

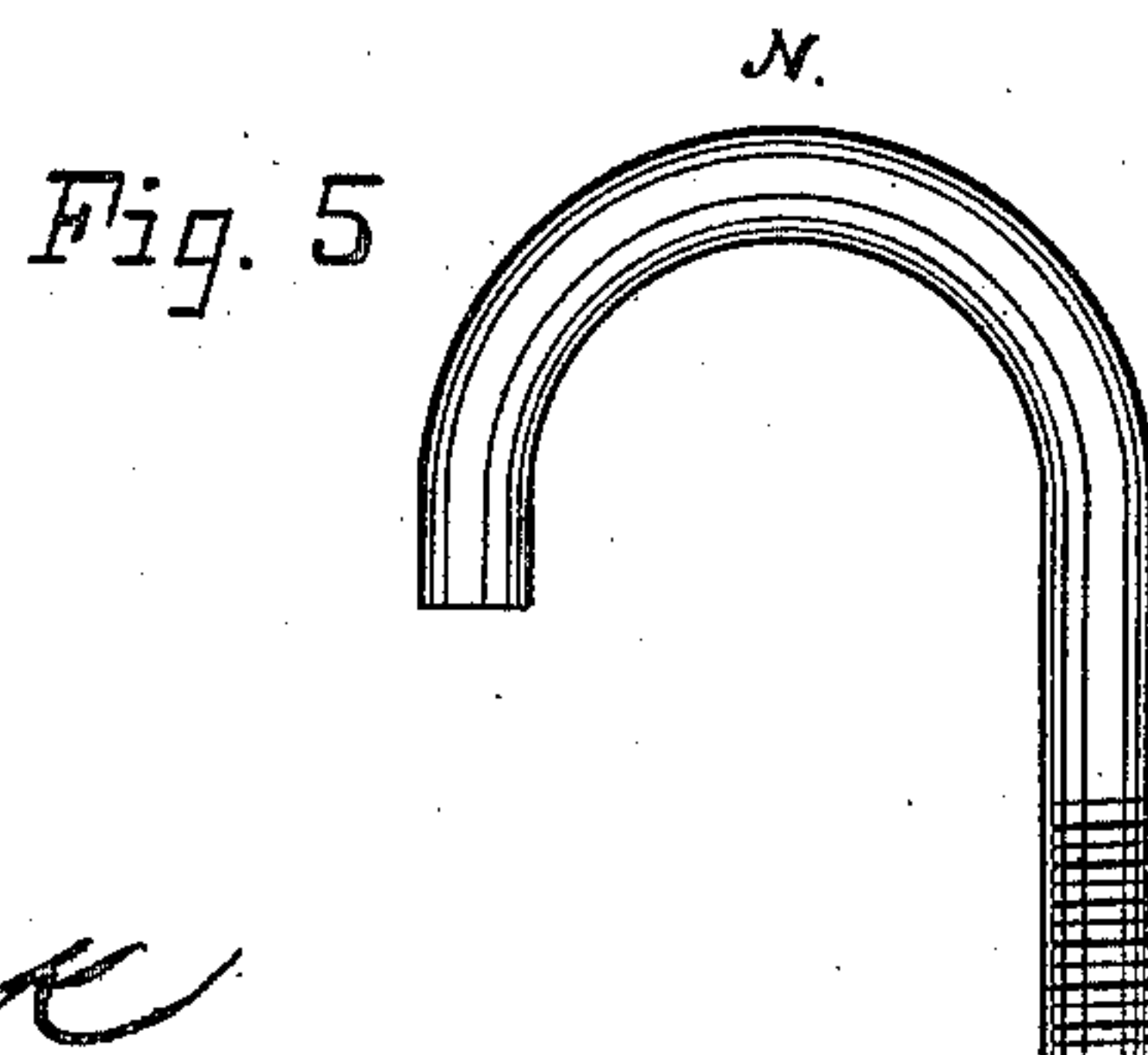
