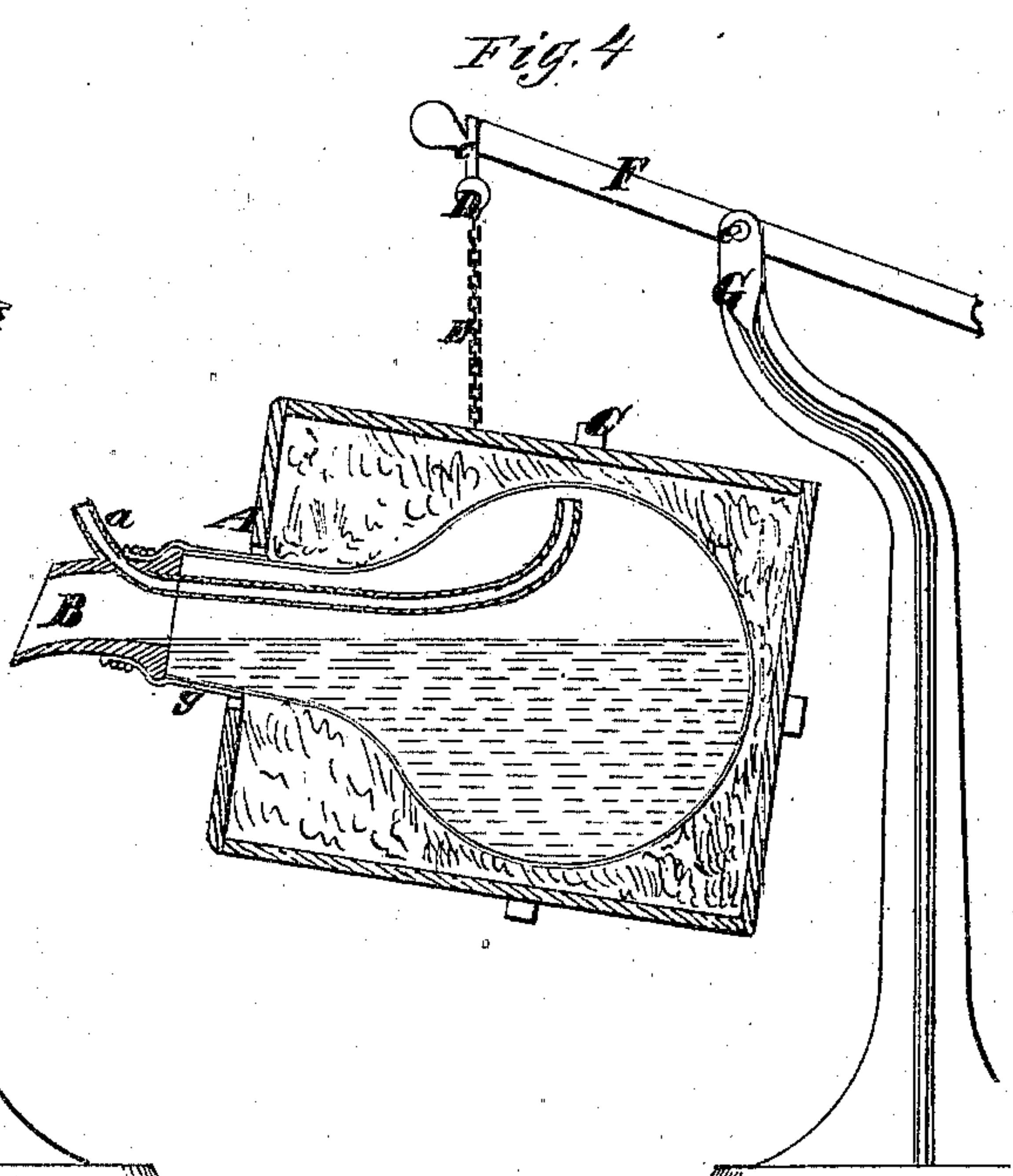
