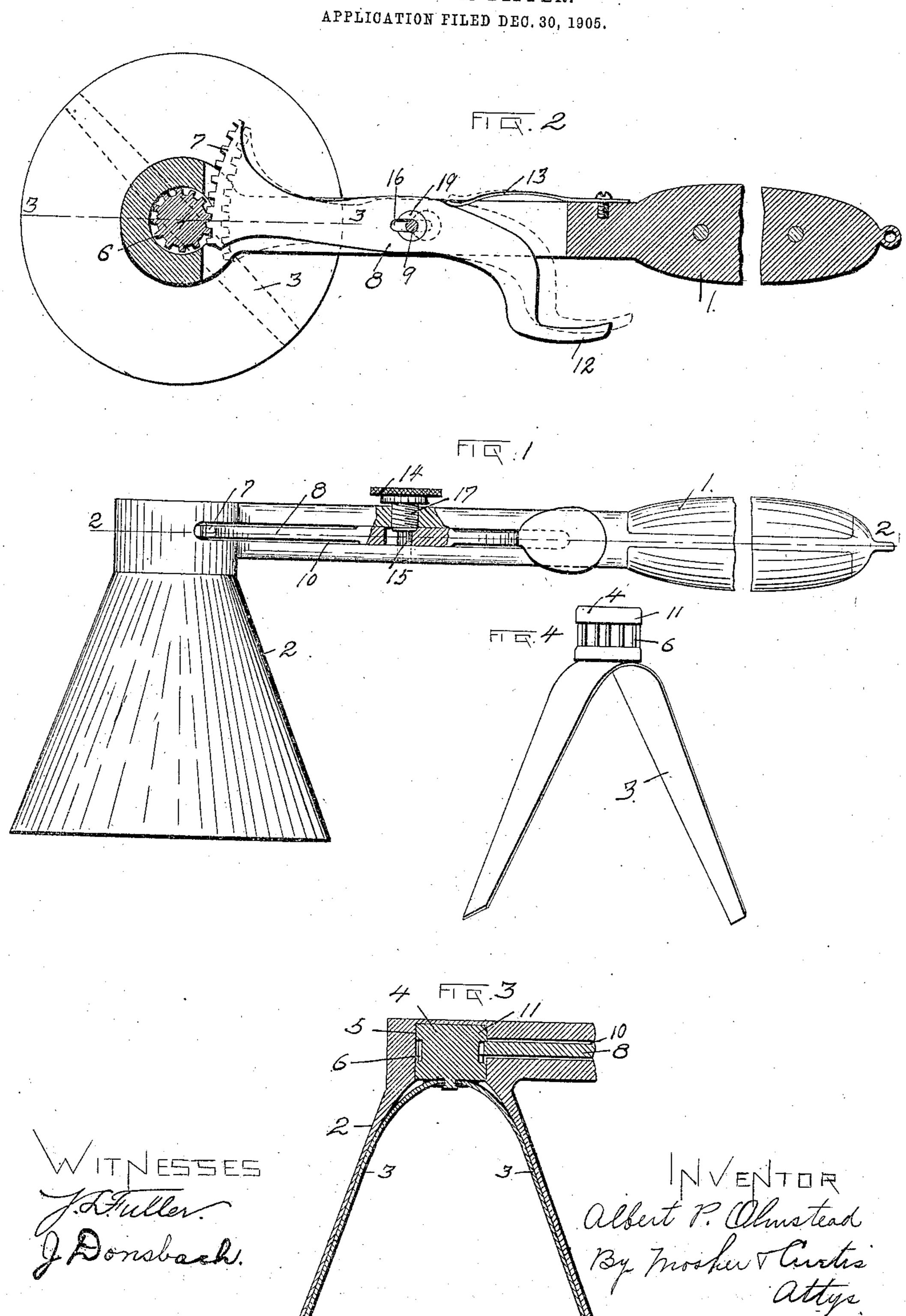
A. P. OLMSTEAD.

ICE CREAM DIPPER.

APPLICATION FILED DEG. 30, 190



UNITED STATES PATENT OFFICE.

ALBERT P. OLMSTEAD, OF WATERVLIET, NEW YORK, ASSIGNOR TO LAZELLE A. MICHAEL, TRUSTEE, OF TROY, NEW YORK.

ICE-CREAM DIPPER.

No. 819,373.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed December 30, 1905. Serial No. 293,931.

To all whom it may concern:

Be it known that I, Albert P. Olmstead, 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 Ice-Cream Dippers, of which the following is a specification.

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

scribed 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 view in side elevation, partly broken away and partly in section, of my improved ice-cream dipper.

Fig. 2 is a horizontal section of the same, taken on broken line 2 2 in Fig. 1. Fig. 3 is a central vertical longitudinal section taken on the broken line 3 3 in Fig. 2. Fig. 4 is a view in side elevation of the scraper detached.

The principal object of the invention is to provide an easily-operated and sanitary dipper for use in serving ice-cream and other

plastic substances.

Referring to the drawings, wherein the invention is shown in its preferred form, 1 is the handle, and 2 is the bowl of the dipper. The bowl may be of any desired form, circular in cross-section, that shown in the drawings being conical in form. The handle projects perpendicularly to the axis of the bowl.

