No. 671,509. Patented Apr. 9, 1901.

C. CRANE.

RECEPTACLE FOR PASTE, &c.

(Application filed June 2, 1900.)

(No Model.)

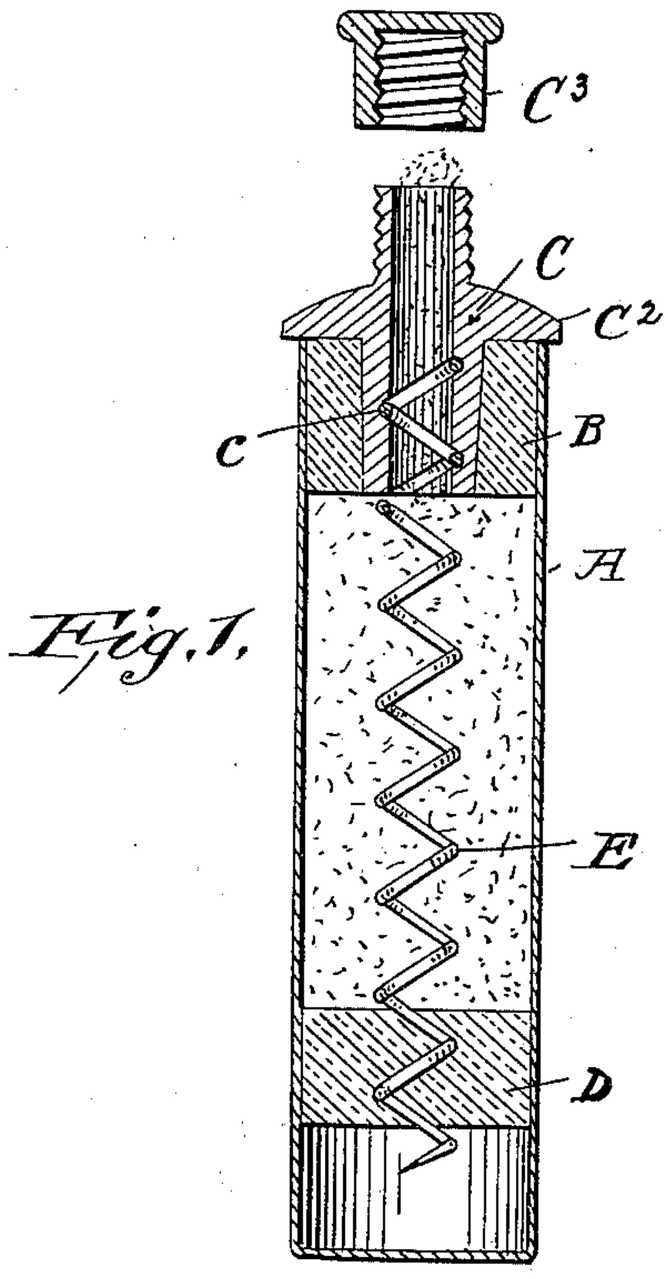


Fig. 1.