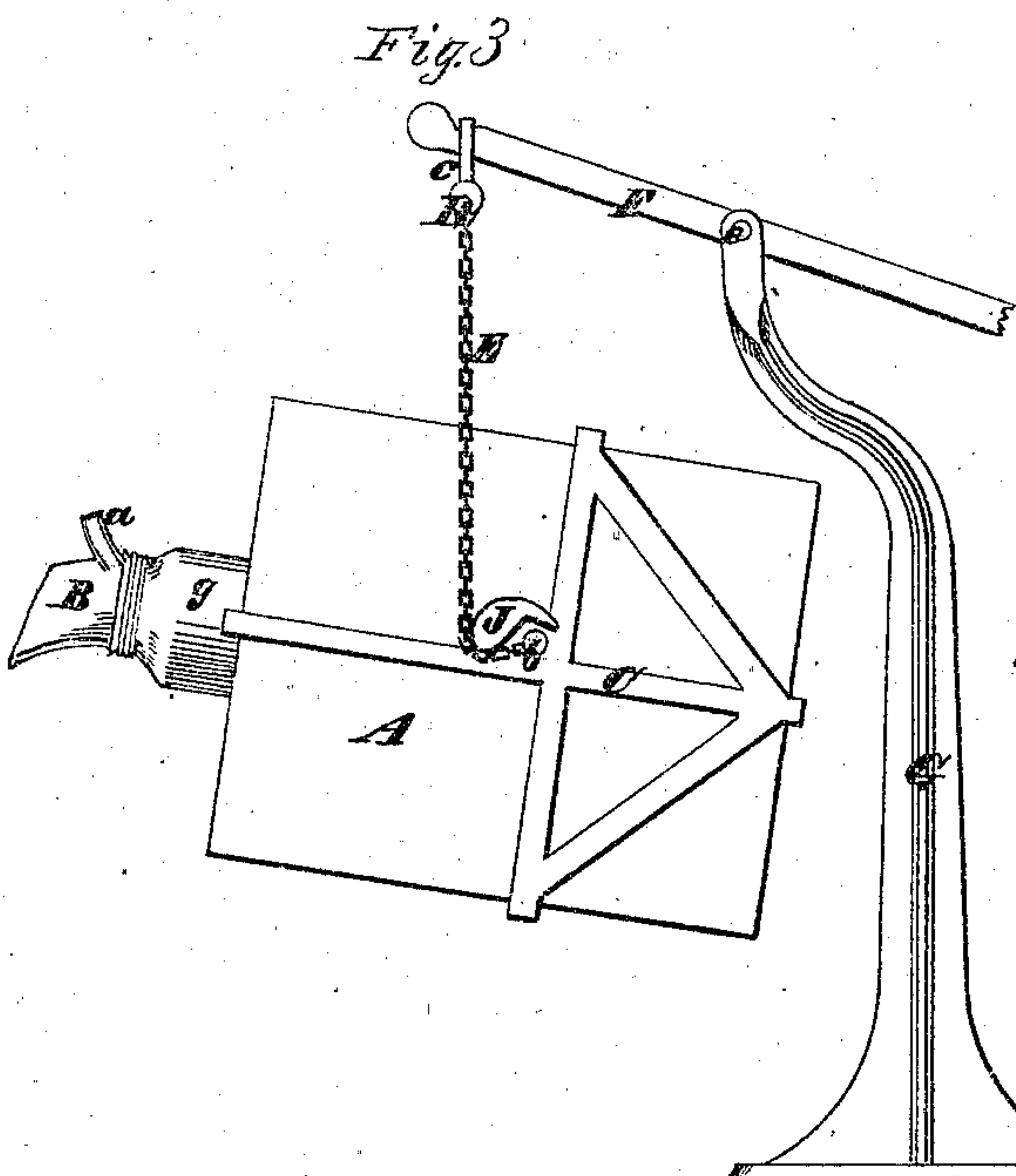
