

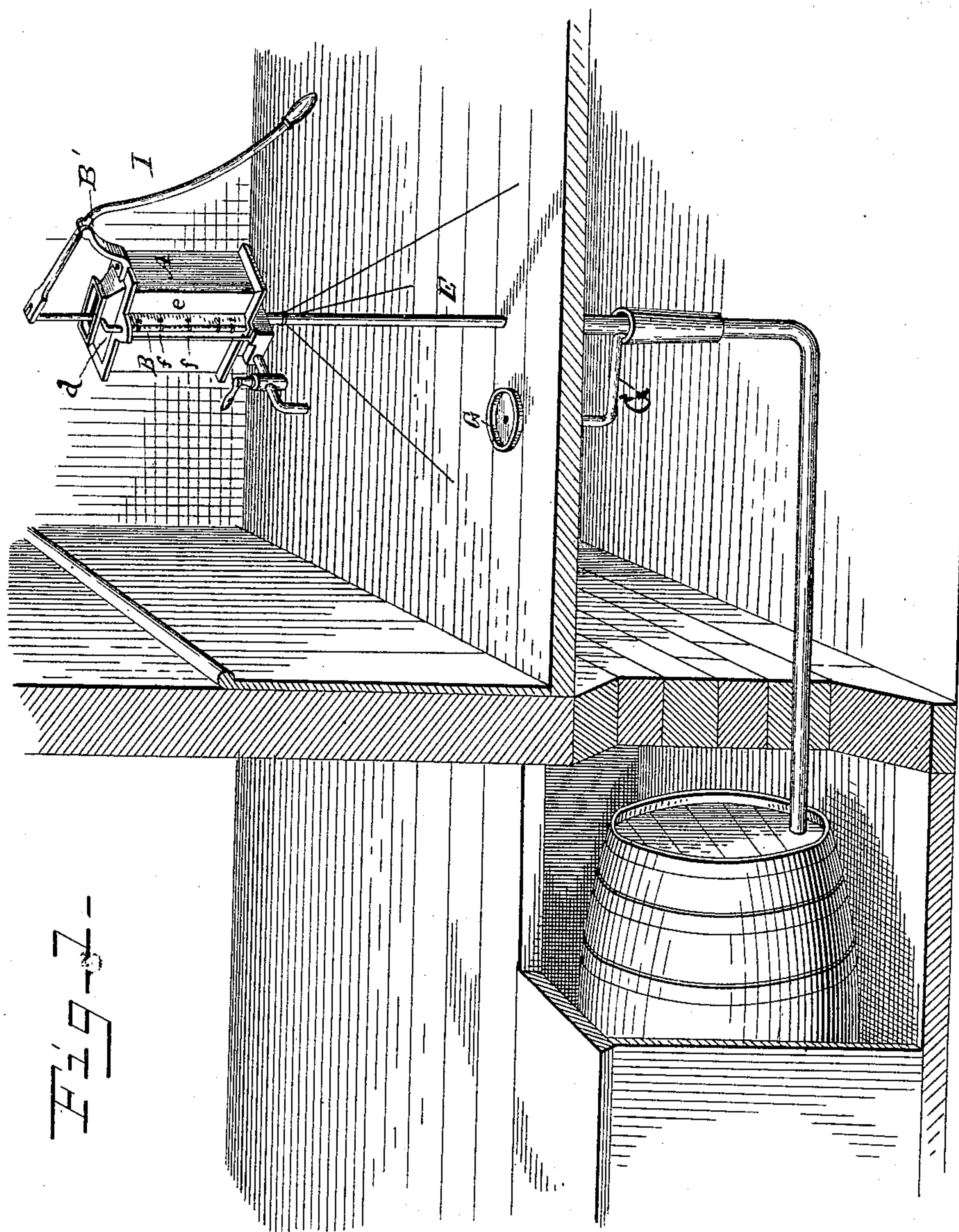
(No Model.)

2 Sheets—Sheet 1.

J. H. THORN.  
MEASURING PUMP.

No. 321,061.

Patented June 30, 1885.



