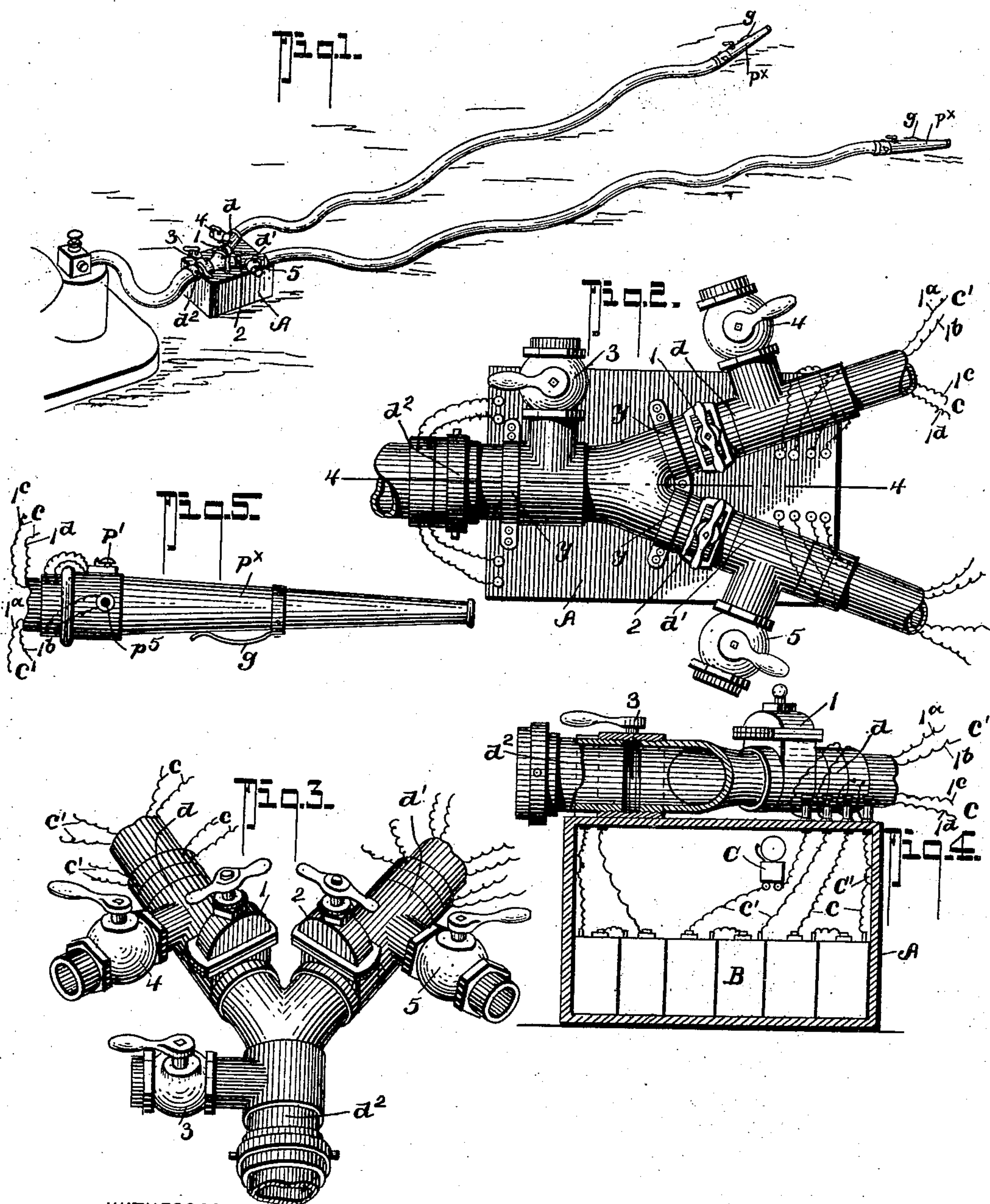


No. 710,246.

Patented Sept. 30, 1902.

J. BUCHEL.
TELEGRAPH FIRE HOSE.
(Application filed Dec. 16, 1901.)

(No Model.)



WITNESSES:

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JOSEPH BUCHTEL, OF PORTLAND, OREGON.

TELEGRAPH FIRE-HOSE.

SPECIFICATION forming part of Letters Patent No. 710,246, dated September 30, 1902.

Application filed December 16, 1901. Serial No. 86,094. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BUCHTEL, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Telegraph Fire-Hose, of which the following is a specification.

My present invention, which relates to that type of fire-hose having electrically-operated means whereby the hoseman, the engineer, or the water-controlling man can be placed in communication with each other for regulating the flow and the force of the supply as conditions may make desirable, more particularly refers to improvements on my Patent No. 378,716, dated March 16, 1897, for a similar invention.

In my patent aforesaid I have provided a signal apparatus including a gong, electric-circuit-conveying means located within the pipe-sections, and circuit-closing devices (push-buttons) at or near the nozzle end, whereby the pipeman can readily and conveniently signal to the engineer or water-supply controller his desires in regard to cutting down or increasing the water force and supply or shutting it entirely off.

My present invention, while embodying the same generic features of my patent aforesaid, seeks to provide an improved "station," including a novel construction of Y connections, valve-gates forming a coöperative part thereof, a box or container in which the electric batteries for engaging the several independent circuits in different lines and a number of gongs, one for each independent circuit, having different tones are contained, whereby the station-keeper can be readily communicated with and receive instructions from the pipeman at the different lines in a positive, quick, and effective manner.

