

(No Model.)

O. H. JEWELL.
STRAINER FOR SUCTION PIPES OF PUMPS.

No. 408,487.

Patented Aug. 6, 1889.

Fig. 1.

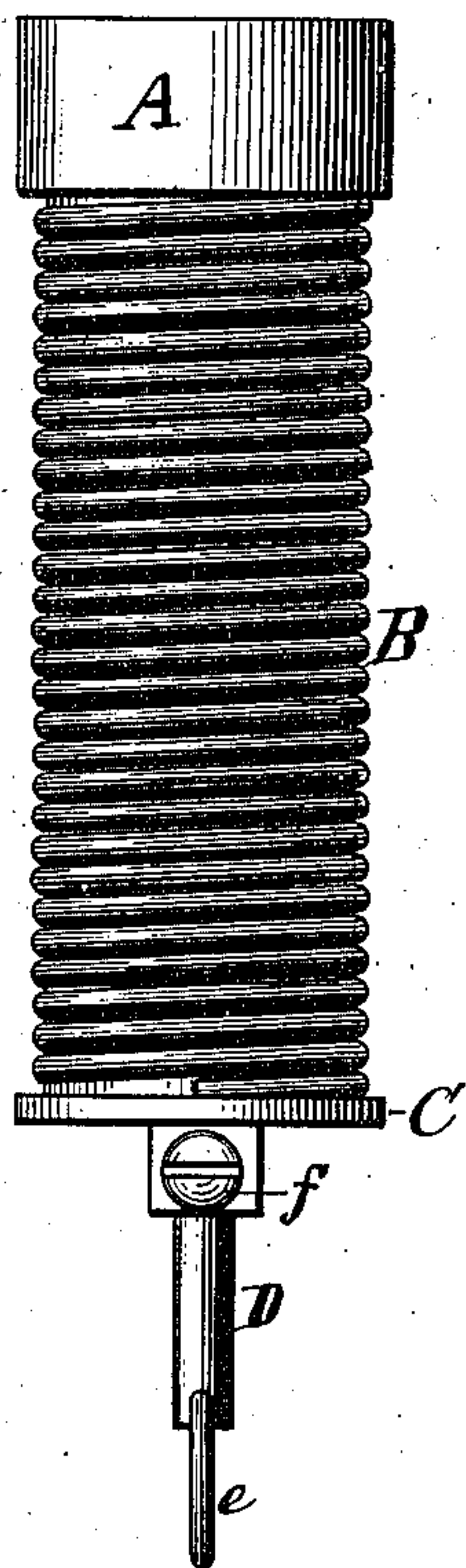


Fig. 2.

