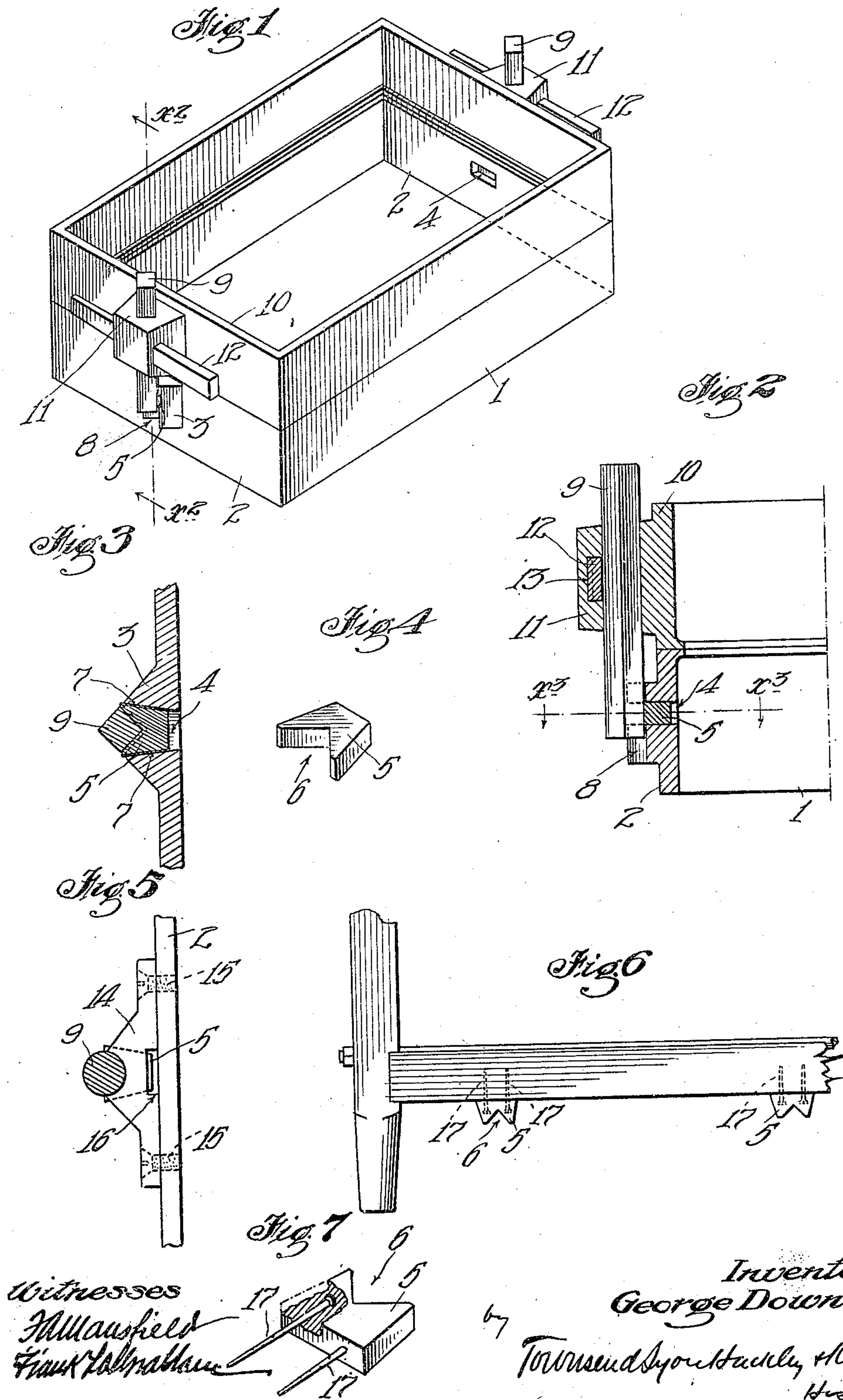


No. 840,999.

