May 13, 1952 E. C. SANDERSON 2,596,870

REPEATING MAGAZINE SLINGSHOT

Filed July 24, 1950 2 SHEETS—SHEET 1

Fig. 1

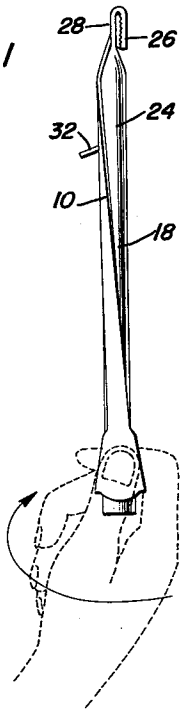


Fig. 2

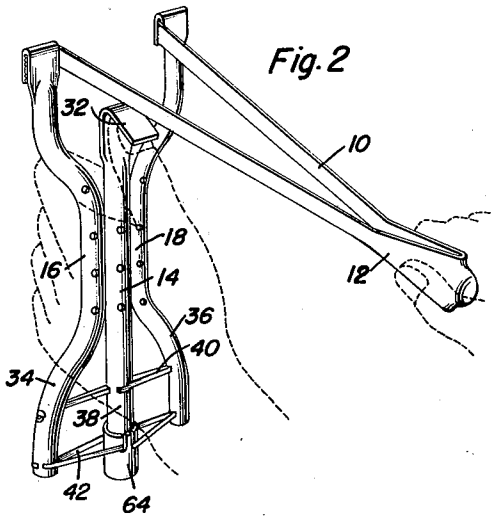


Fig. 10

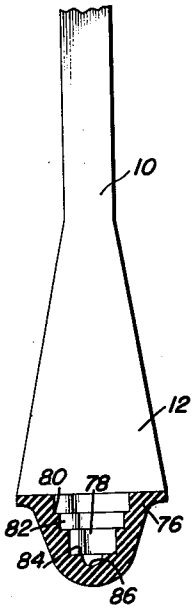


Fig. 6

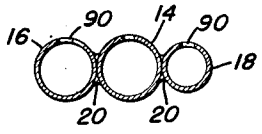
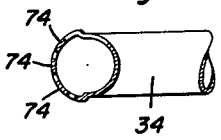
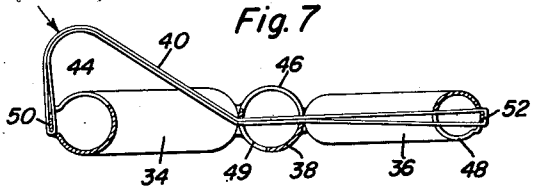