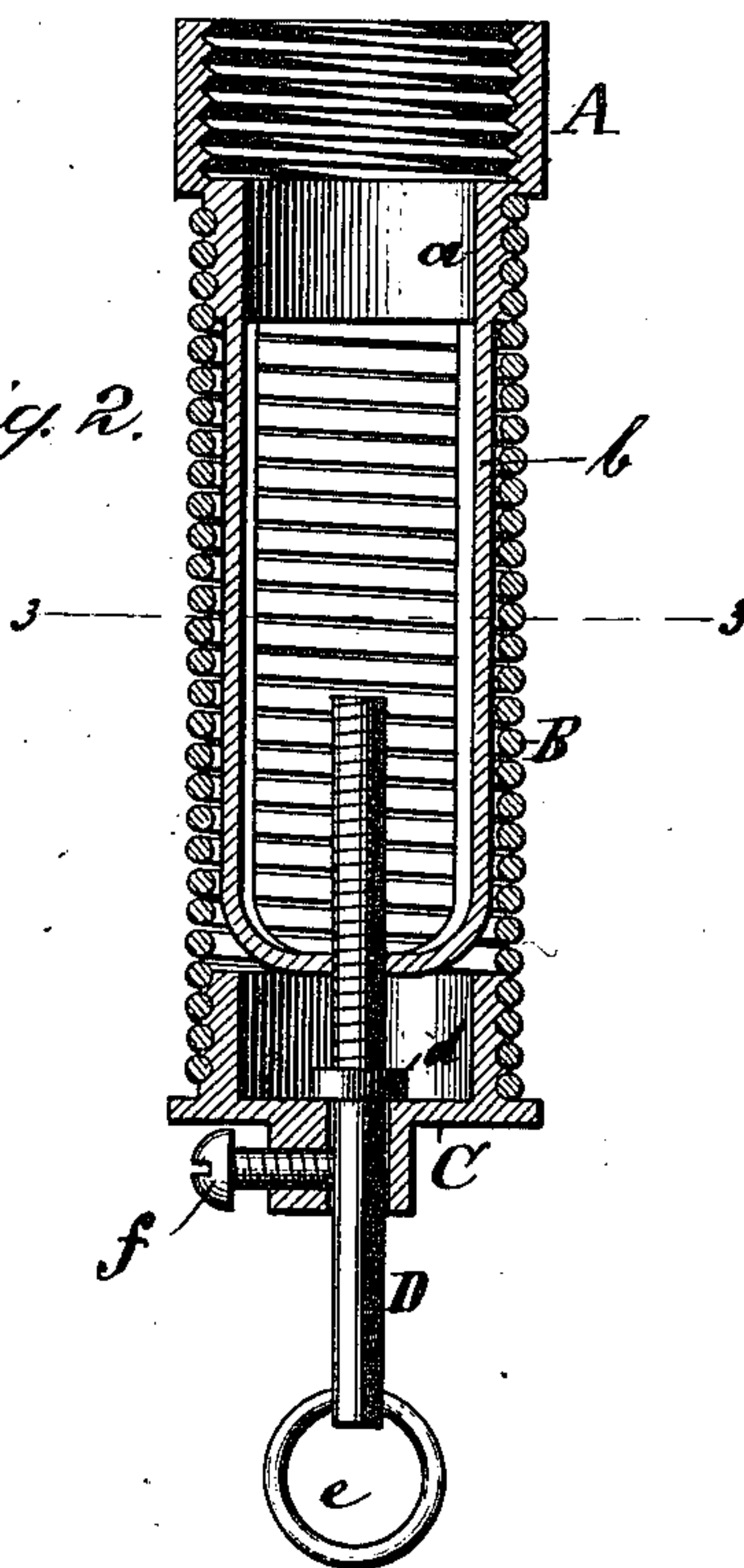
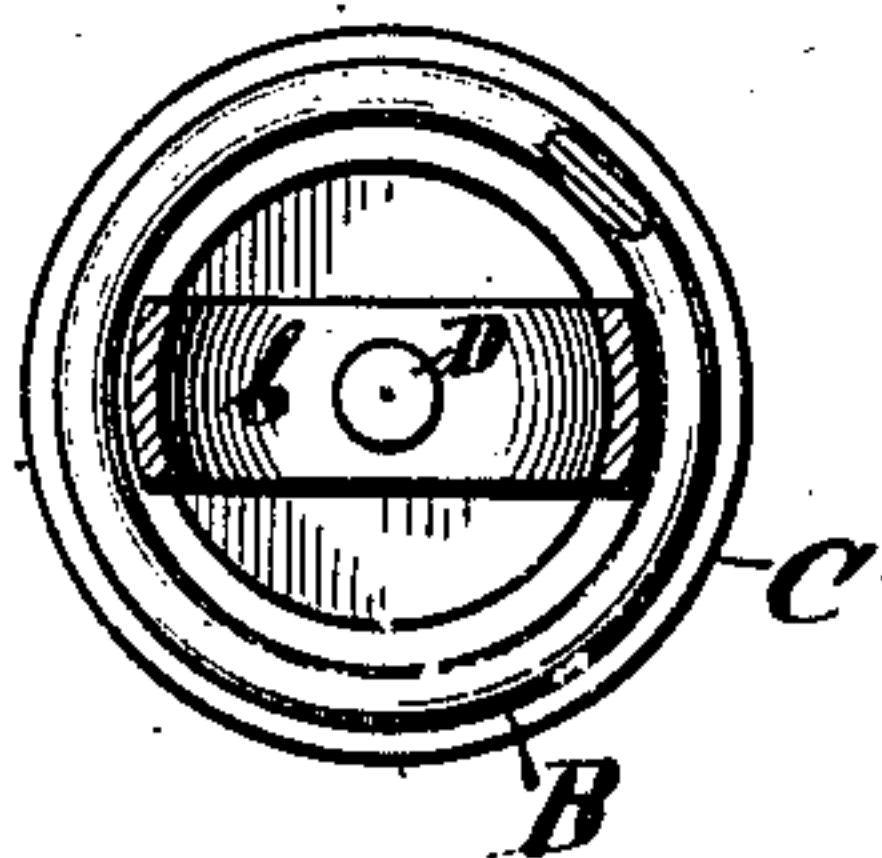


Fig. 3.



