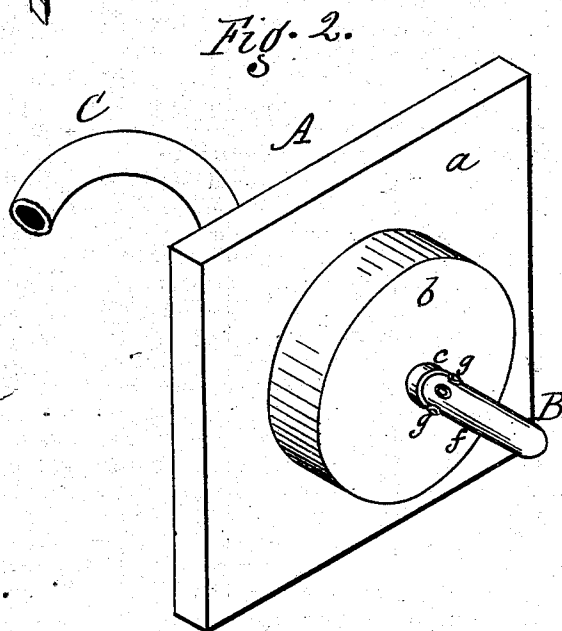
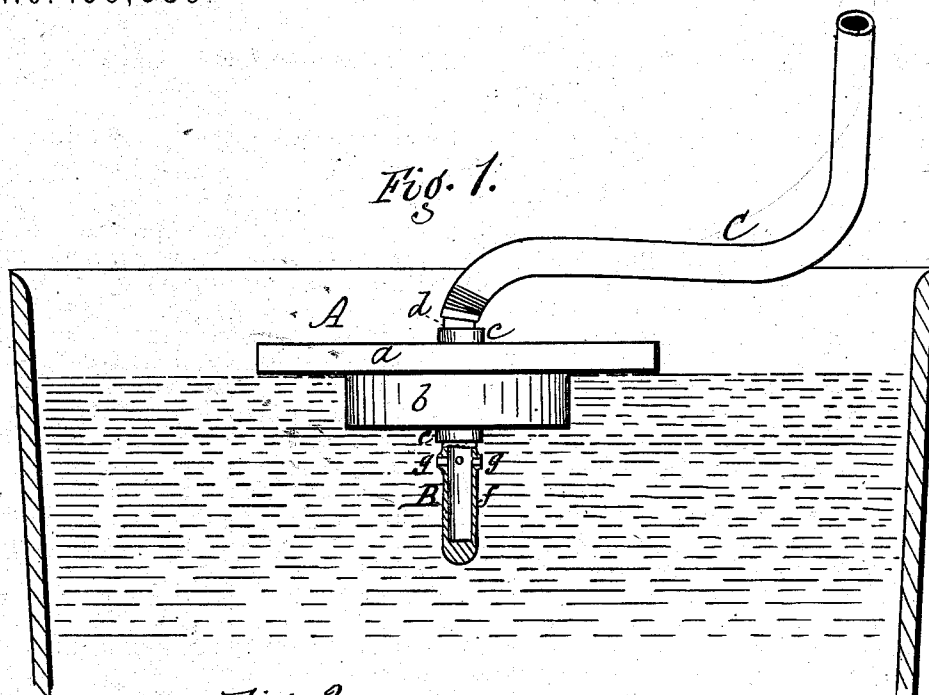


C. MEITZLER & G. H. HAASS.
Float for Suction-Pipes of Pumps.

No. 159,599

Patented Feb. 9, 1875.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES MEITZLER AND G. HERMAN HAASS, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN FLOATS FOR SUCTION-PIPES OF PUMPS.

Specification forming part of Letters Patent No. 159,599, dated February 9, 1875; application filed October 9, 1874.

To all whom it may concern:

Be it known that we, CHARLES MEITZLER and G. HERMAN HAASS, both of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Pumps; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional elevation, showing our improvement applied to a cistern. Fig. 2 is a perspective view of the float removed from place and turned upon one side.

This invention relates to improvements upon that class of apparatus in which a float is used in a cistern to support one end of a pipe near the surface of the water, whereby, when the pump is operated, only the pure surface water is supplied. The invention has for its object to support the body of pipe above the water as the float falls; and it consists of the combination of an elevated platform with a floating block and nozzle, constructed and operating as hereinafter described.

In the drawings, A represents the float, through which passes the nozzle B, to the upper end of which is attached the flexible tube C, extending to the pump, and connecting therewith in any desired manner, so that suction can be applied, by means of the pump, through the flexible tube, thereby raising the liquid. The float consists of two parts—an elevated platform, *a*, and a floating block, *b*, attached beneath it. The block forms the float proper, and rests submerged in the liquid, while the platform, which is of larger size, remains above the surface of the liquid and serves as a rest or support for the bends of the flexible tube, or other bodies which may rest thereon, either side of the center, without tilting or upsetting the device. Its object is specially to accomplish this result, and it is important in large floats, for instance, for fire-engines, where the weight of the hose lying thereon would be considerable, and, if placed on one side, would upset the float or submerge it, so as to discharge the hose. In the latter case, it might also serve as a support for an attendant. Another object is to elevate or raise the platform some distance from the water, so as not to wet the articles thereon. The nozzle is simply insert-

ed through the float, and may be held by shoulders *cc* on opposite sides. The upper end, *d*, which projects through the float, is bent at a suitable angle for the attachment of the flexible tube, and so as to allow said tube to bend in either direction without kinking or closing the passage through the same. The lower end, *f*, extends some distance below the float, so as to produce a counterbalance, and thereby preserve the upright position of the float. The lower end is closed, while the sides, just a little below the float, are pierced with perforations *gg*, which admit the liquid at such a distance above the lower end of the nozzle as not to stir up the sediment.

This invention is applicable to many uses—for instance, for cisterns, wells, fire-engines, breweries, tanneries, and, on a smaller scale, in drug-stores, &c., the object being to draw off from the surface of the liquid instead of the bottom, thereby insuring the drawing only of the pure liquid, and avoiding the stirring and raising of sediment.

As fast as the liquid is drawn the float falls, and, by this means, the whole volume of liquid is really raised at a less height than if all is drawn from the bottom. It is particularly adapted to cisterns and wells, where it can be easily and cheaply applied.

The elevated platform *a* is specially adapted to fire-engines, where the float may be placed in a river or large body of water, with a quantity of hose thereon and an attendant, the platform serving, in that case, to keep the float in the upright position under the considerable weight, and obviating accident, while the block *b* serves as the float proper.

Having thus described our invention, we are aware that floats with flexible pipe attached have been connected with pumps. Such we do not broadly claim.

What we claim as new is—

The combination of the platform *a* with the floating block *b* and nozzle B, for the purpose of supporting the flexible pipe above water, as herein described.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

CHARLES MEITZLER.
G. HERMAN HAASS.

Witnesses:

R. F. OSGOOD,
EDWIN B. SCOTT.