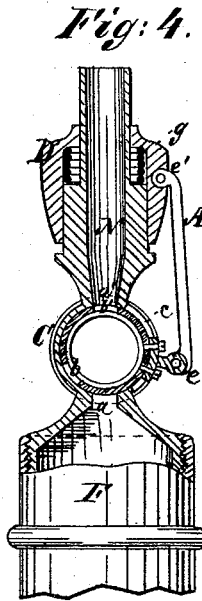
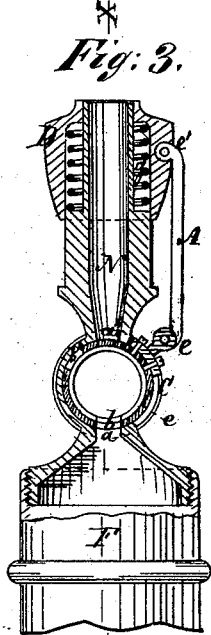
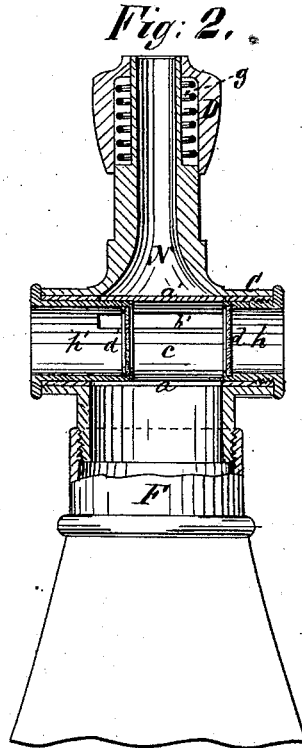
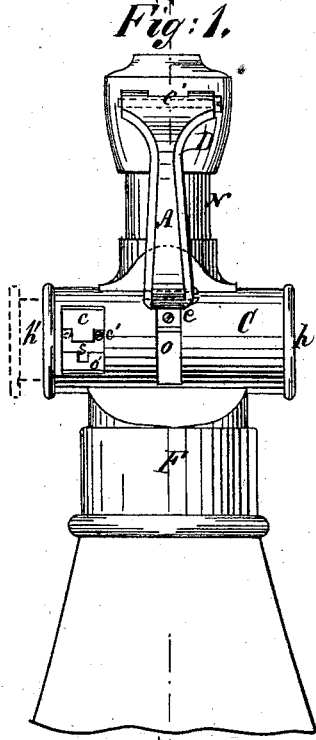


T. HICK & G. W. WEATHERWAX.
Powder and Shot Charger.

No. 163,196.

Patented May 11, 1875.



Witnesses:
Henry Eichling,
Fred. E. Bondy,

Inventors
Theo. A. Hicks
George W. Weatherwax.
per *Hick & Wick*
their Attys.

UNITED STATES PATENT OFFICE.

THEOBALD HICK AND GEORGE W. WEATHERWAX, OF ST. JOSEPH, MICH.

IMPROVEMENT IN POWDER AND SHOT CHARGERS.

Specification forming part of Letters Patent No. **163,196**, dated May 11, 1875; application filed April 8, 1875.

To all whom it may concern:

Be it known that we, THEOBALD HICK and GEORGE W. WEATHERWAX, both of St. Josephs, county of Berrien, State of Michigan, have invented an Improved Top for Powder-Flasks, of which the following is a specification, reference being had to the accompanying drawings forming part hereof.

Our invention consists in the combination, in the top of a powder-flask, of a fixed exterior cylinder, placed transversely between the body of the flask and the nozzle-piece, and provided with openings into the flask and nozzle-piece, within which is arranged a movable interior cylinder, having the peculiar construction hereinafter particularly described, and which is operated to make a partial revolution by a hinged arm extending from the said interior cylinder to a collar, arranged to slide upon the nozzle-piece, which is held in place upon the end of the nozzle-piece by a coil-spring, whereby, when the flask is not in use in loading a gun, a charge of powder of a regulated quantity may flow into and fill the said interior cylinder without escaping through the nozzle-piece, and whereby, when the flask is used in loading a gun, the nozzle-piece being inserted into the gun-muzzle, and pressure exerted to slide the collar back upon the nozzle-piece, the interior cylinder will be partly revolved, so that the charge of powder therein contained will be delivered into the gun, while the escape of the powder remaining in the flask will be cut off.