Witnesses
Ot. Gossiter
Olo. Luthin

Inventor
Omar H. Jewell
By *Wm. C. Lotz*
Atty.

UNITED STATES PATENT OFFICE.

OMAR H. JEWELL, OF CHICAGO, ILLINOIS, ASSIGNOR TO WILLIAM M. JEWELL
AND IRA H. JEWELL, OF SAME PLACE.

STRAINER FOR SUCTION-PIPES OF PUMPS.

SPECIFICATION forming part of Letters Patent No. 408,487, dated August 6, 1889.

Application filed January 26, 1889. Serial No. 297,723. (No model.)

To all whom it may concern:

Be it known that I, OMAR H. JEWELL, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Strainers for the Suction-Pipes of Pumps or Siphons, of which the following is a specification, reference being had therein to the accompanying drawings.

This my invention relates to strainers for suction-pipes of pumps, siphons, &c., to prevent solid matter from entering the pipe, and it has been my object to provide a strainer that with very narrow openings will afford a large inlet of water, and in which the width of the openings can be readily adjusted to be more or less, and which can be easily cleaned by expanding such openings either by hand or by a reverse stream of water; and with these objects in view my invention consists of the novel devices and combinations of devices hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents an elevation, and Fig. 2 a vertical section, of the strainer; and Fig. 3 a horizontal section on line 3 3 in Fig. 2.

Corresponding letters of reference designate like parts in the several figures of the drawings.

A denotes the coupling, being interiorly screw-threaded for connecting the same with the lower screw-threaded end of the suction-pipe of a pump, and having a spirally-grooved extension *a*, for coupling one end of spiral B, formed of wire, with its coils in close contact, and this extension *a* again having connected to be rigid therewith a U-shaped yoke *b*, extending into the spiral B, to provide a guide for such spiral. The lower end of spiral B is wound upon the spirally-grooved rim of a cap C, having an eye through its central hub for the stem of an adjusting-screw D to be passed through it. This adjusting-screw D has a collar *d* shouldering against the upper or inward face of cap C, while its screw-threaded end is tapped through the bottom end of yoke *b*. This screw D has also a handle *e*, which may be ring-shaped,

for turning this screw by hand, and a set-screw *f* is tapped into the central hub of cap C for holding the screw from turning after having been adjusted.

By turning screw D in a left-hand direction the spiral B will be elongated to any desired extent for increasing the interstices between the coils, and by turning the same in a right-hand direction the interstices between the coils will be decreased all uniformly, so a sufficient amount of water may be admitted therethrough, excluding all solid matter contained in the water.

The advantage of a strainer so constructed is that it provides a spirally-continuous opening for admitting water, that with being very narrow will yet provide more entire opening than with perforations made of much larger width or diameter, and that the width of this spirally-continuous opening can be readily adjusted to be more or less.

Another great advantage is that after loosening the set-screw the spiral can be elongated by hand by grasping cap C and pulling it downward, when all solid matter clogging between the coils from the suction of the water will drop off, and then by releasing the said cap the coils will close again to a degree the screw D will permit, which also can be accomplished by reversing the current of water to pass from the pump through the suction-pipe, thereby forcing out all solid matter gathered between the coils, during which time the spiral may be also elongated by the pressure of the water passing through it. The set-screw *f* may be omitted, or its point may enter a longitudinal groove cut into the stem of screw D for preventing such screw D from turning, and still permit the piece C to slide thereon, for the spiral B to be expanded either by hand or from a reverse current of the water.

What I claim is—

1. A strainer for the suction-pipe of a pump or siphon, consisting of a wire spiral secured with one end to a coupling-nozzle provided with a guide-yoke that extends into the spiral, and with its other end to a cap having an eye for the collared shank of an adjusting-screw tapped into the guide-yoke for elongating or contracting the spiral.

gating or contracting such spiral, substantially as and for the purpose set forth.

2. A strainer for the suction-pipe of a pump or siphon, consisting of a wire spiral secured
5 with one end to a coupling-nozzle that extends into the spiral, and with its other end to a cap having an eye for the collared shank of an adjusting-screw tapped into the screw-nozzle for elongating and contracting the spi-

ral, said screw being provided at its lower or projecting end with a handle for turning said screw, all substantially as set forth.

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

OMAR H. JEWELL.

Witnesses:

WM. H. LOTZ,
OTTO LUBKERT.