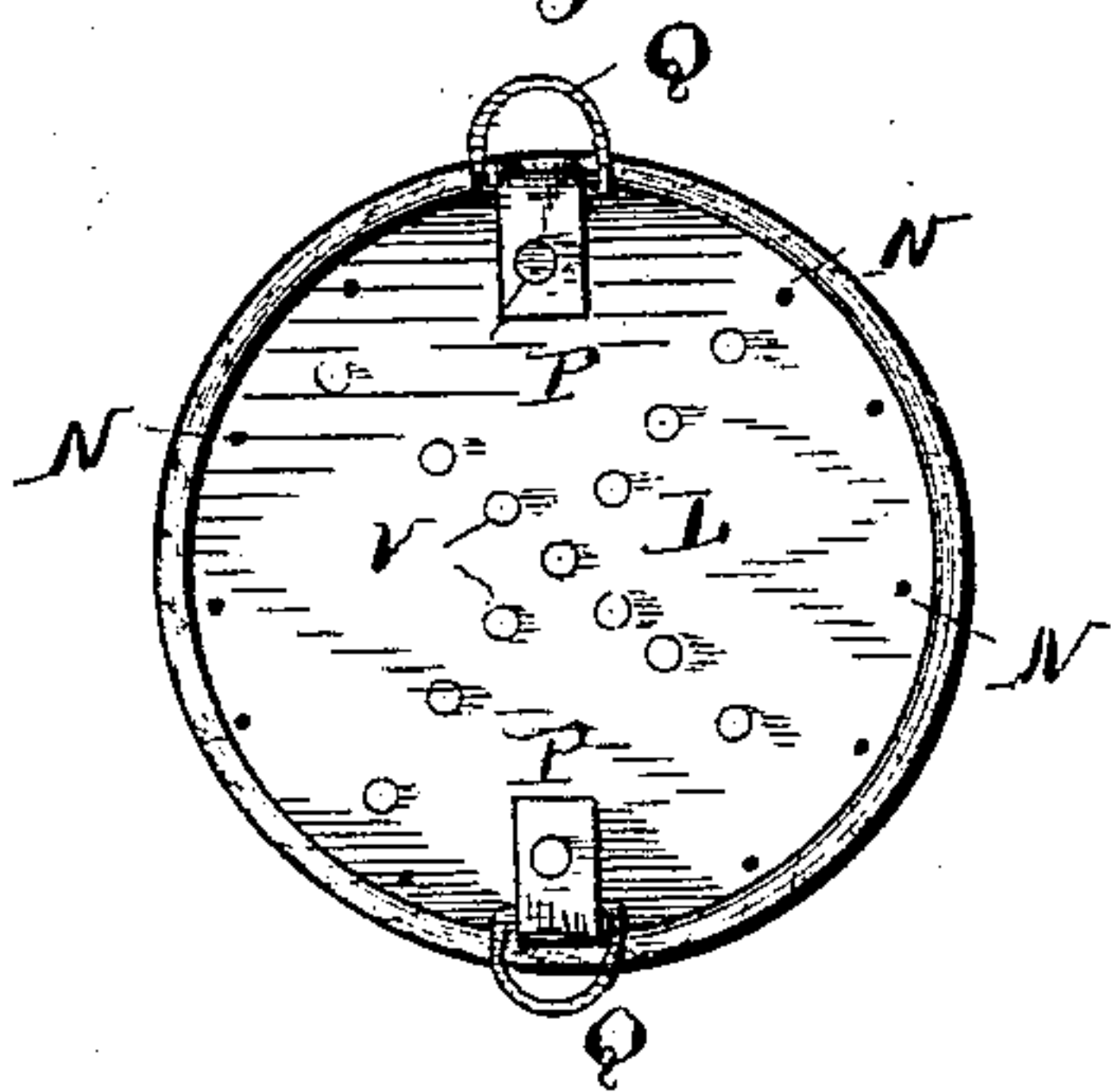
