

E. MORSE.
Bathing-Apparatus.

No. 163,327.

Patented May 18, 1875.

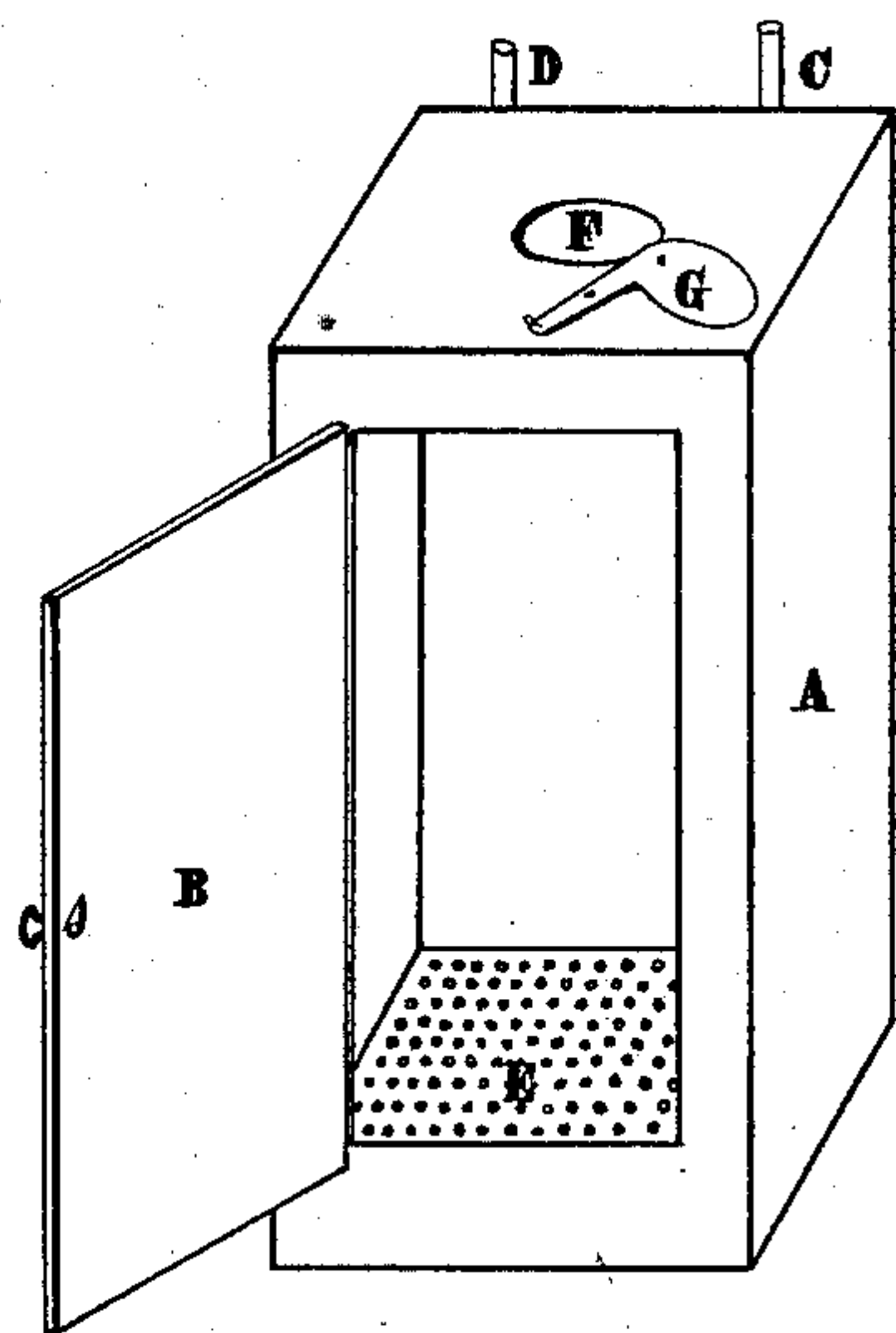


Fig. 1.