The bowl and handle are shown made of a single piece of metal; but they can be made separate from each other and secured together in any known manner to form a sub-

40 stantially integral structure.

Located within the bowl is a rotary scraper 3, comprising a strip of sheet metal bent to conform substantially to the shape of the interior of the bowl, said scraper being fixedly upon a hub 4, rotatably mounted in a bearing 5 at the apex of the bowl. The hub is provided with gear-teeth 6, adapted to mesh with the teeth of a gear-rack 7 on the end of a lever 8, fulcrumed upon the handle of a lever 8, fulcrumed upon the handle at 9 and adapted to play in the slot 10 in the handle, which slot communicates with the hub-bearing at the apex of the bowl to permit the meshing of the teeth on said hub and gear-rack, respectively. The hub 4 is formed

with a peripheral flange 11, overhanging the gear-teeth thereon and adapted in the normal position of the lever 8 to overhang the teeth on the gear-rack 7, whereby said gear-rack serves as a means for locking the hub within its bearing as well as a means for ro- 60 tating said hub and scraper. The lever 8 is provided with a thumb-piece 12, adapted to be engaged by the thumb of the hand of the operator which grasps the handle in using the device, whereby said lever can be positively operated in one direction against the force of the spring 13, which operates the lever in the opposite direction when the thumb-pressure is released.

In using the dipper the handle is grasped 70 by the hand of the operator and the bowl is passed through the body of ice-cream or other plastic material to be served, thereby filling the bowl. The dipper is then held with the bowl over the plate, glass, or other 75 receptacle in which the material is to be served and the lever 8 is operated alternately by the thumb of the operator and the spring 13 to cause rotative movements of the hub 4 and scraper 3, whereby the contents of 80 the bowl are loosened and freed from the walls thereof and permitted to fall by gravity

into said receptacle.

The fulcrum-bearing for the lever 8 is formed by a thumb-screw 14, having a con- 85 tracted end portion 15, which extends through a longitudinal slot 16 in the lever, said screw having a threaded shank fitting a screw-threaded aperture in the upper part of the handle and terminating in a shoulder 90 adapted to fit a countersink 19 in the lever 8, at the outer end of the slot 16. When the screw 14 is fully inserted, its said shoulder is located within the countersink 19, preventing a longitudinal movement of the lever 8 95 and maintaining said lever with its gear-rack in engagement with the gear-teeth on the hub and in position to lock the hub within its bearing, as above described. When it is desired to remove the scraper, as is done in 100 cleaning the dipper, the screw 14 is loosened sufficiently to withdraw its shoulder from the countersink 19, whereupon the lever 8 can be forced outwardly to the position indicated by dotted lines in Fig. 2 to disengage 105 its gear-rack from the hub 4, thereby releasing said hub and the scraper mounted thereupon and permitting the same to be removed

from the open end of the bowl. By further unscrewing the screw 14 the lever 8 can be removed from the slot 10, thus making it possible to thoroughly cleanse every part of the device.

The spring 13 is so placed as to oppose the outward movement of the lever 8, as well as the thumb-induced movement thereof, thus serving to retain the gear-rack in engagement with the scraper-hub to prevent accidental release of the scraper and hub.

What I claim as new, and desire to secure

by Letters Patent, is-

1. A dipper for plastic material comprising in combination a handle and bowl provided with a hub-bearing at the inner end of,
and open to, the bowl; a toothed scraper-hub
rotatively mounted in said hub-bearing and
insertible and removable through the bowl,
so said hub having a peripheral flange overhanging on the inner side the teeth thereon;
a scraper fixed upon said hub; and a handlever mounted upon the handle and having a
gear-rack engageable with the teeth on the
thub on the outer side of said overhanging
flange.

2. A dipper for plastic material comprising in combination a handle and bowl provided with a hub-bearing at the inner end of the bowl; and with a slot in the handle opening laterally into said bearing; a toothed scraper-hub rotatively mounted in said hub-

bearing; a scraper fixed upon said hub; a hand-lever located in said slot in the handle and having a gear-rack engageable with said 35 toothed hub; and a lever-actuating spring.

3. A dipper for plastic material comprising in combination a handle and bowl provided with a hub-bearing at the inner end of, and open to, the bowl and with a slot in the 40 handle opening laterally into said bearing; a toothed scraper-hub rotatively mounted in said hub-bearing and insertible and removable through the bowl, said hub having a peripheral flange overhanging on the inner side 45 the teeth thereon; a scraper fixed upon said hub; a hand-lever located within said handle-slot and having a gear-rack engageable with the teeth on the hub on the outer side of said overhanging flange, said lever being pro- 50 vided with a longitudinal fulcrum-slot formed with an enlargement at its outer end; a fulcrum-screw fitting a screw-threaded aperture in the handle and having a contracted portion passing through the slot in said lever, 55 and a shoulder adapted to fit said slot enlargement.

In testimony whereof I have hereunto set my hand this 28th day of December, 1905.

ALBERT P. OLMSTEAD.

Witnesses:

Mrs. J. W. Dorman, T. L. Fuller.