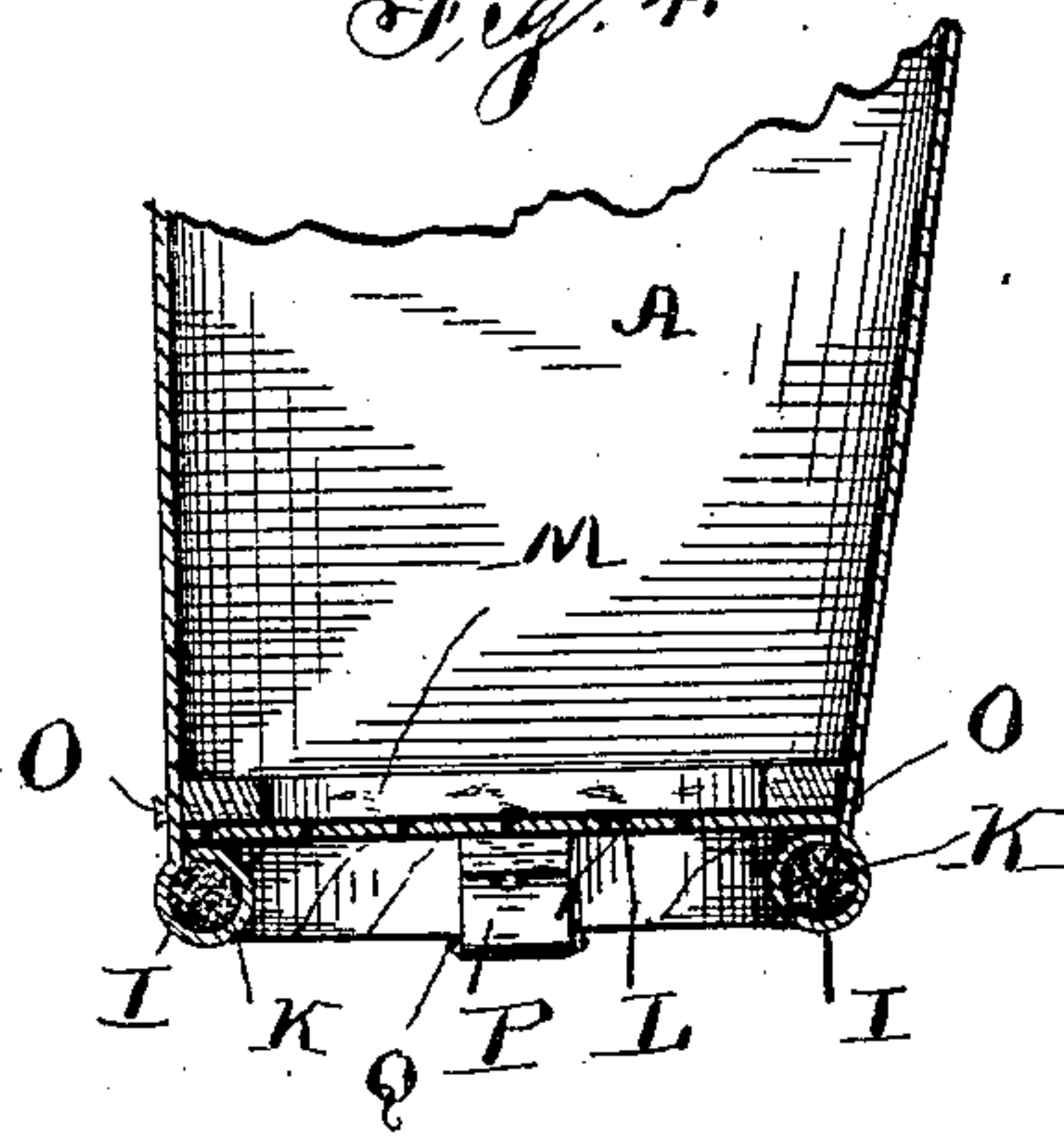
