

C. P. BROWN.
SHOWER BATH APPARATUS.

No. 112,217.

Patented Feb. 28, 1871.

Fig. 1

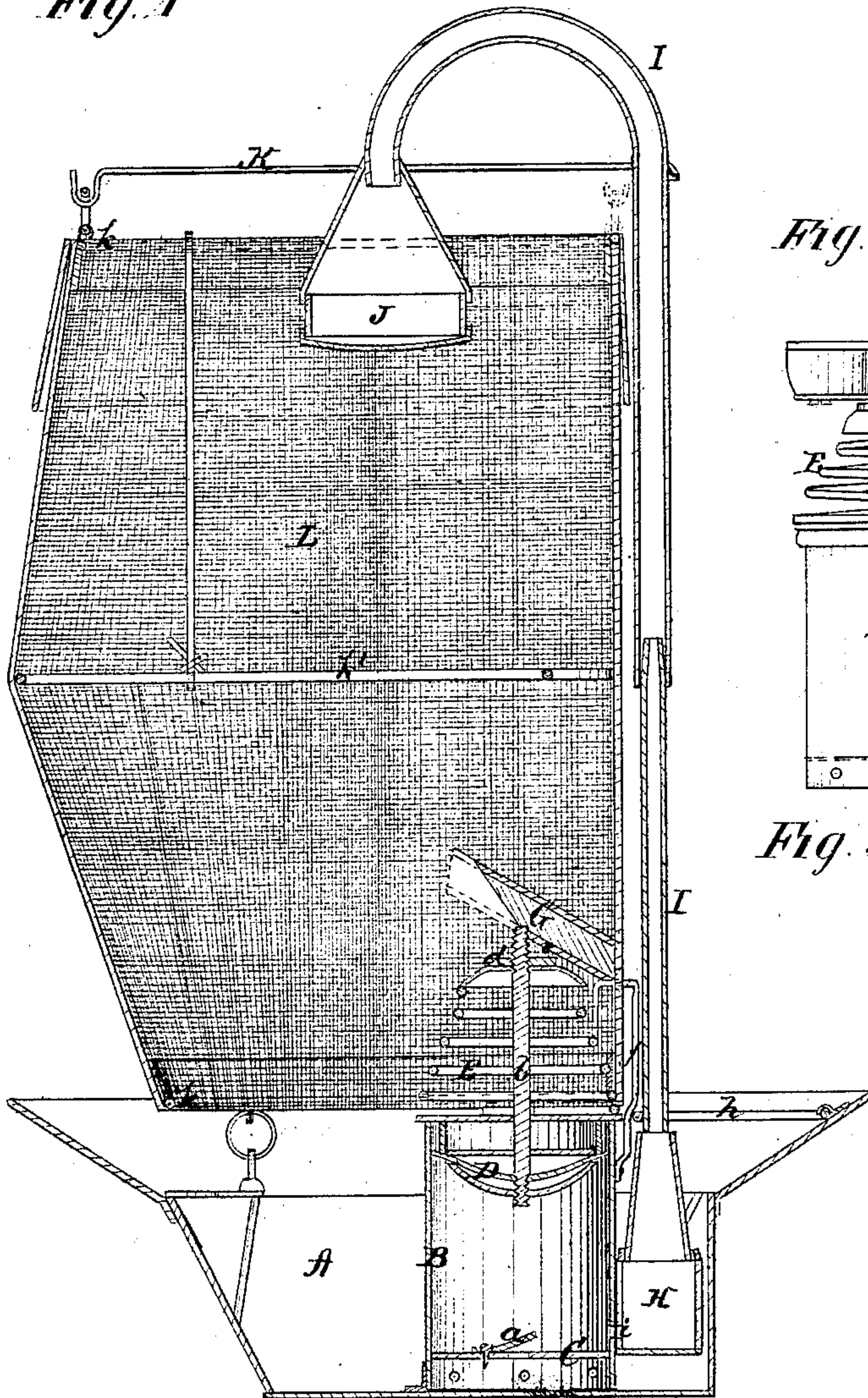


