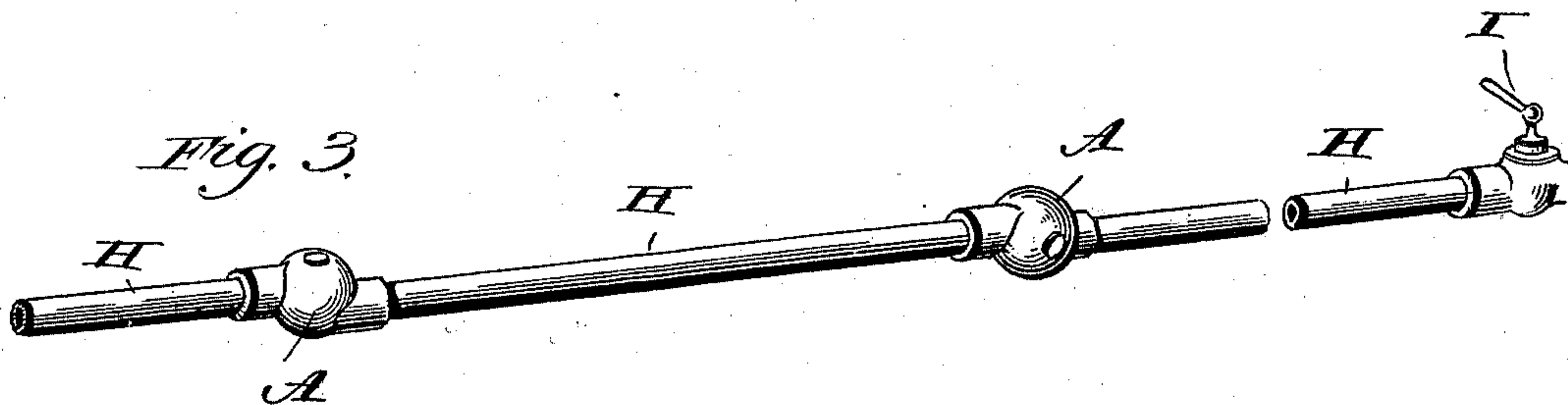
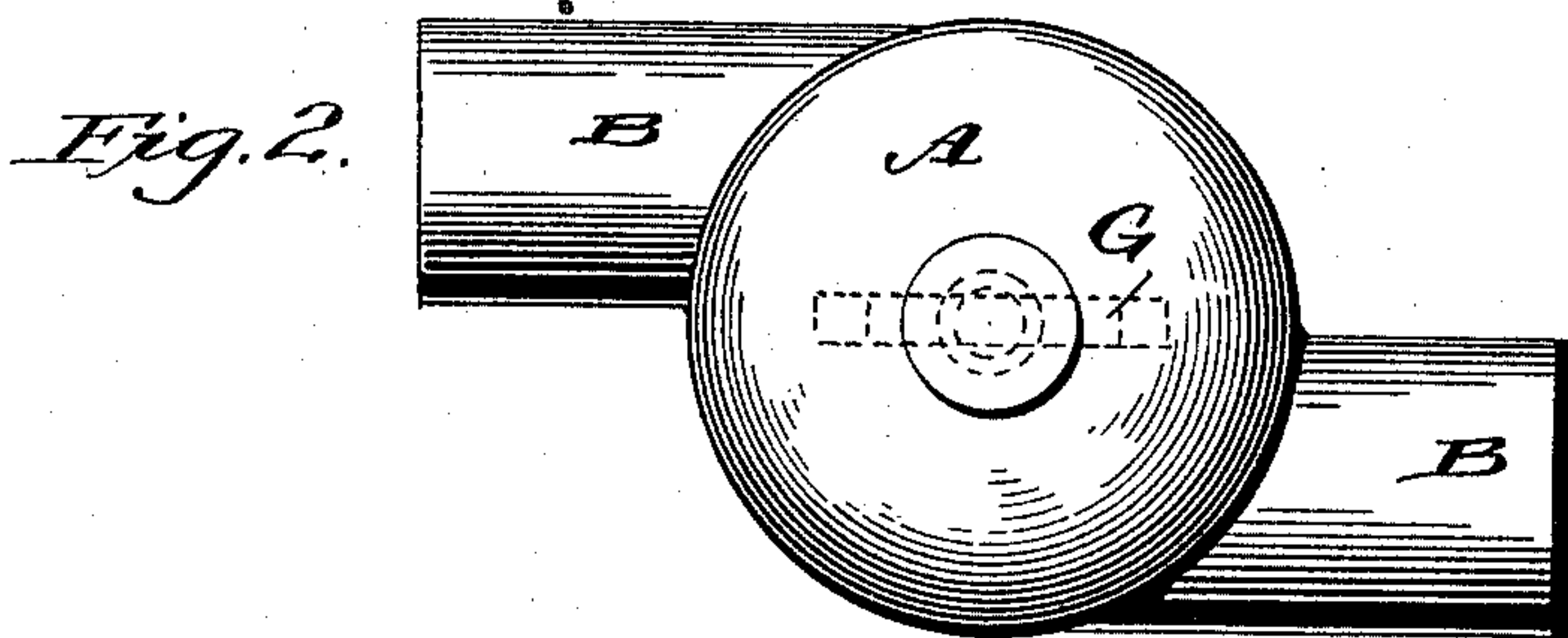