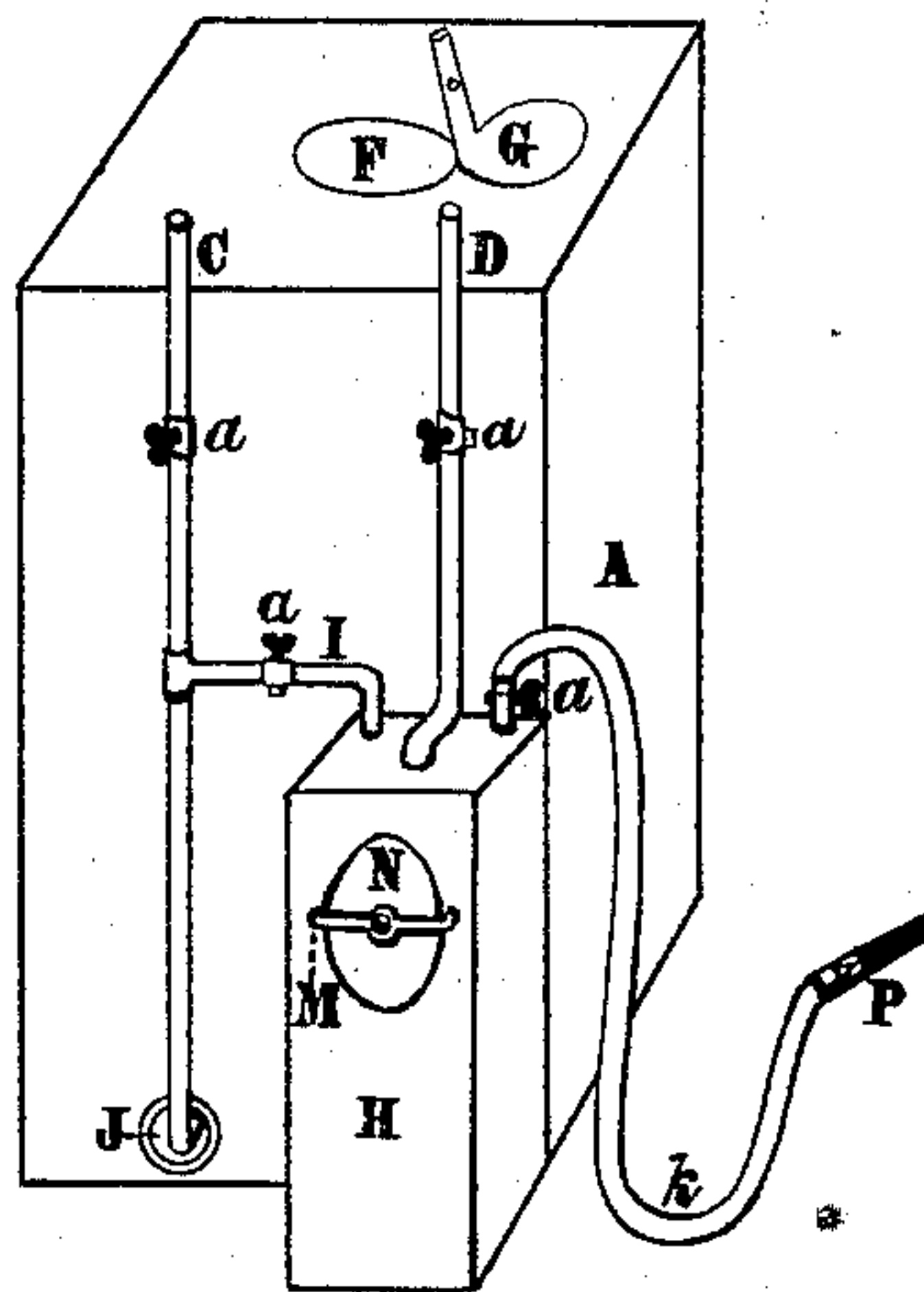


Fig. 2.

