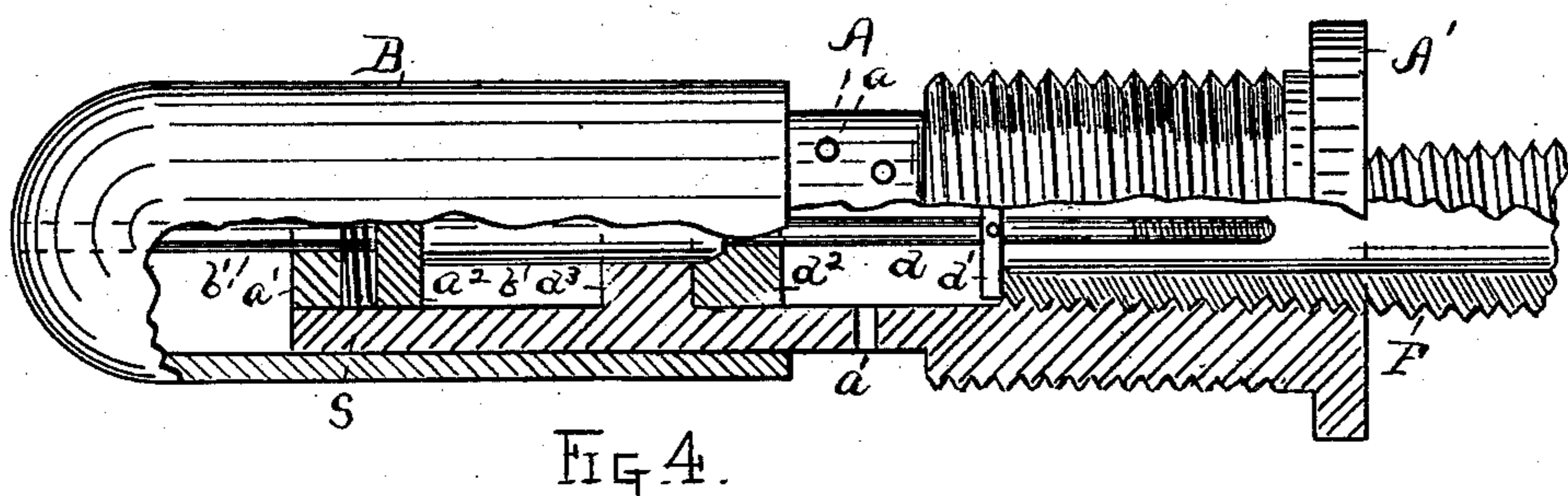
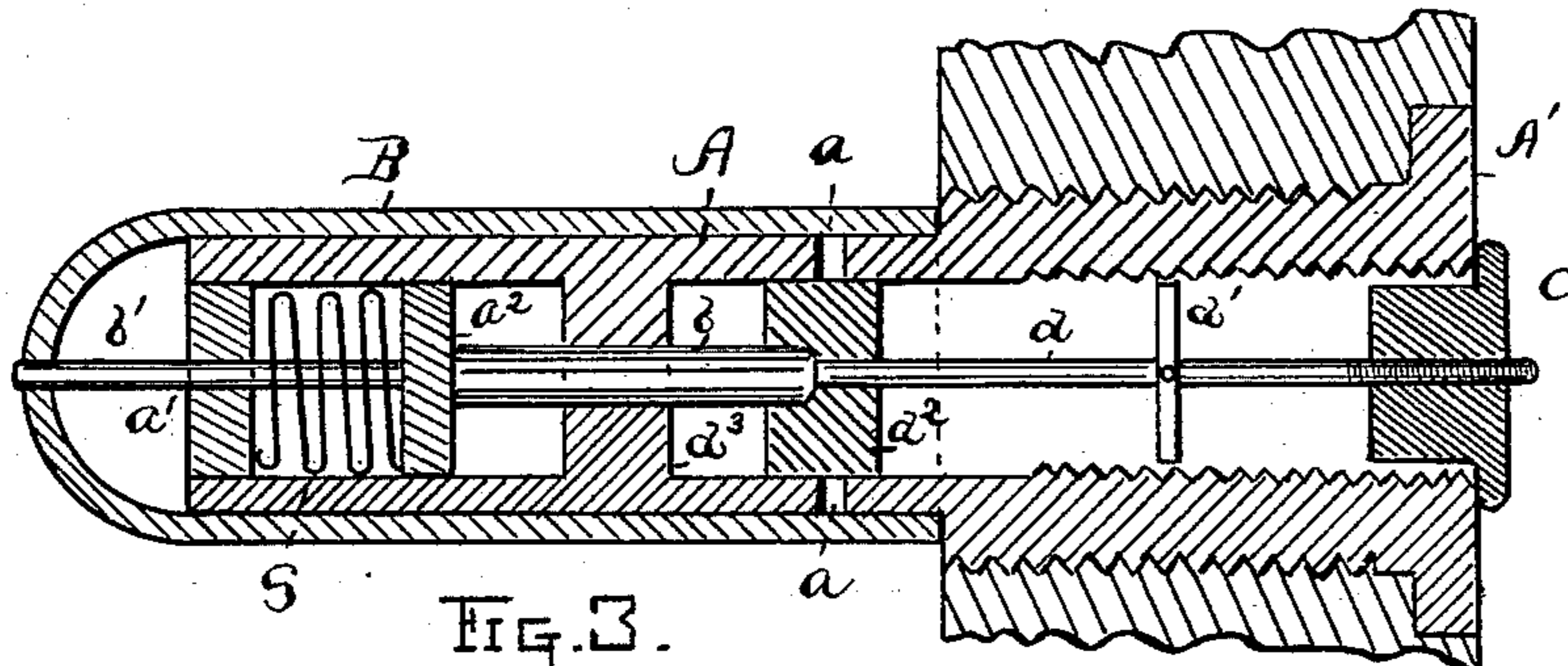
