

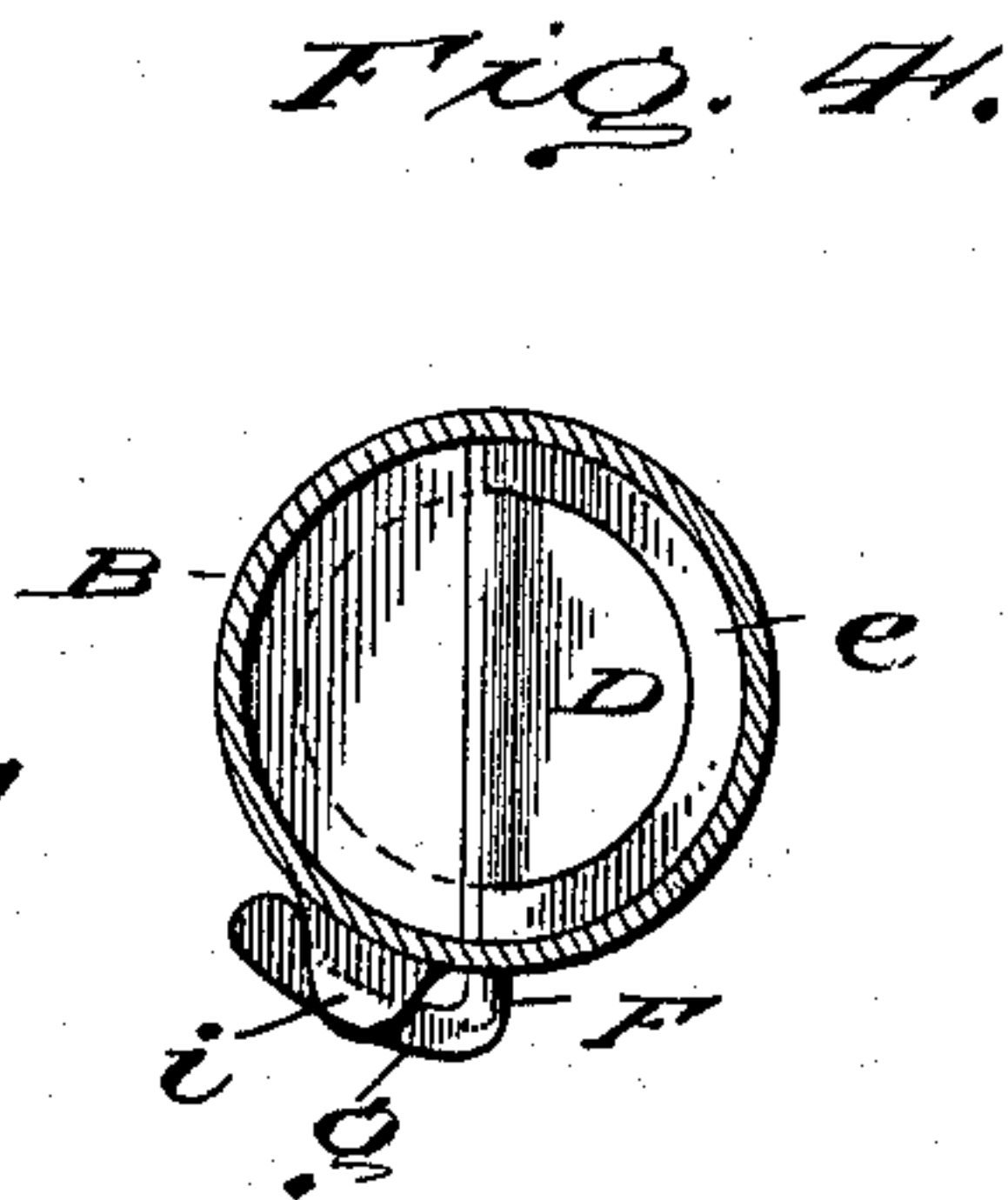