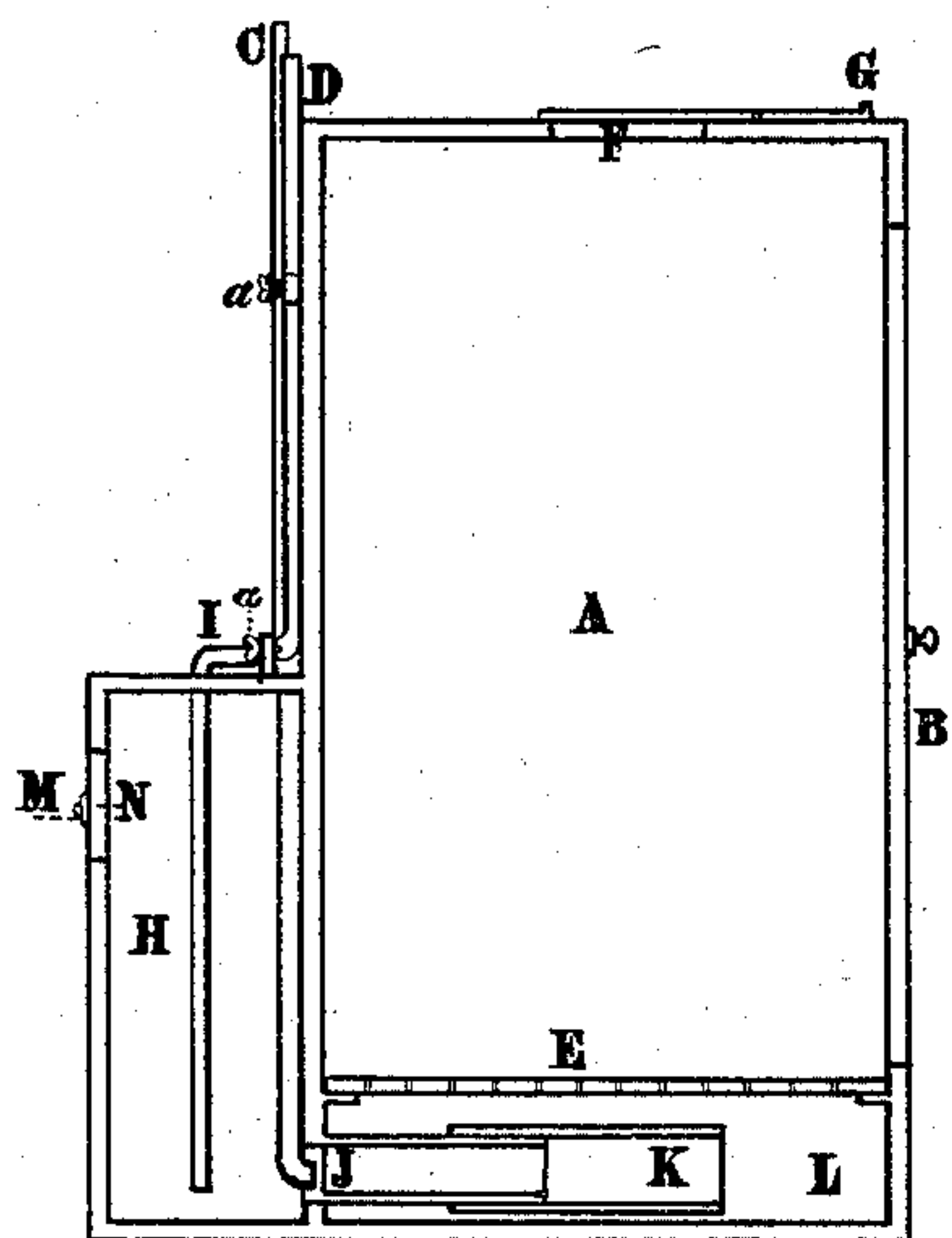


Fig. 3.