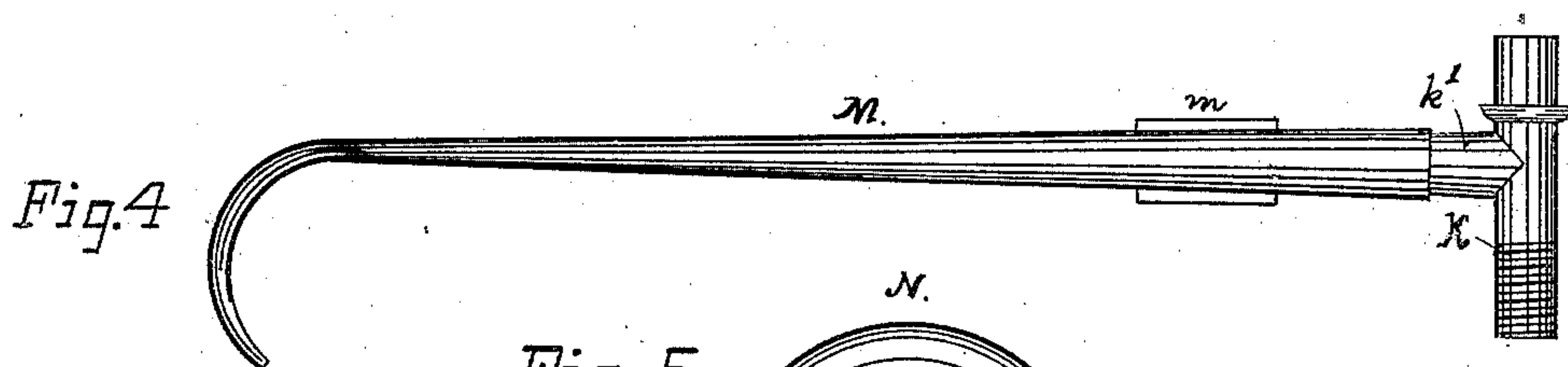
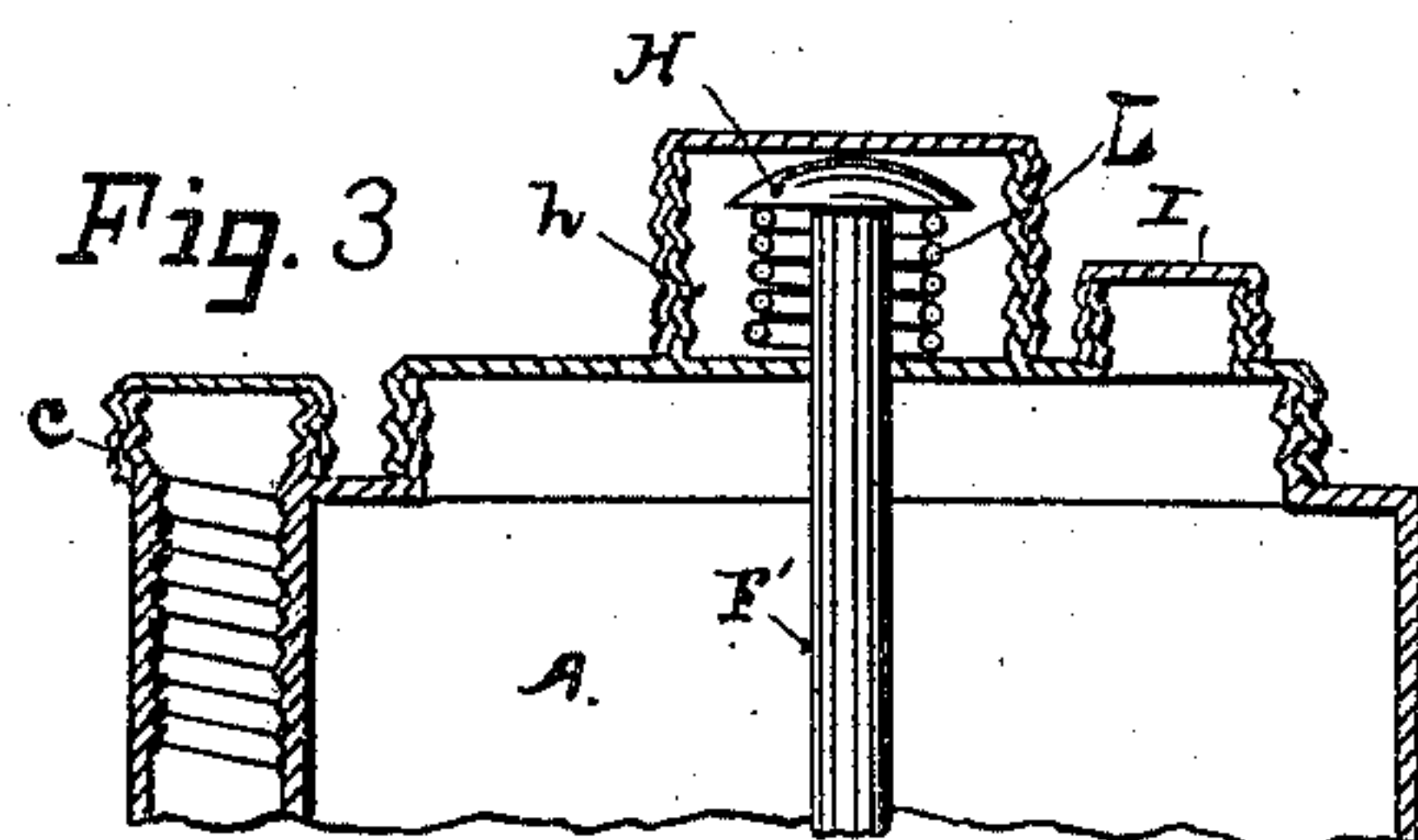
