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Griffis

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[54] **REVOLVER RELOADING DEVICE**

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[52] **U.S. Cl.** **42/89**
[51] **Int. Cl.** **F42b 39/04**
[58] **Field of Search** 42/89

[56] **References Cited**

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[57] **ABSTRACT**

A two-piece device that is preferably molded from a polymerized resin for use in rapidly reloading a revolver with cartridges, and which is so low in cost that it may be discarded after the reloading operation is completed. The device includes a body in which a number of parallel, circumferentially spaced bores are formed in which cartridges are stored, with the bullets projecting outwardly from the body. A number of circumferentially spaced slots are formed in the body that extend inwardly from the exterior surface of the body to communicate with the bores.

A ring is slidably mounted on the body from which a number of fingers project inwardly through the slots and bores to positions rearwardly of the cartridges. When the bullets are disposed in the rear portions of cavities in a revolver cylinder, and the ring is moved from a first to a second position, the fingers eject the cartridges from the body into the cavities to reload the revolver.

10 Claims, 9 Drawing Figures

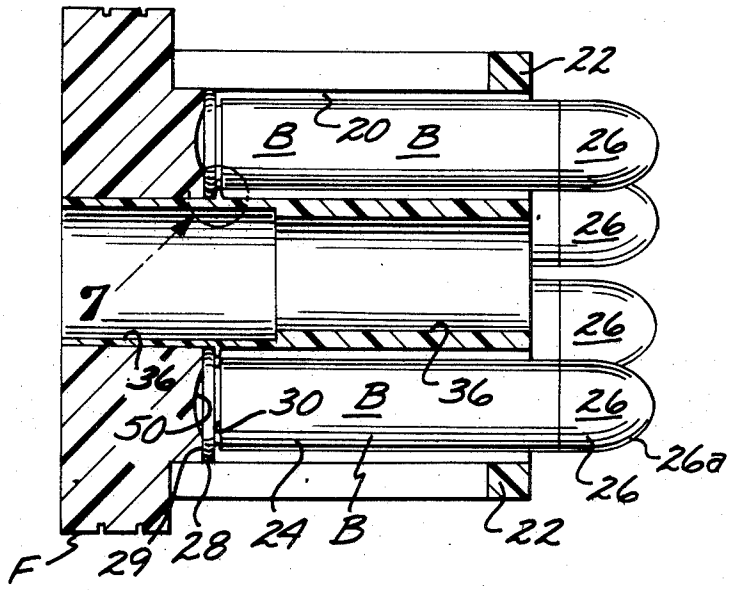


FIG. 1

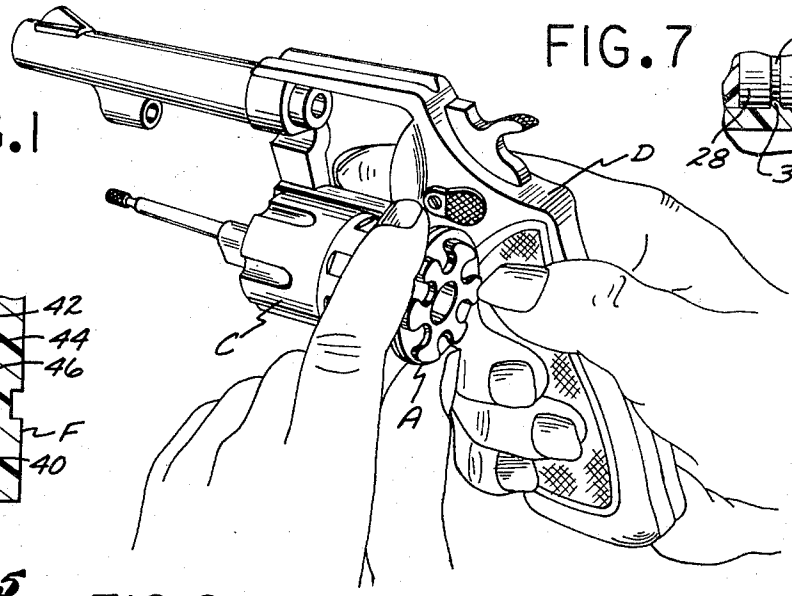


FIG. 7

FIG. 8

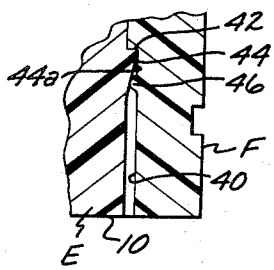


FIG. 2

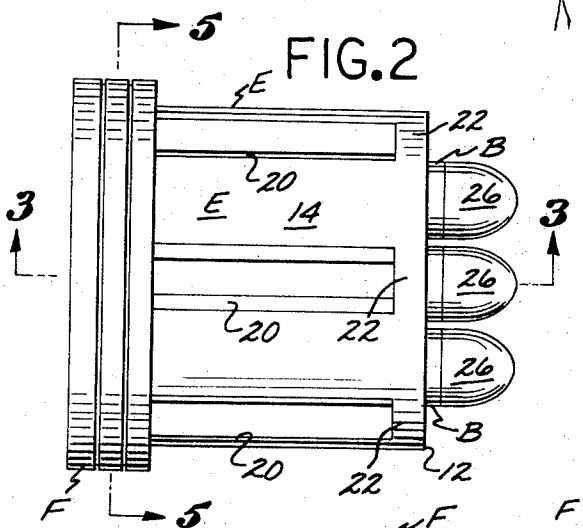


FIG. 3

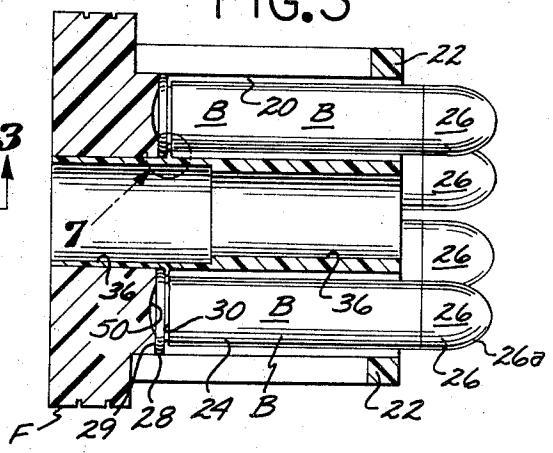


FIG. 4

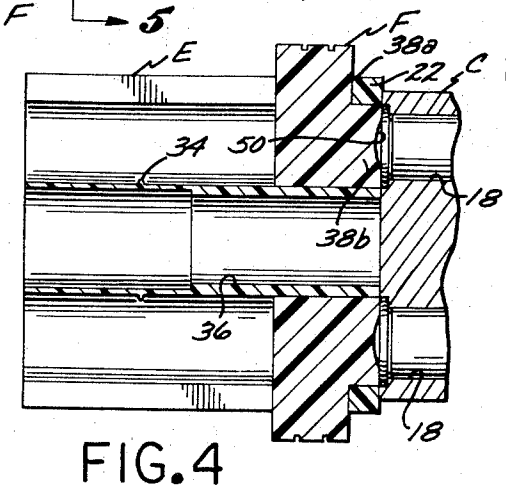


FIG. 5

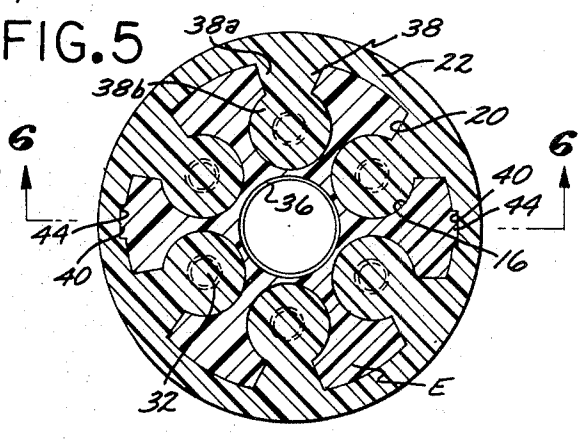
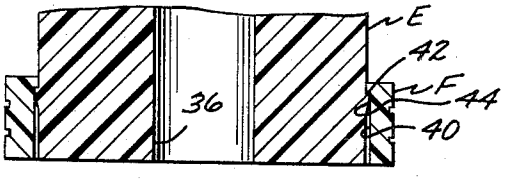


