

(No Model.)

J. F. KLUMPP, Jr.
ELECTRIC SIGNAL APPARATUS FOR FIRE HOSE.

No. 452,506.

Patented May 19, 1891.

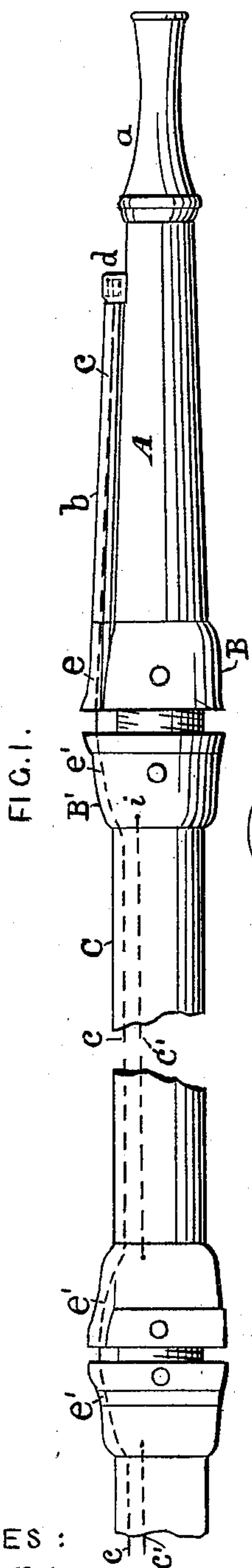


FIG. 1.

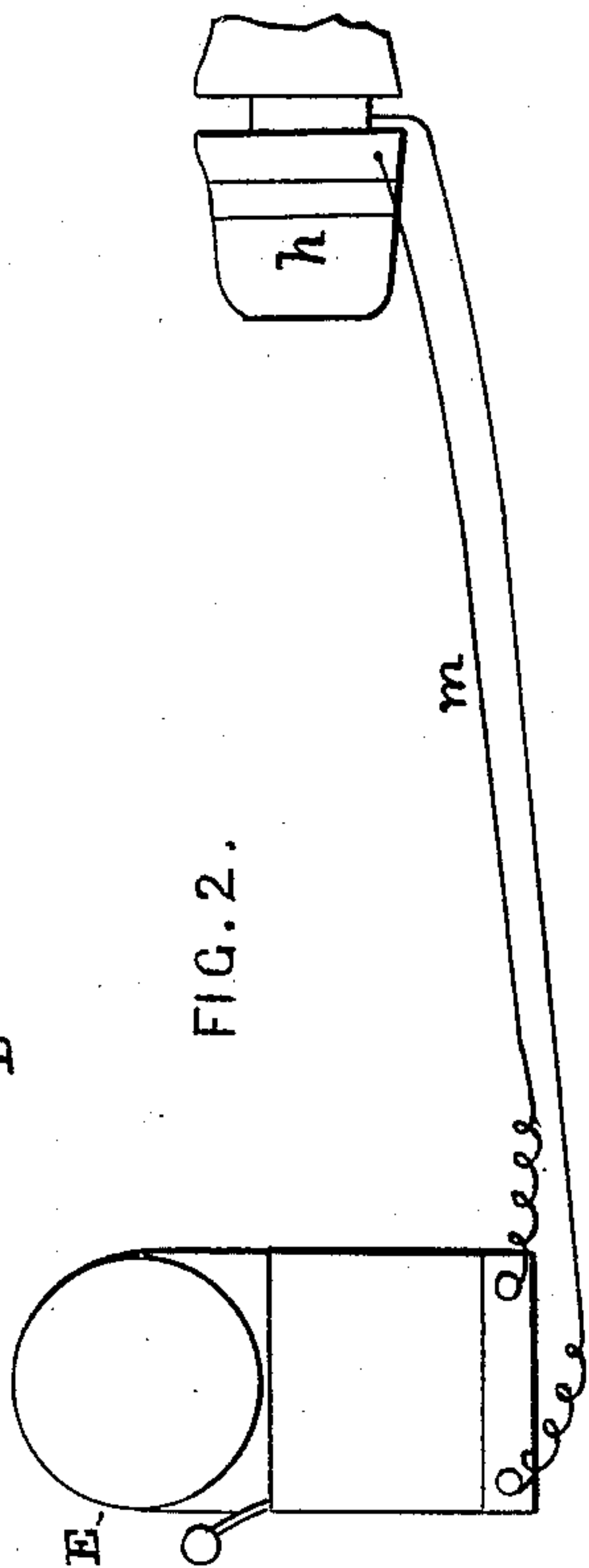


FIG. 2.

