

F. H. SMITH.  
Measuring Funnel.

No. 105,857.

Patented July 26, 1870.

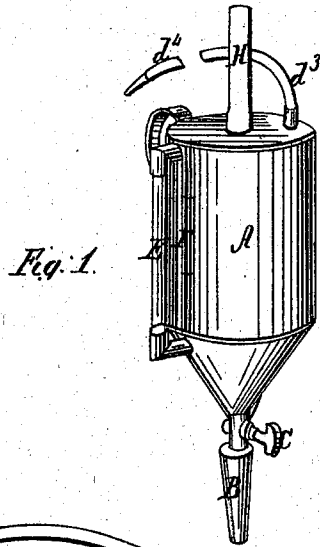


Fig. 1.

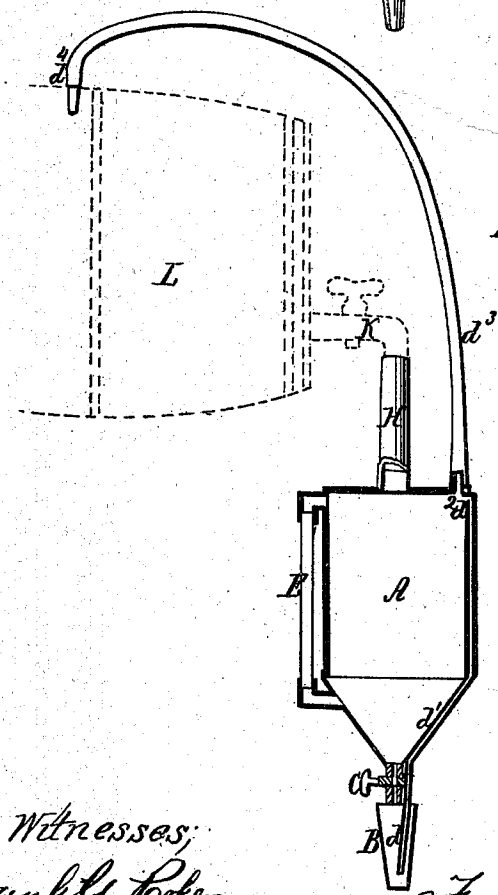


Fig. 2.

Witnesses:  
Frank G. Parker  
Andrew Jones

Inventor:  
Franklin H. Smith  
By his Att'y Melicamp Edson

# United States Patent Office.

FRANKLIN H. SMITH, OF BURKE, VERMONT.

Letters Patent No. 105,857, dated July 26, 1870.

## IMPROVEMENT IN SAFETY MEASURING-FUNNEL.

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

To all whom it may concern:

I, FRANKLIN H. SMITH, of Burke, in the county of Caledonia and State of Vermont, have invented a certain new and useful Safety Measuring-Tunnel, of which the following is a specification.

### *Nature and Object of the Invention.*

The nature of my invention consists in combining, with a measuring-tunnel, tubes and stop-cocks, so as to make a double connection with the barrel or vessel from which the fluid is to be drawn, so that the fluid may be drawn off, measured, and let into the can or jug without being exposed to the air, the object being to provide a safe method of drawing inflammable fluids.

### *Description of the Accompanying Drawing.*

Figure 1 represents my invention in perspective.

Figure 2 represents the same in section, the dotted lines representing a barrel and stop-cock.

### *General Description.*

I construct my device as follows:

A is a measuring tunnel, constructed in any of the approved methods, and is provided with a glass gauge-pipe, B, and with a graduated plate, F, fig. 1, so that the amount of fluid in the tunnel may be known by the height of it in the tube B.

H is a flexible tube, which serves to connect the measuring-tunnel to the cock K of the barrel L, indicated by the dotted lines, fig. 2.

B is a conical tube, extending from the cock at the bottom of the tunnel, so as to direct the fluid into the receiving vessel.

C is a stop-cock, which is to be closed while the measuring-tunnel is being filled.

$d^3 d^4$  is a small flexible tube leading from the measuring-tunnel A to the upper part of the barrel, so that, as the fluid runs from the barrel to the measuring-tunnel A, the displacement in one is balanced by that of the other; thus the fluid will be free to run from the barrel to the measuring-tunnel.

$d^1 d^2$  is a small tube, extending from the lower end of the pipe B to the upper part of the measuring-tunnel A, to allow the displaced air in the measuring-vessel to pass up and fill the vacuum in A.

The advantages of my device are, its safety in measuring dangerous fluids, its convenience in preventing the escape of disagreeable odors, and its convenience as a measuring device.

I claim as my invention—

The combination of the measuring-tunnel A, the glass tube B, and scale F, with the escape-tubes  $d^1$ ,  $d^2$ , and  $d^3 d^4$ , arranged substantially as described, and for the purpose set forth.

FRANKLIN H. SMITH.

Witnesses:

FRANK G. PARKER,  
WILLIAM EDSON.