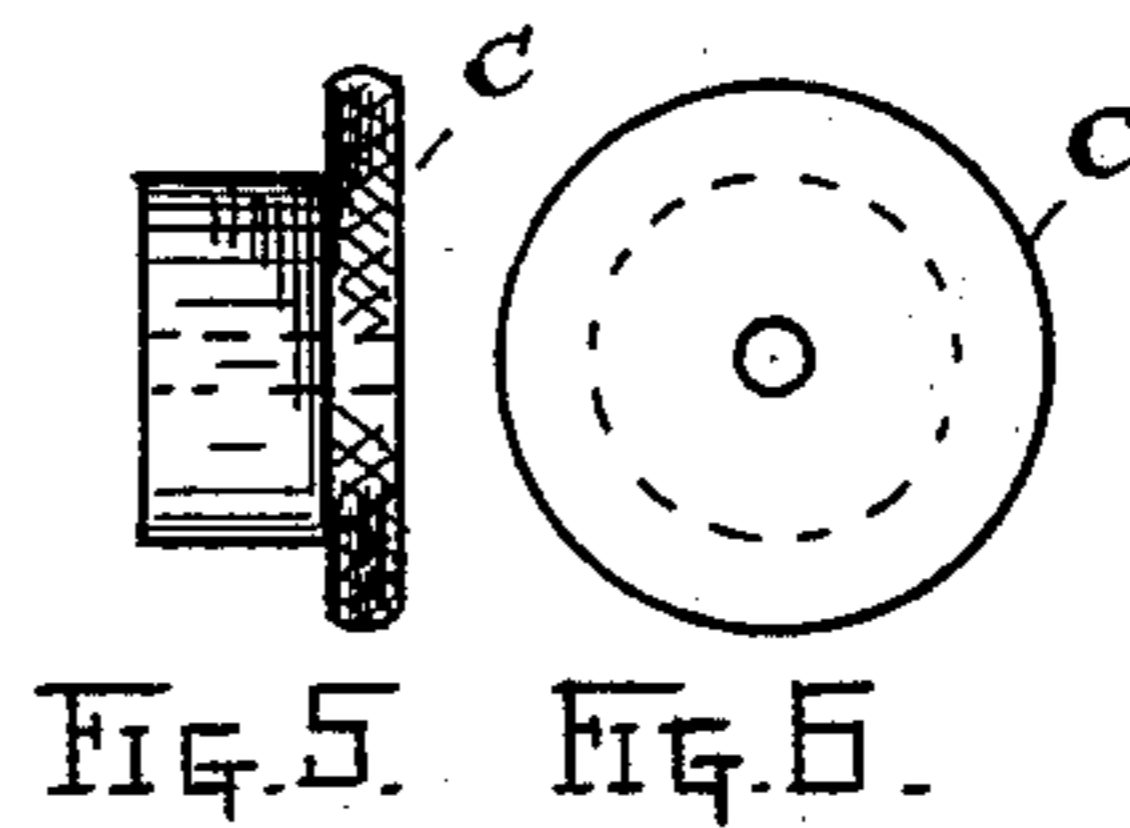