PATENTED JAN. 8, 1907.

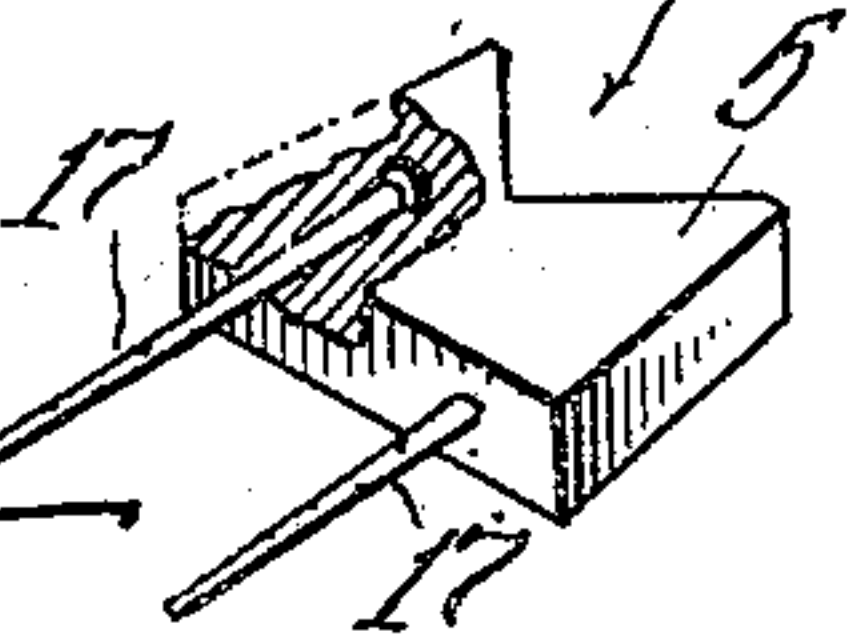
G. DOWNING.
EYE AND PIN FOR FLASKS.
APPLICATION FILED APR. 18, 1906.



Witnesses

Williamfield
Frank J. Mather

Fig 7



Inventor
George Downing

by
Townsend & Boutwell, Attys.

UNITED STATES PATENT OFFICE.

GEORGE DOWNING, OF LOS ANGELES, CALIFORNIA.

EYE AND PIN FOR FLASKS.

No. 840,999.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed April 16, 1906. Serial No. 311,961.

To all whom it may concern:

Be it known that I, GEORGE DOWNING, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented an Improved Eye and Pin for Flasks, of which the following is a specification.

This invention relates to an improved eye and pin for flasks; and one of the objects of the invention is to secure adjustability of the eye to secure a perfect register with the pin.

Another object is to provide a novel pin which is detachable from the cope, so that the pins may be easily renewed or replaced, and pins of various lengths may be applied to the flask without rebuilding the flask.

The accompanying drawings illustrate the invention, and, referring thereto, Figure 1 is a perspective view of an ordinary straight-side flask which is equipped with my improved eye and pin, showing one form of eye-and-pin construction. Fig. 2 is a vertical section, enlarged, on line $x^2 x^2$, Fig. 1. Fig. 3 is a horizontal cross-section through the eye and pin on line $x^3 x^3$, Fig. 2. Fig. 4 is a perspective view in detail of the eye. Fig. 5 is a plan view of a portion of the drag, showing another form of eye and pin, the pin being in section. Fig. 6 is a plan view of a portion of the drag of a floor-flask, showing another method of attaching my improved eye thereto. Fig. 7 is a perspective view, with part broken away, of the form of eye shown in Fig. 6.

