

(No Model.)

F. ATHERTON & M. T. BENTLEY.

HOSE COUPLING.

No. 333,913.

Patented Jan. 5, 1886.

Fig: 1.

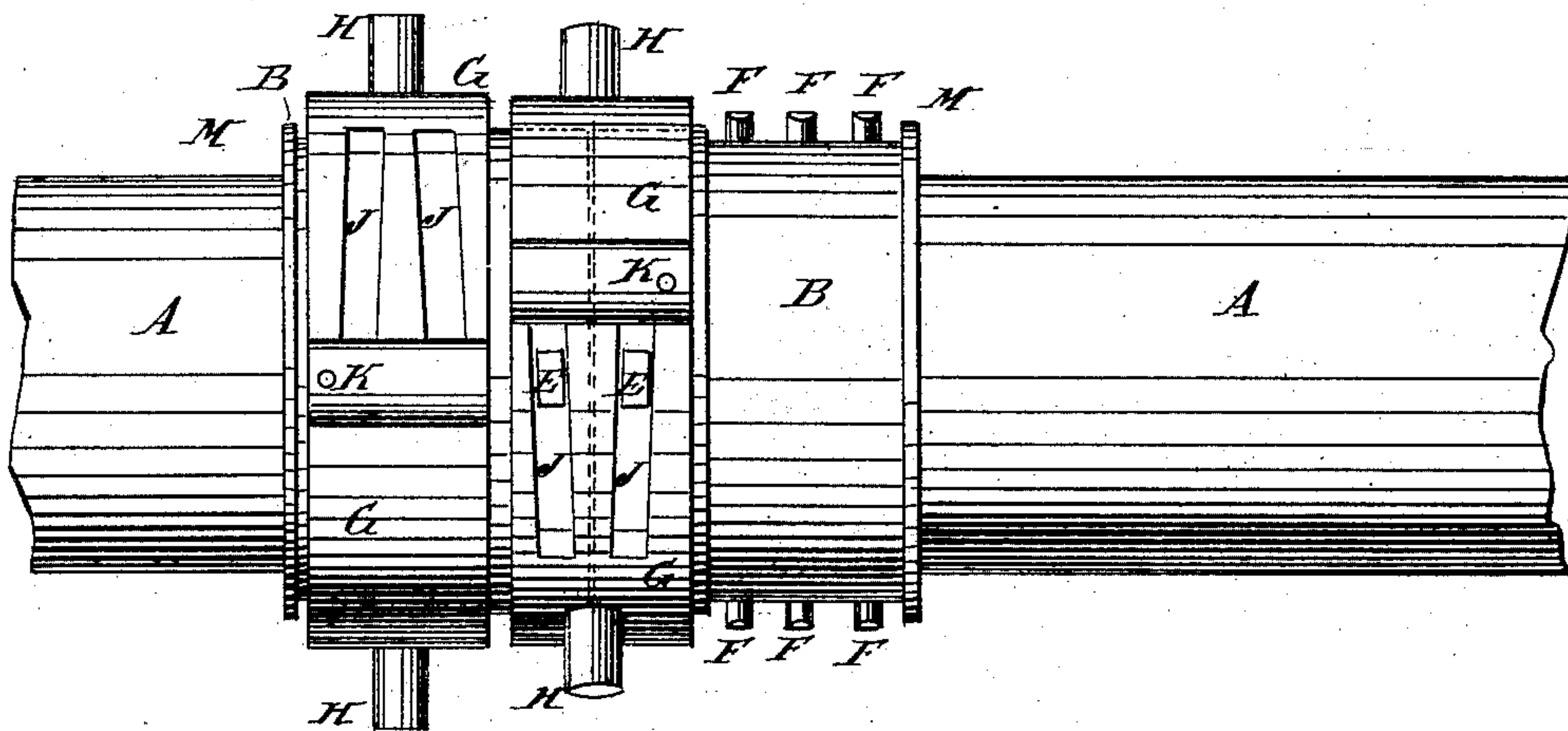


Fig: 2.