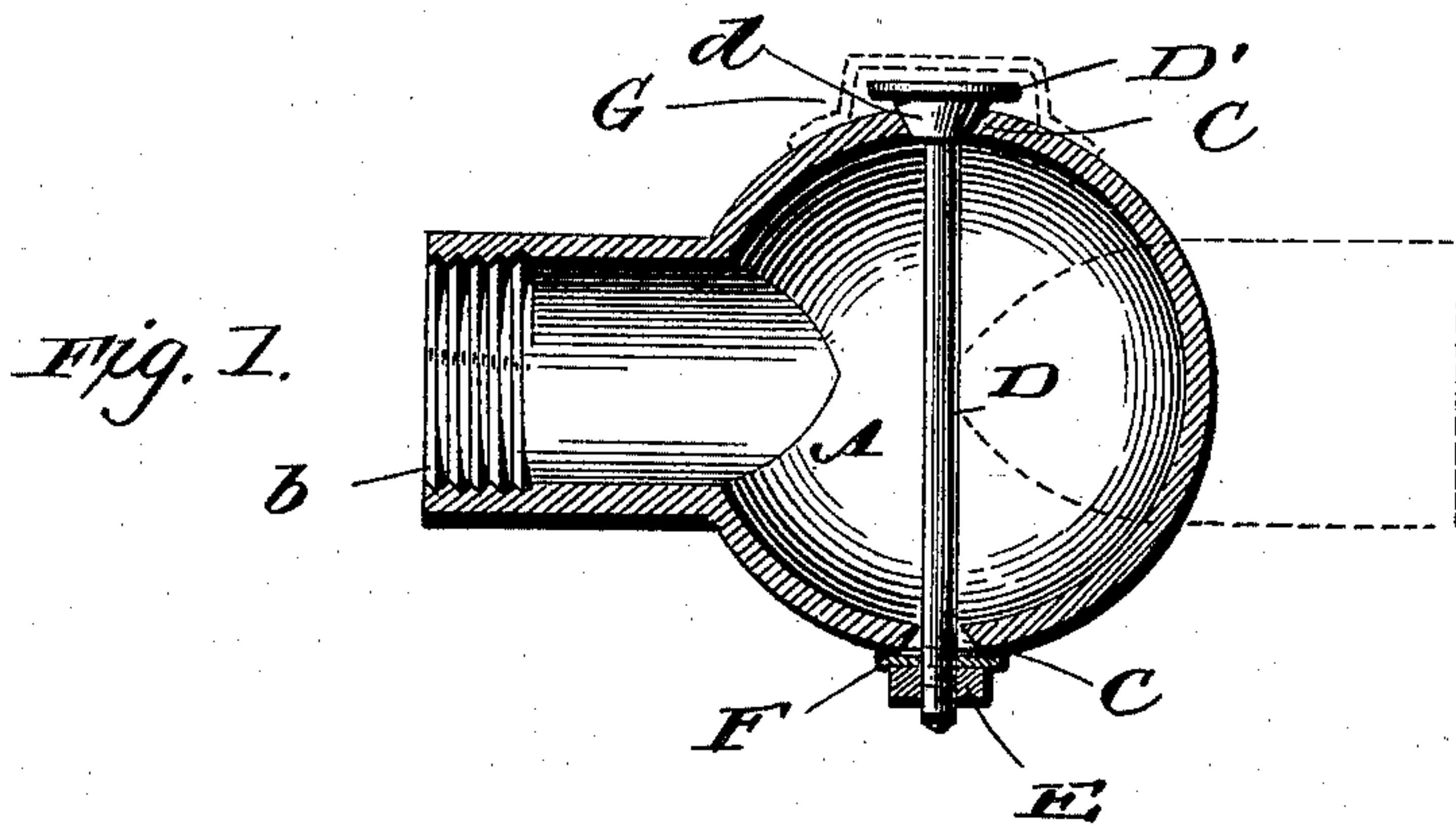