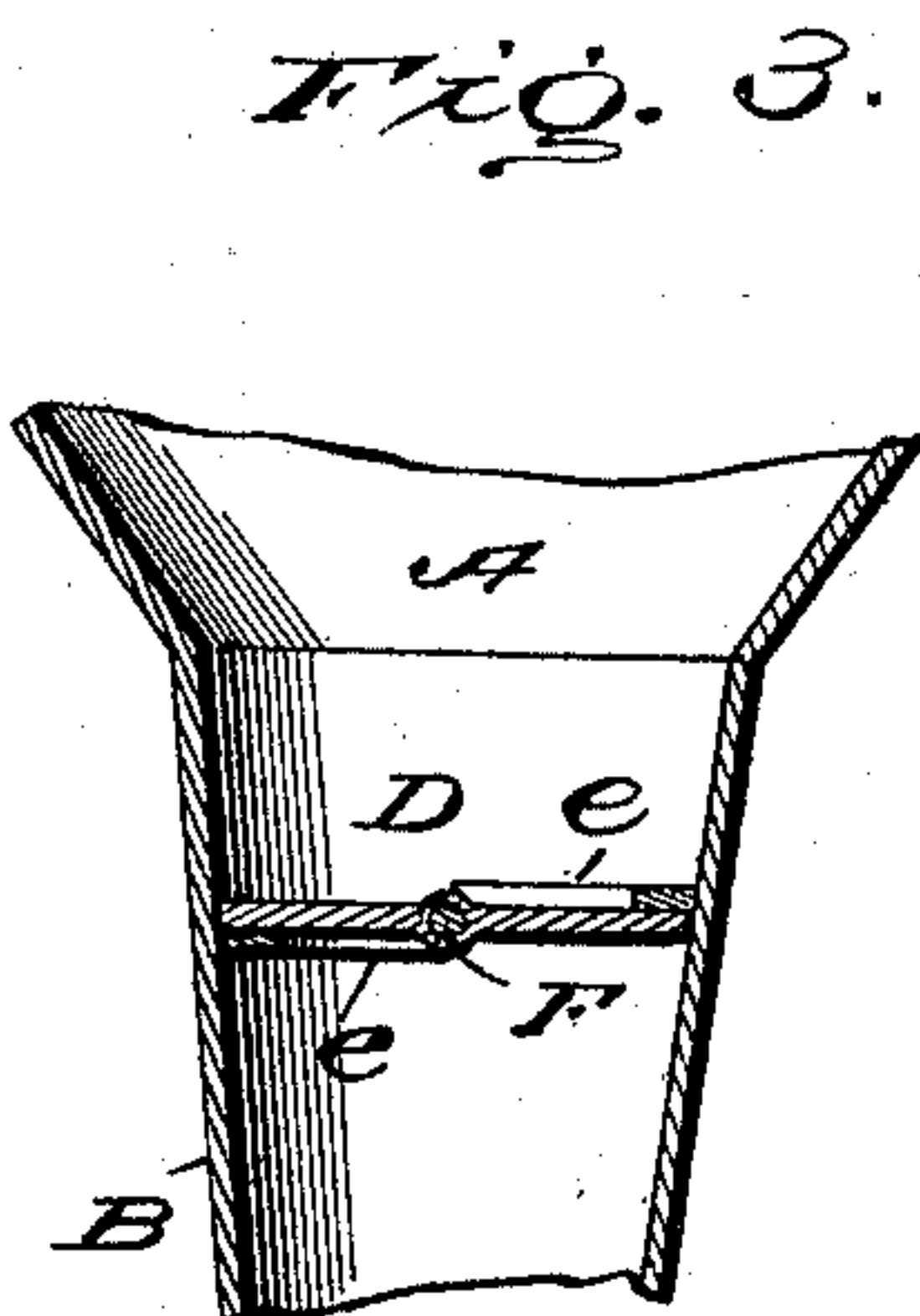