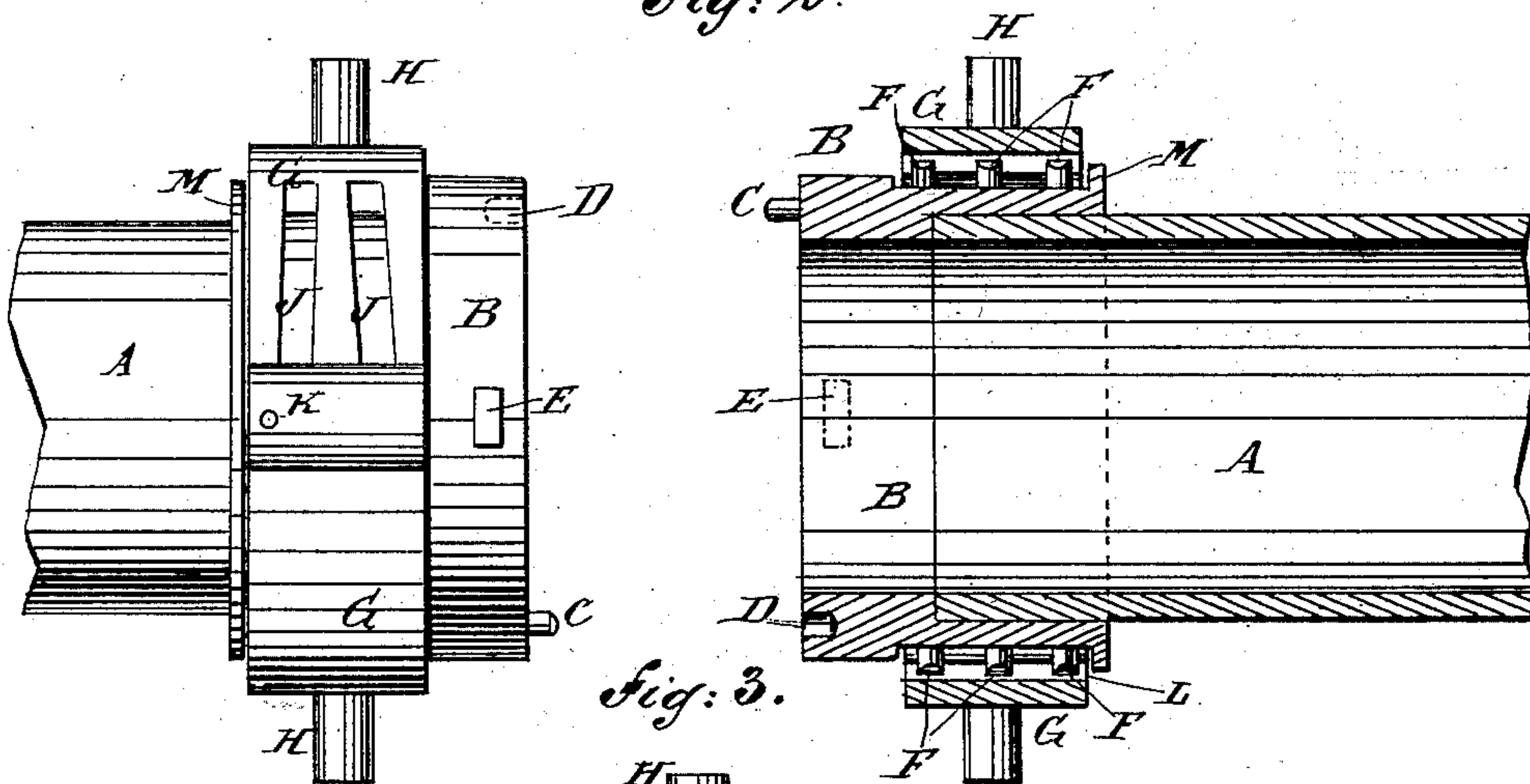