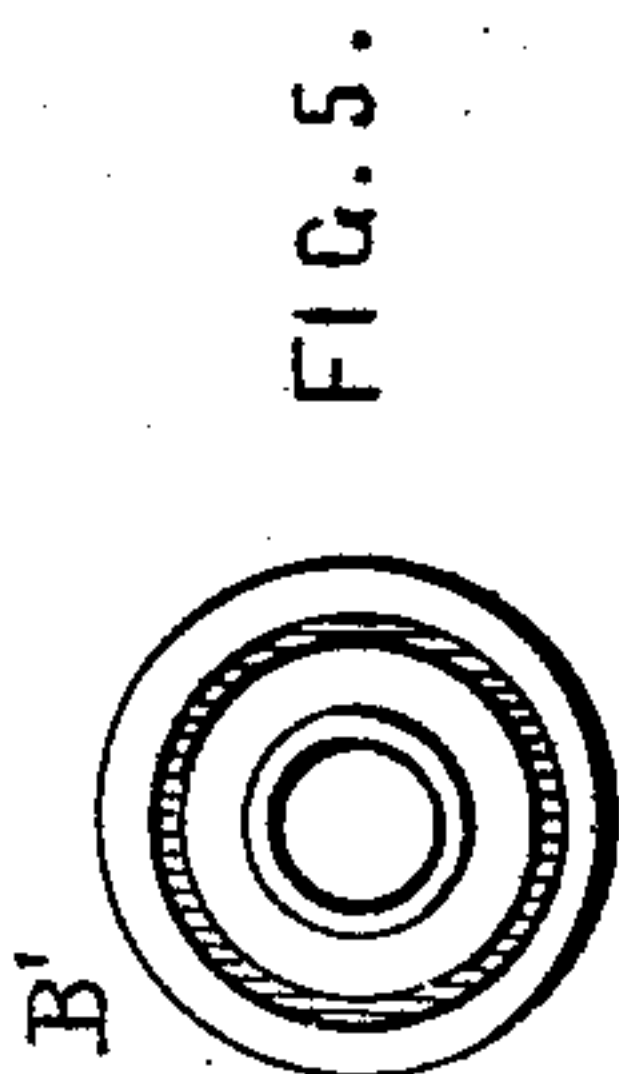


FIG. 5.