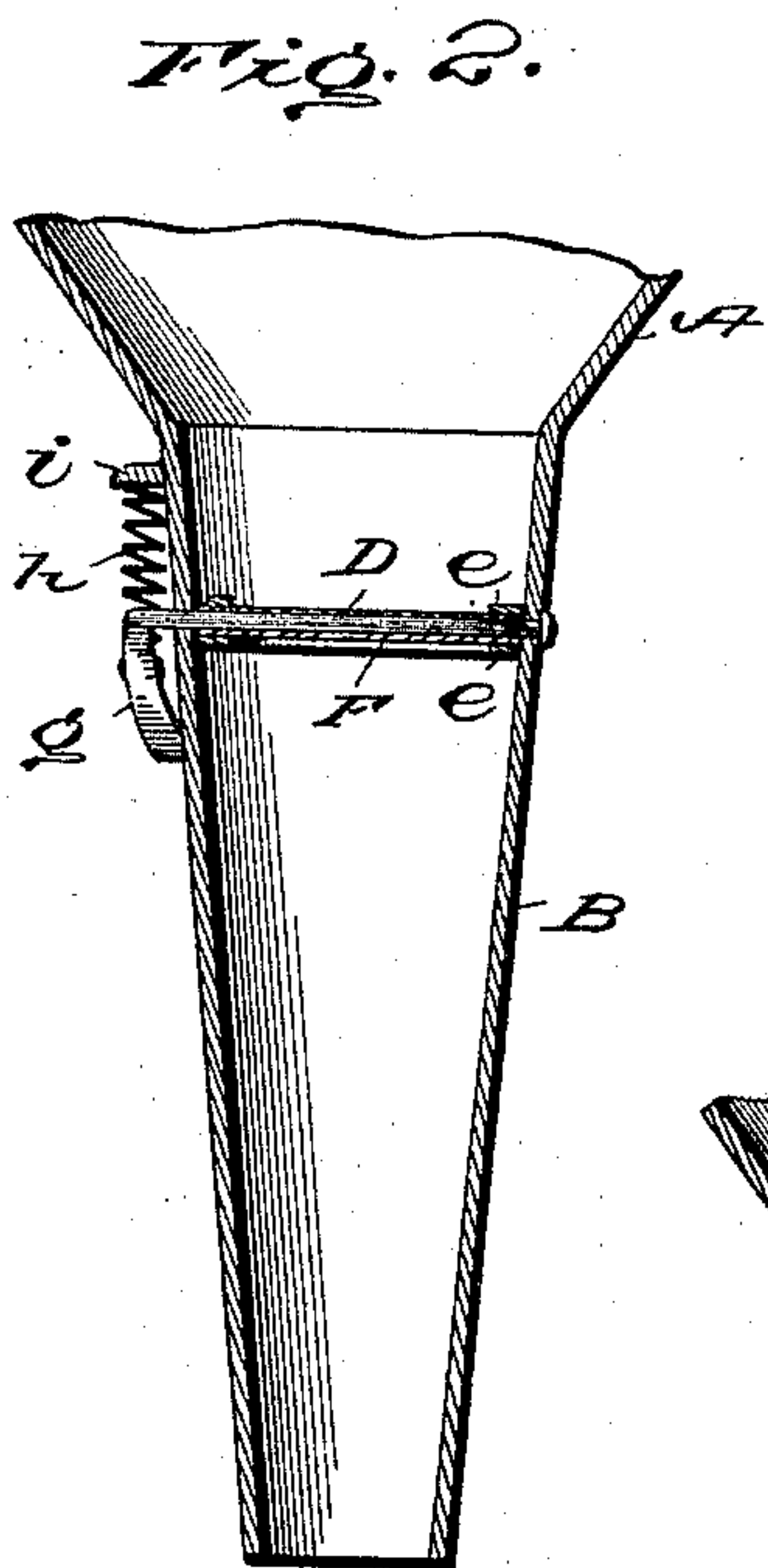