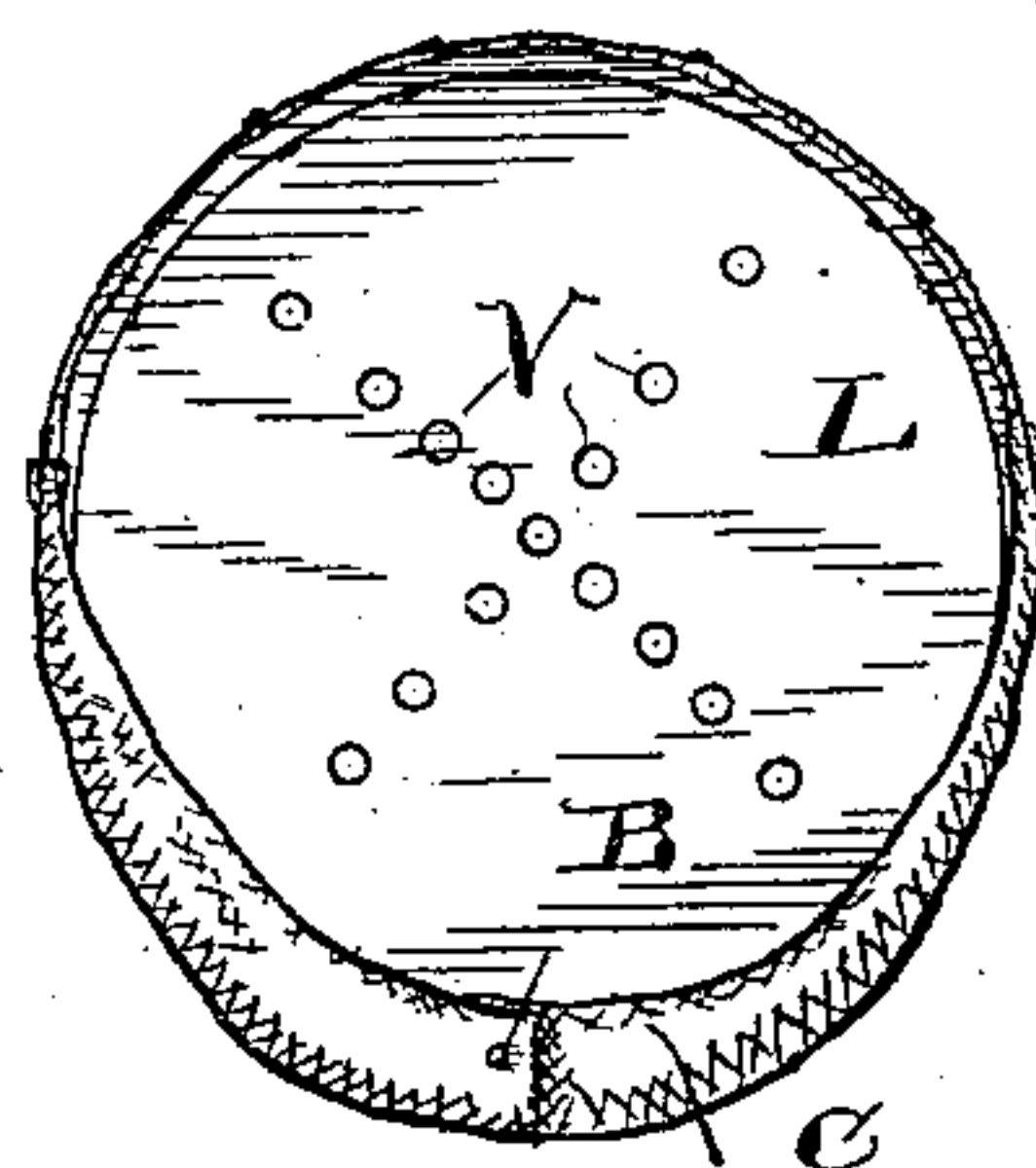
