

J. D. Smedley,

Funnel

N^o 42,024.

Patented Mar. 22, 1864.

Fig. 1

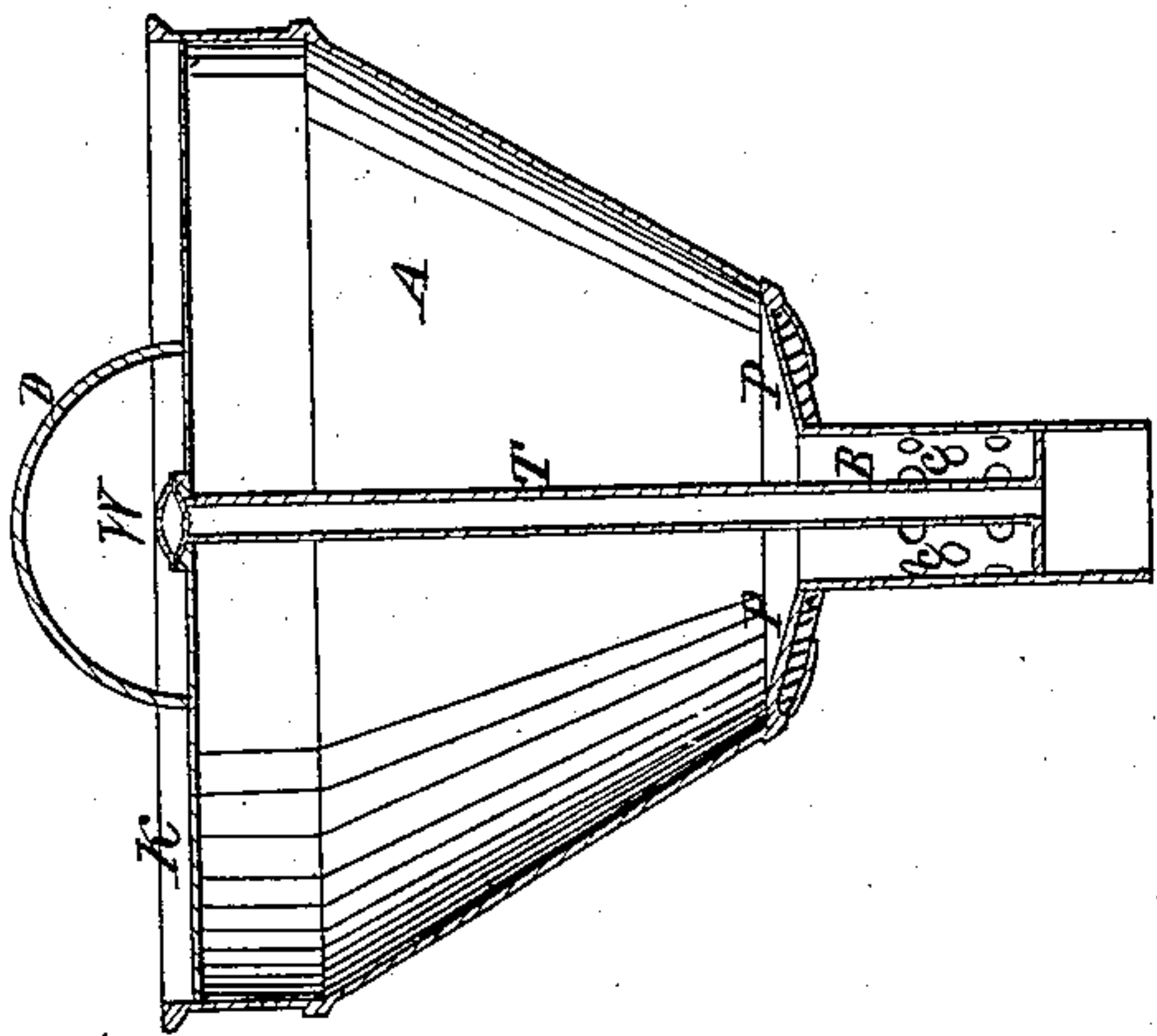


Fig. 4

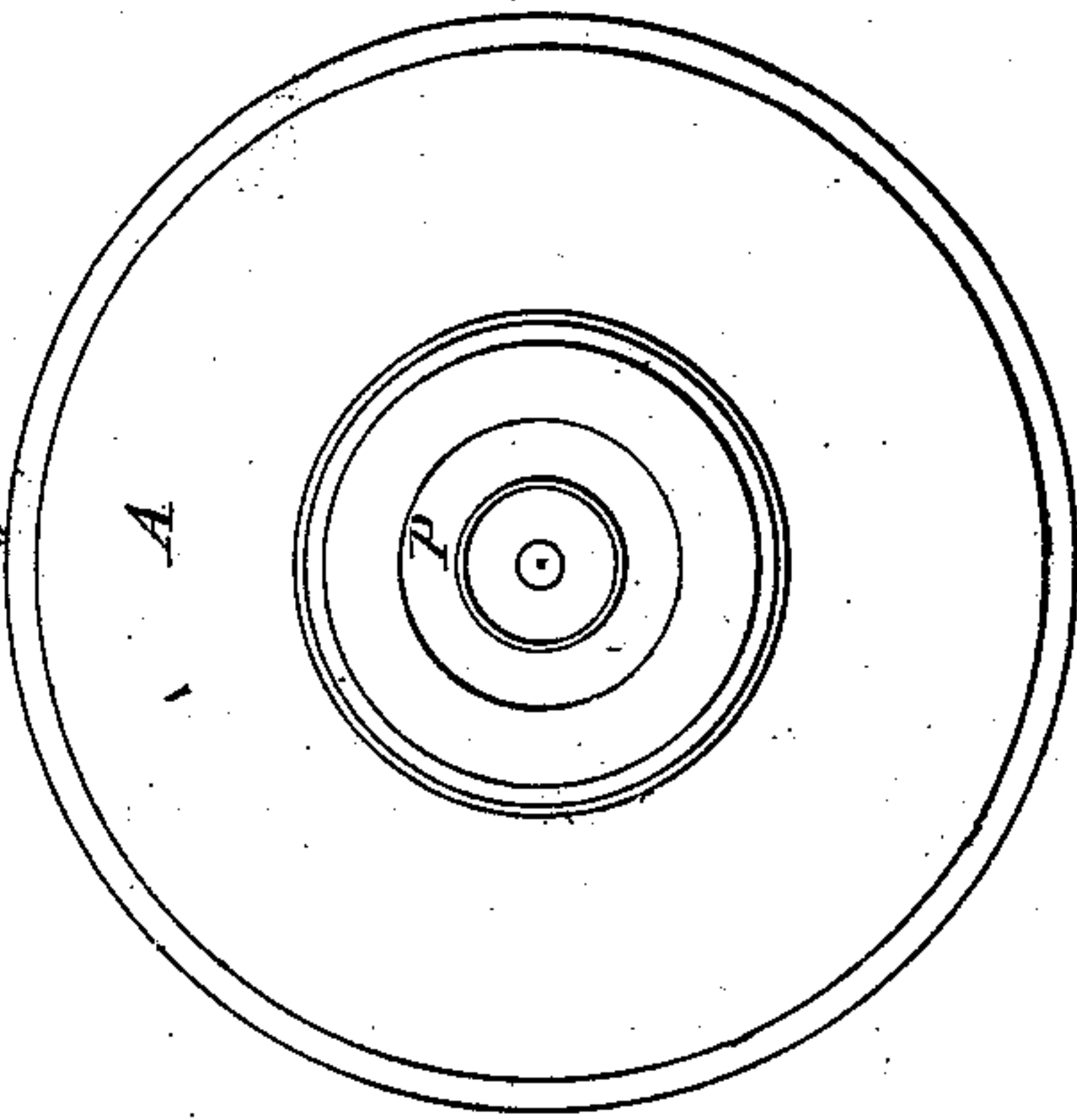


Fig. 2

