and then dragged the car across the switch.

Promptly at the red light, beyond the green one, as the car caught the cable, the intelligent animals would turn out, the driver unhitching the hook, and away the car would go up town, while Belle or Paddy, with a perfectly apparent air of "See how easy that was" would trot with jingling harness bells back to the posts in front of the cable building.

All the motormen and conductors on the road were personally acquainted with Paddy and Belle, and always had a kind word as their cars went by or drew up to be switched. The horses' departure, with the cable, was regretted by every one of them, as well as by the many passengers, early and late, who had watched them at their work, rain or shine, for many years.

Neither Paddy nor Belle nor Dick is for sale. The company officials are still considering what sinecure will be awarded them in view of their faithful services. At present the very best in the stables on Avenue A is none too good for them, and in inclement weather no other animals there receive more tender care.