

983,555.

Fig. 1.

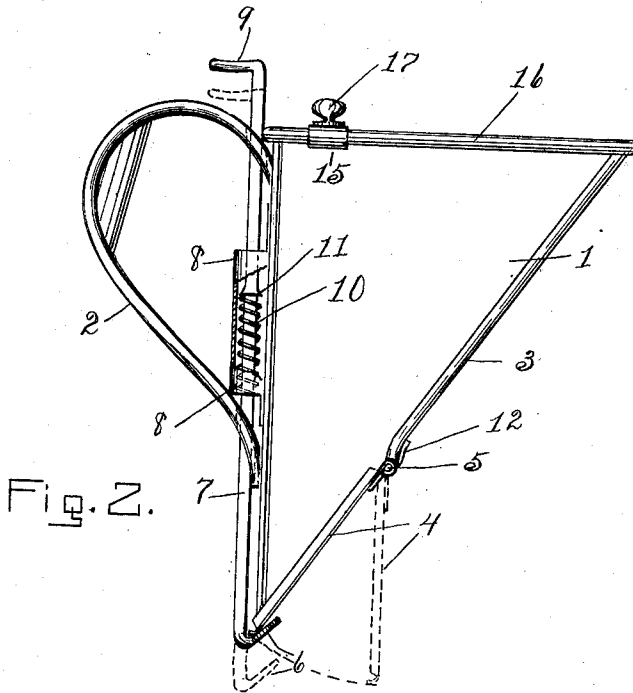


Fig. 2.

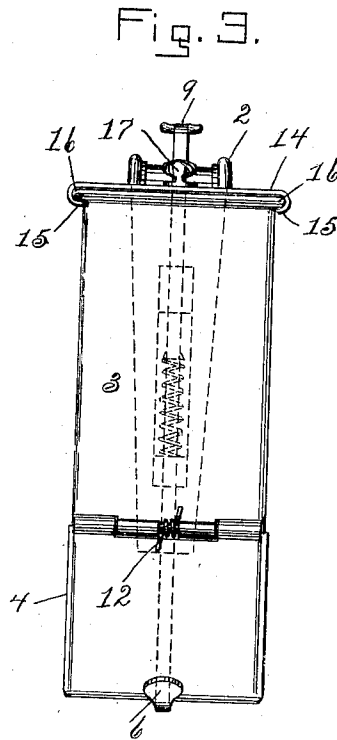


Fig. 3.

J. E. Donzbach.
Rose A. Leduc.

Frederick A. W. Kelley
By Frank C. Curtis
att'y

UNITED STATES PATENT OFFICE.

FREDERICK A. W. KELLEY, OF WATERVLIET, NEW YORK, ASSIGNOR TO TROY SCALE COMPANY, OF TROY, NEW YORK, A CORPORATION OF NEW YORK.

SELF-DUMPING HAND-SCOOP.

983,555.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed August 4, 1910. Serial No. 575,442.

To all whom it may concern:

Be it known that I, FREDERICK A. W. KELLEY, a citizen of the United States, residing at Watervliet, county of Albany, and State of New York, have invented certain new and useful Improvements in Self-Dumping Hand-Scoops, of which the following is a specification.

The invention relates to such improvements and consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the reference characters marked thereon, which form a part of this specification. Similar characters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a top plan view of my improved self-dumping hand-scoop. Fig. 2 is a side elevation of the same. Fig. 3 is a front elevation of the same.

The principal object of the invention is to facilitate the use and emptying of a hand-scoop such as is commonly used in measuring beans, grain or the like.

Other objects will appear in connection with the following description.

Referring to the drawing wherein the invention is shown in preferred form, 1, represents the body of the scoop having a handle, 2, whereby the same can be conveniently manipulated. The front-wall, 3, of the scoop converges downward toward the rear-wall thereof, as shown in Fig. 2, thus making the body of the scoop tapered from top to bottom. A lower section, 4, on said front-wall is made separate from the body of the scoop and hinged thereto at its upper end at, 5, whereby it is adapted to swing from the closed position shown by solid lines in Fig. 2 to the position indicated by dotted lines in said figure, and open the bottom of the scoop for the automatic dumping of its contents. The hinged section, 4, which thus forms a valve for the bottom-opening of the scoop, is adapted to be held in closed position by means of a hook-shaped latch, 6, on the lower end of a rod, 7, supported to slide vertically in a bearing, 8, and having on its upper end a thumb-piece, 9, accessible to the thumb of the hand grasping the handle 2. The rod, 7, is held in a raised position by means of a coil-spring, 10, confined between a shoulder, 11, on said rod and the bottom-wall of the bearing, 8.

The scoop can be used in the ordinary manner to dip up a quantity of small merchandise such as beans, grain or the like, which can then be dumped into a bag or other receptacle by holding the lower end of the scoop in line with the bag-opening or open end of the receptacle, and then pressing upon the thumb-piece 9. As soon as the catch, 6, has been thus depressed below the bottom edge of the hinged section, 4, gravity and the weight of the contents of the scoop will cause said hinged section to swing open and said contents to be deposited in said bag or receptacle. The hinged section, 4, can then be closed by hand and locked by releasing the pressure on the thumb-piece 9. I prefer, however, to provide a weak spring, 12, of sufficient strength only to swing the hinged section, 4, to closed position when the scoop is empty.

The body of the scoop is preferably made of a definite measuring capacity, and I have shown the same provided with a strike, 14, comprising a flat strip of metal extending across the open top of the scoop, and having its ends inturned to embrace the beads or ribs, 16, along the sides of the open top of the body of the scoop, as shown at, 15, in Fig. 3. The strike may be provided with an operating handle, 17, if desired, whereby the strike can be slid back and forth across the open top of the scoop to level the contents thereof.

What I claim as new and desire to secure by Letters Patent is—

1. In a self-dumping hand-scoop, the combination with a scoop-body having one of its walls downwardly inclined toward another, and a lower section of said inclined wall formed separate from and hinged to the body of the scoop; of a latch for holding said hinged section closed; and a handle for said scoop, and a thumb-piece for actuating said latch both in position to be grasped and engaged by the same hand of the operator.

2. In a self-dumping hand-scoop, the combination with a scoop-body having one of its walls downwardly inclined toward another, and a lower section of said inclined wall formed separate from and hinged to the body of the scoop; of a rod slidably mounted on the body of the scoop; a hook on the lower end of said rod adapted to engage said hinged section to hold the same closed; a

handle for said scoop, and a thumb-piece on the upper end of said rod, both adapted to be grasped by the same hand of the user; and a spring for yieldingly supporting said rod in raised position.

3. The combination with a self-dumping hand-scoop having guide-ribs along the sides of its open top, and having a hinged member adapted to close a bottom-opening therein; a latch for holding said hinged member closed; and a handle for the scoop, and a

thumb-piece for releasing said latch, both adapted to be grasped by the same hand; of a strike extending across the open top of the scoop, and slidably engageable with said ribs.

In testimony whereof, I have hereunto set my hand this 19th day of July, 1910.

FREDERICK A. W. KELLEY.

Witnesses:

ROSE A. LEDUC,
J. E. DONSBACH.