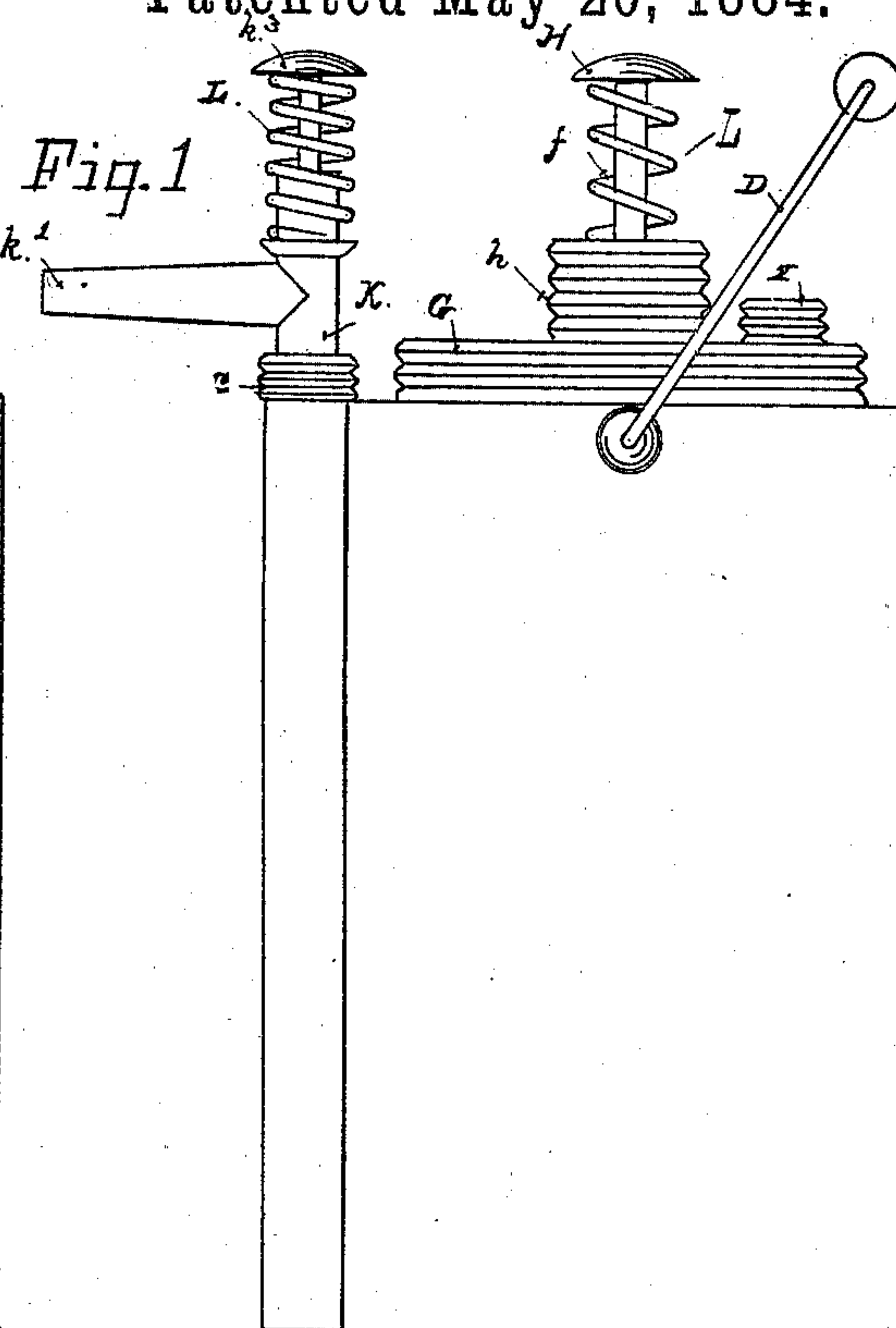