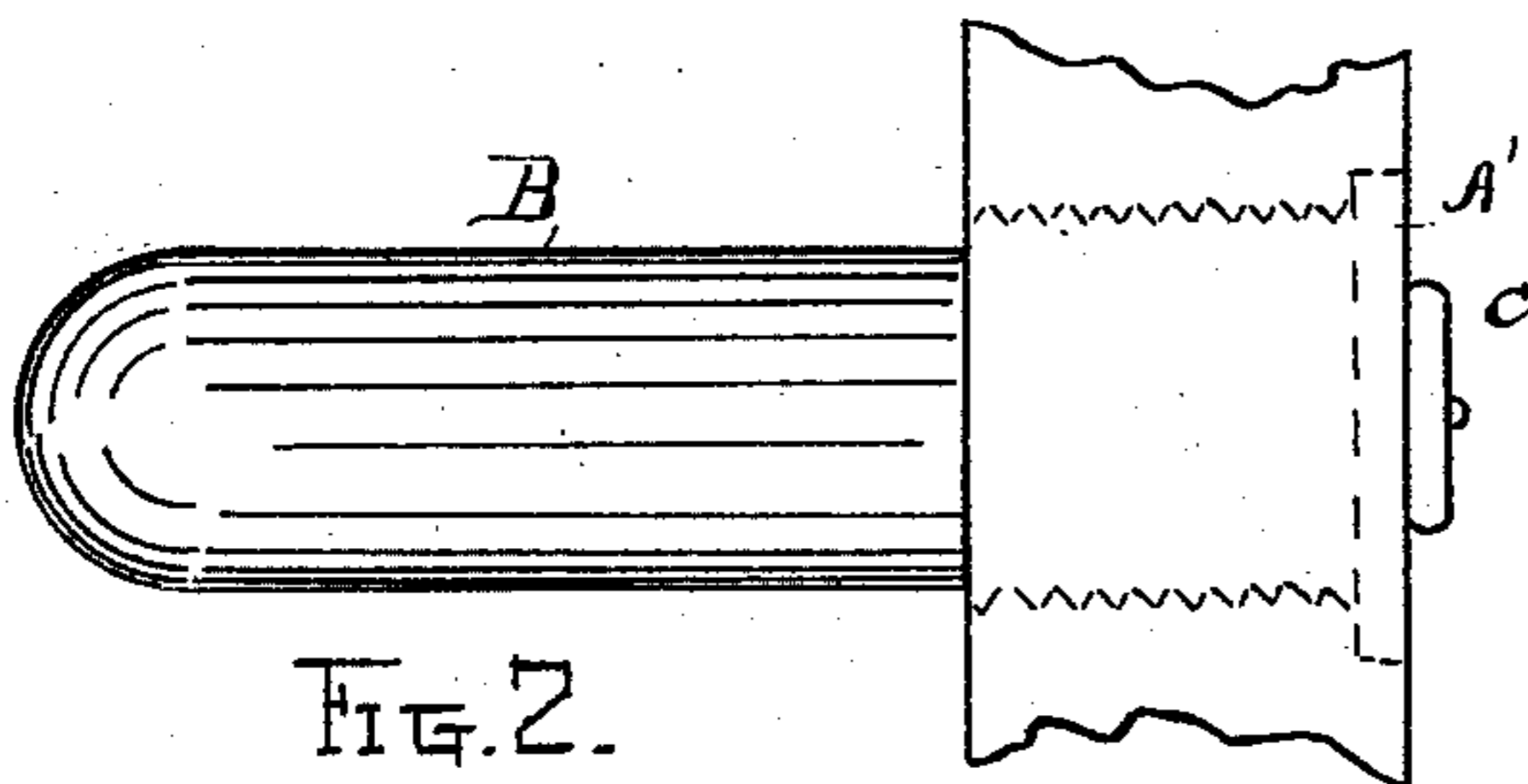
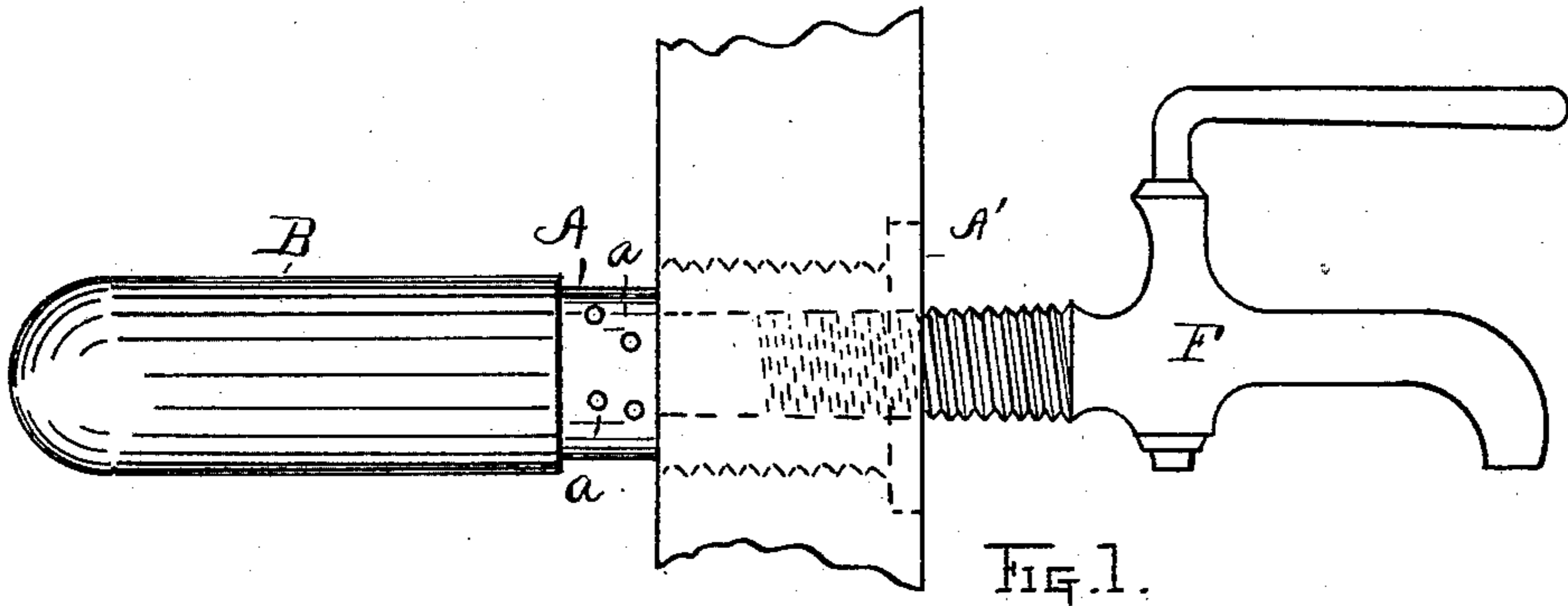