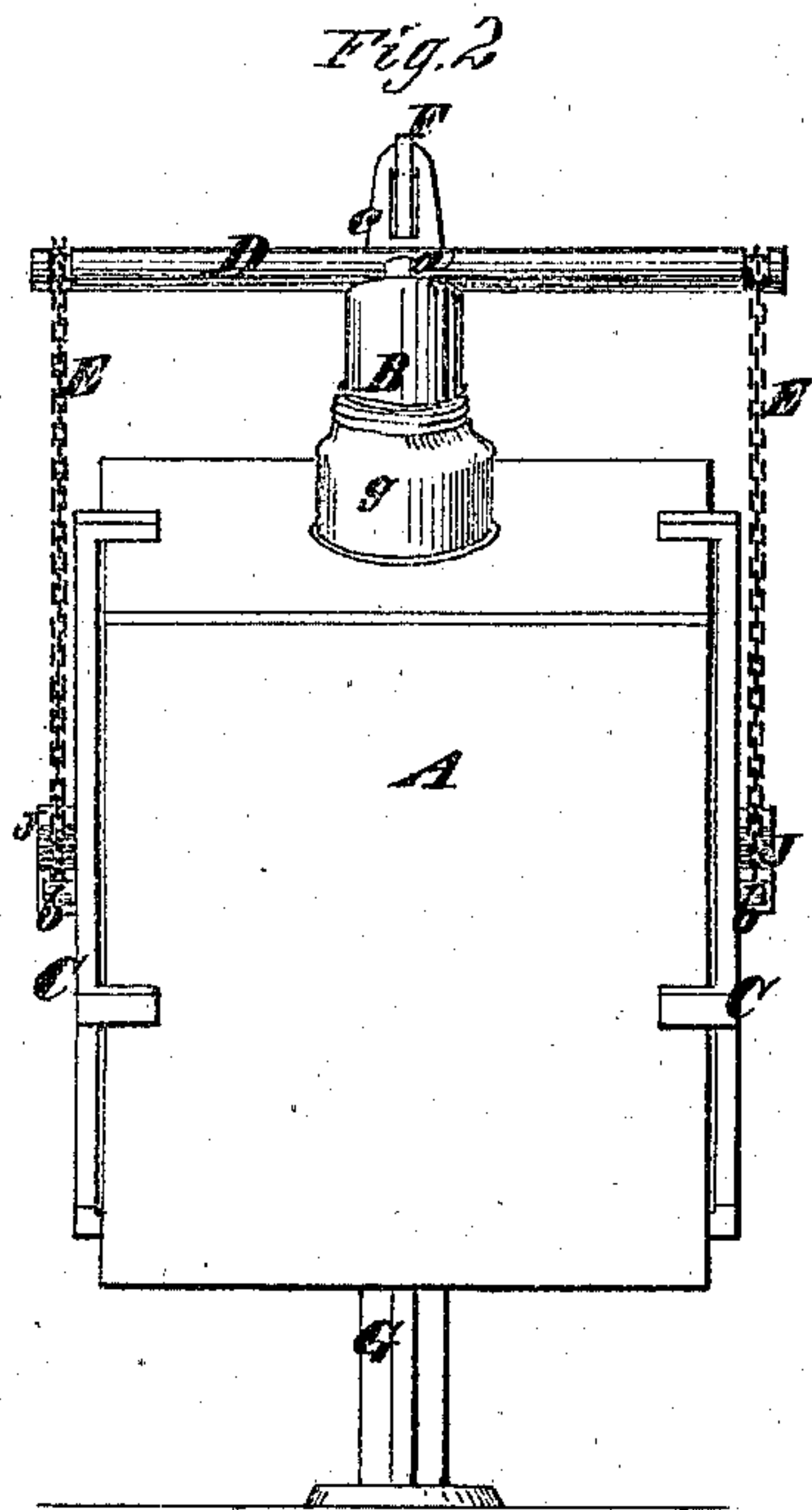