Fig. 2

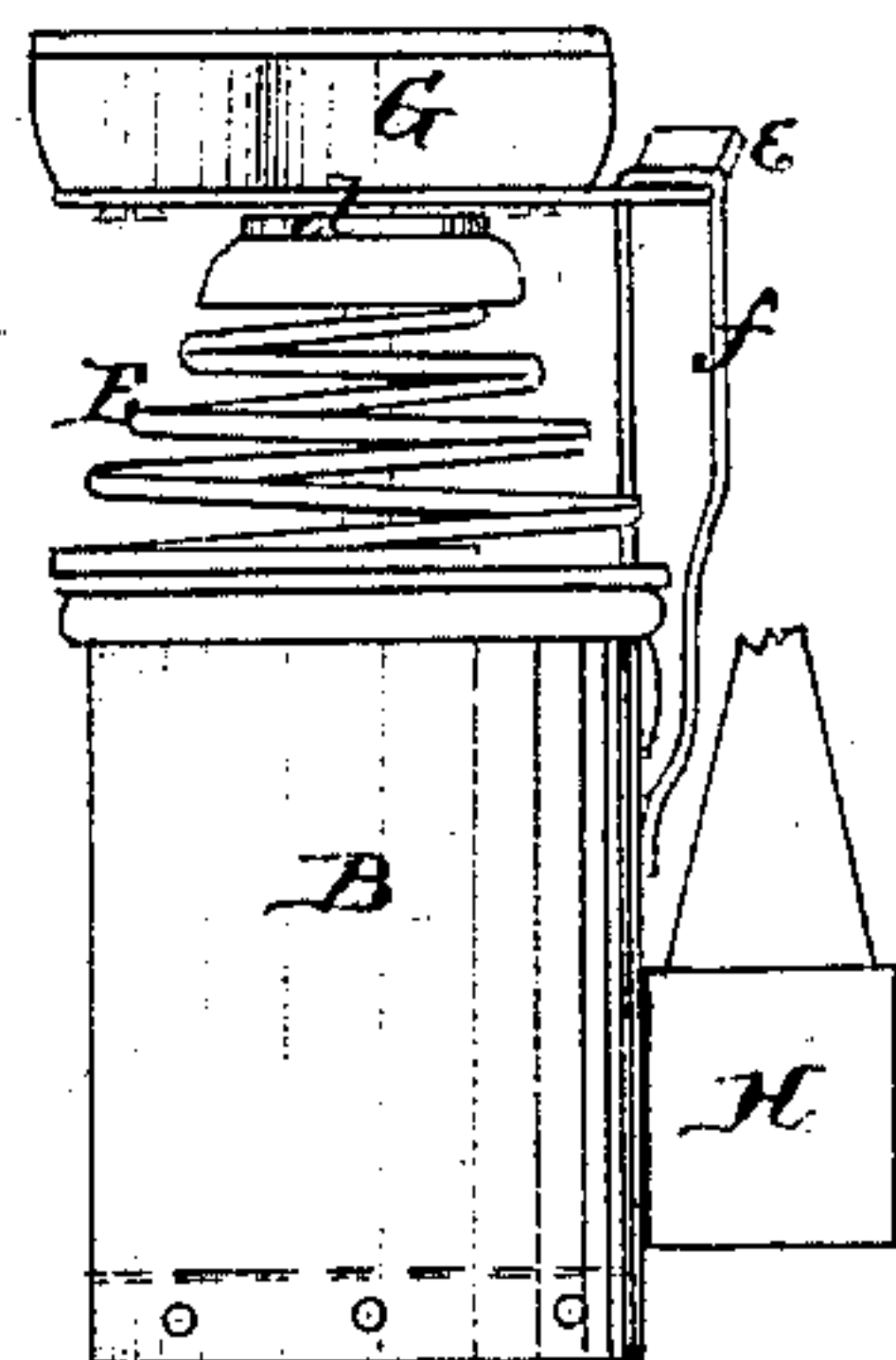
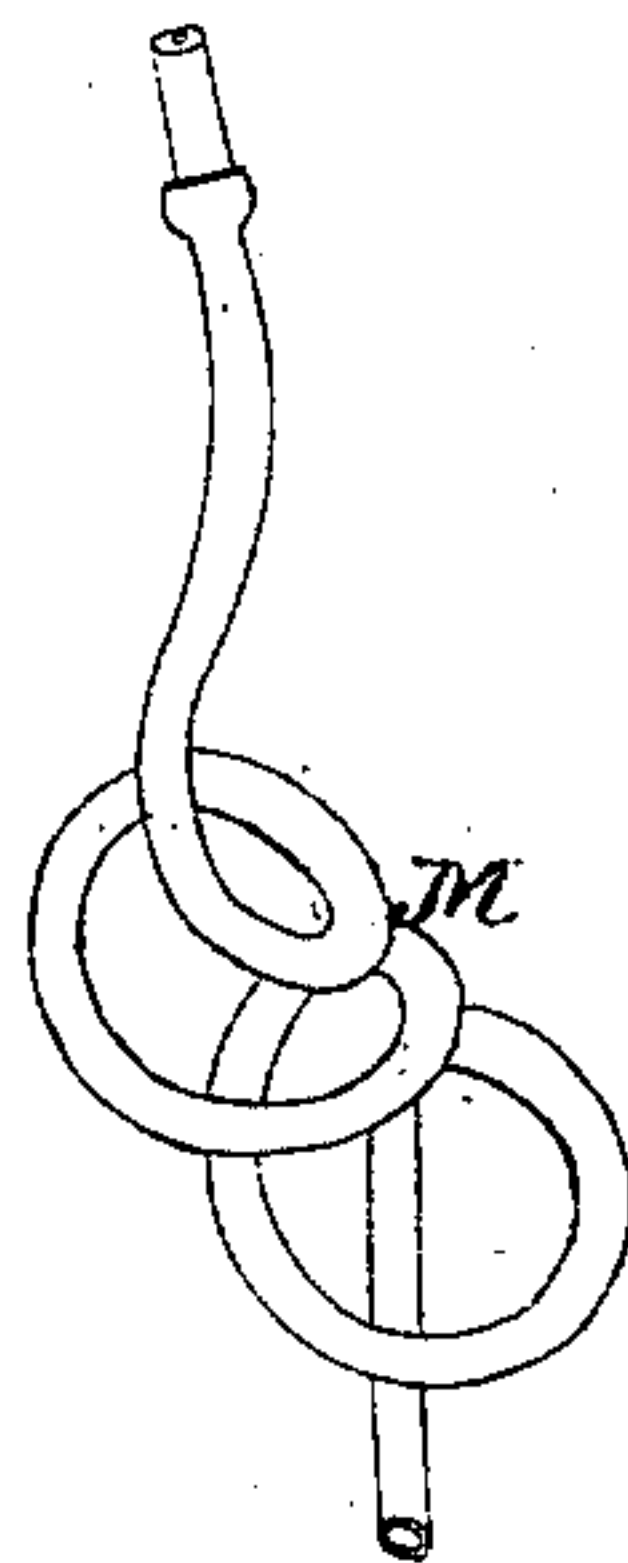


