Nov. 15, 1966 I. SHAFER 3,285,236

SLINGSHOT

Filed Oct. 26, 1964

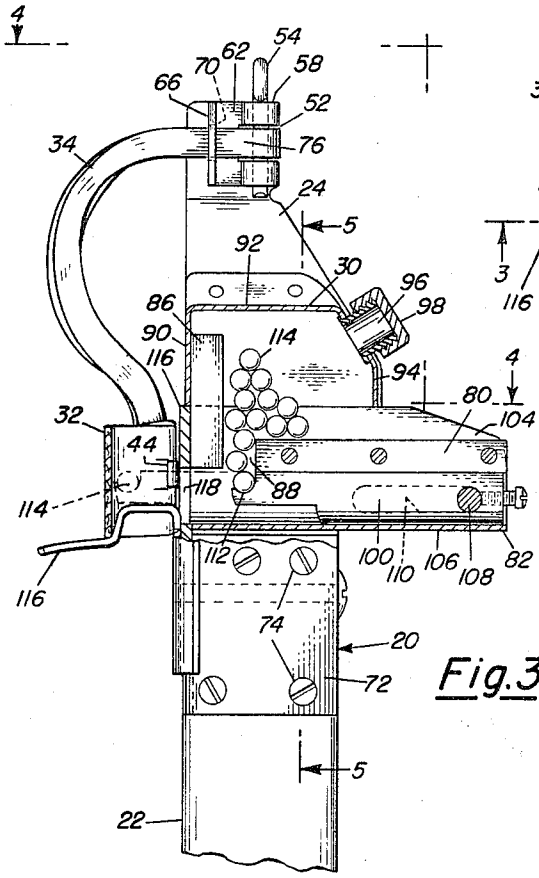


Fig. 3

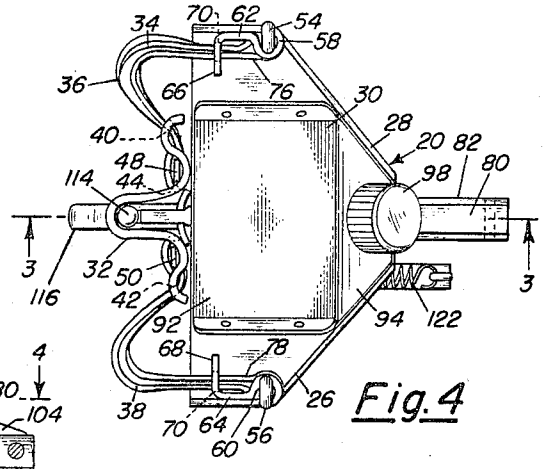


Fig. 4

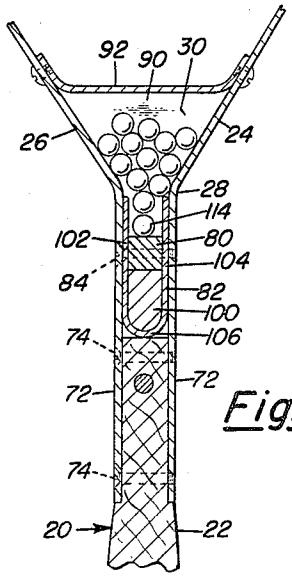


Fig. 5

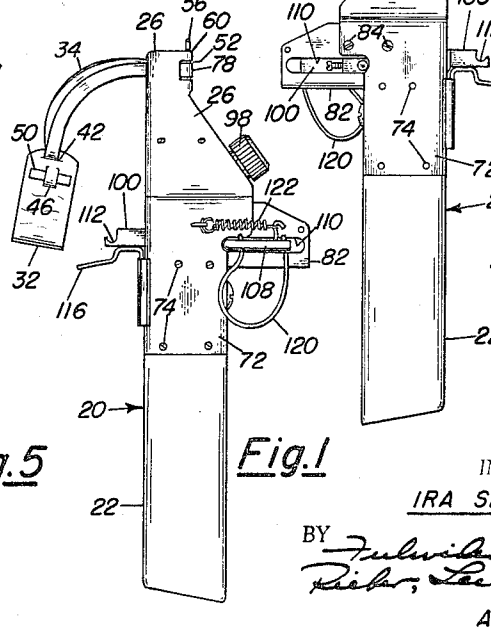


Fig. 1

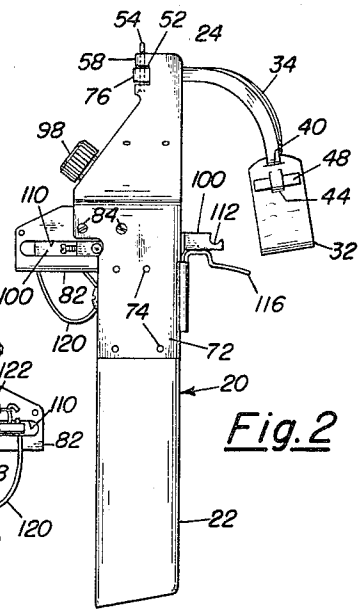


Fig. 2

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SLINGSHOT

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4 Claims. (Cl. 124—20)

The present invention relates to a slingshot of the type including a handle and a pair of prongs, which extend upwardly and outwardly from the upper part of the handle, and elastic means in the form of rubber which is connected with the upper parts of the prongs, and further including a sling-pocket for a pellet and which sling-pocket is connected to the elastic means midway of the latter.

In carrying out the present invention, the slingshot is provided with a magazine for pellets. This magazine is provided with an outlet. A carriage is carried by the slingshot and this cartridge is movable to a position in which it receives a pellet from the outlet of the magazine. The cartridge is also movable to a second position from which position the pellets can be manually removed.

In the preferred embodiment of the invention, the magazine is carried in the crotch provided by the handle and the prongs, and the carriage is so disposed with respect to the sling-pocket that the pellet can be brought into receiving relationship with the sling-pocket when the carriage is in the second mentioned position. Also in the preferred embodiment of the invention, means is provided for yieldingly urging the carriage to the second mentioned position.

The invention also contemplates novel means for fastening the elastic means to the prong and to the sling-pocket. The elastic means of the present invention is in the form of two rubber bands. The upper end of each prong is provided with a horizontally extending slot for receiving a loop of a band. Pins are carried by the prongs. Each pin extends through the respective loop of the band and is thereby held in position on the prongs.