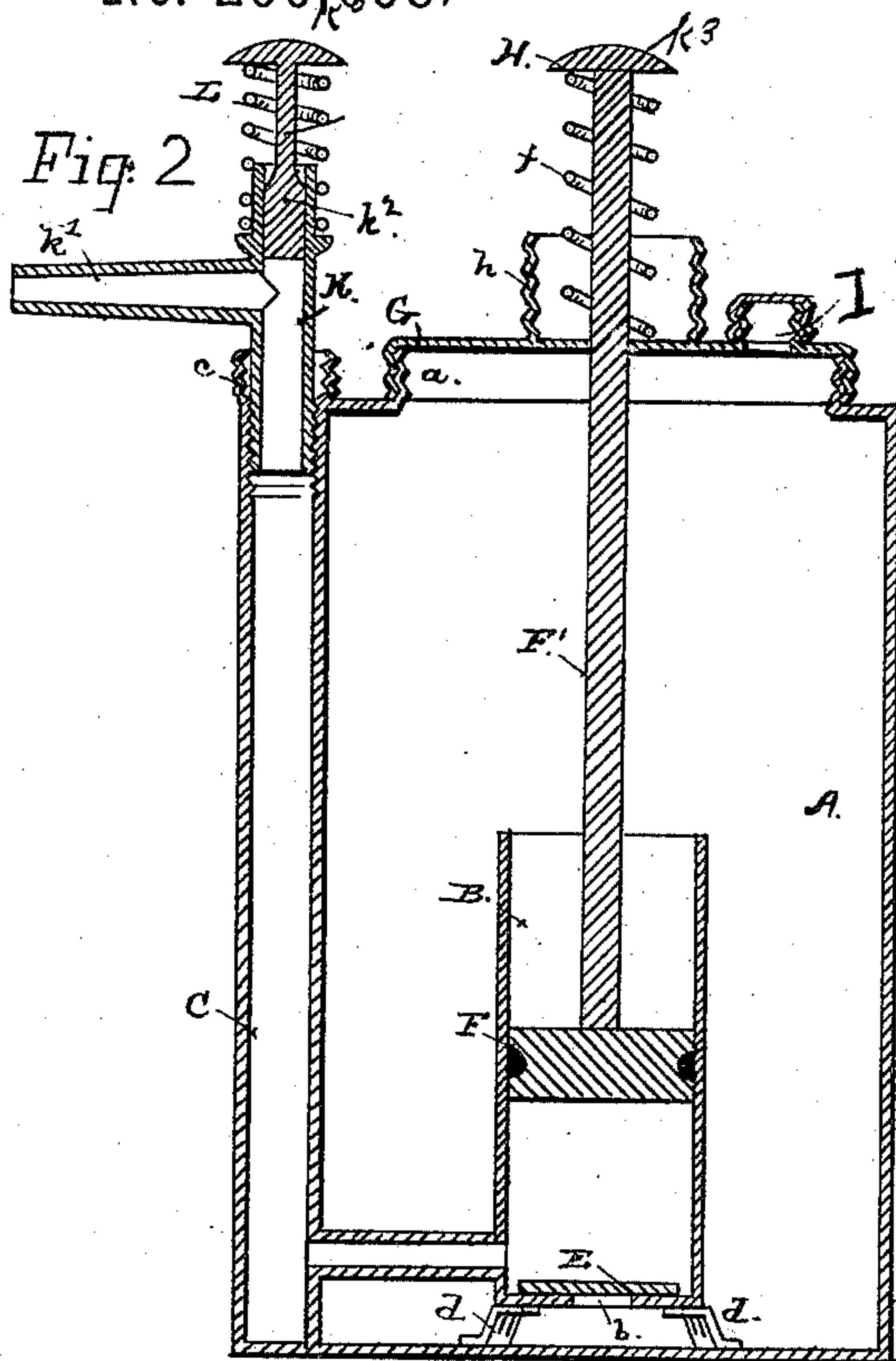
(No Model.)