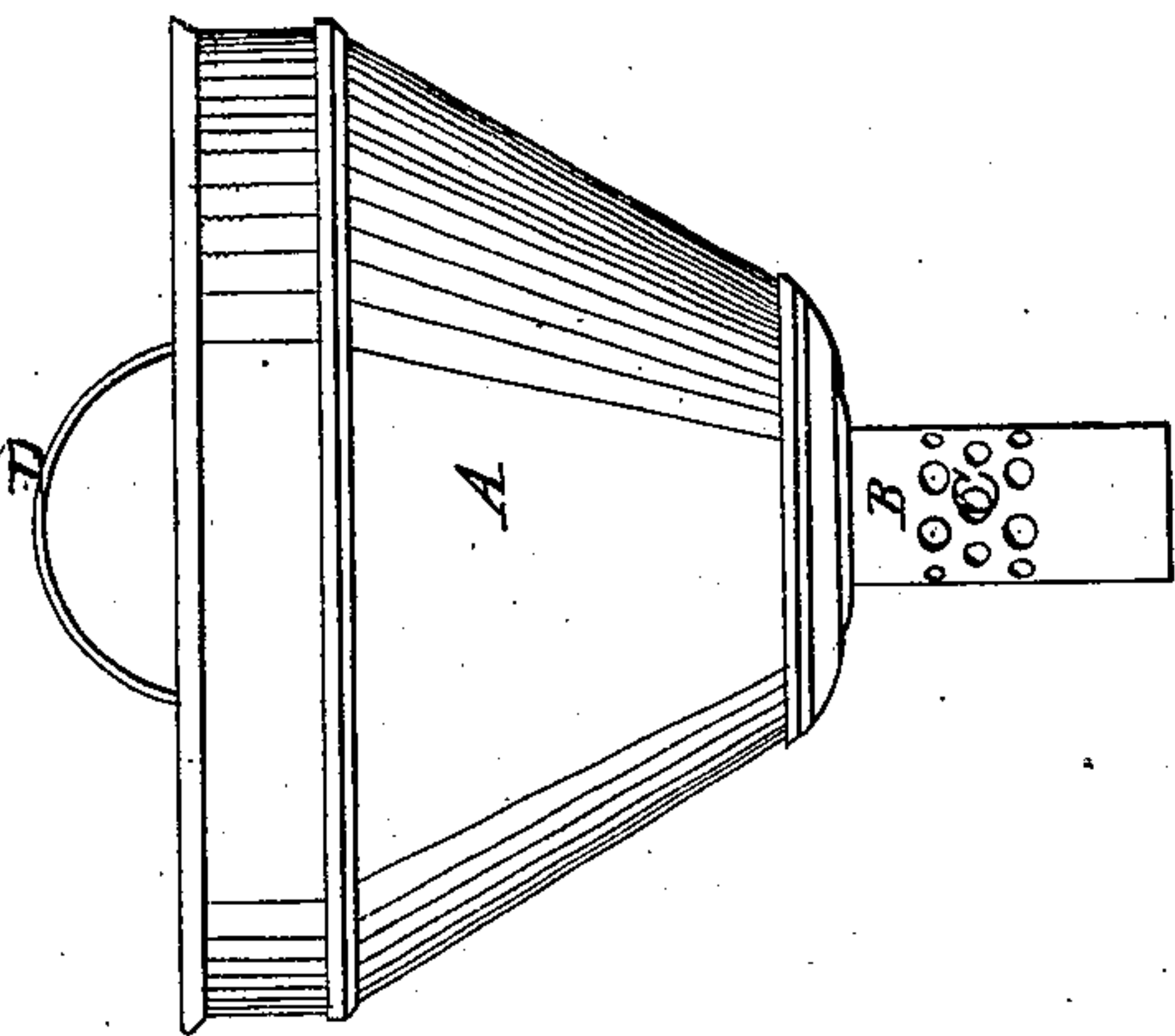
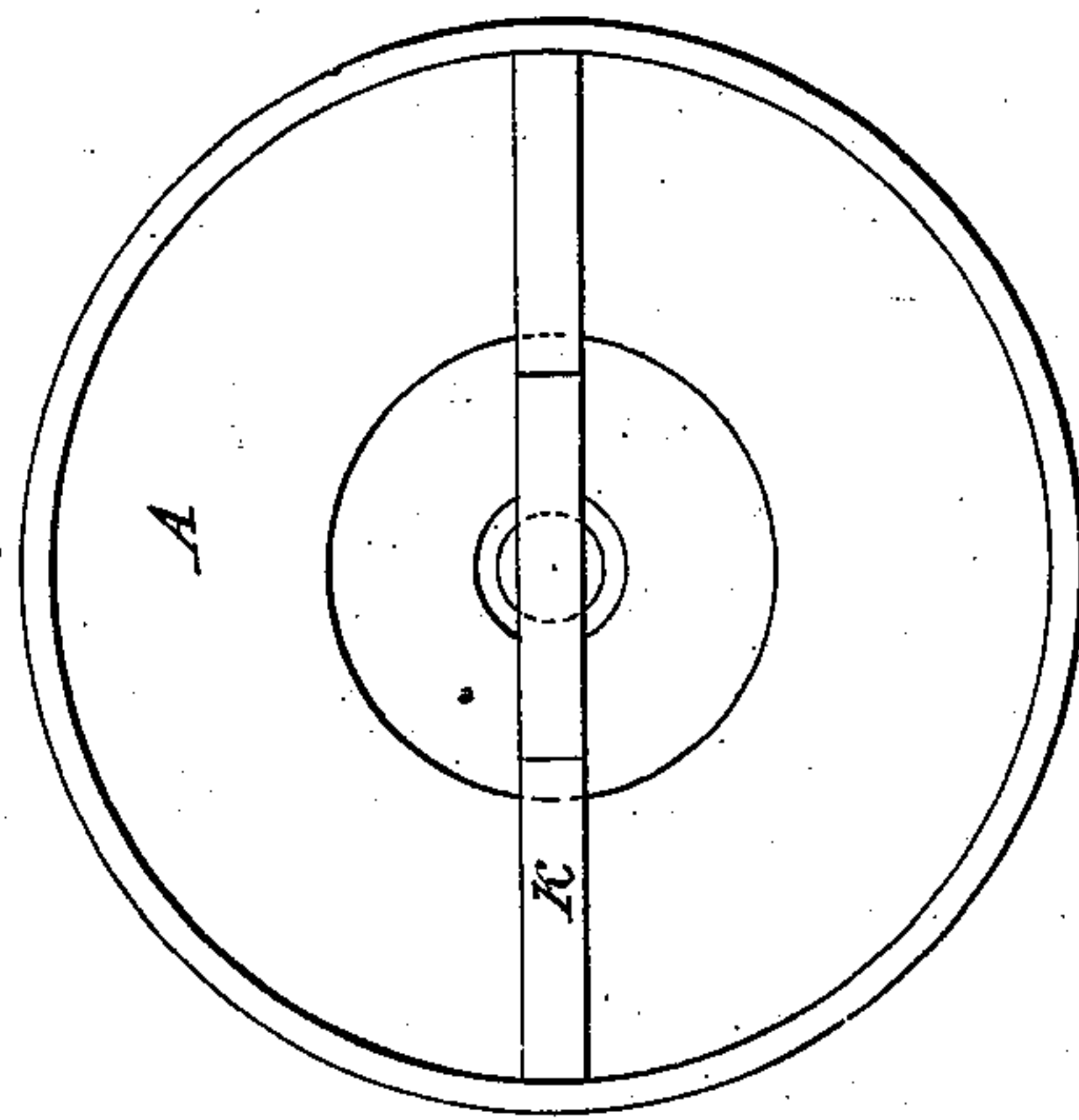