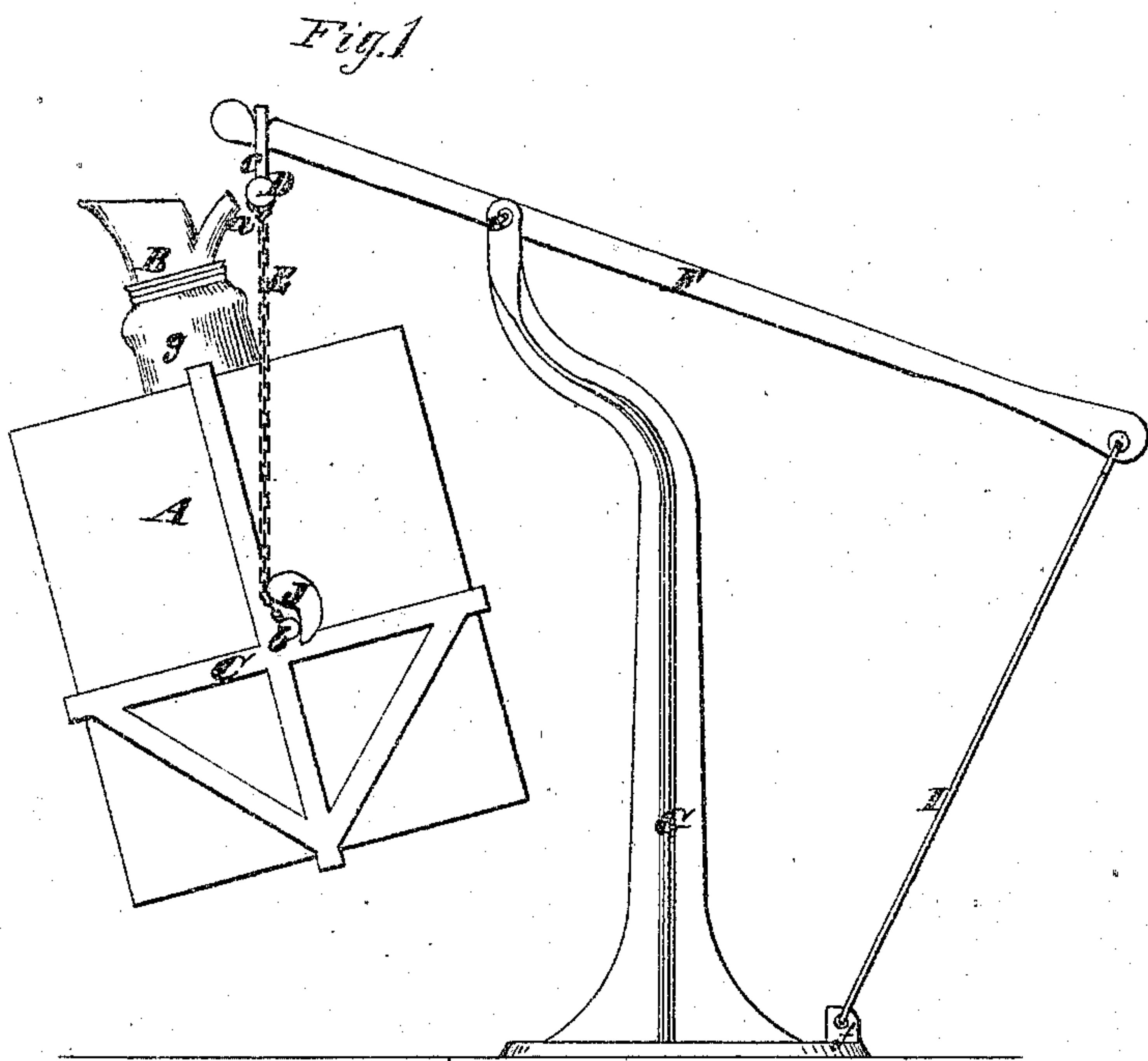