J. A. GRISWOLD.

OIL CAN.

No. 299,068.

Patented May 20, 1884.



Witnesses:

John Taggart
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UNITED STATES PATENT OFFICE.

JOHN A. GRISWOLD, OF SAN FRANCISCO, CALIFORNIA.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 299,068, dated May 20, 1884.

Application filed October 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. GRISWOLD, a citizen of the United States, residing in the city and county of San Francisco, State of California, have made and invented certain new and useful Improvements in Shipping and Service Cans for Lubricating and Burning Oils; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and letters marked thereon.

My invention relates to a can or receptacle adapted to contain oils in condition suitable for shipment or storage, and when required for use to be converted into a service-can from which the contents can be drawn or discharged in quantities, as desired. In such form or arrangement of parts it serves as a perfect distributor for lubricating-oils and like fluids and as a safe lamp-filling device for burning-oils. In its principal features and arrangement of parts as a lamp-filling device it is an improvement upon the Letters Patent granted to me on the 8th day of February 1876; but it differs from that device in that the parts constituting the discharging apparatus are greatly simplified, and are accessible for repairs; that the stream of oil at the time of discharge can be more exactly regulated and can be cut off at any point, and that the can is readily closed up at all outlets for shipment.

The following description fully explains the nature of my said improvements and the manner in which I proceed to construct, apply, and use them, the said drawings being referred to by figures and letters, as follows:

Figure 1 is a side elevation of the can. Fig. 2 is a vertical section through the can, showing its adjustment for use as an oiler. Fig. 3 is a section of the top of the can when it is in condition for shipment. Fig. 4 shows the cut-off spout and oiling-nozzle. Fig. 5 is a nozzle to replace the oiling spout and nozzle when the can is used as a lamp-filler.

A represents the body of the can, preferably of cylindrical form.

B is a small cylinder, open at the top, and with inlet *b* leading out of the bottom.

C is a discharge tube or passage leading from the lower part of the cylinder B up to the top of the can and terminating in a screw-threaded socket or coupling, *c*, for connecting a nozzle. This conducting-passage can be placed either on the outside or the inside of the can.

D is a handle for convenience in carrying the can about.

E is a loose disk or clapper-valve covering the inlet *b*, and kept to its seat, or limited in its vertical play by the piston playing above it.

F is a piston fitting closely in the cylinder, and operated by a rod or stem, *F'*, that extends up through the top of the can. This rod is operated in one direction by pressure, and in the opposite direction by a coil-spring, *f*, of suitable strength bearing upon the top of the can at the lower end and under the head H at the upper end.

h is a screw-threaded neck or rim around this top opening of the can, to which a screw-cap is fitted.

I is a filling-aperture closed by a screw-cap, removable to permit the can to be filled.

K is a small removable cut-off faucet with a valve, *k'*, operating in one direction by pressure on the head *k''*, and in the other direction by a spring, L.

k' is a spout adapted to receive the tube or nozzle M, of greater or less length and of straight or curved shape.

M N illustrate two forms of nozzles to be attached to the outlets *c* or *k'*. The one, M, in connection with the spout, converts the can into an oiler. The other one, N, is a simple nozzle for use without the spout L, for filling and emptying lamps and vessels.

The top of the can is provided with a screw-threaded neck, *a*, and a removable top, G, is screwed thereon. The rim *h* is provided on the top G, and also the filling-aperture I.

The cylinder B is fixed in place on the bottom of the can A by means of feet *d d*, to give clear space beneath and around the central inlet-aperture, *b*, in the bottom of the cylinder.

The valve E is a metal disk having a leather or other pliable washer fixed to the rim. It

is dropped loosely into place from above before the piston is inserted, and, being of about the same diameter as the cylinder, it plays up and down without guides.

5 The outlet from the cylinder is a fixed metal tube, C, that may be carried to the outside of the can, or be fixed inside the can-body. In both cases the end will project from the can to afford means of connecting a discharge nozzle
10 or spout. This end *c* is screw-threaded to receive a cap or plug to close the outlet and to afford connection for the spout and nozzle.

The piston F is a disk of wood, having a circumferential groove in its rim to receive a
15 strip of felt or other suitable material, to form a packing.

The aperture in the top of the can for the piston-rod is screw-threaded to receive a cap. The piston-rod can be pressed down into the
20 can and the aperture tightly closed. This affords a means of sealing up the can and securing the contents in condition for shipment, or to prevent evaporation, or to close up the can when not required for use.