(No Model.)

J. K. MACKSEY.  
SPRINKLER.

No. 584,822.

Patented June 22, 1897.



Witnesses:

L. C. Hills.

E. A. Bond

Inventor:

John K. Macksey.

by E. B. Stocking  
Atty.



# UNITED STATES PATENT OFFICE.

JOHN K. MACKSEY, OF CLEVELAND, OHIO.

## SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 584,822, dated June 22, 1897.

Application filed April 3, 1896. Serial No. 586,053. (No model.)

*To all whom it may concern,*

Be it known that I, JOHN K. MACKSEY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Sprinklers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in sprinklers; and it has for its objects, among others, to provide a simple and cheap device that can be used as a sprinkler or as a fire-extinguisher. The device is readily applicable to a pipe or pipes in any desired position or location and is capable of use for various purposes. It can be used for street or lawn sprinklers, or in buildings for use in case of fire, or in sea-going vessels, in mines, for use in case of fire or explosions, or for cooling or washing the decks or other portions of the vessels. It can be employed in railway-coaches or alongside the track for the purpose of washing off the roofs and exteriors of the coaches. It may be employed in the same manner in connection with electric street-railways. In fact it is applicable for use in a great variety of places and for almost innumerable purposes; for instance, in a mill or other large establishment. The sprinklers may be arranged on pipes throughout the entire building and connections made whereby water may be turned on into any one or all of the rooms simultaneously, if desired.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a substantially central section through my improved sprinkler. Fig. 2 is an elevation thereof, showing it adapted for connection with the pipe upon opposite sides; and Fig. 3 is a perspective view showing two of the sprinklers applied to a pipe.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the draw-

ings by letter, A designates the main portion of the device, which is of globular form, having one or more nipples or necks B interiorly threaded, as shown at *b*, for connection with a pipe or pipes, to which the sprinkler is designed to be attached. The main or globular portion is provided with one or more openings C, through which the water is to be discharged when the same is admitted into the globular portion. The opening or openings are shown as provided with inclined or flaring walls, as seen in Fig. 1, and in one of these forms I provide a rod D, one end of which is provided with the cone-shaped portion *d*, beyond which is the annular flange or disk-like portion D', the conical portion fitting the tapered opening in the body portion A and the disk or flange serving as a spreader or a sprayer. This rod extends through the diametrically opposite opening, and is provided with a nut E on its screw-threaded end, and between this nut and the adjacent wall of the body portion is a washer F of any suitable material. The outlets are regulated by the adjustment of the nut.

The washer and the conical portion at the opposite end prevent ingress of rain or snow, while the opening adjacent to the screw-threaded end of the rod permits of the drainage of the body portion after the water has been shut off, the rod by gravity assuming a position in which the conical portion seats itself in a tapered opening, and the nut and washer at the opposite end fall away from the body portion sufficiently to provide egress for the water, whereby freezing in cold weather is prevented. This rod may be dispensed with, or, if desired, it may have at each end a conical portion, the rod having sufficient play in the body portion, so that the water when admitted will force open the valves or conical portions of the rod, so as to allow the water to escape through the openings in the body portion. A greater number of openings may be provided, as circumstances require.

When I employ the rod, with its conical portion, either with or without the flange and dispense with the nut at the opposite end, I employ a guard G, secured to the outer surface of the body portion and extending across the conical portion or its flange, as indicated by



dotted lines in Figs. 1 and 2, and serving as a stop to limit the outward movement of the valve.

In use the sprinklers may be applied to a supply-pipe H, as seen in Fig. 3, having a valve or cock I, by which the inlet of water thereto is controlled, and the sprinklers arranged so as to discharge the water in a vertical or horizontal direction or at any desired angle, according to the circumstances and the location of the same.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages. The shape of the body portion may be varied as may be required, and the size and capacity thereof may also be varied in accordance with the conditions under which it is to be used.

It will be understood that the sprinkler, as well as the valves, may be made of any suitable metal or material, and I may find it preferable to make the valves of rubber, as a tighter fit can be thus produced, and dispensing with the use of the washer. The nut also may be made of a shape to correspond to that of the opening, and in this way the washer need not be present.

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

1. As an improved article of manufacture, a sprinkler having a body portion of globular form with diametrically oppositely-disposed openings, and threaded nipples at diametrically opposite sides of the body portion and at right angles to said openings, a rod diametrically disposed and passed through said openings and carrying valves adapted to close the same; all substantially as herein shown and described.

2. The combination with a pipe provided with a shut-off valve, of a sprinkler secured to one end of said pipe and having a rod diametrically disposed at right angles to the length of said pipe and carrying a valve adapted to close an opening in the body portion of the sprinkler, and a threaded nipple upon the opposite side of the body portion, a pipe secured therein, and a sprinkler upon the opposite end of said pipe having a diametrically-disposed rod carrying a valve, and a guard over one end of said valve and secured to the outer surface of the body portion of the sprinkler; substantially as described.

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

JOHN K. MACKSEY.

Witnesses:

L. ROOD LOOMIS,  
W. D. MCTIGHE.