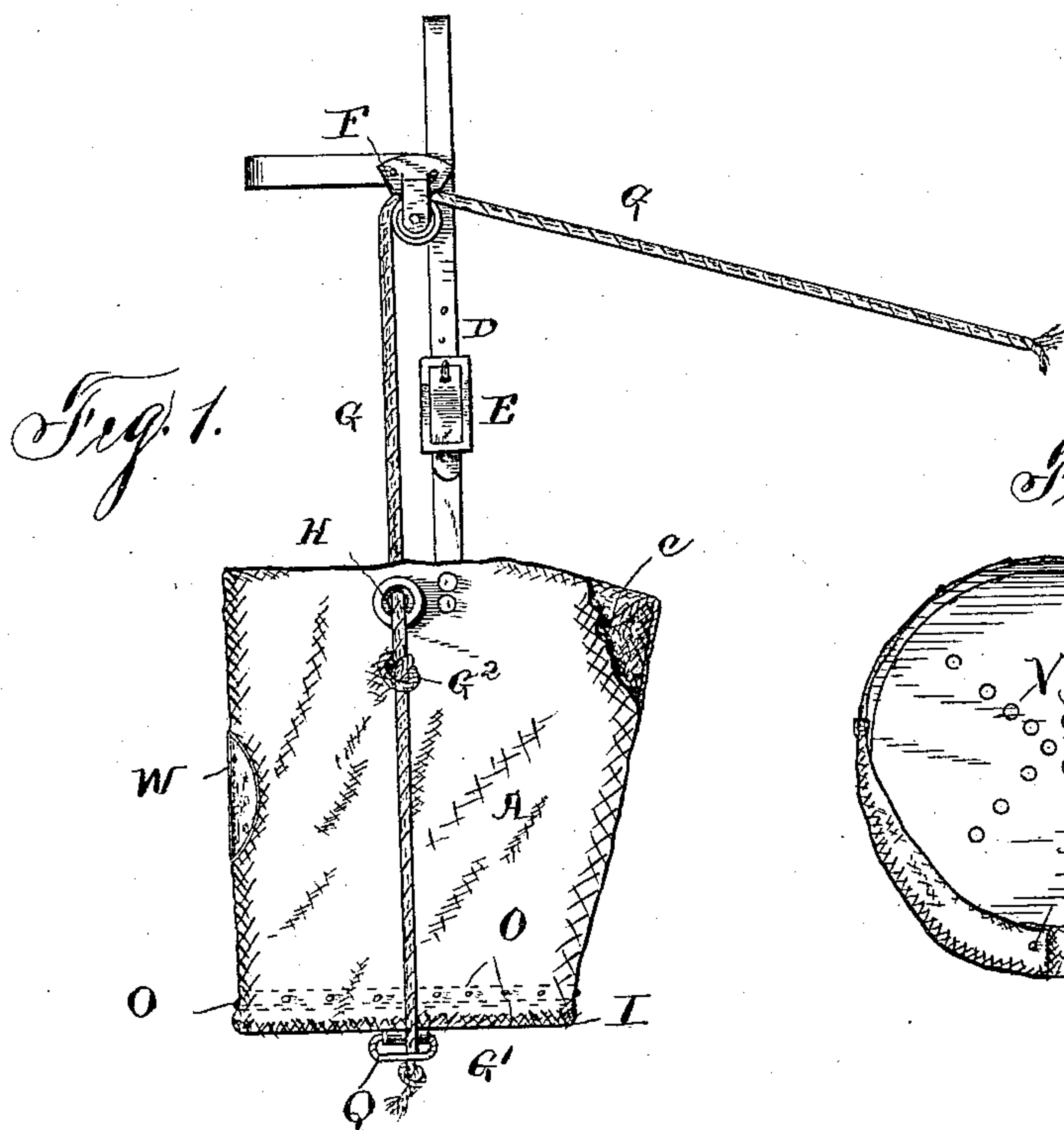


