

No. 615,487.

Patented Dec. 6, 1898.

C. KEMPER.

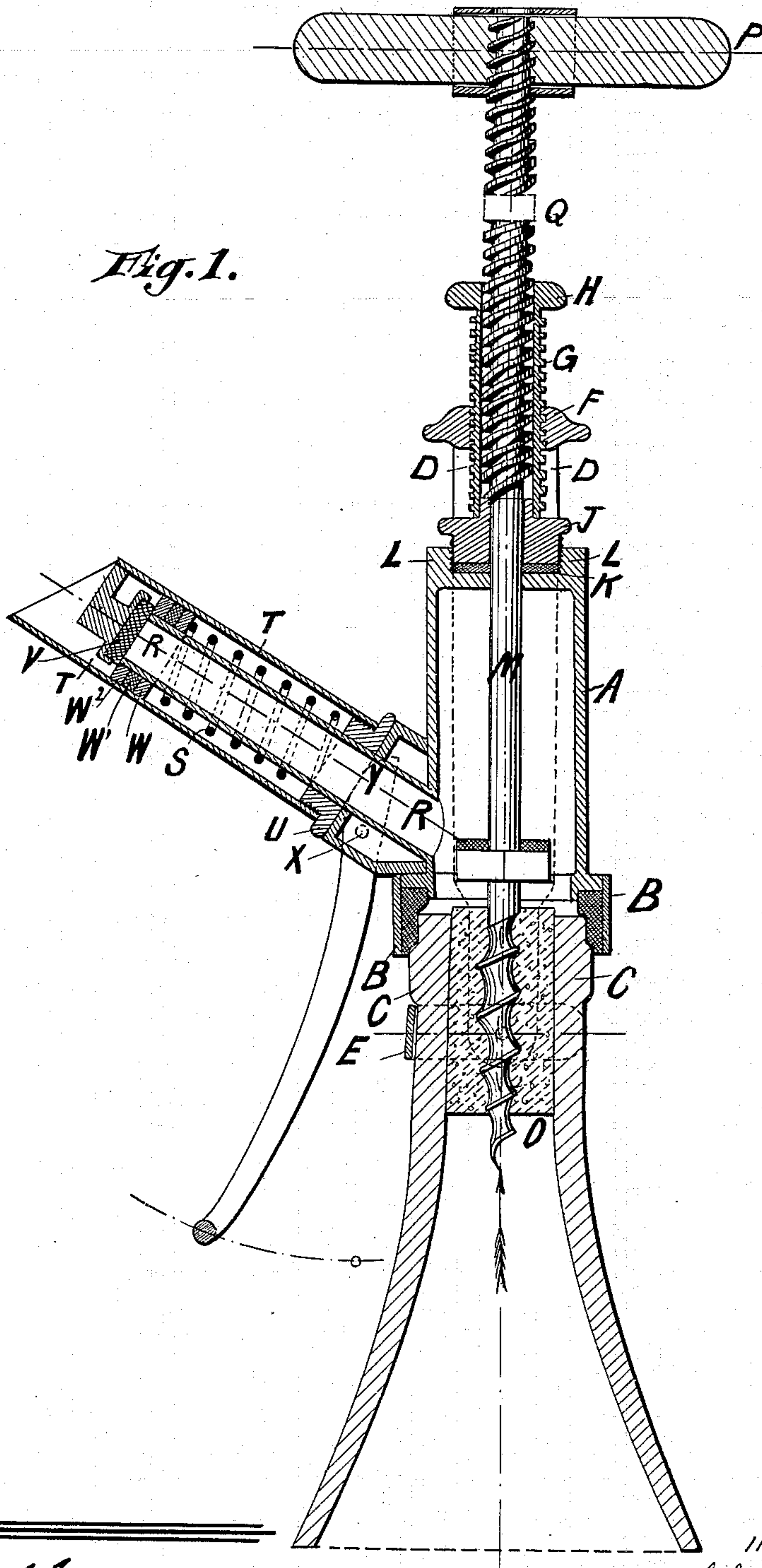
DEVICE FOR OPENING OR CLOSING BOTTLES.

(Application filed July 15, 1898.)

(No Model.)

3 Sheets—Sheet 1.

Fig. 1.