Fig. 3



Witnesses.
Jas. C. Hutchinson
C. L. Evers

Inventor.
Cyril P. Brown.
per
Alexander Mason
Atty.

United States Patent Office.

CYRIL P. BROWN, OF HUDSON, MICHIGAN.

Letters Patent No. 112,217, dated February 28, 1871.

IMPROVEMENT IN SHOWER-BATH APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CYRIL P. BROWN, of Hudson, in the county of Lenawee and in the State of Michigan, have invented certain new and useful Improvements in Shower-Bath Apparatus, and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a shower-bath apparatus, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a vertical section of my apparatus;

Figure 2 is a side view of the pump; and

Figure 3 shows a flexible tube to be used with the apparatus.

A represents a tub of any suitable dimensions, within which, on one side, is placed the upright pump-cylinder B.

The lower end of this cylinder is perforated, as shown, and above said perforations is located the bottom C.

In the center of the bottom C is an upward opening-valve, *a*, through which the water in the tub is drawn up into the cylinder.

D is the plunger, or piston secured on the rod *b*, which passes up through the cover of the cylinder, and provided at its upper end with a nut or bur, *d*.

Between this bur and the cover of the pump-cylinder, around the piston-rod, is placed a spiral spring, E, which draws the piston up to the top of the cylinder.

On the side of the cylinder is attached a wire loop, *f*, which extends a suitable distance upward, and a hook, *e*, attached to the foot-pad G, hooks into the same, as shown in fig. 2.

The foot-pad G is made of the form best adapted to the naked foot, and may be padded and covered with any suitable material.

The hook *e* of the foot-pad is a part of a plate extending under the entire pad, and secured to the same. This plate has a slot, through which the upper end of the plunger-rod *b* is inserted.

From the cylinder B, immediately above the bottom C, a passage, *i*, leads into a chamber, H, attached to the cylinder, from which chamber a pipe, I, leads upward, as shown.

This pipe or conductor may be made of any suitable material, either whole or in sections, and its upper end is curved over so that the extreme end will come directly over and point down to the center of the tub.

At this end of the conductor I is attached a rose, J, the lower side of which is convex and perforated. This convexity is necessary to scatter the stream of water sufficiently to strike the whole body simultaneously.

The entire pump, with attachments, is fastened by means of a hook, *h*, to the tub A.

To the conductor I, just below where its upper end commences to curve, is secured a rod, K, which passes directly over the center of the tub, and, is at its outer end, provided with a hook. From this hook, and from a hook attached to or forming part of the inner end of said rod, is suspended the curtain L, the lower edge of which is attached to hooks secured to the tub.

At the upper and lower ends of the curtain are hoops, *k*, for holding it in position, and about the middle of the curtain is a larger hoop, *k'*, giving increased room for the movement of the arms and trunk.

The curtain is also so hung that it can be raised to allow the admission or exit of the person to or from the same and adjusting itself into proper position, the bottom hoop being of just sufficient size to pass within the tub.

The operation of this apparatus is readily seen. There being a suitable quantity of water in the tub, the foot-pad G is pressed down, which forces the plunger down to the bottom. When, now, this force is removed from the pad, the spring E raises the plunger, which forms a vacuum in the pump-cylinder, drawing the water up through the valve *a*; then, by pressure upon the pad again, the plunger is moved downward, closing the valve and forcing the water up through the conductor I and through the rose J onto the person standing in the tub and operating the pump.

This operation may be continued as long as desired, and the curtain preventing any loss of water, as all the water must return to the tub. An inexhaustible pond is thus obtained from which to pump.

The rose J may be removed and a hose, M, attached to the conductor for the purposes of local or general bathing.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the pump B C D, rod *b*, nut *d*, spring E, loop *f*, and foot-pad G, with its slot-

ted plate and hook *e*, all constructed and arranged to operate substantially as and for the purposes herein set forth.

2. The combination of the tub A, pump B C D, spring E, foot-pad G, chamber H, conductor I, rose J, and curtain L with the hoops *k k k'* and bar K, all constructed and arranged substantially as shown and described, and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of December, 1870.

CYRIL P. BROWN.

Witnesses:

S. BEAN,

J. C. SAWYER.