

(No Model.)

J. BUCHTEL.
TELEGRAPH FIRE HOSE.

No. 578,716.

Patented Mar. 16, 1897.

Fig. 1.

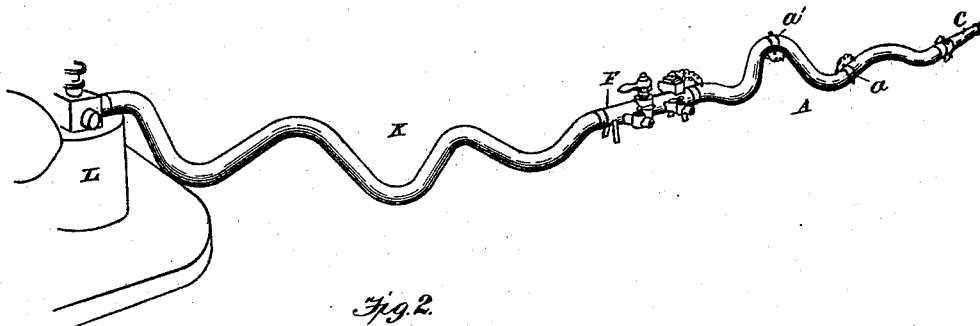


Fig. 2.

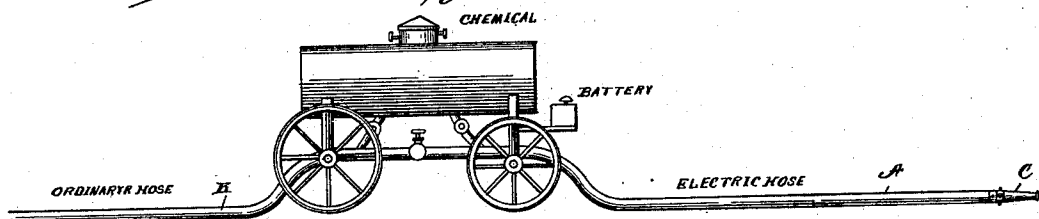


Fig. 3.

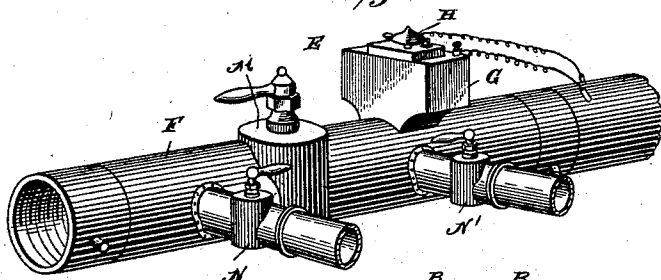


Fig. 6.

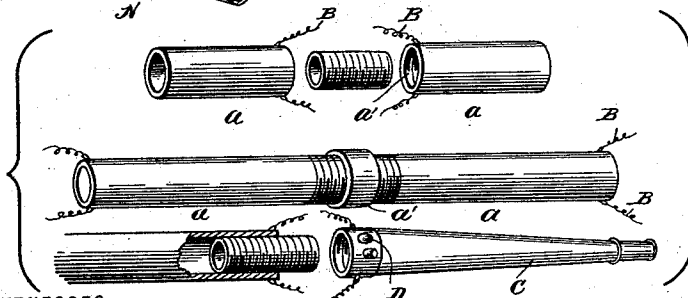
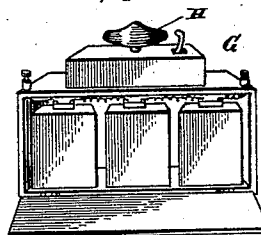


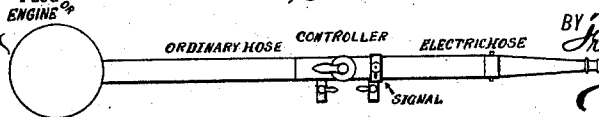
Fig. 4.

WITNESSES:

J. C. Shaw
C. E. Brock

PLUG
ENGINE

Fig. 5.



INVENTOR

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UNITED STATES PATENT OFFICE.

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TELEGRAPH FIRE-HOSE.

SPECIFICATION forming part of Letters Patent No. 578,716, dated March 16, 1897.

Application filed April 14, 1896. Serial No. 587,497. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH BUCHEL, 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.

This invention relates generally to an improved telegraph fire-hose, and more particularly to certain improvements upon Patents Nos. 151,750 and 211,833, granted to me June 9, 1874, and February 4, 1879, respectively.

The object of the present invention is to greatly simplify all prior devices and provide a telegraph-hose which shall be cheap and simple and capable of use in connection with any form of fire apparatus and water-plug now in use.

Another object of the invention is to provide a telegraph-hose adapted for use in connection with a central controlling-station and signal apparatus, so that by means of the signal the operator at the controlling-station can cut the water-supply on or off, as directed.

Another object is to provide a telegraph-hose which can be used either with or without any of the well-known chemical-engines now in use.