WITNESSES:

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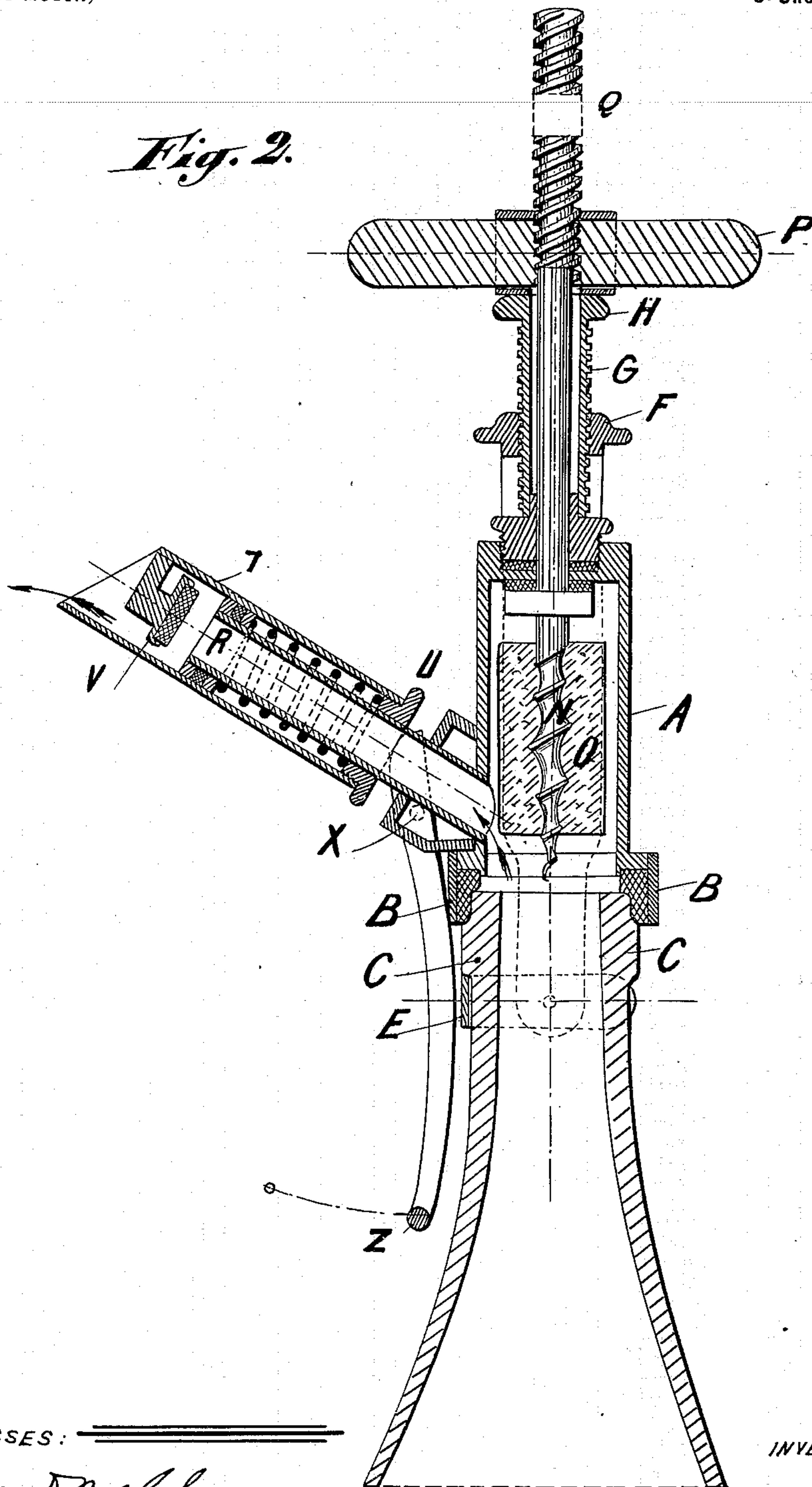
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Fig. 2.