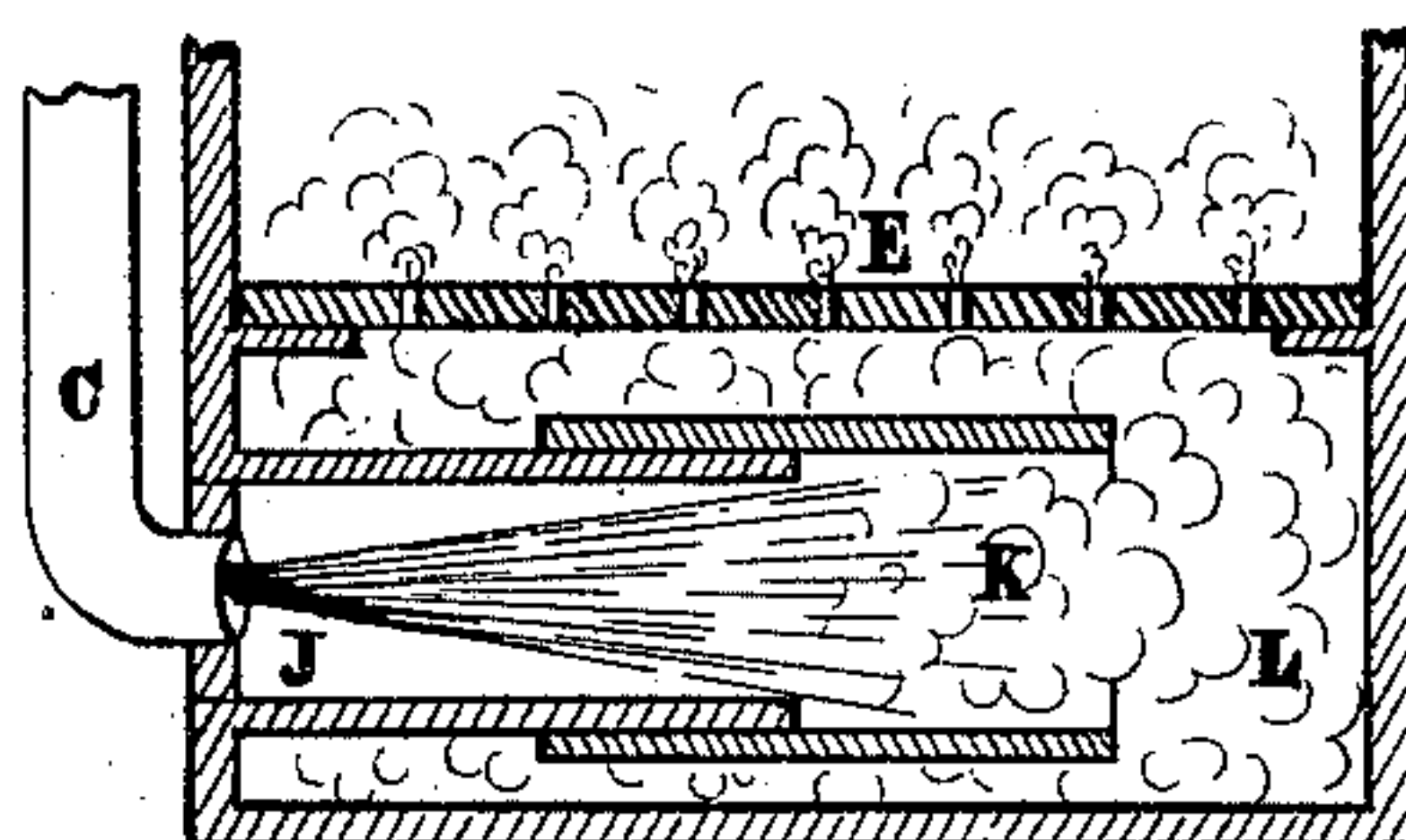


Fig. 4.