(No Model.)

C. IVES.
BUNG.

No. 347,046.

Patented Aug. 10, 1886.



WITNESSES:

Charles D. F. Hoxie
Edward H. Wells

INVENTOR.

Charles Ives

UNITED STATES PATENT OFFICE.

CHARLES IVES, OF KIRKLAND, NEW YORK, ASSIGNOR OF ONE-HALF
TO GEORGE H. IVES, OF SAME PLACE.

BUNG.

SPECIFICATION forming part of Letters Patent No. 347,046, dated August 10, 1886.

Application filed February 25, 1885. Serial No. 156,978. (No model.)

To all whom it may concern:

Be it known that I, CHARLES IVES, of the town of Kirkland, in the county of Oneida and State of New York, have invented a new and useful Improvement in Bungs, of which the following is a specification, reference being had to the accompanying drawings, and to the letters and figures marked thereon.

My invention relates to an improved bung used in casks and other vessels containing beer, ale, or other liquids; and it consists in a stationary tubular perforated bung-piece, over which a movable tubular sheath is fitted, and constructed to move thereon, and in which tubular perforated bung-piece is a moving disk for covering the perforations in the bung-piece, and other mechanism hereinafter more fully described.

Heretofore various devices, more or less successful, have been provided (for stopping bung-holes in casks and other vessels containing malt, fermented liquors, and other liquids) with devices for inserting or removing faucets for drawing the liquid from the cask or vessel. To overcome the difficulties in tapping or inserting the faucet in the bung, and to prevent the liquids from escaping while this is being done, I have provided my improved bung, which will hereinafter be more fully described.

In the accompanying drawings similar letters of reference refer to corresponding parts throughout the several views.

Figure 1 represents a side view of my improved bung, showing the tubular sheath extended to uncover the perforations in the bung-piece, to allow the liquids in the cask or vessel to be drawn from the cask or vessel. The broken lines indicate a section of the cask or vessel with the faucet inserted in the bung.