WITNESSES

Edwin L. Jewell.  
J. J. Sinsbaugh

INVENTOR

John H. Thorn  
By J. J. Sinsbaugh  
Attorney

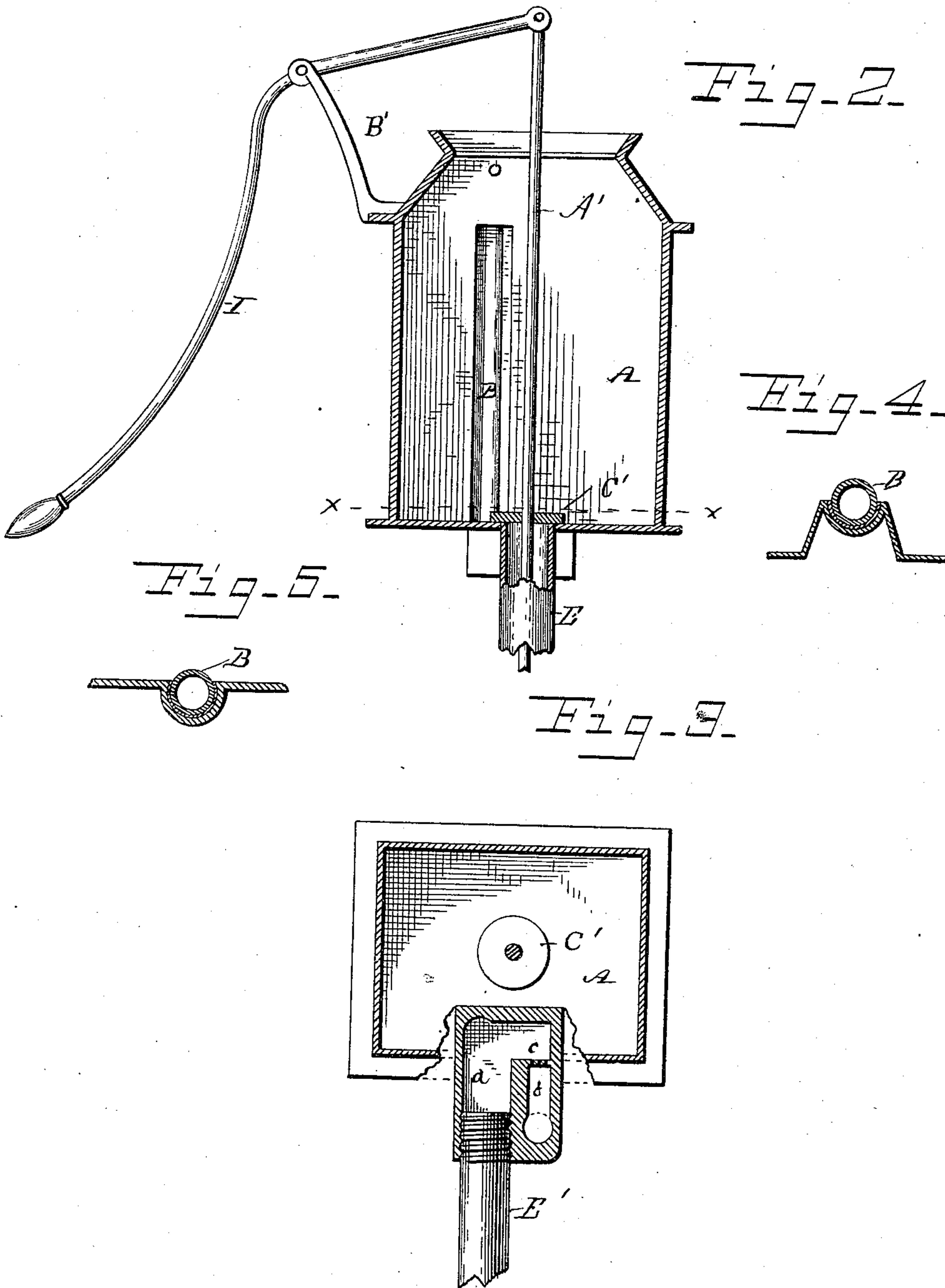
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# UNITED STATES PATENT OFFICE.

JOHN H. THORN, OF YOUNGSTOWN, OHIO.