Referring to Figs. 1 to 4, inclusive, 1 designates the drag having end pieces 2, each end piece having preferably cast integrally therewith a lug 3. The lug 3 is provided with a wedge-shaped slot 4, the inclined walls of which form a seat for the eye 5. The eye 5 is shown in detail in Fig. 4 and comprises a wedge-shaped member, the wide end of which is provided with a V-shaped notch 6. The eyes 5 are firmly held in place in the eye-seats in the drag by forcing them in, so that they are wedged in place, and they may be adjusted to contact with the pins of the cope to secure a perfect register of the cope with the drag. For example, if the ends of the cope and drag are out of register the eye 5 of one end of the drag may be forced farther into its seat, and the eye at the other end of the drag may be adjusted farther out in its seat a corresponding distance by first re-

moving the eye and then inserting a shim 7 on either side of it, as illustrated in Fig. 3, the eye then being again forced in tightly. If the side pieces of the cope and drag are out of register, the shims on one side of the pins may be removed or reduced in thickness and the shims on the other sides of the eyes may be thickened, which will throw the eyes toward the opposite side piece. The slot 4, as shown in Fig. 3, extends clear through the end piece 2, so that the eye may readily be driven out from its seat when desired. Each lug 3 also has a vertical V-shaped groove 8, as shown in Figs. 1 and 2, which allows the pin to seat upon the eye. This structure of the lug 3 forms a strong support for the eye 5.

9 designates a pin, which in Figs. 1, 2, and 3 is shown square in cross-section, but which can be modified in various ways and still accomplish practically the same results. For instance, the pin may be hexagonal, octagonal, or it may be round in cross-section, as shown in Fig. 5.

The end pieces of the cope 10 are provided with lugs 11, forming pin-holders, each pin-holder having a vertical hole, which may be cut square, as shown in Figs. 1, 2, and 3, or which may be cut round or hexagonal or otherwise, and the pins 9 project through the pin-supports 11, and each pin is secured detachably in place by means of a wedge-shaped key 12, which is inserted in the horizontal slot 13, formed in the pin-holder 11. Thus by removing the keys 12 the pins 9 may be removed from the pin-holders and other pins of different lengths substituted, if desired. It is obviously an easy matter to adjust the pins 9 vertically, if desired.

The keys 12 are made of sufficient length so that they may be utilized as handles for lifting the cope.

In the form shown in Fig. 5 the eye 5 is mounted in an eye-holder 14, the eye-holder 14 being secured to the drag 1 by screws 15. The eye-holder 14 is provided with a wedge-shaped slot similar to the slot 4 of the preceding form, and the eye-holder 14 has a horizontal slot 16, into which the small end of the eye 5 protrudes, which affords a chance to insert an implement to force the eye 5 from its seat when desired. In this form the eye-holder 14 has a semicircular concave groove which allows the passage of the round pin 9 shown, and the eye 5 is also

provided with a concave semicircular notch instead of the V-shaped notch. (Shown in Fig. 4.

Figs. 6 and 7 show another form, in which the eye 5 has pins 17 cast therein, forming means for attaching the eye direct to the drag of a wooden floor-flask.

This device is especially designed and adapted for iron flasks, although I do not limit myself to its use with iron flasks solely, as it may also be applied to wooden flasks.

What I claim is—

1. In a flask, an eye comprising a wedge-shaped member having a notch, the drag of the flask having a wedge-shaped slot for receiving the eye.

2. In a flask, an eye comprising a wedge-shaped member having a notch, the drag of the flask having means for receiving the eye, the cope of the flask having a pin-holder pro-

vided with a pin-hole, a pin mounted in the hole, and means for detachably holding the pin in the hole.

3. In a flask, eyes comprising wedge-shaped members each having a notch, the drag of the flask having wedge-shaped slots in each end piece, the cope having pin-holders on each end piece, each pin-holder having a pin-hole, pins in the holes in the pin-holders, each pin-holder having a transverse slot and keys in the transverse slots in the pin-holders for detachably holding the pins in place.

In testimony whereof I have hereunto set my hand, at Los Angeles, California, this 7th day of April, 1906.

GEORGE DOWNING.

In presence of—

GEORGE T. HACKLEY,
VERNA A. TALBERT.