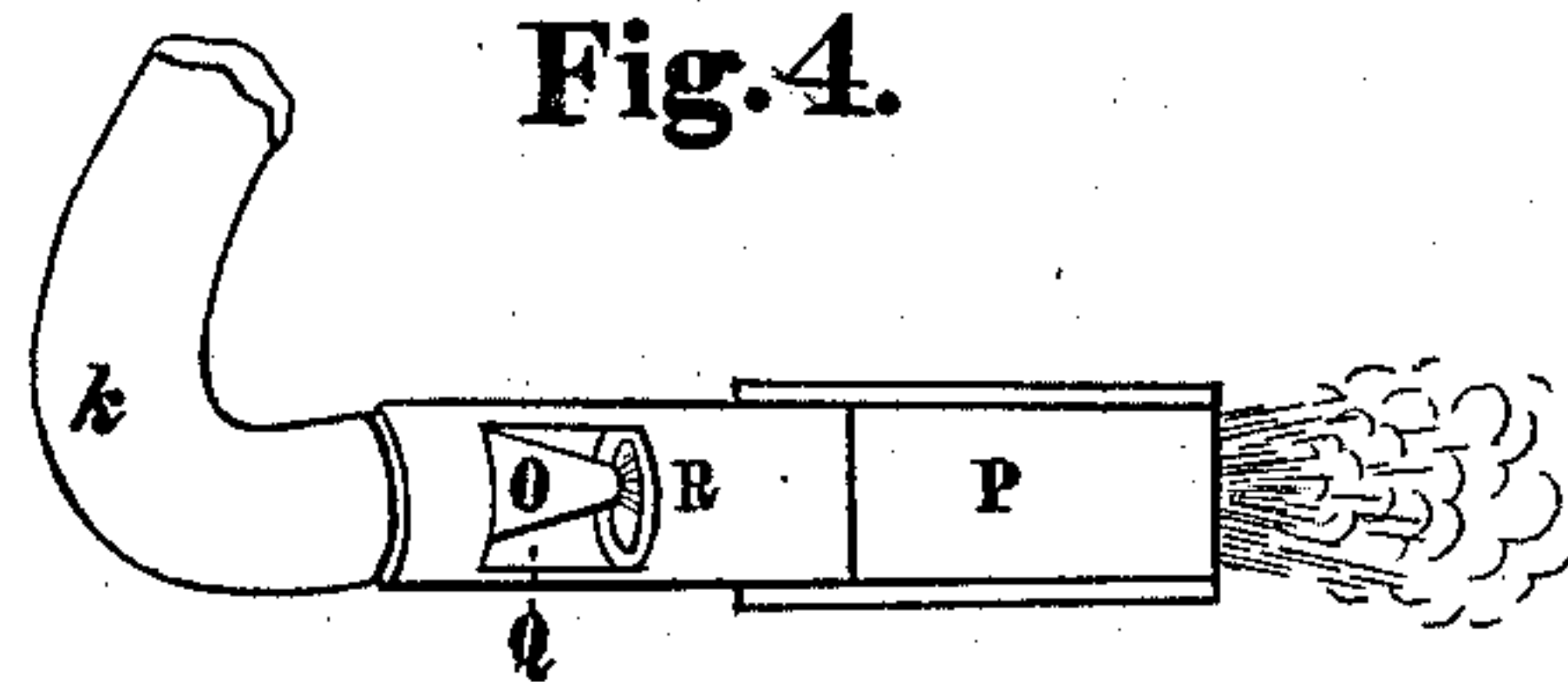


Fig. 5.

Witnesses;
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Inventor;
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UNITED STATES PATENT OFFICE.

EDWARD MORSE, OF STONEHAM, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOSEPH A. LOVEJOY, OF SAME PLACE.

IMPROVEMENT IN BATHING APPARATUS.

Specification forming part of Letters Patent No. **163,327**, dated May 18, 1875; application filed March 1, 1875.

To all whom it may concern:

Be it known that I, EDWARD MORSE, of Stoneham, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Bathing Apparatus, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an isometrical perspective view of my improved apparatus; Fig. 2, a like view, showing the chamber and pipes for medicating the vapor; Fig. 3, a vertical longitudinal section; Fig. 4, a sectional view, showing the injecting mechanism or regulator; and Fig. 5, an enlarged sectional view of the nozzle to the pipe K.

Like letters of reference indicate corresponding parts in the different figures of the drawing.