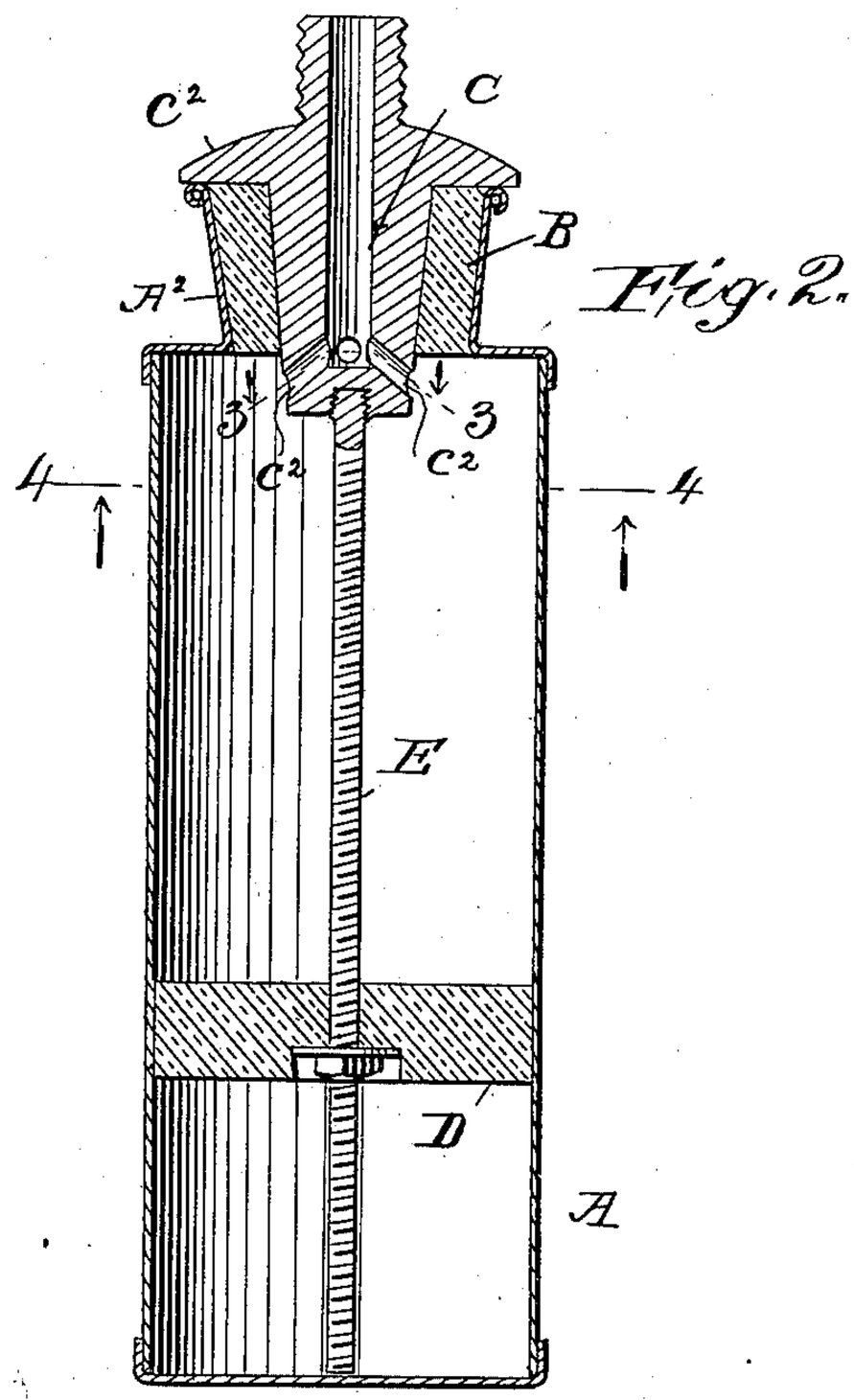
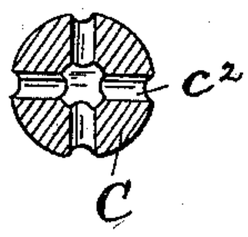


Fig. 2.

Fig. 3.



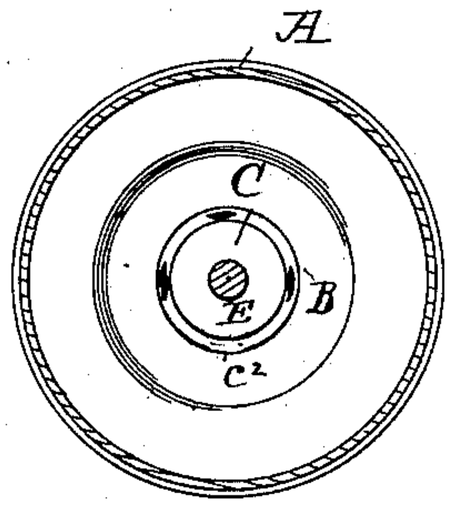


Fig. 4.

WITNESSES

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CHARLES CRANE, OF RAHWAY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO JOSEPH A. HEROLD, OF SAME PLACE.

RECEPTACLE FOR PASTE, &c.

SPECIFICATION forming part of Letters Patent No. 671,509, dated April 9, 1901.

Application filed June 2, 1900. Serial No. 18,805. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CRANE, a citizen of the United States, residing in Rahway, Union county, New Jersey, have invented certain new and useful Improvements in Receptacles for Paste and Analogous Substances, of which the following is a specification.

The object of my invention is to provide a receptacle from which the contents can be ejected in the desired quantity in a convenient and expeditious manner; and to this end my invention comprises a case or retainer provided with a nozzle or outlet, a head or plunger movable longitudinally within the case adapted to force the contents through said nozzle, and means for operating said head or plunger by the relative rotation of the parts to eject the contents as desired.

The invention also consists in the novel details of improvement and the combinations of parts that will be more fully hereinafter set forth and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part hereof, wherein—

Figure 1 is a central longitudinal section of a receptacle embodying my invention. Fig. 2 is a similar view of a modified form of receptacle more particularly adapted for greater contents. Fig. 3 is a section on the line 3 3 in Fig. 2, looking downwardly. Fig. 4 is a horizontal section on the line 4 4 in Fig. 2, looking upwardly.