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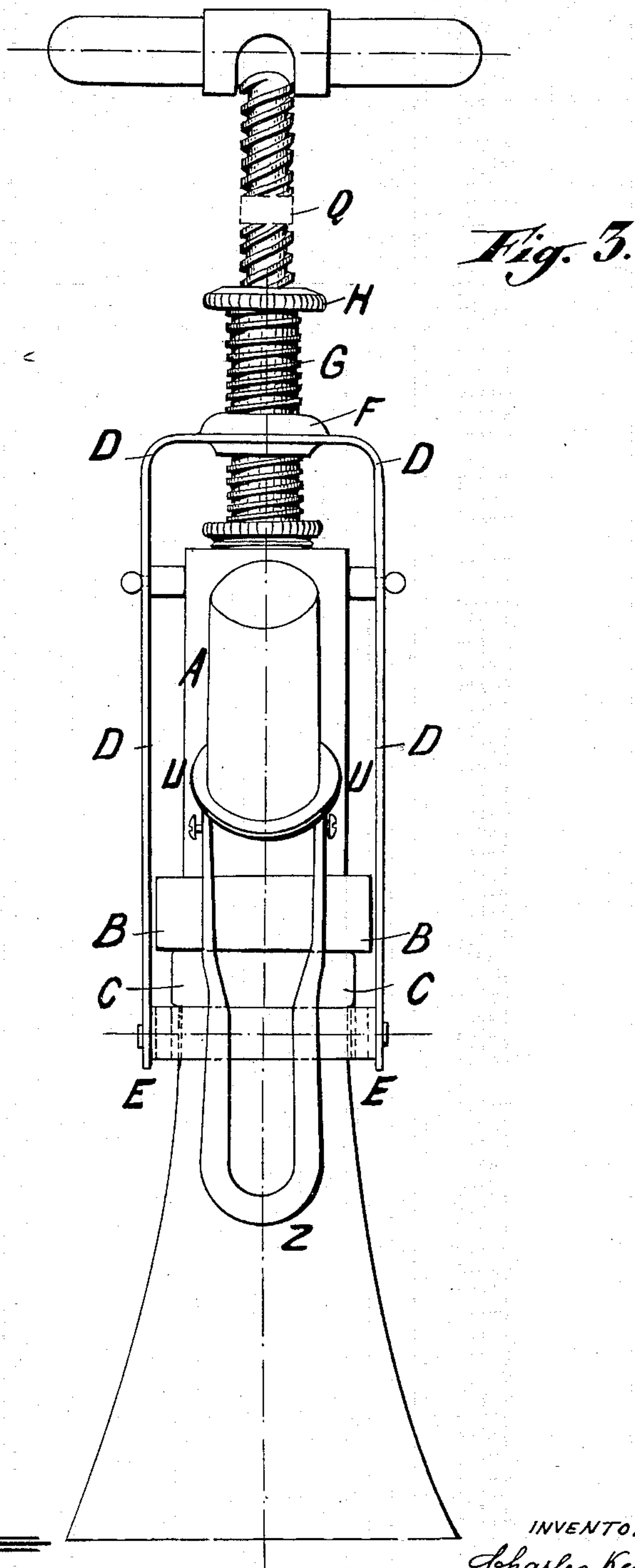
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DEVICE FOR OPENING OR CLOSING BOTTLES.

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(No Model.)

3 Sheets—Sheet 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES KEMPER, OF BRUSSELS, BELGIUM.

DEVICE FOR OPENING OR CLOSING BOTTLES.

SPECIFICATION forming part of Letters Patent No. 615,487, dated December 6, 1898.

Application filed July 15, 1898. Serial No. 685,982. (No model.)

To all whom it may concern:

Be it known that I, CHARLES KEMPER, manager, a citizen of Germany, residing at 25 Rue du Marché aux Herbes, Brussels, in the Kingdom of Belgium, have invented certain Improved Devices for Opening or Closing Bottles, the nature of which I declare to be as follows.

This invention relates to a contrivance constructed with a view to enable bottles containing champagne or other effervescent liquids to be uncorked in such a manner as to prevent any escape of gas from or any admission of air into the bottle during the removal of the cork and to substitute said cork as soon as it is removed from the neck of the bottle by an automatic air-tight closing contrivance.

This automatic air-tight closing device is destined for drawing off effervescent liquids, champagne, &c., like a siphon—*i. e.*, to open the closing device and to enable the liquid contained under pressure in the bottle to escape it is only necessary to press a lever with the hand, and as soon as the lever is released the discharge-opening is immediately automatically closed in an air-tight manner.

The novelty and the principle of the present invention lie, therefore, in the combination of the two devices aforementioned, constituting a single apparatus which can be easily and conveniently placed on bottles of all kinds and removed with the same facility when the bottle is emptied.

The apparatus is represented in Figure 1 in a vertical section, the corkscrew being supposed to be at the bottom of its course and completely screwed into the cork. Fig. 2 indicates the same position of the corkscrew, but at the top of its course. In Fig. 3 a front view of the instrument is given.

The instrument is fixed on the neck of the bottle C by means of the cylindrical body A, bearing at its open lower extremity a ring B, forming the joint, and is held on the bottle by means of a spring-collar E, which is placed on the neck of the bottle, below the shoulder, and is connected to the cylindrical body A by means of a pivoted shackle or bent plate D.

The shackle D is provided with a nut F at its upper part, into which the thread G of a wormed tube having a collar H is screwed, the lower part of said tube resting on a round

nut J, which compresses a ring or washer K, forming a joint in the upper part L of the cylindrical body A, in such a way that the guide-spindle M of the corkscrew is made air-tight in the upper part of the body A. By screwing the collar a little up or down the ring or washer B in the lower part of A can be pressed to a greater or less extent against the neck of the bottle C, since, on the one hand, the collar E is connected to D and is pressed from the bottom upward against the shoulder of the neck C, and, on the other hand, the joint-washer B, connected to A, L, and J, presses against the latter from the top, so that by varying the relative distance of F and J it is possible, by turning G and H, to exercise a variable pressure of B on the neck C of the bottle.