The sling-pocket includes two pairs of longitudinally extending slits, one pair being disposed adjacent one end of the sling-pocket and the other pair being disposed adjacent to the opposite end of the sling-pocket. Loops of the rubber band extend through the respective pair of slits and pins extend, respectively, through a pair of slits and a loop for fastening the loops to the sling-pocket.

Other features and the advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawing wherein a preferred embodiment of the invention is illustrated.

In the drawing:

FIG. 1 is a right side view of the improved slingshot;

FIG. 2 is a left view of the slingshot;

FIG. 3 is a view similar to FIG. 1, but on a larger scale and part of the slingshot is shown in sections, the sections being taken along line 3—3 of FIG. 4, showing, in full lines, the carriage in its pellet receiving position, and showing, in dotted lines, the carriage in its pellet delivered position;

FIG. 4 is a top plan view of the slingshot shown on the scale as shown in FIG. 3 but showing the carriage in its pellet delivered position; and

FIG. 5 is a fragmentary sectional view taken along line 5—5 of FIG. 3.

Referring more in detail to the drawing, the slingshot is shown at **20** including a handle **22** and a pair of upwardly and outwardly extending prongs **24** and **26**, the left prong being shown at **24** and the right prong at **26**. The handle **22** and the two prongs, at their junction, with the handle form a crotch **28**. A magazine **30** for pellets is suitably secured above the crotch **28**.

The slingshot **20** also includes a sling-pocket **32**, preferably formed of a soft material such as soft leather. This sling-pocket is connected to the prongs **24** and **26** by resilient means **34** in the form of two endless rubber bands **36** and **38**.