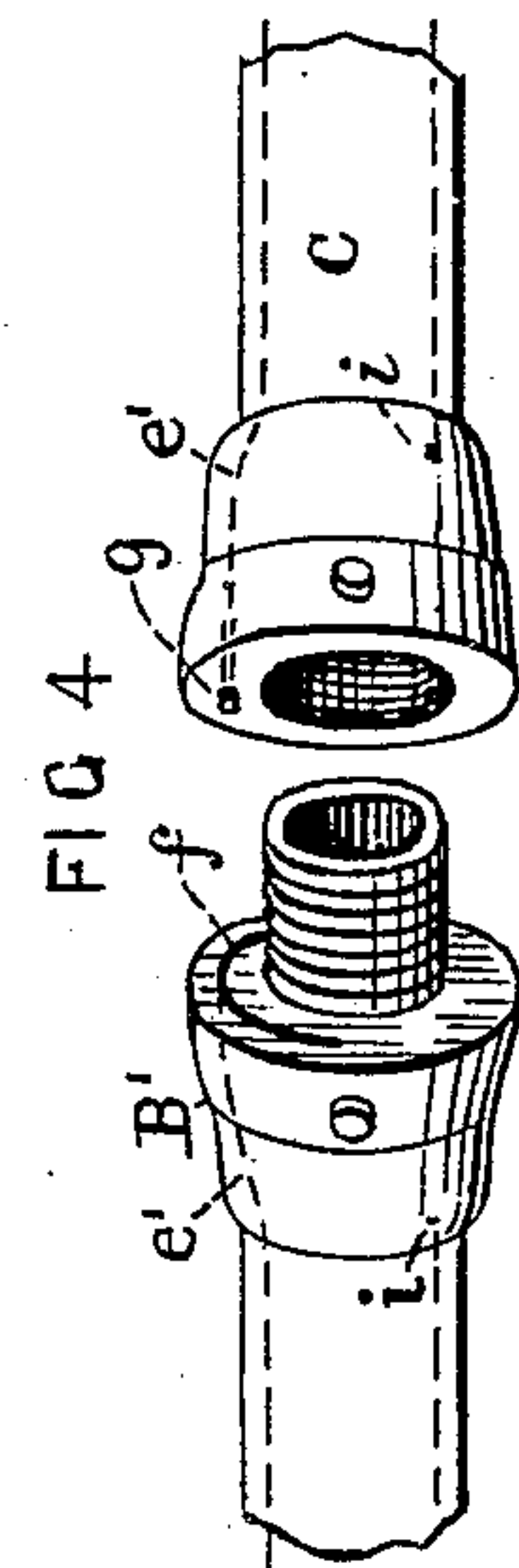


FIG. 4.

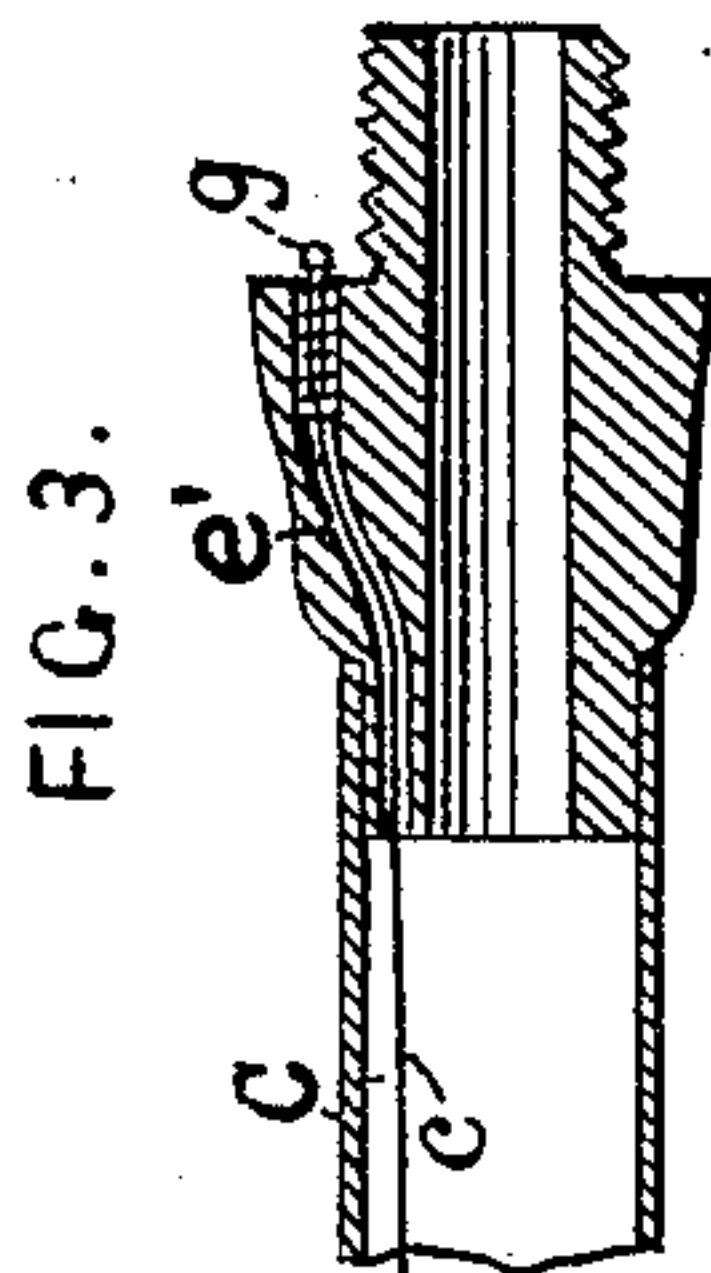


FIG. 3.

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ELECTRIC SIGNAL APPARATUS FOR FIRE-HOSE.

SPECIFICATION forming part of Letters Patent No. 452,506, dated May 19, 1891.

Application filed May 17, 1890. Serial No. 352,131. (No model.)

