

(No Model.)

D. C. RIPLEY.
CONDIMENT MILL.

No. 386,722.

Patented July 24, 1888.

FIG. 1

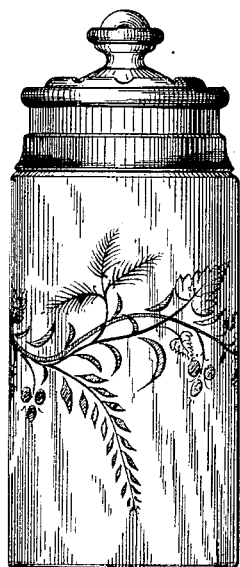


FIG. 2.

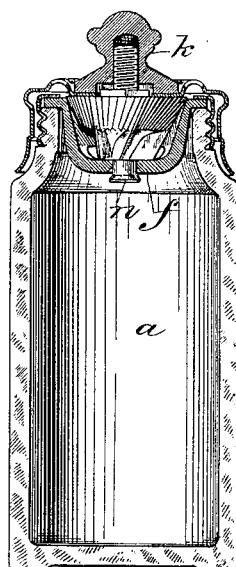


FIG. 8.

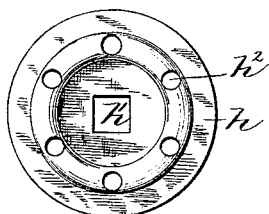


FIG. 6.

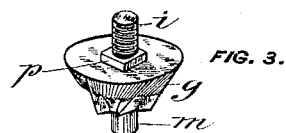
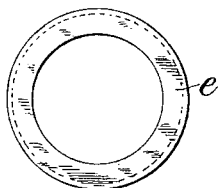


FIG. 3.

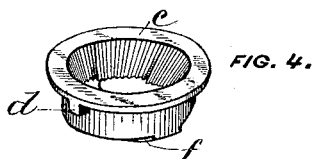


FIG. 4.

FIG. 9.



FIG. 7.

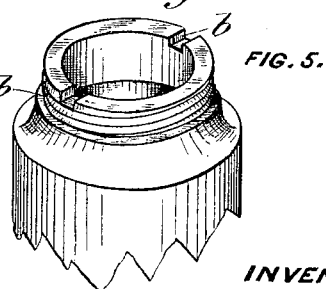
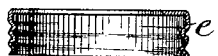


FIG. 5.

WITNESSES.

W. B. Corwin.
H. L. Gill.

INVENTOR,

Daniel C. Ripley.

BY

Bakerwell & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

DANIEL C. RIPLEY, OF PITTSBURG, PENNSYLVANIA.

CONDIMENT-MILL.

SPECIFICATION forming part of Letters Patent No. 386,722, dated July 24, 1888.

Application filed December 30, 1886. Serial No. 223,007. (No model.)

To all whom it may concern:

Be it known that I, DANIEL C. RIPLEY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Condiment-Mills; and I do hereby declare the following to be a full, clear, and exact description thereof.

My improvement consists of an improvement in spice or condiment bottles, having a grinding or reducing mill in its upper end, whereby the spice-berries contained therein are reduced to the proper degree of fineness and sifted through the perforated top.

To enable others skilled in the art to make and use my improvement I will now describe it by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the complete device; Fig. 2, a vertical section of the same, partly in elevation. Fig. 3 is a view of the runner of the grinding-mill. Fig. 4 is a view of the grinding-shell. Fig. 5 is a view of the top of the bottle. Figs. 6 and 7 are respectively plan and sectional views of the securing-flange. Figs. 8 and 9 are respectively plan and sectional views of the perforated cap.

Like letters of reference indicate like parts in each.

I make a glass or other suitable bottle or holder, *a*, with a mouth provided with grooves or recesses *b*, for receiving the grinding-shell *c*, the said grinding-shell being provided with lugs or projections *d*, which fit in the grooves or recesses *b*, which hold the grinding-shell stationary. The outside of the mouth or neck of the bottle *a* is screw-threaded, or has an equivalent provision for attaching the securing-flange *e*, which holds the grinding-shell *c* in place thereto. The grinding-shell *c* is provided with a strap, *f*, in which the lower end of the runner or grinding nut *g* is stepped. The cap *h* has a square central opening, *h'*, through which the supporting-screw *i* of the runner *g* projects vertically, and which fits over the square nut or hub *p* at the base of the screw. The runner is attached to the cap *h* by means of a nut, *k*, which screws on the upper end of the screw *i* above the surface of the cap *h*. The cap *h* is perforated, as at *h²*, for discharging the ground material which passes the runner-nut.

Thus constructed my device is put together in the following manner: The runner is secured to the grinding-shell by inserting the pin *m* on the lower end of the grinding-nut, through the central perforation in the strap *f* of the grinding-shell, and then upsetting the lower end of the pin *m*, as shown at *n* in Fig. 2. The grinding-shell, with the runner attached thereto, as described, is inserted into the mouth of the bottle *a*, so that the lugs *d* shall enter into the recesses *b*, and is then fastened to the bottle by means of the securing-flange *e*. The cap is placed over the screw *i*, so that its square central opening, *h'*, shall fit over the corresponding part, *p*, of the grinding-nut, and, finally, the nut *k* is screwed on the upper end of the screw *i*, and the device is in the condition shown in Figs. 1 and 2, ready for use.

In using, the bottle is inverted, the cap is held in one hand, and the bottle turned with the other, causing the spice-berries to be ground between the grinding-surfaces and the comminuted material to fall through the perforations *h²* of the cap.

It is apparent that other means of preventing the rotation of the grinding-shell *c* in the mouth of the bottle may be adopted instead of the lugs *d* and recesses *b*—as, for instance, the contact-surfaces may be roughened, and by screwing the cap and flange down tight the friction will be sufficient to prevent any such rotation. In so far as the first claim is concerned I do not limit myself to the particular construction of the grinding-mill shown and described, because many other forms are known, some of which can easily be adapted to use with my improvement by any ordinary skilled mechanic. It is not necessary that the device which connects the runner *g* and the cap *h* should consist of a square hub, *p*, and the square hole *h'*, because changes in this part are obvious to any skilled mechanic.

Modifications of other parts might be suggested, so as to indicate that, in mere features of construction not covered by the claims, mechanical changes may be made without differing from my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a condiment-bottle

with a grinding-shell secured in its mouth, a
perforated revoluble cap, and a runner se-
cured to the cap and operating in conjunction
with the grinding shell, substantially as and
5 for the purposes described.

2. The combination of a condiment-bottle
with a grinding shell removably secured in its
mouth, a runner stepped in the shell, and a
perforated revoluble cap to which the runner

is secured, substantially as and for the pur- 10
poses described.

In testimony whereof I have hereunto set my
hand this 28th day of December, A. D. 1886.

DANIEL C. RIPLEY.

Witnesses:

THOMAS B. KERR,
GEORGE W. BLAIR.