25 In all devices or apparatus of this character, the cylinder and piston constitute a means of forcing out the liquid contents in quantities or charges. The detachable nozzles enable the can to be used as a lamp-filler, and to be con-
30 verted into an oiler or a distributor for lubricating-oil. The particular construction of these parts also greatly reduces the cost of manufacture, and contributes, besides, to the durability of the apparatus.

35 When used for distributing oil for lubricating purposes, the piston renders effective service in forcing the oil through a length of nozzle to such points and localities in and about machinery that are difficult of access. The
40 discharge of oil is then independent of the position of the can, and will take place even while the end of the nozzle is held in position above the supply. With a long spout or nozzle overhead work can be reached, and a curved nozzle
45 can be employed to apply oil to many points now practically inaccessible by ordinary oilers.

As the operation of the pressure or forcing device is such that when once the cylinder B
50 is charged and pressure is maintained by hand on the plunger-head, the flow of oil will continue until the cylinder is emptied. I provide and employ a cut-off to be used in connection with the oiling-nozzles. This cut-off
55 consists of the spout or faucet body K, having its lower end screw-threaded to fit the outlet *c*, and provided with a spout or outlet end to receive the tube or nozzle M.

In the body K is a plunger-valve having a
60 stem, *k*², carried out through the top and furnished with a head, *k*³, below which is fixed a coil-spring, L. Pressure upon the head *k*³ forces the valve down across the outlet through the spout and cuts off the supply, while the
65 spring opens the valve, when this pressure is

removed. This cut-off is useful in controlling the outlet when the nozzle is turned down to reach points below the position in which the oil-receptacle is held. This valve or cut-off is not required when the can is used as a
7c lamp-filler when its place is occupied by the curved spout N.

To put the can in condition for use, the caps over the apertures *c h* are unscrewed. The nozzle N is then screwed into the outlet *c*, and
75 the apparatus is ready for use.

The spring *f* may be dispensed with, as rod F' may be worked altogether by hand.

The advantage of using the spring is that it recharges the cylinder B as often as it is
80 emptied, and for this purpose it is more especially useful in working the apparatus as an oiler, for it enables the supply of oil to be controlled and the rods F' *k*² managed with one
85 hand.

As thus constructed my improved can constitutes a simple, efficient, and valuable article for shops, factories, and the household.

Illuminating and lubricating oils and many fluids and liquids attended with more or less
90 risk and danger to life and health can be handled in a safe manner.

The can or holder A is made of different sizes, according to the quantity of oil it is required to contain. Those for stores and large
95 establishments, where the consumption of oil is greater, will be considerably larger in capacity than those provided for household purposes and for use as oilers.

Having thus fully described my invention, 100 what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the can or holder A, of the fixed cylinder with valved inlet *b*, piston F, and rod F', fixed outlet tube or pas- 105 sage C, terminating in the socket or coupling *c*, head or handle H, to operate the piston-rod from the outside of the can, and the cut-off spout K, with valve and valve-spring, substantially as hereinbefore described. 110

2. The combination, with the can or holder A, having the socket or coupling *c*, for connection of a nozzle, and the piston-rod F', arranged to be returned into the can through the aperture in the can-top, of the screw- 115 threaded rims around the apertures *c h*, and screw-caps to fit thereon, substantially as hereinbefore described, for the purpose set forth.

3. The combination, with the can or holder 120 A, of the fixed cylinder having valved inlet *b* and an outlet, the piston F, and piston-rod F' working through the top of the can, the fixed outlet tube or passage C, the screw-threaded rims *c h*, and caps or nozzles there- 125 for, substantially as hereinbefore described, for the purpose set forth.

4. The combination, with the can or holder A, having the fixed outlet tube or passage C, terminating in the socket or coupling *c*, of the 130

cut-off faucet K, with valve k^2 , spring L, and spout k' , adapted to receive attachment of a nozzle, substantially as described.

5 The can or holder A, having socket or couplings c on the outside, the piston-rod aperture h and surrounding rim, fixed cylinder B, fixed outlet-passage C, a piston-rod, F', of suitable length to be returned into the holder

through its aperture, the caps or covers to close said parts c h , and the removable head 10 or top, all in combination, substantially as hereinbefore described.

JOHN A. GRISWOLD. [L. S.]

Witnesses:

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