Another object is to provide a telegraph-hose in connection with a central controlling-station and means whereby the pressure can be relieved prior to cutting off the entire stream; and a still further object is to provide a suitable drain-pipe to draw off the water contained within the telegraph-hose after the water-supply has been completely cut off.

Finally, the object of my invention is to provide a telegraph-hose in connection with a controlling-station and signal, so that the fireman can signal when to turn the water off or on and when to regulate the flow, and this station can be arranged within five hundred feet or less of the fire, so that the expense of the electric hose is very small compared with the amount that will be saved by its use, as by its use the fireman can have the water cut off the moment the necessity for its use ceases, thereby preventing destruction by a superfluity of water.

With these various objects in view my invention consists in the peculiar construction

of the various parts and in the novel combination or arrangement, all of which will be fully described, and then pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a view showing the invention in use without a chemical-engine. Fig. 2 shows the manner of using the same in connection with a chemical-engine. Fig. 3 is a detail view of the controlling-station and signal. Fig. 4 shows details of construction; Fig. 5, a diagrammatic view. Fig. 6 is a view of the battery and bell.

In the practical application of my invention I employ what I call a "telegraph-hose" A, composed of one or more sections *a*, each section carrying conductor-wires B B, said wires being inserted in the hose-sections during their manufacture. Each section has two wires, and the ends *b* project slightly beyond the end couplings *a'*, but do not interfere with said coupling in any way, and it will be understood that these couplings can be of any desired construction.

When the sections *a* of the hose A are connected, the wires B are also united, thereby providing a continuous conductor from one end of hose A to the other. The ends *b* of the wire are properly insulated to prevent contact with the metallic joints. A nozzle C is arranged upon the forward section of hose and carries a push-button or key D, to which the wires B D are connected, said push-button or key being operated by the fireman when he wishes to signal to the controller at the station E. The rear section of the hose A connects with a pipe-section F, located at station E and preferably carrying a battery G and magneto-electric bell H, the rear end of the wire *b* being connected with the battery, which is electrically connected with the bell, so that when the push-button or key is operated the bell will be sounded, and by a definite series of rings any signal desired can be sent by the fireman to the controller at the station E.

Any ordinary hose-pipe K extends from the pipe-section F to the engine or plug L. The pipe-section F has a gate-valve M about midway its length and discharge-cocks N and

N' upon opposite sides of said valve, and these cocks can be connected with a chemical-engine, if desired, as shown in Fig. 2, but the apparatus can be used without a chemical-engine, as shown in Fig. 1.

The telegraph-hose A, pipe-section F, and the ordinary hose K are all carried by the reel or hose-carriage the same as usual. Now when it is desired to use my invention the ordinary hose K is connected with the plug or engine and any desired length unreeled, it being preferred to carry the hose K as close to the fire as possible, say within three hundred feet. The hose K is then attached to the pipe-section F, and the telegraph-hose A attached also to said section F, the valve M being closed. In making up the hose a the wires B are connected with each other and with the button or key at one end and with the battery at the other. When the fireman is in position to use the hose, he signals to the controller at station E, who opens valve M and lets the water flow through. Should the fireman desire to change his position and move up or down a ladder, he signals again to the controller, who first opens valve N to relieve the pressure and then cuts off the valve M, thereby relieving the hose A and K of all pressure. After the fireman is ready again he gives the signal and valve M is opened and cock N closed. When the fire is out and no more water is needed, the fireman so signals and both cocks N and N' are opened and valve M closed, thus relieving all pressure and draining the sections A.

The operation above described is when a chemical-engine is not used, and when a chemical-engine is used said engine can be connected at any suitable point, but in practice I prefer to connect it at the station E.

By means of the apparatus herein described I am enabled to use a limited length of telegraph-hose, thereby placing the apparatus within reach of all fire departments, and, furthermore, I am able to use such improve-

ment in connection with any of the engines, plugs, and hose now in common use.

It will also be seen that by use of my invention a great deal of damage by water can be avoided, as the fireman always has the water-supply under his direction, and, in addition to this, is relieved of all pressure or strain while not using the stream.

The cheapness and simplicity of the device is a decided advantage over anything known to me, and by the use of my device an incalculable amount of property can be saved from destruction by water.

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

1. In a telegraph fire-hose, the combination of a hose-section adapted to be connected with the fire-engine or water-plug, and a series of sections, each carrying conductor-wires, one of such sections having a nozzle provided with a circuit-closer, of an independent pipe-section connecting the ordinary hose and the telegraph-hose and carrying a signal apparatus, a cut-off valve, a relieve-cock and a draw-cock, all arranged substantially as shown and described.

2. The combination with the ordinary hose, of the pipe-sections having a cut-off valve, cocks on each side of valve, the telegraph-hose composed of sections carrying conductor-wires, the signal apparatus, the nozzle and circuit-closer, substantially as shown and described.

3. The combination with the ordinary hose, of the pipe-section having a cut-off valve, cocks on each side of the valve, the telegraph-hose composed of sections carrying conductor-wires, the nozzle, the circuit-closer, and a chemical fire-engine connected with said cocks, substantially as described.

JOSEPH BUCHTEL.

Witnesses:

VALENTINE BROWN,
S. H. BLOOMER.