FIG. 6



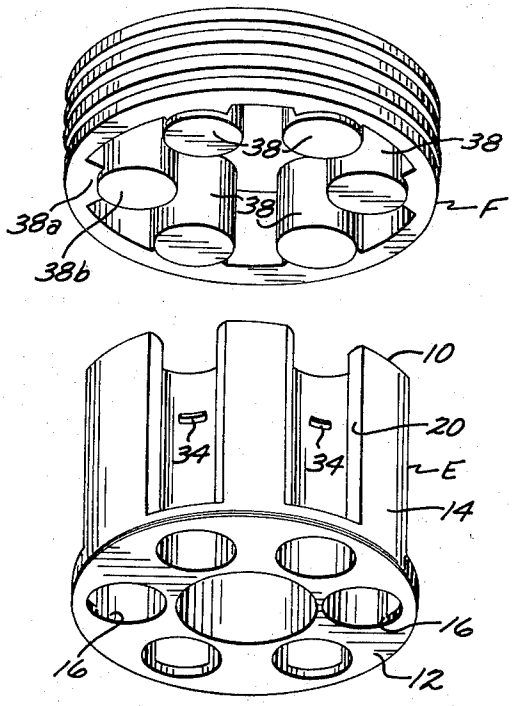


FIG.9

REVOLVER RELOADING DEVICE

BACKGROUND OF THE INVENTION

1. Field of the Invention

Revolver reloading device, and like accessories.

2. Description of the Prior Art

In the past, various types of revolver reloading devices have been devised and marketed that retail at from 5 to 12 dollars apiece. Obviously, such a reloading device is too expensive to be discarded after use.

The primary purpose in devising the present invention is to provide a reloader that is compact, light in weight, can be molded from plastic, and is particularly adapted for use by police, and the like, who must frequently reload a revolver in a minimum length of time under hazardous conditions.

SUMMARY OF THE INVENTION

A two-piece revolver reloading device that can be injection molded from inexpensive plastic. The device includes a body in which a number of circumferentially spaced, parallel, cartridge-holding bores are formed that communicate with associated parallel slots that extend outwardly to the exterior surface of the body. A ring is slidably mounted on the body. The ring has a number of fingers that extend inwardly through the slots into the bores to positions rearwardly of the cartridges. When the ring is slid from a first to a second position on the body, the cartridges are ejected from the body into the revolver chamber. First, second and third means are provided that prevent displacement of the cartridges from the body, and for preventing the ring from being moved beyond a first end of the body.

A major object of the invention is to supply a revolver reloader that may be injection molded from a plastic material, which material is both durable enough for the reloader to be reused, and inexpensive enough to permit the reloader to be dropped or thrown away after loading a revolver under emergency conditions.

Another object of the invention is to furnish a revolver reloader that is so simple and positive in operation that loading of a revolver is made fast and easy, even in the dark.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a revolver being reloaded by use of the invention;

FIG. 2 is a side elevational view of the reloading device with bullets of the cartridges projecting therefrom;

FIG. 3 is a longitudinal cross-sectional view of the reloading device, taken on the line 3—3 of FIG. 2, with the charging ring in a first position;

FIG 4 is the same view shown in FIG. 3, but with the charging ring being in a second position;

FIG. 5 is a transverse cross-sectional view of the reloading device, taken on the line 5—5 of FIG. 2;

FIG. 6 is a fragmentary cross-sectional view of the reloading device, taken on the line 6—6 of FIG. 5 and illustrating the means that prevent inadvertent discharge of the charging ring from a second end of the cartridge-holding body;

FIG. 7 is a fragmentary longitudinal cross-sectional view of the device illustrating the means that prevents a cartridge from being inadvertently displaced from the supporting body;

FIG. 8 is a fragmentary longitudinal cross-sectional view of the device illustrating the means that removably holds the charging ring at a first position on the cartridge-holding body; and

FIG. 9 is an exploded perspective view of the cartridge-holding body and the charging ring that may be slidably mounted on the body.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The reloading device A, when disposed in the position shown in FIG. 1, may be used to concurrently eject the cartridges B contained therein into the cavities in a cylinder C of a revolver D when the cylinder is swung to a lateral position relative to the revolver. The device A, as best seen in FIG. 9, includes a cylindrical body E in which the cartridges B are stored and a discharge ring F used in ejecting the cartridges in unison from the body.

