

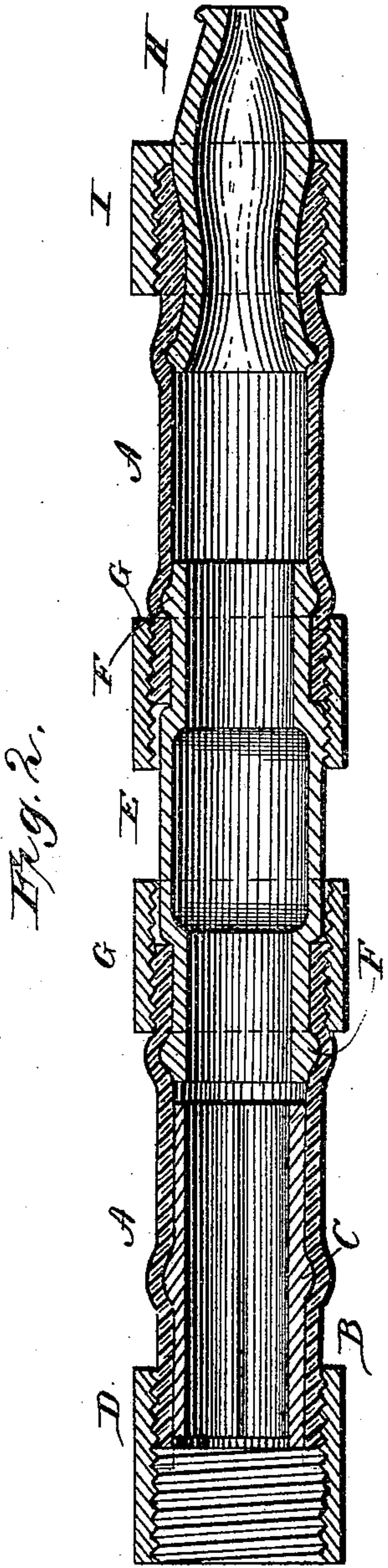
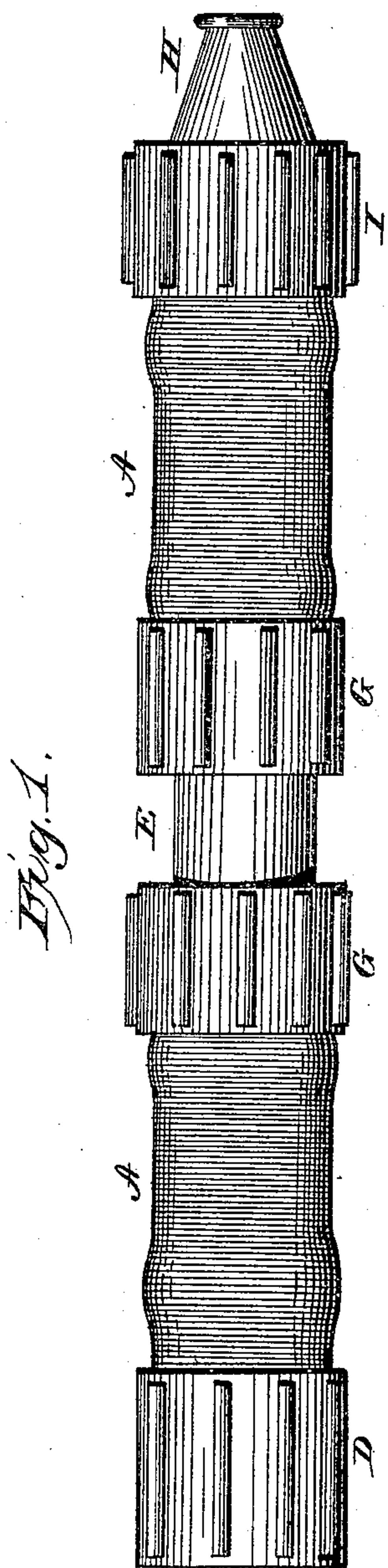
(Model.)

F. HICKMAN.

HOSE COUPLING.

No. 246,135.

Patented Aug. 23, 1881.



Witnesses,
Frank L. Curand
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UNITED STATES PATENT OFFICE.