WILLIAM GEE.  
Improved Apparatus in Discharging Acid from Carboys.  
No. 120,259. Patented Oct. 24, 1871.



WITNESSES  
W. H. Smith,  
George W. Bennett

William Gee



# UNITED STATES PATENT OFFICE.

WILLIAM GEE, OF NEW YORK, N. Y.

## IMPROVEMENT IN APPARATUS FOR DISCHARGING ACID CARBOYS.

Specification forming part of Letters Patent No. 120,259, dated October 24, 1871.

*To all whom it may concern:*

Be it known that I, WILLIAM GEE, of the city, county, and State of New York, have invented a new and useful Apparatus for Discharging or Emptying Acid Carboys; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification.

The object of this invention is to enable a carboy to be easily lifted and poured from by one man without any danger of spilling or splashing about of its contents; and to this end it consists in frames which grasp and hold the carboy, and in a peculiar manner of suspending it by chains secured to a yoke pivoted to the end of a lever, whereby the carboy can be lifted and tipped, and its contents poured out. It also consists in a combined mouth-piece and vent-tube, whereby the pouring of the contents of the carboy is facilitated.

In the accompanying drawing, Figure 1 is a side view of my apparatus. Fig. 2 is a front view thereof. Fig. 3 is a side view, showing it tipped or tilted; and Fig. 4 is a central section, showing it in the same position.

Similar letters of reference indicate corresponding parts in all the figures.

A is the carboy, consisting of a glass bottle inclosed in an outer case and packed with soft material. B is a combined mouth-piece and vent-tube, made of metal, with a throat or spout, and having secured to or formed with it a vent-tube, *a*, that is bent at its ends so that one projects from the mouth-piece and the other into the bottle, as shown in Fig. 4. The mouth-piece has secured to its lower portion an elastic rubber socket, *g*, which fits over the neck of the bottle and thereby secures the mouth-piece to it. C C are two frames whose shape is fully represented, and which have toes or hooks that project over the edges of the carboy and are thereby enabled to be attached to it. On these frames, below the center of mass of the carboy and in rear of its center of gravity are studs or trunnions *b b*, to which the end of chains E E suspended from a yoke, D, are secured. A little above and in rear of said studs are cams J J,

against which the chains bear, and whereby, as the carboy is tilted more or less, its actual points of suspension from the chains is changed, such points being where the chains start from the surfaces of the cam. The yoke has formed on its middle portion a loop, *c*, by which it is hung from a notch in the shorter arm of a lever, F, pivoted, by a pin, *e*, that forms its fulcrum, to a standard, G. At the end of the longer arm of the lever is a brace or stay, I, which may be hooked into an eye, *f*, at the base of the standard to hold the lever in such position that the carboy is suspended from it clear of the ground.

In order to empty a carboy the frames C C are first attached to it, which is effected by lifting one side a little off the ground and placing one of the frames over it, and then lifting the other side and placing on it the other frame. It may then be raised by one man, pulling down the longer arm of the lever F and hooking the end of the stay I in the eye *f* in the standard. As the carboy is suspended in rear and below its center, as before described, it is inclined a little forward, but is prevented from inclining much by the cams bearing against the chains. While the carboy is thus suspended one man can easily tip it sufficiently to pour from it, the cams in the meantime forming the fulcrum or center; and, as the carboy is tipped more and more, the said fulcrum is changed nearer to the center of gravity and to the upper side of the carboy, and thereby counteracting the increasing liability to tip forward as the acid or other liquid flows from it, and rendering the person tipping it less liable to spill any of the contents. The mouth-piece, which is attached to the neck of the bottle after its cork or bung is withdrawn, greatly facilitates the pouring of the acid or other liquid, and the vent-tube provides for the admission of air without interfering with the flow, and, by projecting from the mouth-piece B, enables the man managing the carboy to blow the tube through and clear it of any liquid that might settle in it and prevent the passage of air.

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

1. The combination of the suspending-chains E E and the frames C C provided with cams ar.

ranged in relation to the attachments of the said chains E E, substantially as and for the purpose herein set forth.

2. In combination with the above, the yoke D, lever F, standard G, and stay or brace I, substantially as and for the purpose described.

3. The combined mouth-piece B and vent-pipe

*a* provided with an elastic socket, *g*, for its attachment to the neck of the bottle, substantially as and for the purpose herein specified.

WILLIAM GEE.

Witnesses:

C. F. SMITH,

GEORGE W. BENNETT.

(167)