Fig. 2 is a side view of the bung inserted in the cask in position before the faucet is inserted. Fig. 3 represents a longitudinal section of my improved bung, representing the same in position in the head of the cask before the faucet is inserted. Fig. 4, represents a side view of the bung in position after the faucet is inserted, the broken lines indicating a portion of the outer shell removed. Fig. 5 represents a side view of a cap; Fig. 6, a top view of the same.

Having described my invention by reference to the figures illustrated in the accompanying drawings, I will now proceed to describe it by reference to the letters marked thereon, in which A represents a tubular perforated bung-piece provided with screw-threads on a portion of the periphery, as indicated in Fig. 3, for inserting the same in the bung-hole of the cask or vessel. Screw-threads are provided on the inner surface, as indicated in Fig. 3, for receiving and retaining the faucet for discharging the liquids from the cask. On the end of the tube is a flange, A', which may be let into or screwed against the head of the cask or vessel. About the center of this tube holes are perforated through the wall to allow the liquid in the cask to flow into the tube, thence through the faucet.

a a, Figs. 1 and 3, represent the perforations.

B represents a sheath fitted over and sliding on the external surface of the tubular perforated bung-piece, for opening and closing the perforations a a. This sheath is moved over the perforations to close the same by means of piston-rod b', one end of which is let into the circular end of the sheath. The other end is attached to piston-head a'', the piston-rod passing through stationary head a', which is screwed into the end of the tubular perforated bung-piece, by means of a coil-spring, S, acting against the stationary head and piston, as indicated in Fig. 3. The sheath is moved inward for the purpose of uncovering the perforations, to allow the liquid to flow into the tubular perforated bung-piece, thence through the faucet, by means of connecting-rod d, (indicated in Fig. 3,) one end of which bears against piston a''. The other end is constructed to receive a cap, as hereinafter described.

d' represents a disk fitted over and rigidly attached to connecting-rod d, constructed to slide inside of the tubular perforated bung-piece, and so located that the faucet will strike the same when inserted in the bung-piece.

d'' represents a movable stop fitted over and rigidly attached to connecting-rod d. This stop is fitted closely in the tubular perforated bung-piece, and is so located on the connecting-rod as to cover the perforations a a, to prevent the liquid from flowing into the bung-

piece before the faucet is inserted, and is adapted to be moved inward to uncover the perforations in the tubular bung-piece when the faucet is inserted therein; and when the faucet is removed the stop is moved outward to cover the perforations and exclude the liquid by the action of spring S on piston a^2 .

d^3 represents a partition wall in the tubular bung-piece, through which connecting-rod b passes, and into which the same is fitted closely, for steadying the connecting-rod and to prevent liquid from escaping into the spring and piston chambers.

F represents the faucet inserted in the bung-piece.

c represents a cap for covering the perforated tubular bung-piece when the faucet is removed, for excluding the dirt. This cap fits over and screws onto the end of connecting-rod d , as indicated in Fig. 3.

I am aware that it is old to construct the tubular perforated bung-piece in combination with the sheath fitting over the bung-piece and a rod connecting with the sheath and carrying a valve in the bung-piece, and I therefore disclaim such construction, broadly; but I am not aware that a faucet of this kind has been so constructed that the piston-valve serves to close the holes in the faucet, as is effected by my device and the peculiar construction shown and described.

What I therefore do claim is—

1. The combination, with a tubular perforated bung-piece, of a sleeve which telescopic-

ally incloses the bung-piece, a rod secured to the sleeve, and a piston-head mounted on the rod, said piston-head being of sufficient length to cover and close the perforations in the bung-piece, all constructed and combined to operate substantially as described, whereby the piston-head and sleeve close the same perforations in the bung-piece from opposite sides and in conjunction with each other.

2. In a bung, the bung-piece having the holes a and a rigid partition, d^3 , and a perforated end piece, a' , in combination with the sleeve B, rod d , piston-head a^2 , and the spring S, which is incased between the partition d^3 and the end piece, a' , thus preventing any liquid from coming into contact with the spring, substantially as described.

3. In a bung, the bung-piece having perforations a , in combination with a sleeve which slides over said perforations, a piston-rod rigidly secured to the sleeve, and a piston-head secured to the piston-rod, said piston-head being in direct line with that portion of the sleeve which closes the holes in the bung-piece, whereby the liquid is cut off by the sleeve and forced forward in the shell by the piston-head and prevented from getting into the rear of the bung-piece, substantially as described.

CHARLES IVES.

Witnesses:

CHARLES DE F. HOXIE,
EDWARD H. WELLS.