To all whom it may concern:

Be it known that I, JACOB FREDRICK KLUMPP, Jr., a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Electric Signal Apparatus for Fire-Hose; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to electric signaling apparatus for fire-hose, whereby a hoseman holding the pipe may communicate with the engineer or person in charge of the fire-engine; and it consists in certain improvements in such apparatus, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side view of fire-hose and discharge-pipe provided with my improvements, parts being broken away. Fig. 2 illustrates the connection of an electric sounding apparatus with the butt of an engine. Fig. 3 is a section of one part of the hose-coupling. Fig. 4 illustrates the two parts of the coupling. Fig. 5 is a face view of one part of the coupling in a modified form.

A designates the discharge-pipe, which is connected with the hose, and is provided with a nozzle *a*. A tube *b* is formed on the pipe A and extends along the same, as shown, being made solid therewith. The coupling-piece B, which is screwed to the pipe A for connection with the hose C, is also provided with a tubular passage *e* to be brought in line with the tube *b* on the pipe when the parts are connected. At one end of said tube *b* is placed a push-button *d*, which is seated in the shell of pipe A for the purpose of closing the circuit, as hereinafter set forth. The coupling-piece B', connected with the hose and adapted to be screwed to the coupling-piece of the pipe A, is also formed with a tubular passage *e'* in its shell to be brought in line with the passage *e* in the coupling B, the said passage *e'* leading into the interior of the hose.

An insulated wire *c* is connected with the push-button *d* and passed through the tube *b* and passage *e'* into the hose, through which it is extended to the mouth or butt of the engine, with which said wire is connected.

Each coupling of sections of hose is constructed in two parts, each of which is provided with a tubular passage *e'*, formed in its shell, for the wire *c*, the latter being made in sections corresponding in length with the sections of hose. The joints of the sections of wire are formed in the following manner: The end of a section of wire *c*, which passes through a passage *e'* in the shell of one coupling-piece B', is connected with a curved piece of wire *f*, which is seated in a groove in the face of said piece B', as seen in Fig. 4. The end of the wire-section which passes through the passage *e'* in the opposite coupling-piece is provided with a spring-pin *g*, which may be pressed inward, and when the two parts of the coupling are screwed together the pin *g* is brought in contact with the curved wire in the groove in the part B', and is held in such contact by its spring.

Another insulated wire *c'* is employed to form the circuit, said wire being in sections and placed within the hose. Each section of the wire *c'* is extended along within one section of hose, and is connected at its extremities with the coupling-pieces attached to such hose-section, as indicated at *i*, the metallic couplings answering the purpose of wire connections.

As will be seen, the wires *c* and *c'* are entirely inclosed by the hose and coupling-pieces and the sections of wire are readily separated, this being effected by simply detaching the sections of hose. The wires thus extended through the hose may be connected with the butt or engine-coupling *h*, from whence connection with an electric signaling device may be established by wires *m*, as seen in Fig. 2, a gong of ordinary construction being shown at E, and by such means the hoseman may instantly communicate with the engineer or person in charge of the engine.

In Fig. 5 the groove in the face of coupling-piece B' to receive the wire *f* is shown in an annular form, which may be deemed preferable.

I claim—

1. The combination, with a discharge-pipe, of hose having a circuit-closing device seated in the shell of said pipe and provided with a tube *b*, formed on said pipe and extending from said circuit-closing device to the base

end of said pipe, a hose-coupling piece adapted to be screwed to said pipe and provided with a tubular passage *e'*, formed in the shell of said coupling-piece and adapted to be
5 brought in connection with said tube *b*, and an insulated wire connected with said circuit-closing device and extended through said tube *b* and passage *e'* into the hose, the parts being so constructed that said wire being
10 passed through said tube *b* may be extended from the base end of the pipe directly into the end face of said coupling-piece, substantially as set forth and described.

2. The combination, with fire-hose, of a
15 coupling device consisting of two hollow parts, each of which is provided with a tubular pas-

sage *e'* for wire, one of said two parts being provided with a curved or annular groove, in which is seated a curved metallic piece, a section of wire connected with said curved metallic piece and extending through one part of the coupling, and another section of wire extended through the opposite part of the coupling and provided with a spring-pin, substantially as set forth and described. 20 25

In testimony whereof I have affixed my signature in presence of two witnesses.

JACOB FREDRICK KLUMPP, Jr.

Witnesses:

W. H. BEYMOTH,
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