Body E is preferably cylindrical, and has a first end 10, second end 12, and an exterior side wall surface 14. The body E is preferably formed from a polymerized resin by injection molding, or the like. If the injection molding operation so requires, the body E may be molded in two or more sections that are subsequently bonded together to form a complete body.

Body E has a number of elongate cartridge-supporting bores 16 formed therein that are in circumferentially and radially spaced relationship, and extend the length of the body. The bores 16 are axially alignable with the cavities 18 in cylinder C when the body is positioned relative thereto, as may be seen in FIG. 4. A number of circumferentially spaced, parallel slots 20 are formed in body E which extend inwardly from side surface 14 to communicate with the bores 16, as shown in FIGS. 2 to 5 inclusive, and FIG. 9. Slots 20 extend longitudinally in body E from the first end 10 thereof towards the second end 12. As shown in the drawings, the slots 20 terminate prior to reaching the second end 12 of the body E. Slots 20 and bores 16 cooperatively define a plurality of circumferentially spaced arcuate segments 22 in the second end 12 of the body E.

Each cartridge B (FIG. 3) includes a cylindrical casing 24 that has a bullet 26 projecting from a forward end thereof. Each bullet 26 has a forwardly and inwardly tapered exterior surface 26*a*. Each casing 24 is provided with an outwardly projecting rim 28 on the second end 29 thereof, and a circumferentially extending groove 30 forwardly of the rim. The diameter of each bore 16 is slightly greater than that of one of the rims 28. The cartridges B have a detonating cap 32 or other detonating means included as a part thereof.

As may be seen in FIGS. 3, 7 and 9, body E has a number of small tabs 34 extending outwardly from the interior surfaces of the body that define the bores 16. The tabs 34 removably engage the grooves 30 to prevent inadvertent displacement of the cartridges B from body E. The tabs 34 are so disposed that when in engagement with grooves 30, the bullets 26 project forwardly from body E and are used to guide the cartridges B into cavities 18. Due to the resiliency of the material defining body B, the tabs 34 may deform sufficiently as to permit the rim 28 to be forced thereby when forward pressure is applied to second end 29, as occurs when the cartridges B are ejected from the body into cavities 18. Body E is preferably formed with a centrally disposed, longitudinally extending bore 36 therein to lessen the amount of material required in the

fabrication thereof, as well as to lessen the weight of the body.

Ring F is slidably mounted on surface **14** and includes a number of circumferentially spaced fingers **38** that are radially positioned and extend inwardly from the ring. Each finger **38** includes a first portion **38***a* that is disposed in one of the slots **20** and a second portion **38***b* situated in one of the bores **16.** Each second portion **38***b* extends forwardly from the forward surface of portion **38**a a distance at least as great as the thickness of one of the arcuate segments **22.** The previously mentioned dimensions are necessary in order that the cartridges B will be completely ejected from body E when ring F moves from the first position illustrated in FIG. **2** to the second position illustrated in FIG. **4.** To prevent inadvertent displacement of ring F from first end **10** of body E, ring F has at least one groove **40** formed therein, as shown in FIGS. **5** and **6** that terminates in a wall **42** which acts as a stop. The body E has at least one protuberance **44** projecting outwardly therefrom, as shown in FIG. **6,** that engages wall **42** when the ring F is in the first position and prevents the ring from being inadvertently displaced from first end **10** of body e.

Should it be desired to guard against inadvertent forward movement of the ring F from the first position shown in FIG. **2,** a small deformable tab **46** may be formed on the interior of ring F, as shown in FIG. **8,** that engages the tapered surface **44***a* of the protuberance.