(No Model.)

G. D. LEONARD.  
FEED BAG FOR ANIMALS.

No. 454,054.

Patented June 16, 1891.



Witnesses

*James*  
 W. Johnson,  
 J.R. Nottingham

Geo. D. Leonard  
By W. H. Bartlett  
Inventor  
Atty.

# UNITED STATES PATENT OFFICE.

GEORGE D. LEONARD, OF NEW HAVEN, CONNECTICUT.

## FEED-BAG FOR ANIMALS.

SPECIFICATION forming part of Letters Patent No. 454,054, dated June 16, 1891.

Application filed October 30, 1890. Serial No. 369,799. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. LEONARD, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Feed-Bags for Animals, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to feed-bags for animals.

The object of the invention is to produce a feed-bag which is strong and serviceable, and make a bag with a metallic bottom which shall be firmly held in place.

Figure 1 is a side elevation, partly broken away, of a feed-bag and its supporting attachments. Fig. 2 is a top plan of the bag. Fig. 3 is an under side view of the bag-bottom. Fig. 4 is a central vertical section of lower part of bag.

A indicates the body of the bag, which is preferably of canvas—a little larger at top than at bottom. The seam in the body is at the back side of the bag, and the canvas is overlapped at the top of the seam and secured by a rivet B, so that the upper part of the canvas forms an intumed flange C at the back part of the bag. This flange prevents the escape of grain from the bag when the animal throws up his nose.

The bag is attached to the side straps D of a halter or head-band, and these straps preferably have buckles E, by which the height of the bag may be adjusted. The halter has pulleys F, one at each side of the halter, and a cord G passes over the pulley and back to the water-hook or other part of the harness. The cord G extends down alongside the animal's head when the bag is in use, and, entering the top of the bag, passes through a grommet H in the bag near its top, and thence extends down alongside the bag. (It will be understood that the two sides of the bag are alike.) The bottom of the canvas forms a welt or hem I about a cord, wire, or distending piece K, the swell of the welt being mostly inside the outer circumference of the bag. A bottom plate or disk L of thin sheet metal, perforated for ventilation, is firmly secured to a wooden hoop M by nails or rivets N, extending through the metallic bottom and into

the wooden hoop. In the manufacture the hoops are first secured to the bottom plate, and then the bottom and hoop are dropped into the bag and pressed down against the welt I. Nails or rivets O are then driven through the canvas, leather, or other flexible material A of the bag-body, thus firmly holding the bag-body and hoop in place. A strip or loop of leather P is doubled around a metallic ring Q and riveted to the metallic bottom of the bag, one of these being at each side of the bag and the ring projecting at the side of the bag. The rope G extends down through this ring, and is knotted below the ring, as at G', or otherwise secured to the ring. The rope or cord may also be knotted below the grommet, as at G<sup>2</sup>.

The halter, bridle, or head-strap D is intended to support the bag while in use. The cord G serves to draw up the bottom of the bag as the feed gets low therein. The flange C prevents waste. The perforations V in the metallic bottom and perforations W in the side of the bag supply air to the animal while feeding. The metallic bottom L is firmly secured to the hoop M and the hoop to the body of the bag, and the bottom is also held between the loop and welt. The doubled leather loop or strip P, passing under the hem or welt I, serves as a leg and preserves the welt from wear when the bag stands on its bottom.

What I claim is—

1. The combination of the flexible bag-body having a welt at its bottom, a metallic disk resting on said welt, and a wooden hoop inside the bag, resting on the bottom and firmly nailed to said bottom and to the flexible body just above the bottom, substantially as described.

2. The combination, with the bottom plate, of the flexible body having a welt below said plate, and the leather loops secured to the bottom plate and passing under this welt, all substantially as described.

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

GEORGE D. LEONARD.

Witnesses:

LIVINGSTON W. CLEAVELAND,  
CHARLES T. PENNELL.