The sling-pocket **32** is provided with two laterally extending slits **40** and **42** disposed adjacent opposite ends of the pocket. It is also provided with two pairs of longitudinally extending slits below the transverse slits **40** and **42**; one of these pairs of slits is shown at **44** and the other pair is shown at **46**. The rear loop of the rubber band **36** extends inwardly through the slits **40** and a flat pin or bar **48** extends through the slits **44** and through the loop of the band **36**. This bar extends beyond opposite sides of the slits **44** so as to attach the sling-pocket **32** to the band **36**. The rubber band **38** is attached to the opposite end of the sling-pocket in the same manner as described with respect to the rubber band **38** and by a bar **50**.

The upper ends of the prong **24** are each provided with a slot **52** which extends from the front of the prong rearwardly for receiving the upper loops of the bands **36** and **38**, respectively. Cotter pins **54** and **56** are carried by the prongs **24** and **26**, respectively, and extend through the loops **76** and **78**, respectively, to thereby fasten the upper end of the rubber band to the prongs. The holes or eyes **58** and **60** for receiving the pins **54** and **56** are formed by bending the upper parts of the prongs rearwardly. These rearwardly extending parts are shown at **62** and **64**. These rearwardly extending parts are then bent inwardly toward one another to form ears **66** and **68**. These ears are provided with vertically extending slots **70** and the rubber bands extend through these slots and are guided thereby.

As is more clearly shown in FIGS. 4 and 5, the prongs **24** and **26** are formed of sheet metal having a reverse bent portions **72**, the lower part of which is fastened to the handle **22**, preferably formed of wood, by screws **74**. This reverse bent portion, extends upwardly to the crotch **28**. The magazine **30**, being disposed above the crotch, is substantially triangular in shape. The bottom wall of the magazine **30** is formed by a bar **80** which is carried by a U-shaped frame **82**. The U-shaped frame is disposed in the handle between the reverse bent portions **72** of the sheet metal that forms the prongs and is held in place by screws **84** which extend through the frame and through both of the reverse bent portions **72**. As is more clearly shown in FIG. 3, a vertically extending bar **86** is suitably fastened between the upstanding legs of the U-shaped frame **82** and is aligned with the bar **80**. As viewed in FIG. 3, the left end of the bar **80** is spaced horizontally from the bar **86** to provide an opening **88** which constitutes the outlet opening for the magazine **30**.

The side walls of the magazine **30** are provided by the inside walls of the prongs **24** and **26**. The rear wall **90**, the top wall **92**, and the front wall **94**, of the magazine, are formed of sheet metal which is suitably secured to the prongs **24** and **26**. The front of the magazine is provided with an opening **96** which is closed by a cap **98**.

The frame **82** forms a horizontally extending guiding support for a horizontally movable carriage **100**. Like the bar **80**, the carriage **100** is disposed between the upright walls **102** and **104** of the frame **82**. The carriage is slidable on the bottom wall **106** of the frame **82** and is guided by the side walls **102** and **104**. The carriage **100** carries a transversely extending pin **108** and this pin extends through slots **110** in the side walls **102** and **104** of the frame **82**. The pin **108** is utilized for moving the carriage forwardly and rearwardly. The carriage is shown and is in full lines in its forward position in FIG. 3 and in dotted lines in its rear position.

As is more clearly shown in FIG. 3, the extreme rear end of the carriage **100** is provided with an open top pocket **112**, shaped to complement a spherical pellet **114**. It will be observed that when the carriage **100** is in its foremost position, as shown in full lines in FIG. 3, the pocket **112** of the carriage is directly below the opening **88** formed by the bars **80** and **86**. The yoke **116** for the reverse bent portions **72** is provided with an opening **118** and the carriage **100** extends rearwardly through this opening to the dotted line position when the carriage is moved rearwardly.