FRANCIS HICKMAN, OF PHILADELPHIA, PENNSYLVANIA.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 246,135, dated August 23, 1881.

Application filed June 16, 1881. (Model.)

To all whom it may concern:

Be it known that I, FRANCIS HICKMAN, of Philadelphia, in the county of Philadelphia, and in the State of Pennsylvania, have invented certain new and useful Improvements in Hose-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in hose-couplings; and it has for its objects to provide an improved means whereby the hose may be attached to the coupling, and at the same time form a gasket which will pack against the delivery-pipe of a hydrant or plug; to provide certain means whereby the coupling-joints may be secured to the hose-sections and the said sections may be connected with each other, and also to provide for securing a nozzle or jet pipe to the hose, as more fully hereinafter specified. These objects I attain by the devices illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of my invention, and Fig. 2 a longitudinal sectional view thereof.

The letter A indicates the sections of a flexible hose, which may be constructed of any suitable material.

B indicates a short metallic tube, which is adapted to fit within the end of the section to be secured to the hydrant or the plug. The said tube is provided on its outside with a rib or bead, C, about midway between its two ends, and, for convenience in casting, is constructed in two longitudinal parts. The said tube is to be placed in one end of the hose-section, in such position that the outer end of the hose-section will project slightly beyond the outer extremity of the said tube, in order to form a gasket to bind or pack against the end of the hydrant or plug pipe, and form a water-tight joint when secured thereto.

The letter D indicates an internally screw-threaded collar of metal, which is adapted to be screwed upon the end of the section of the rubber section over the outer end of the me-

tallic tube B. The said collar is screwed down until it binds the material of the hose against the bead, thus making a tight joint. The end of the collar is fastened by the internal screw-threads to the end of the hydrant-pipe or plug-pipe, when it is desired to secure the hose to the same, the end of the hose-section taking the place of the usual detachable gasket or washer and forming a tight joint.

The letter E indicates the coupling-tube, which is constructed of metal, preferably cast with beads or shoulders F at each end. This tube is adapted to be fitted within the contiguous ends of two hose-sections to be coupled. The said tube is provided with two loosely-fitting internally screw-threaded and flanged coupling-rings, G, which are adapted to be screwed in opposite directions upon the respective hose-sections, so as to firmly bind the same against the beads or shoulders on the coupling-tube, and thus form a perfectly-tight joint.

The hose nozzle or jet is indicated by the letter H. This is constructed of cast metal, and is hollowed out on its outside, as indicated in the drawings, or is provided at its rear end with an abrupt shoulder or bead similar to the shoulders or beads on the coupling-tube before mentioned. The said nozzle is provided with a screw-threaded binding-ring, I, which binds the hose-section into the hollowed portion of the nozzle, or against the shoulder thereof.

It will be perceived that my improved attaching or coupling devices will, owing to their construction, tend to make the joints tighter just in proportion as they are forced apart or extended longitudinally by internal pressure or otherwise, thus making the hose perfectly water-proof at every joint.

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

1. In combination with the hose-section and internally screw-threaded ring, the internal tube having a bead or shoulder between its ends, and adapted to set within the hose-section a short distance back of its end, so as to form a gasket or packing to abut against the hydrant or plug pipe, substantially as specified.

2. In combination with the hose-sections, the

internally-fitting coupling-tube, shouldered at both ends, and the internally screw-threaded coupling-rings adapted to screw upon and bind the ends of the sections against the respective
5 shoulders, substantially as set forth.

3. In combination with the nozzle curved out on its exterior, the internally screw-threaded binding-ring adapted to secure the hose-section within the curved portion, substantially
10 as specified.

4. In combination with the nozzle shouldered at its rear end, the screw-threaded binding-ring adapted to secure the hose-section against said shoulder, substantially as and for
15 the purposes set forth.

5. In combination with the nozzle curved out on its exterior and provided with a shoulder at its rear, the internally screw-threaded ring adapted to secure the hose-section against the shoulder and clamp it within the curved-out
20 portion of the tube, substantially as specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 13th day of June, 1881.

FRANCIS HICKMAN.

Witnesses:

J. J. MCCARTHY,

H. AUBREY TOULMIN.