Figure 1 is a front elevation of a powder-flask top embodying my invention. Fig. 2 is a longitudinal central sectional view of the same. Fig. 3 is a similar view of the same on the line *x x*, Fig. 1, showing the position of the parts when the flask is not in use in loading a gun; and Fig. 4 is a similar view of the same, showing the position of the parts during the operation of loading.

Similar letters of reference indicate similar parts.

C is the exterior cylinder, fixed transversely between the body of the flask F and the nozzle-piece N, and provided with the opening *a* into the flask, and the opening *a'* into the nozzle-piece. *c* is the movable interior cylinder, arranged within the exterior cylinder C, as

shown, and provided with the openings *b* and *b'*, as shown, situated so that when the opening *b* is opposite or corresponds with the opening *a* in the exterior cylinder C, the opening *a'* in the exterior cylinder will be closed by the wall of the interior cylinder *c*, and the opening *b'* will lie against the wall of the exterior cylinder C; and when the opening *b'* is brought opposite to or corresponds with the opening *a'* in the exterior cylinder C, the opening *a* in the exterior cylinder will be closed by the wall of the interior cylinder *c*, and the opening *b* will lie against the wall of the exterior cylinder. The interior cylinder *c* is provided, upon one end, with the screw-head *h*, and upon the other end with the adjustable extension head *h'*, which may be secured in the position desired by means of the catch *e'*, fixed therein, as shown, arranged to engage in the notched slot *s* in the wall of the interior cylinder *c*, and visible through the slotted opening *o'* in the wall of the exterior cylinder C. The disks or head-pieces *d* and *d'* of the heads *h* and *h'*, respectively, may be made of glass, so that a view of the interior of the cylinder *c* may at all times be readily had. A is an arm, hinged at one end to the interior cylinder *c* at *e*, through the slotted opening *o* in the exterior cylinder C, and hinged at the other end to the collar D at *e'*. The collar D is arranged to slide upon the nozzle-piece N, as shown, and is sustained and held in place upon the upper end thereof by the coil-spring *g*, which is arranged about the nozzle-piece within the collar, as shown.

Now it is evident that when the flask is not in use in loading a gun, the various parts will be held in the position shown in Figs. 1, 2, and 3, the opening *b* being opposite to or corresponding with the opening *a* into the flask, and the opening *a'* into the nozzle-piece being closed by the wall of the cylinder *c*, the opening *b'* in the interior cylinder *c* lying against the wall of the exterior cylinder C, so that the powder in the flask may readily flow into and fill the cylinder *c*, while its escape through the nozzle is prevented. And it is also evident that, by placing the nozzle-piece N in the muzzle of the gun, and pressing the collar D back upon the nozzle-piece, the arm A will operate to turn the cylinder *c*, so that the

opening *b'* will correspond with the opening *a'* into the nozzle-piece, and the opening *a* into the flasks will be closed by the wall of the cylinder *c*, the opening *b* being moved to lie against the wall of the exterior cylinder C, as shown in Fig. 4, so that the charge of powder contained in the cylinder *c* will be delivered into the gun, while the further flow of powder from the flask into the cylinder *c* will be cut off. It is also evident that, by means of the extension-head *h'*, the charge of powder to be used may be gaged or regulated.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, in the top of a powder-

flask, of the fixed exterior cylinder C, having the slotted openings *o* and *o'*, and the openings *a* and *a'*, communicating, respectively, into the flask F, and the nozzle-piece N, the movable interior cylinder *c*, with its openings *b* and *b'*, the screw-head *h*, and the extension-head *h'*, provided with the catch *c'*, engaging in the notched slot *s*, the hinged arm A, the collar D, and the coil-spring *g*, as described.

THEOBALD HICK.

GEORGE W. WEATHERWAX.

Witnesses:

JAMES H. CANFIELD,
DAMON A. WINSLOW.