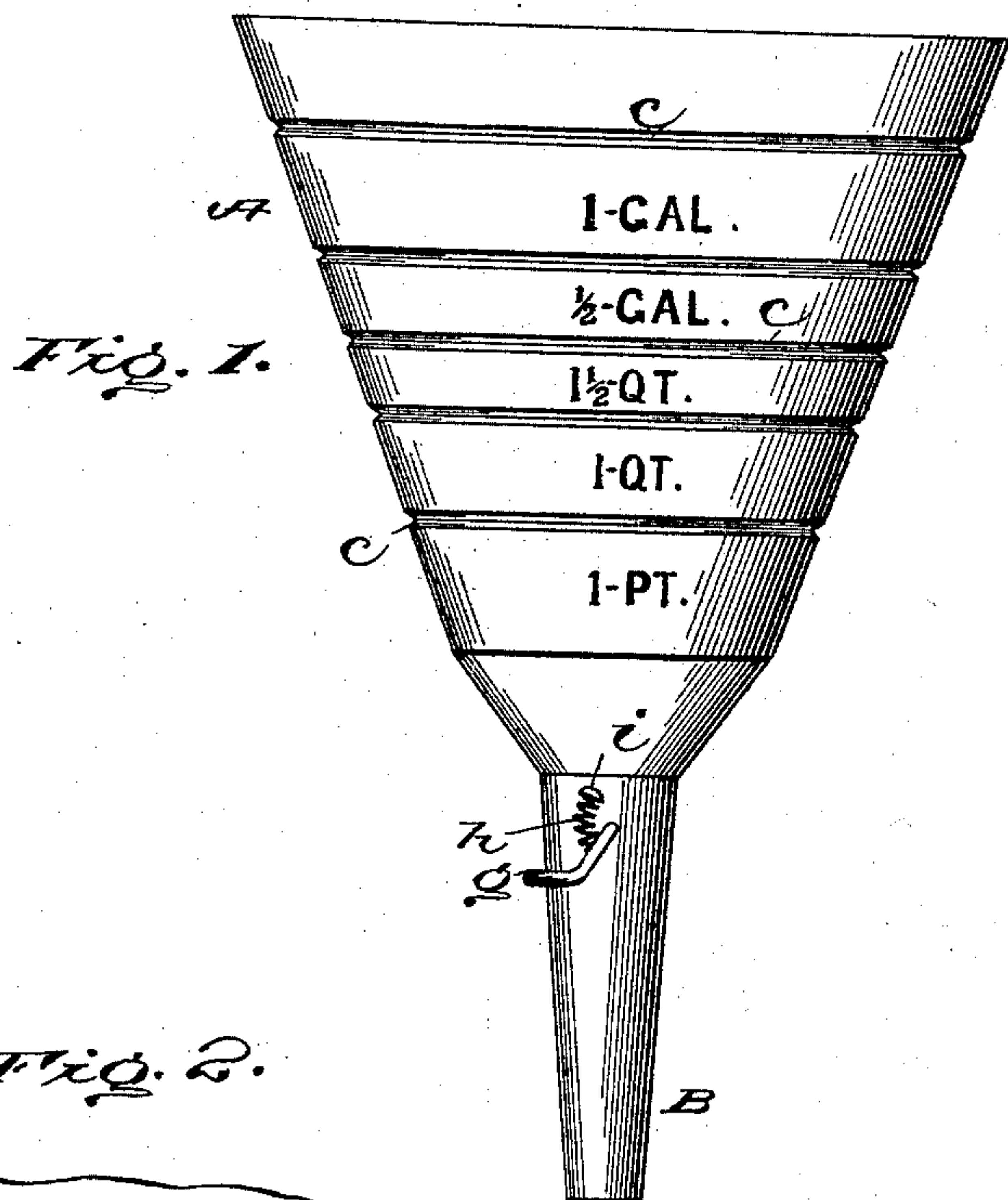
No. 612,510.