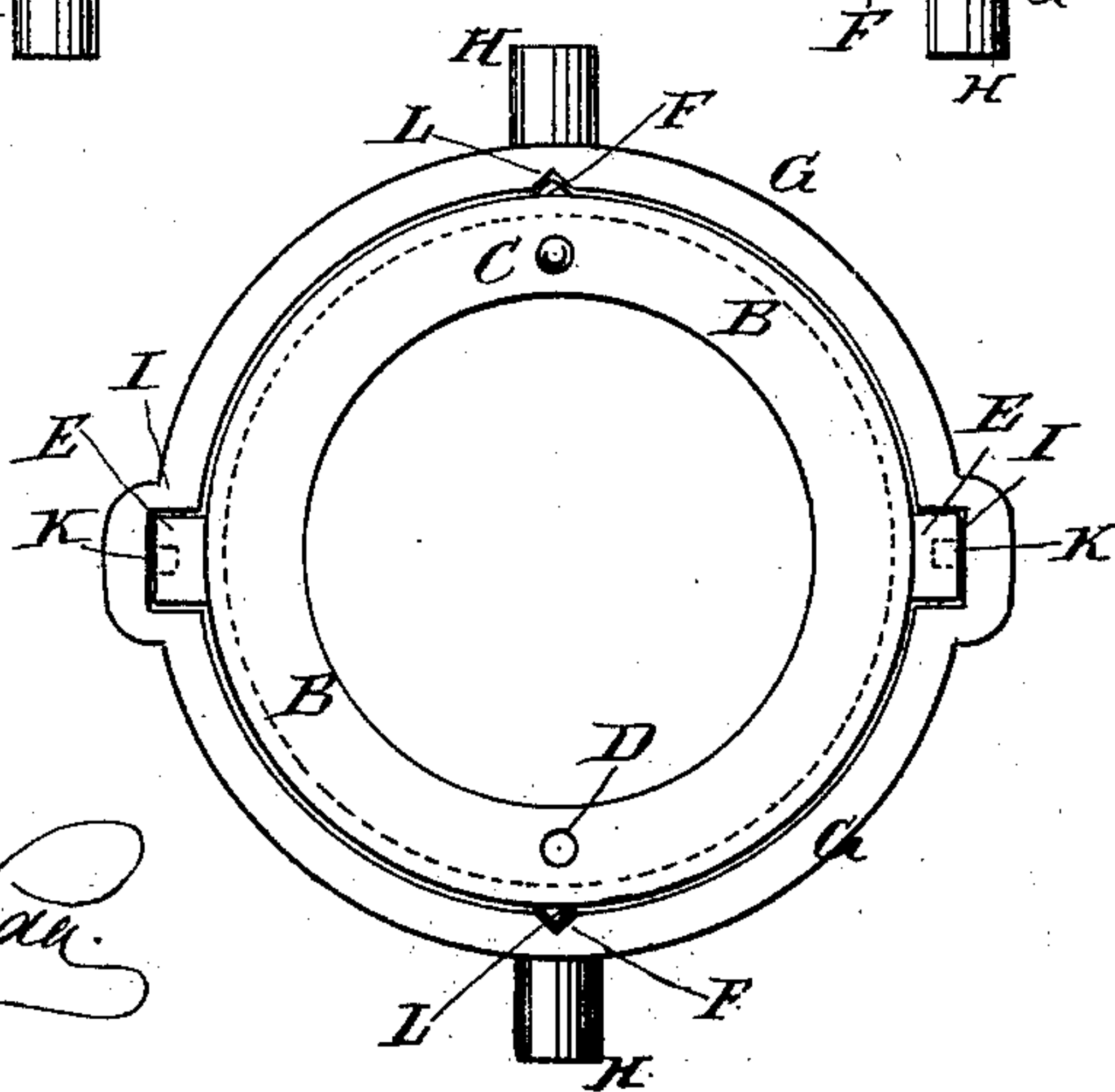