The device is simple and easy to use, and will normally be in the first position shown in FIG. **2.** Loading of the revolver D is achieved by swinging the cylinder outwardly, as illustrated in FIG. **1,** and then axially aligning the device A therewith, with the bullets **26** projecting into cavities **18.** Ring F may then be manually moved forwardly, with fingers **38** longitudinally displacing cartridges B from bores **16** into cylinder cavities **18.** The cartridges are completely displaced from body E when finger portions **38**a contact the arcuate segments **22,** as shown in FIG. **3.** Cylinder C may then be swung back into the revolver D, with the latter then being ready for use. Due to the inexpensive cost thereof, the device may be either discarded or reloaded, with the ring F being returned to the first position illustrated in FIGS. **2** and **3.** Pressure on detonating caps **32** is avoided by forming the forward faces of finger portions **38**b with cavities **50** therein.

I claim:

1. A device for so removably storing a plurality of cartridges that they may be concurrently ejected therefrom into a cylinder of a revolver to rapidly reload the same when the cylinder is swung out laterally relative to said revolver, said cylinder having first and second ends between which a plurality of circumferentially spaced cartridge-receiving cavities extend, with each of said cartridges being of the type that includes a cylindrical casing having first and second ends, a circular rim extending outwardly from said second end of said casing, detonating means on said second end of said casing, and a bullet having an inwardly and forwardly tapered configuration projecting from said first end of said casing, which device comprises:

a. a body having an external surface and first and second ends between which a plurality of bores extend that are so circumferentially and radially spaced as to be axially alignable with said cavities in said cylinder, said bores being of slightly greater diameter than the diameter of said rims, a plurality of circumferentially spaced, parallel, longitudinally extending slots in said body that extend from said second end towards said first end, and said slots also extending inwardly from said external surface to communicate with said bores;

b. a charging ring slidably mounted for longitudinal movement on said external surface of said body, said ring having a first end surface and an exterior surface;

c. a plurality of circumferentially spaced fingers that project inwardly from said ring and slidably engage said slots and bores, said fingers having first end surfaces that are so related to said first end surface of said body that when said first end surface of said body is in contact with said first end surface of said cylinder and said bullets extend into said cavities, said cartridges are completely displaced from said body into said cavities when said ring is longitudinally moved on said body to a predetermined position thereon adjacent said first end surface thereof; and

d. first means on said body for removably engaging said cartridges to prevent the latter being inadvertently displaced from said body.

2. A device as defined in claim **1** which further includes:

e. second means on said body and ring for preventing said ring from being inadvertently slid from said first end of said body.

3. A device as defined in claim **1** which further includes:

e. second means on said body and ring for preventing said ring from being inadvertently slid from said second end of said body.

4. A device as defined in claim **1** wherein said body, ring and fingers are molded from a dimensionally stable polymerized resin.

5. A device as defined in claim **4** which further includes:

e. second means molded as integral parts of said body and ring for preventing said ring from being inadvertently slid from said first end of said body.

6. A device as defined in claim **4** which further includes:

e. second means molded as integral parts of said body and ring for preventing said ring from being inadvertently slid from said second end of said body.

7. A device as defined in claim **4** which further includes:

e. second means molded as integral parts of said body and ring for preventing said ring from being inadvertently slid from said body.

8. A device as defined in claim **1** wherein said body is formed from a polmerized resin, said cartridges being of the type that have grooves extending circumferentially around the casing adjacent said second ends thereof, and said first means comprise tabs integrally formed with said body that extend into said bores to removably engage said grooves.

9. A device as defined in claim **6** wherein said ring is formed from a polymerized resin and said second means includes:

f. a circumferentially extending recess on an interior surface of said ring that defines a body shoulder; and

g. a projecting portion on said body disposed in said recess, with said projecting portion contacting said body shoulder to prevent inadvertent sliding of said ring from said second end of said body.

10. A device as defined in claim 1 wherein said body and ring are formed from a polymerized resilient resin and said device further including second means for removably holding said ring at a predetermined position on said body where said fingers are not in pressure contact with said second ends of said casings, which second means includes:

e. a recess formed on the interior surface of said ring that defines a body shoulder;

f. a first projecting portion on said body disposed in said recess and in contact with said body shoulder, said first portion having a tapered surface; and

g. a second projecting portion on said interior surface of said ring that contacts said tapered surface of said ring that contacts said tapered surface of said first portion, with said recess, body shoulder, first and second projecting portions and said tapered surface cooperatively removably maintaining said ring at said predetermined position.

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