Fig. 3



Witnesses
David Goodwin
Fredrick Goodwin

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UNITED STATES PATENT OFFICE.

JOHN D. SMEDLEY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN INDICATING-FUNNELS.

Specification forming part of Letters Patent No. 42,024, dated March 22, 1864.

To all whom it may concern:

Be it known that I, JOHN D. SMEDLEY, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Funnels to be used in Filling Casks of every Description with Liquids; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a vertical section view; Fig 2, a perspective view. Fig. 3 is a top view, and Fig. 4 a bottom view.

The nature of my invention consists in constructing a funnel to be used in filling casks, barrels, &c., with fluids, with such an alarm as will indicate the height of the fluid without removing the funnel or thumping or striking the cask, and to indicate precisely when the same is full.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my funnel in the ordinary form externally with a bowl, and conduit leading from the lower or smaller end of the bowl to the requisite depth into the cask I wish to fill.

Similar letters refer to similar parts.

A is the bowl of the funnel.

B is the conduit, leading from the bottom or small end of the funnel. This conduit is perforated with holes or side passages, as shown at C. Below these holes there is a floor or division, *s*, made in the conduit B.

K is a cross-bar passing over the top of the funnel.

T, Fig. 1, is a small tube, which starts from below the floor or division *s*, perforating said floor or division, and passes up through the conduit and terminates on the upper side of the cross-bar K.

D, Fig. 2, is a loop or guide, resting upon the cross-bar K.

W, Fig. 1, is the top of the small tube T, and covers the tube, except a small space—say about one-tenth the size of the tube. This

small orifice or vent of the tube being so much smaller than the tube causes the air from the cask, which gives way for the liquid, to rush up with a loud whistling sound. This contraction of the tube into a small orifice may be adjusted to any part of the tube instead of being placed on top of the same.

P represents a layer of packing of india-rubber or cloth or any equivalent substance which will fit tightly upon the bung-hole of the cask or barrel, leaving no chance for the air to escape from the cask or barrel outside of the conduit B.

When the funnel is in use, the liquid is poured into the bowl A, and passes down through the conduit B, and, being intercepted by the floor or division *s*, it passes through the holes or side passages, C, into the body of the cask, while the air is forced through the small tube T, and makes a whistling alarm, indicating when it is full by the cessation of the sound. It is also advantageous in preventing the burst which is apt to occur between the conduit B and the sides of the bung-hole, made by the great pressure of the air upward, carrying off some portion of the liquid with it.

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

1. In combination with a fluid-filling funnel, A, and conduit B, and side passages, C, and floor *s*, any air-tight packing P at the base of the funnel, as described, and a tube, T, with a contraction at the top or in any part thereof, so constructed as to make a distinct sound when the air from the cask is conducted up through it, as described.

2. The combination of air-tight packing at the base of a funnel, and a tube through the conduit of a funnel, by which the air displaced by the liquid when entering the cask escapes, substantially as described.

JOHN D. SMEDLEY.

In presence of—

DANIEL GOODWIN, Jr.,
JAMES A. COWLES.