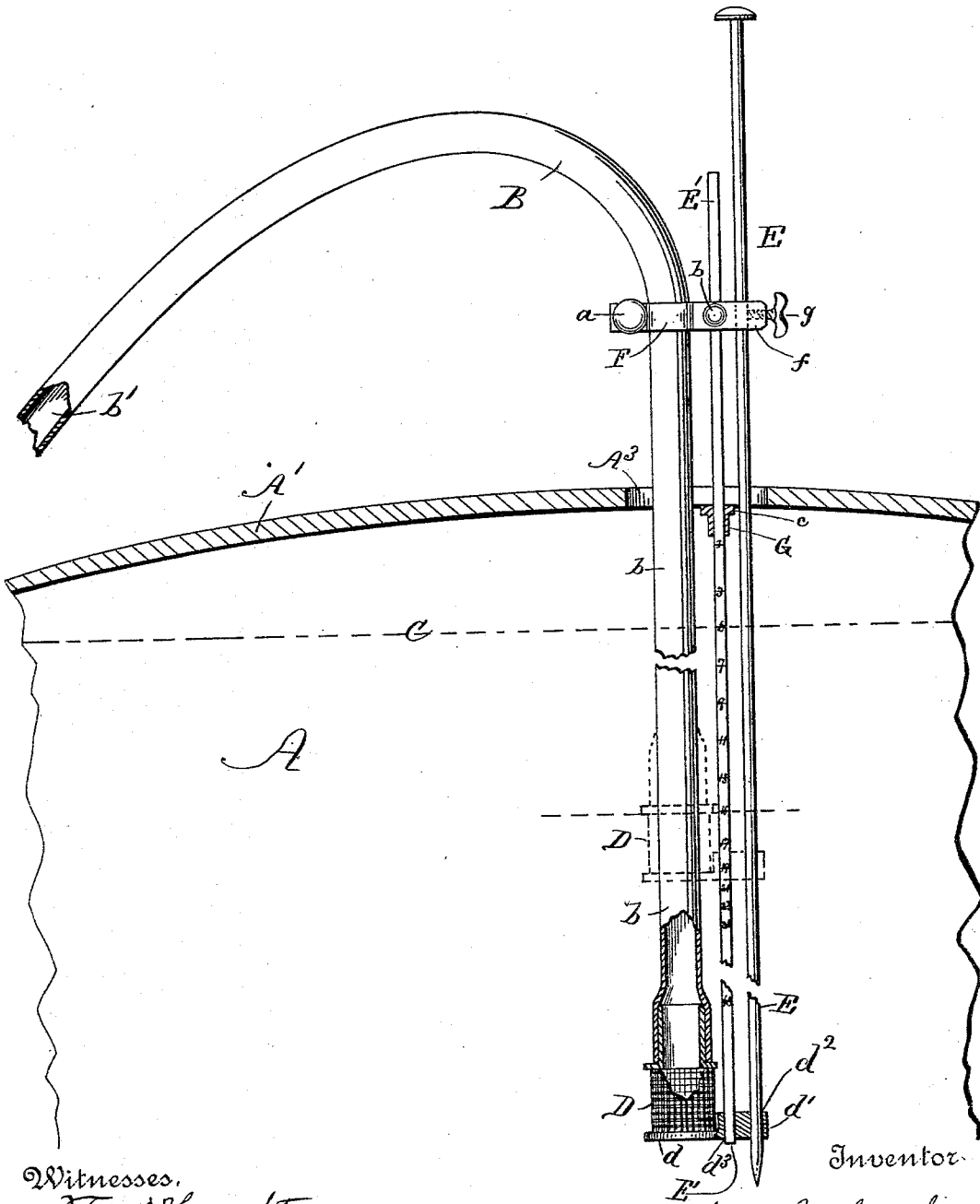


(No Model.)

J. M. CLARK.
MEASURING SIPHON.

No. 401,413.