## MEASURING-PUMP.

SPECIFICATION forming part of Letters Patent No. 321,061, dated June 30, 1885.

Application filed March 16, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. THORN, a citizen of the United States, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Measuring-Pumps; and I do hereby declare that the following is a full, clear, and exact description of the invention.

Figure 1 is a view in perspective of my improved pump as applied to drawing liquids from barrels or casks. Fig. 2 is a vertical sectional view of the measuring-vessel mounted on top of the pump stock or barrel. Fig. 3 is a sectional plan view on the line *xx* of Fig. 2. Fig. 4 is a sectional view of the measuring can or compartment with raised and indented side, to receive the glass indicating-tube. Fig. 5 is a modification showing the side of the can or vessel depressed, to receive the glass indicating-tube.

A is the measuring-tank, secured directly to the upper end of the pump stock or barrel E, and may be of any desired shape or size; but for general purposes should be made to hold about one gallon. The tank or measuring-vessel is made by preference of cast-iron; but tin or any other suitable material may be used.

E is the pump barrel or stock secured to the lower side of the tank and connected directly therewith, in which is placed the ordinary or any suitable sucker-rod and valve A', the upper end of said sucker-rod being secured to the end of the handle or lever I, said lever being pivoted to the bracket-arm B', which is attached to the side of the tank.

C' is a valve adapted to slide over the sucker-rod A', and is forced up by the pressure of the liquid as the sucker-rod is making the upward or pumping stroke, but is forced down as soon as the stroke is made by the weight of the liquid in the measuring-tank onto the top of the pump-barrel, and prevents the liquid in said tank from running back into the pump-barrel.

D' is a box or receptacle open at the top, which is secured under an aperture in the bottom of the tank A. The box D' is provided with an aperture in which is secured the faucet-pipe E', and through which the contents of the tank A are drawn off. The box or chamber D' is provided with two compartments, *a* and *b*, the former of which connects with the pipe

E', while the other or smaller compartment communicates with the compartment *a* by means of a perforated wall or diaphragm, *c*. The object of the perforated wall is to prevent the dirt or sediment from entering the indicating-tube. In the outer end of the compartment *b* is secured the lower end of the indicating-tube B, said tube being secured therein by any suitable cement.

The upper end of the indicating-tube connects with the interior of the measuring-tank by means of the tube-section *d*, so that when the indicating-pipe and the main body of the tank A is full the surplus liquid will be carried back into the measuring-tank, and thus prevent waste by overflow.

*e* is a scale or index plate secured to the side of the tank A and parallel with the glass indicating-tube.

The indicating-tube is placed in recess or indentation formed in the wall of the measuring-tank and secured therein with plaster-of-paris or other suitable cement, so that the tube is not liable to be broken by jars, while the walls of the measuring-tank, coming well around the tube, also serve as a guard to the glass tube.

As a further guard to the glass tube I place around the same stays or supports *f*, of metal, the ends of which are secured to the outside walls of the tank.

G is a drip-basin, to the lower end of which is secured the pipe G', which conducts the liquid that has been spilled back to the pipe leading to the cask.

The operation of my device is as follows: The handle I is raised and lowered a few times, as in the ordinary pumping operation; the tank A is filled; the valve C' then closes down onto the pipe or pump-barrel E, and retains the liquid in the tank or receptacle A, from whence it can be drawn in the usual manner.

The simplicity of arrangement and the small number of parts used in its construction enable me to make a cheap and reliable measuring-pump.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a measuring-pump, the measuring-tank A, mounted directly on top of the pump-barrel and communicating therewith, a sucker-

rod passing through said tank or receptacle and into the pump-barrel, and a sliding valve adapted to slip over the sucker-rod and close the top of the pump-barrel by the weight of  
5 the liquid in the measuring-tank, as set forth.

2. In a measuring-pump, the two-part chamber D', secured to and communicating with the measuring-tank A, the chamber b, pro-

vided with the strainer, in combination with the indicating-tube, open at both ends and communicating with the measuring-tank, as set forth.

JOHN H. THORN.

Witnesses:

W. R. STEWART,  
B. F. WIRT.