G. B. & J. L. WALKER.
FUNNEL.

Patented Oct. 18, 1898.

(Application filed Dec. 13, 1897.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE BROSNAHAM WALKER AND JOHN LAURENCE WALKER, OF PENSACOLA, FLORIDA.

FUNNEL.

SPECIFICATION forming part of Letters Patent No. 612,510, dated October 18, 1898.

Application filed December 13, 1897. Serial No. 661,699. (No model.)

To all whom it may concern:

Be it known that we, GEORGE BROSNAHAM WALKER and JOHN LAURENCE WALKER, citizens of the United States, residing at Pensacola, in the county of Escambia and State of Florida, have invented certain new and useful Improvements in Funnels; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in funnels; and its object is to provide a simple and convenient form of valve-controlled funnel in which the amount of liquid contained therein may be readily ascertained and the amount discharged therefrom determined and regulated with certainty.

The invention consists, essentially, of a funnel having a graduated body portion and a spout and a valve mounted in said spout and comprising an oscillatory shaft carrying a valve mounted to tilt thereon and provided with an exteriorly-projecting arm adapted to rest upon the rim edge of the neck of a vessel and support the funnel and to be forced upwardly to cause the valve to open and a spring acting on said arm to normally hold the valve closed.

In the accompanying drawings, illustrating the invention, Figure 1 is an outer side elevational view of our improved funnel. Fig. 2 is a vertical longitudinal section of the spout, taken on a line parallel with the oscillatory valve-shaft. Fig. 3 is a similar view taken on a line at right angles to the valve-shaft. Fig. 4 is a horizontal section of the spout, showing the valve in top plan view.

Referring now more particularly to the drawings, wherein like letters of reference designate corresponding parts throughout the several views, A represents the approximately conical-shaped body portion of the funnel, and B the spout or nozzle thereof. In the present instance we have illustrated in the drawings a funnel of the capacity of one gallon; but it is to be understood that the funnel may be made of any desired shape, size, or capacity. The said body portion A is formed with an annular series of beads or grooves c, representing lines of graduations, whereby the amount of liquid contained or poured therein from a pint to a gallon, the

full capacity of the funnel shown, may be readily and conveniently measured with exactitude.

The flow of liquid through the spout or nozzle B is controlled by a disk-valve D, which is provided with suitable packing-rings or segments e to effect a fluid-tight joint when the valve is closed between it and the spout. This valve is mounted to tilt on an oscillatory shaft F, having bearing in the walls of the spout and extended at one end to form an approximately L-shaped arm g, projecting downwardly and laterally on the exterior of the spout. A stout spiral spring h, connecting between said arm and a lug i on the spout, serves to normally force said arm downward and hold the valve closed. In operation when the spout is inserted into the neck of a vessel the outer end of the arm rests upon the upper end or rim edge of the neck and serves as a support for the funnel. By forcibly depressing said funnel the arm g will be automatically forced upwardly and the valve D opened against the tension of the spring to permit the contents of the funnel to run into the vessel.

The advantages of our improved funnel will be clearly understood from the above description taken in connection with the accompanying drawings. By its use the amount of liquid to be poured into a large bottle or other vessel may be determined without the use of a measure, and the exact amount may be poured into a vessel of known capacity without liability of overflowing the same and wasting the liquid.

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

A funnel of the type described, comprising a body portion provided with graduations, a spout, an oscillatory shaft having bearing in the walls of the spout and extended on the exterior at one end to form an arm, a valve mounted to tilt upon said shaft, and a spring acting on said shaft-arm to normally hold the valve closed.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE BROSNAHAM WALKER.

JOHN LAURENCE WALKER.

Witnesses:

E. C. MAXWELL,

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