Patented Apr. 16, 1889.



Witnesses,
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UNITED STATES PATENT OFFICE.

JAMES M. CLARK, OF LOUISVILLE, KENTUCKY.

MEASURING-SIPHON.

SPECIFICATION forming part of Letters Patent No. 401,413, dated April 16, 1889.

Application filed January 22, 1889. Serial No. 297,142. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. CLARK, a citizen of the United States of America, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Siphons; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

I have shown my device as attached to a flexible hose-siphon, though it may be used with any other kind of siphon.

The object of my invention is to provide an adjustable support for siphons, whereby the inlet end of a siphon may be set at any required distance below the level of the fluid to be withdrawn, and be held or supported there until the fluid descends to the level of the inlet end of the siphon; also, to draw off any desired quantity of fluid from a barrel, whether the barrel be full or partially empty, and at the same time so as not to disturb the sediment in bottom of barrel while the fluid is being drawn off. These objects I accomplish by the devices herein described and claimed.

A represents a portion of a barrel, partly in section; A' the bung-hole stave, and A³ the bung-hole.

B is a siphon, its shorter arm, *b*, within the barrel, its longer arm, *b'*, hanging down outside the barrel.

C is the level of the fluid in the barrel.

At the bottom of arm *b* of the siphon I attach or secure a wire cage, D, whose bottom *d* is provided with a guide-lug, *d'*, which is perforated, as shown at *d² d³*, so as to slide easily up and down on two vertical rods, E E'. The lower end of rod E is pointed for the purpose of being driven a short distance into the bottom of barrel A. Rod E may be of any convenient length to suit the barrels, kegs, tanks, or other fluid-holders with which the siphon may be used.

E' is a square gage-rod graduated from its

upper end downward, so as to indicate the quantity of liquid taken out of the barrel. Rod E' is graduated on one side to gage sixteen-gallon packages, on another side for twenty-five gallons, another for forty-five to sixty, or for any other quantities.

b is a set-screw to secure gage-rod E' to clamp F.

g is a set-screw for rod E.

G is a sliding collar, provided with a projection or flange, *c*.

F is a clamp, made so as to grasp the siphon, moving easily thereon, and is provided with a set-screw, *a*, to tighten the clamp upon the siphon at any required distance from the bottom of the short arm *b* of the siphon. Clamp F has an outwardly-projecting lug, *f*, perforated for the reception of rods E E'.

Now, let it be required to draw ten gallons from a barrel from which some of its contents have been previously taken out. I first insert the shorter end of the siphon with its attachments secured thereto, as shown in the drawings, and slip the little collar *c* of the gage-rod immediately under the bung-hole stave A', and observe at what line on the gage-rod the liquid in the barrel reaches. This reading I will suppose is 5, indicating five as the number of gallons that have been withdrawn. To this I add the number of gallons, in this case ten, which gives fifteen. I now loosen set-screw *a* and gently draw the siphon up until the upper edge, *f*, of the wire cage reaches 15 on the gage. I then tighten set-screw *a* and replace the siphon, as shown in the drawings. The dotted lines of the cage show its position as set to withdraw ten gallons from barrel A.

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

1. The combination of a flexible siphon with a gage-rod and a supporting-rod adjustably secured to said siphon, as herein shown, and for the purposes set forth.

2. In combination with a siphon, a supporting-rod, E, an adjustable clamp, F, and a bottom guide-lug, *d'*, as and for the purpose herein set forth.

3. In combination with a siphon, a supporting-rod, E, an adjustable clamp, F, a gage-rod,

E', and guide-lug *d*, as herein shown and set forth.

4. In combination with a siphon, a supporting-rod, E, a gage-rod, E', an adjustable clamp, F, and a wire cage, D, provided with
5 an extension-lug, *d'*, as and for the purposes herein set forth.

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

JAMES M. CLARK.

Witnesses:

E. A. HEWETT,
H. A. FORRESTER.