Before placing the apparatus on the neck of the bottle the cork is cut flush with the neck. Then the apparatus is put in position and the joint B made air-tight. The corkscrew N, which is of the customary construction, is driven into the cork O by pressing on the handle P and turning the screw Q, guided at G by means of the guide-spindle M. (See Fig. 1.) Then the handle P is turned until it presses upon the part H until the cork O is drawn out by continuing the rotation of the handle P. (See Fig. 2.) Thus the bottle is uncorked, the gases filling the interior space of the cylindrical body A, whence they are prevented from escaping by the washers or joints B and K. On the other hand the gases pass, together with the liquid, into the discharge passage or tube R, which is arranged at the side and at an angle to the lower part of A. On this discharge-tube R is a helical spring S, which at one end presses against a shutting-collar U, on which a tube T is screwed bearing a joint-ring V, and which presses, on the other hand, against a washer W, fixed on R. The result of this arrangement is that through the pressure of the spring S the closing washer or plug V is always held automatically pressed against the open end R of the discharge-tube, thus closing the discharge-opening of the apparatus. The discharge-tube is opened by the pressure of the short arm Y of a lever pivoted at X by pressing by hand on the long arm Z of said lever. (See Fig. 2.) By applying Y against U the

tube T rises, in which tube the closing-washer V is suitably arranged.

To prevent any liquid from escaping outside along the tube R in the tube T, an elastic washer or packing W' is arranged at the end of the discharge-tube R between two fixed rings W W² in such a manner that said elastic ring forms a tight joint against the side of tube T.

When it is desired to remove the apparatus from the bottle when the latter is empty, it suffices to turn the threaded tube G by means of the collar H, so that the parts B and E get farther apart, and thus release the neck of the bottle.

The shackle D is connected by hinge-joints with the collar E in such a manner that after B is raised the body A can be removed by simply folding down the shackle D.

I claim as my invention—

1. In a cork-pulling device, the combination of a corkscrew, a stationary cylinder penetrated by said corkscrew and adapted to rest upon the top of the bottle, a shackle having means for connecting its lower end or ends to the bottle, and a tightening-screw for said shackle operatively connected to the same at its upper end, bearing on the end of said cylinder and also penetrated by the corkscrew, substantially as described.

2. In a cork-pulling device, the combination of a corkscrew, a stationary cylinder penetrated by said corkscrew and adapted to rest upon the top of the bottle, a shackle having means for connecting its lower end or ends to the bottle and carrying a nut at its upper end and a tightening-screw for said shackle engaging the nut thereof, bearing on the upper end of said cylinder and also penetrated by the corkscrew, substantially as described.

3. In a cork-pulling device, the combination of a corkscrew, a stationary cylinder penetrated by said corkscrew and adapted to rest upon the top of the bottle, a shackle consisting of a bent plate having its extremities projecting downwardly beneath said cylinder, a split spring-collar pivotally connected to the extremities of said shackle and adapted to engage the neck of the bottle, a nut car-

ried at the upper end of said shackle, and a tightening-screw for said shackle engaging said nut, bearing on the upper end of said cylinder and penetrated by the corkscrew, substantially as described.

4. The combination with a bottle, of a corkscrew, a stationary cylinder penetrated by said corkscrew and adapted to rest upon the top of and communicate with said bottle, a valve-controlled outlet for the cylinder, said cylinder being substantially hermetically sealed, a shackle consisting of a bent plate having its extremities projecting downwardly beneath said cylinder, a split spring-collar pivotally connected to the extremities of said shackle and adapted to engage the neck of the bottle, a nut carried at the upper end of said shackle, and a tightening-screw for said shackle engaging said nut, bearing on the upper end of said cylinder and penetrated by the corkscrew, substantially as described.

5. The combination with a bottle, of a corkscrew, having a threaded upper end, a handle penetrated by said corkscrew and engaging the threaded portion thereof, a stationary cylinder penetrated by said corkscrew and adapted to rest on and communicate with said bottle, a shackle detachably connected to said bottle-neck on its lower end, a nut carried at the upper end of said shackle, a tightening-screw for said shackle engaging said nut, bearing on the upper end of said cylinder and also penetrated by said corkscrew, a discharge-pipe communicating with said cylinder, a spring-actuated tube inclosing said pipe, a valve carried by said pipe and adapted to close the free end of said tube, a lever adapted to actuate said tube and the valve carried thereby and means for forming airtight joints between the parts of the device and between the said device and the bottle, substantially as described.

In testimony that I claim the foregoing I have heretofore set my hand this 21st day of June, 1898.

CHARLES KEMPER.

Witnesses:

P. POHLEY,
GREGORY PHELAN.