My invention relates more especially to apparatus for administering medicated ærovapor baths; and consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a simpler, cheaper, and more effective device of this character is produced than is now in common use.

In Fig. 1, A is the box or casing of the apparatus, which is provided with the door B, steam-pipes C D, and foraminous false or auxiliary bottom E, upon which the patient stands while receiving the bath. There is also an aperture, F, through or by means of which and the damper G the draft or quantity of air passing through the apparatus may be regulated. Beneath the bottom E there is a horizontal funnel, J, extending outwardly through the side of the box, and provided with the sliding joint or sleeve K. This funnel is considerably larger than the induction steam-pipe C, which opens into it, as shown in Figs. 2 and 4, thus leaving an air-space around the end of the pipe. Attached to one side of the box there is a chamber, H, provided with the induction steam-pipe D and the eduction-pipes

I K. This chamber is for containing herbs or any other substance, either liquid or solid, with which it may be desired to medicate the vapors of the bath, the same being introduced through the aperture N, which is then closed by means of the truss-clamp M. The pipe I connects with the main induction-pipe C, and is provided with a stop-cock, a, the pipes K, D, and C being also provided with similar stops. The pipe K is of rubber, and its object is to localize the bath, or to enable a jet of medicated vapor to be applied to any required part of the body. The object of the funnel J and sleeve K is to graduate the quantity of air to be mixed with the steam as it is forced into the chamber L below the bottom E. The nozzle of the pipe C being smaller than the outer opening in the funnel J, the jet of steam at its point of discharge will not fill the funnel at its outer end, as is best seen in Fig. 4; but as the steam expands immediately after leaving the pipe C, thus forming a cone, with its apex at the pipe, if the funnel is long enough, the base of the steam cone or jet so formed will come in contact therewith, and the funnel will be filled with steam; but if too short the steam will be forced through it, leaving an air-space all around the jet its entire length, in which latter case a less quantity of air will be carried into the chamber L than when the funnel is filled with steam; that is to say, when the steam-jet entirely fills the inner end of the funnel on its passage through the same, it will tend to form a vacuum, and thus cause the outer air to be forced or drawn in around the nozzle of the pipe C, and be carried along with the steam into the chamber L, and so through the bottom E into the body A; but when the jet does not fill the funnel the tendency to form the vacuum will not be so great, and hence nearly pure steam will be discharged into the chamber, varying in accordance with the air-space around the jet. It will, therefore, be seen that by lengthening the funnel J, by means of the sleeve or joint K, the funnel will be more readily filled with steam, and consequently a greater quantity of air will be forced into the chamber L, while by shortening the funnel a greater air-space

will be created around the steam-jet, and less air will be forced into the chamber. In this manner the admixture of steam and air may be very accurately adjusted. The pipe K is provided with a funnel, R, and sliding sleeve or joint P, which operate in substantially the same manner in respect to said pipe in which the funnel J and sleeve K operate in respect to the pipe C. The funnel R is attached to the nozzle O, and is provided with an aperture, Q, for the admission of air.

From the foregoing the nature and operation of my invention will be readily obvious to all conversant with such matters. The patient being placed in the box A, and the door B closed, steam of the required temperature, and in a proper quantity, is admitted through the pipe C by turning the stop-cock *a*, the funnel J being lengthened or shortened by means of the sleeve K, in proportion to the amount of air it is desired to mix with the steam, as described. When it is desired to medicate the main bath the stop-cocks in the pipes I D are

opened, permitting steam to pass through the chamber H into the pipe C, it being obvious that when the stop in the pipe I is closed the medicated vapor will be shut off.

Having thus described my invention, what I claim is—

1. In a bathing apparatus, substantially as described, the pipes C and J and sleeve K, combined to operate substantially as and for the purpose specified.

2. In a bathing apparatus, substantially such as described, the funnel R, provided with the sleeve P and aperture Q, in combination with the nozzle O and rubber pipe K, substantially as and for the purpose set forth.

3. In a bathing apparatus, substantially such as described, the chamber H, in combination with the pipes I D C K, substantially as and for the purpose specified.

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Witnesses:

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