This invention therefore consists in certain details of construction, and novel combination of parts, all of which will hereinafter be fully described, and particularly pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a view illustrating my invention as in use and connected with a plug or hydrant. Fig. 2 is a plan view of the Y connections with the flood-gate devices and the

box or container attached thereto. Fig. 3 is a perspective view of the Y with its attached parts. Fig. 4 is a cross-section taken on the line 4 4 of Fig. 2. Fig. 5 is a view of the nozzle end of the hose.

In the practical arrangement of my present invention I provide a station, in the nature of a box A, in which the batteries B and gong C are held, the batteries being arranged for energizing the independently-running circuits $c c'$, the one, c' , of which is in connection with the gong C, while the other joins with the push-button C' , the two gongs being of different tones, the reason for which will presently appear. The station also includes a novel construction and arrangement of Y. This Y construction includes five gates or cut-offs (designated by 1, 2, 3, 4, and 5) and three connections, and the said five gates include three relief or flood gates (designated by 3, 4, and 5) provided for the purpose of giving more perfect communication between pipeman and station and the station and pipeman. In the arrangement of the gongs the pipeman's signal to the station is distinctive from the station-man's signal to the pipeman, and for such purpose four wires are carried within the hose, one set for the circuit to the pipeman's gong and the other set for the station-man's gong, the said signal devices being so arranged that when the station-man desires to communicate with the pipeman he does so by pressing the circuit-closing button C' at the station in the pipeman's line, which energizes an electric alarm P' on the heel or butt-end of the pipe or nozzle P^x to signal him to come out from the fire on account of danger or any other orders that may be necessary to communicate to said pipeman. Likewise the pipeman by pressing the circuit-closer p^5 , located on the play-pipe or nozzle, can, by means of a predetermined code, signal orders, such as "Stop," "Start," "Slow," "Slower," "Fast," or "Faster," "Fire out," or other orders he may want the station-man to receive.

The relief-gates on the Y, as described and shown, render valuable assistance, as the water can be drawn therethrough almost instantly or the pressure quickly removed when desired, and thereby make it possible to main-

tain complete control of the extinguishing fluid, chemical, or water between the station-man and the pipeman.

To obtain the best results in the practical application of my invention, I find it advantageous to make the pipes $d d'$ about two and one-half inches in diameter and the intake d^2 about three inches in diameter and to provide two nozzles, so that when but one feed-line is run a nozzle having a discharge of one to one and one-half inches can be attached and when both lines are used the larger-bore nozzle, having a suitable discharge, can be utilized.

The Y is made fast to the box containing the batteries and gongs by straps $y y$, as shown, and for the convenience of the pipeman the nozzle or pipe end has a band or hook g to engage the fireman's belt to give him free use of both hands when moving from place to place, and by reason of the simple manner in which the pipeman can signal to cut off the water it follows that as water if "off" in ascending or descending a ladder he need have no water to carry.

My construction of electric hose, if desired, can be used from engine or hydrant to station, and, if desired, the station may also be put into electrical communication with the engine by a supplemental gong, circuit-buttons, &c., arranged similar to the connection between end of hose and station.

By providing the Y with a third flood-gate 3, arranged between the joint of the two pipe-lines $d d'$ and the inlet pipe-section d^2 , the flood-gate 3 can be manipulated to produce certain pulsations in the flow out of the nozzle, and hence by such pulsations, the code of which is understood by the lineman, will act as a means for signaling under certain conditions.

From the foregoing, taken in connection with the accompanying drawings, it is thought the advantages and complete operation of my invention will be readily understood. It will be noticed by reason of the combined arrangement of the Y with the flood-gates and the relief-valves and the signaling devices the station-man can readily send out his orders in every direction, and by reason of the rapidity in which the signals may be sent from or to the station a great saving of life and property, as well as avoidance of damage by water, can be effected.

The signal-station in the practical application of my invention is carried on the hose-wagon.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a telegraph-hose under the control of the pipeman, which has means of signaling to a station; the combination of a supply-pipe, a plurality of offtakes, a connection at the station for joining said supply-pipe and offtakes, and valved flood-gates for said offtakes, for the purposes described.

2. In a telegraph-hose under the control of the pipeman, and having means for signaling to a station; the combination of a Y connection at the station, comprising a supply-pipe and a plurality of feed-sections, flood-gates in said feed-sections, one for each section, said gates including valved discharges, and a hydraulic signaling mechanism coöperatively joined with the feed-pipe sections and the connection therefor, as specified and for the purposes described.

3. The combination with a plurality of ordinary hose-sections, terminating at a common station and having telegraphic communication, whereby the hoseman may communicate therewith; of a Y-shaped connection for uniting said hose-sections to one common source of supply, said Y-shaped section consisting of a supply-pipe, offtake-sections, a connection joining the supply-pipe and said offtakes; a valved flood-gate for each of said offtakes, affording independent means for communicating with each of the hosemen; and a valved flood-gate 3, whereby all of the hosemen may be simultaneously given the same signal by a single operation, for the purposes set forth.

4. The combination with a plurality of ordinary hose-sections terminating at a common station and having telegraphic communication therewith; of a Y-shaped connection for uniting said hose-sections to a common source of supply, said Y-shaped connection having means for varying the water-supply, whereby the station-man may communicate with the hoseman, as described and for the purposes set forth.

JOSEPH BUCHTEL.

Witnesses.

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