As is more clearly shown in FIG. 1, the pin **108** extends forwardly to receive a U-shaped wire finger hold **120** which forms an actuator for moving the carriage **100** forwardly. A spring **122** under tension, is suitably connected to the pin **108** and the sheet metal frame forming the reverse bent portions **72** to yieldingly urge the carriage **100** rearwardly to the position shown in full lines in FIGS. 1 and 2. When the pin **108** is moved forwardly by the finger hold **120** in the position shown in FIG. 3, the pocket **112** of the carriage **100** will be directly below the opening **88** in the magazine for receiving one of the pellets **114**. Then upon moving the carriage rearwardly, to beyond the opening **118** and to the position shown in dotted lines in FIG. 3 and in full lines in FIGS. 1 and 2, the pellets will be delivered outside the magazine. The position of the carriage **100** is such that when it is in the rearmost position, the pellet is manually removable and also the position is such with respect to the sling-pocket that the user can place the sling-pocket about the pellet, the sling-pocket being guided by the guide **116**. Then the user can grasp the pellet between the inside walls of the sling-pocket with his thumb and finger. In this manner the slingshot is ready for use with the pellet in position. Thereafter the slingshot is operated in the usual manner.

While the form of embodiment herein shown and described, constitutes preferred form, it is to be understood that other forms may be adopted falling within the scope of the claims that follow.

I claim:

1. A slingshot comprising in combination:

(A) means forming:

(1) a lower handle;

(2) two prongs diverging outwardly and upwardly from the upper part of the handle, said handle and prongs forming a crotch at the junction thereof;

(B) a magazine for pellets carried by said means above the crotch, said magazine having an outlet for pellets;

(C) a horizontally extending guide below the magazine, said guide being disposed in the handle below the crotch;

(D) a carriage guided by said guide and movable to a position for receiving a pellet from the outlet of the magazine and movable to a second position from which latter position the pellet can be manually removed;

(E) elastic means connected with the upper ends of the prongs;

(F) and means forming a sling-pocket connected with the elastic means midway of the latter;

(G) manually actuated means for moving the carriage horizontally to the second mentioned position thereof;

(H) and resilient means for returning the carriage from the first mentioned position to the second mentioned position.

2. A slingshot as defined in claim **1**, characterized in that the elastic means includes two endless rubber bands, and further characterized in that the upper ends of the prongs are each slotted horizontally to receive a loop of a band:

(I) pins carried by the prongs, each of said pins extending through respective loops in a slot.

3. A slingshot as defined in claim **1**, characterized in that the elastic means includes two endless rubber bands and further characterized to include:

(I) means on each of the prongs for receiving and securing a loop of the band to the prongs,

and further characterized in that the sling-pocket is formed of flexible material, said material having two pairs of longitudinally extending slits, one pair of the slits being disposed adjacent one end of the sling-pocket and the other pair being disposed adjacent the opposite end of the sling-pocket;

(J) and two pins, one pin extending through one of said pairs of slits and a loop of one of the bands and the other pin extending through the other pair of slits and a loop of the other band.

4. A slingshot as defined in claim **1**, characterized in that the elastic means includes two endless rubber bands, and further characterized in that the upper ends of the prongs are each slotted horizontally to receive a loop of a band:

(I) and rubber band attaching means including pins carried by the prongs, each of said pins extending through the respective loop in the slot;

(J) means forming a slot and disposed rearwardly of said rubber band attaching means for guiding the rubber, and further characterized in that the sling-pocket is formed of flexible material, said material having two pairs of longitudinally extending slits, one pair of the slits being disposed adjacent one end of the sling-pocket and the other pair being disposed adjacent the opposite end of the sling-pocket;

(K) and two pins, one pin extending through one of said pairs of slits and a loop of one of the bands and the other pin extending through the other pair of slits and a loop of the other band.

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UNITED STATES PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 3,285,236 November 15, 1966

Ira Shafer

It is hereby certified that error appears in the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 1, lines 18 and 20, for "cartridge", each occurrence, read -- carriage --; line 52, after "left" insert -- side --; column 3, line 20, for "in" read -- to --.

Signed and sealed this 12th day of September 1967.

(SEAL)
Attest:

ERNEST W. SWIDER
Attesting Officer

EDWARD J. BRENNER
Commissioner of Patents