In the accompanying drawings similar letters of reference indicate corresponding parts in the several views.

The letter A indicates a case or retainer provided with a stopper B at one end, the opposite end being suitably closed. The stopper B may be in the form of a cork fitted tightly within the bore of case A or in a neck A^2, attached thereto or formed integral therewith.

C is a nozzle or outlet, shown in the form of a flanged tubular body, having a bore communicating with the interior of case A, the flange or head C^2 being in position to be grasped by the operator, and for convenience its rim may be milled. In Fig. 1 the head or flange is shown projecting beyond the case A, and in Fig. 2 beyond the neck A^2, so that it may be grasped, whereby the case may be rotated independently of the nozzle. The nozzle C is located in a bore in stopper B, whereby they may be rotated independently. If preferred, however, stopper B and outlet C can be held firmly together, as by friction, so that case A and stopper B can rotate independently. The outlet or nozzle C may have a detachable cap C^3.

Within case A is a head or plunger D, adapted to slide longitudinally therein, whereby a space is formed within the case between said head and the stopper for the contents. When the head or plunger D is moved toward the stopper, the contents can be forced through the nozzle. It is designed to cause the head or plunger D to move toward the outlet by the relative rotation of case A and nozzle C, and for this purpose I have shown a screw or threaded rod E within the case adapted to coact with the head or plunger.

In Fig. 1 the screw E is shown as made of wire substantially in the form of a corkscrew, adapted to work in a hole in the head or plunger D, and in such case the latter may be made of cork or any suitable material. The screw is to be attached to the outlet or nozzle C, and for convenience I have shown the bore in the latter as provided with a groove *c*, adapted to receive the screw E for this purpose. The screw extends near to the bottom of case A. The head or plunger D is fitted within the case A so as to rotate therewith, as by frictional engagement, and yet has a sliding fit within the case.

In Fig. 2 the screw E is shown in the form of a threaded rod secured at the inner end of nozzle C, as by meshing in a threaded bore therein, and the nozzle is shown provided with a plurality of apertures c^2, leading to its bore. The head or plunger D is provided with a bore to receive screw-rod E, and F is a nut secured to the head, so as not to rotate independently thereof, but working on the threaded rod D.

In charging the receptacle the stopper is removed, the head or plunger D is placed within the same near or at the lower end, the contents are filled in upon the head or plunger, and the stopper, nozzle, and screw are inserted, so that the screw will engage with the head or plunger. Where a removable

bottom or cover *a* is used, the case A may first be filled or charged, head or plunger D inserted and adjusted to the feeding screw or rod D, and said bottom or cover placed in position.

In either construction shown the arrangement is such that by holding the nozzle C and simultaneously rotating case A, or vice versa, the head or plunger D will be caused to travel within the case toward the stopper, whereby more or less of the contents will be pushed through the outlet. The device is particularly adapted to contain paste or semifluid or a powder, and the same can be retained within the receptacle comparatively air-tight and can be expeditiously withdrawn by a simple rotary movement of the parts. The case can be made of any suitable material—such as metal, glass, celluloid, and the like—and may have such a base that the device can stand upright thereon. A further advantage is that the receptacle can be refilled and used many times.

I do not limit my invention to the precise details of improvement shown and described, as they may be varied without departing from the spirit thereof, and by the term "screw" I mean either construction of part E shown in Figs. 1 and 2 or the equivalent thereof.

Having now described my invention, what I claim is—

1. A receptacle of the character described, comprising a case, a head or plunger adapted to travel therein, a screw within the case adapted to cause the head or plunger to travel along the same to push out the contents upon the relative rotation of the parts, means for rotatively supporting the screw, and a nozzle rotatively supported at the outlet of the case, substantially as described.

2. A receptacle of the character described, comprising a case, a head or plunger adapted to travel therein, a nozzle journaled at one end of the case, and a screw connected with the nozzle and adapted to cause the head or plunger to move toward the outlet, substantially as described.

3. A receptacle of the character described, comprising a case, a head or plunger adapted to travel therein, a stopper at the end of the case, a nozzle connected with the stopper so as to rotate independently of the case, and a screw connected with the nozzle adapted to move the head or plunger within the case, substantially as described.

4. A receptacle of the character described, comprising a case, a stopper at its open end, a nozzle leading through the stopper and having a head or flange projecting beyond the adjacent part of the case, whereby the latter can rotate independently of the nozzle, a screw connected with the nozzle, a head or plunger having a sliding fit within the case and connected with the case so as to rotate therewith and connected with the screw to travel within the case by the relative rotation of the parts, substantially as described.

CHAS. CRANE.

Witnesses:
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T. F. BOURNE.