Fig: 3.



WITNESSES:

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FRANK ATHERTON AND MANTON T. BENTLEY, OF PATERSON, NEW JERSEY.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 333,913, dated January 5, 1886.

Application filed July 20, 1885. Serial No. 172,114. (No model.)

To all whom it may concern:

Be it known that we, FRANK ATHERTON and MANTON T. BENTLEY, both residents of Paterson, in the county of Passaic and State of New Jersey, have invented a new and useful Improvement in Hose-Couplings, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of our improved coupling, shown as connecting two sections of hose. Fig. 2 is a side elevation of the same, partly in section and shown disconnected. Fig. 3 is an end elevation of one part of the coupling.

The object of this invention is to provide hose-couplings constructed in such a manner that the parts of the coupling can be readily connected and disconnected, and which, when in use, will connect the hose-sections securely.

The invention consists in the construction and combination of the various parts of the coupling, as will be hereinafter fully described and then claimed.

A represents the adjacent ends of two sections of hose. To each end of each section of hose is secured the short tube B, which forms the body or stock of each part of the coupling, and which is rabbeted in the inner surface of its inner end to receive the end of the hose-section A. The outer ends of the tubes B are so formed as to make a close joint when brought together, and are centered upon each other and guided into the right position by a dowel-pin, C, attached to the outer end of each tube B, and which enters a hole, D, in the outer end of the other tube, as indicated in Figs. 2 and 3.

Upon the opposite sides of each tube B, near its outer end, are formed lugs E, and upon the opposite sides of the inner parts of the tubes B, and midway between the lugs E, are formed lugs F, the outer ends of which are beveled upon the opposite sides, as shown in Fig. 3.

Upon each tube B is placed a sleeve, G, of a width about equal to two-thirds the length

of the said tube, and which is provided upon its opposite sides with lugs H for the wrench to engage with in turning the said sleeve. In the inner surface of the sleeve G are formed grooves I, to receive the lugs E, and from the said grooves I slots J are formed in such position as to receive the lugs E of the two tubes B when the said tubes are placed end to end, and the sleeve G of either tube is moved outward over the joint between the said tubes and partially rotated. To the sleeve G, at the inner ends of the grooves I, are attached inwardly-projecting pins K, in such positions as to stop the outward movement of the sleeve when the lugs E are opposite the ends of the slots J, so that when the said sleeves are turned the lugs E will enter the said slots. The slots J incline toward each other slightly, as shown in Figs. 1 and 2, so that the said sleeves, when turned, will draw the two tubes B closely together. The parts of the sleeves G in which the grooves I are formed are thickened, as shown in Fig. 3, to prevent the said sleeves from being weakened by the formation of the said grooves.

In the inner surface of each sleeve G, midway between the grooves I, are formed angular grooves L, to receive the beveled lugs F, to prevent the said sleeves G from turning when pushed inward and off the lugs E, so that the said sleeve G will always be in position for the lugs E to enter the grooves I when the said sleeve is pushed outward.

With this construction, when the ends of two tubes, B are brought together, only two movements are necessary in fastening the coupling—viz., an outward movement of a sleeve, G, to bring it over the joint between the tubes B, and a rotary movement of the said sleeve to bring the lugs E of the two tubes B into the slots J of the said sleeve. The sleeves G are kept from passing off the inner ends of the tubes B by flanges M, formed around the said inner ends.

Each tube B is provided with a sleeve, G, although only one sleeve is used in connecting two tubes, so that it will be impossible for two ends of hose-sections to come together that cannot be coupled.

Having thus described our invention, we

claim as new and desire to secure by Letters Patent—

In a hose-coupling, the combination, with the tube B, having dowel-pin C and lugs E and F, of the sleeve G, having lugs H, grooves I L, pairs of inclined slots J, and stop-pins K, substantially as herein shown and described, whereby sections of hose can be readily

coupled, and will be securely connected, as set forth.

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Witnesses:

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