Fig. 11



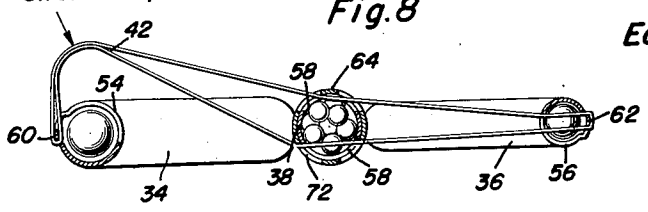
Stretched position

Fig. 7



Stretched position

Fig. 8



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Fig. 3

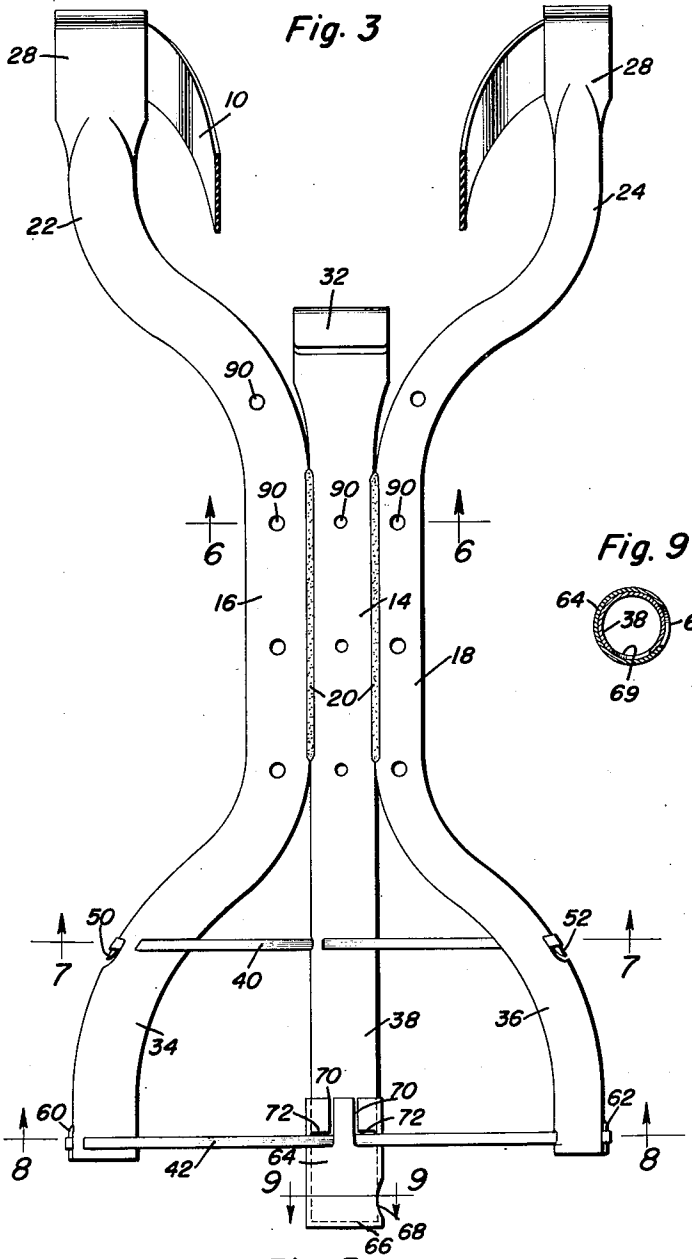


Fig. 9

Fig. 4

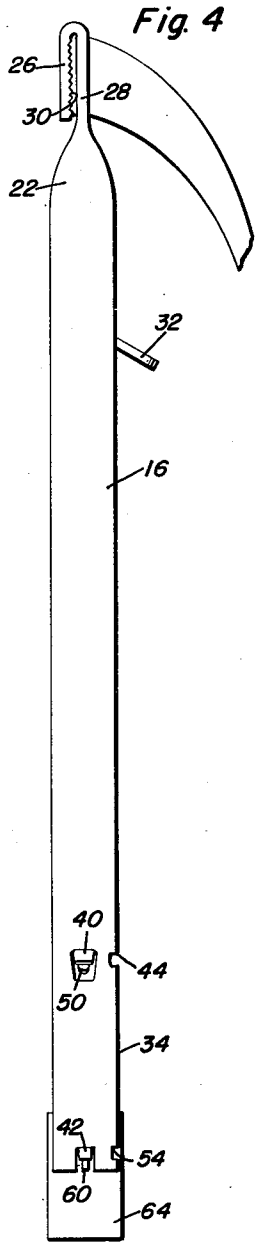
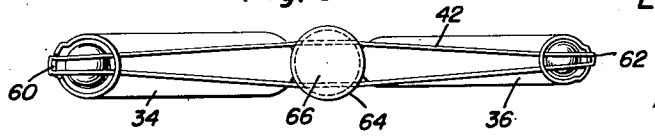


Fig. 5



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REPEATING MAGAZINE SLINGSHOT

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Application July 24, 1950, Serial No. 175,645

9 Claims. (Cl. 124—20)

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This invention comprises novel and useful improvements in a repeating magazine slingshot and more specifically relates to a slingshot of greatly improved construction providing facility for storing different sizes of shots in magazines within the frame members of the slingshot together with improved means for dispensing shot from the magazine to the sling together with an improved shot recess or pocket in the sling.

The primary object of this invention is to provide an improved slingshot having a frame possessing the advantages of great strength, lightness in weight, durability and serviceability, and one which shall be of inexpensive construction.

A further object of the invention is to provide an improved slingshot in conformity with the foregoing object, in which there shall be provided an improved projectile receiving recess or pocket in the sling member of the slingshot.

Yet another important object of the invention is to provide an improved slingshot as set forth in the foregoing objects, wherein the various members making up the frame of the slingshot are provided with shot storing magazines whereby a variety of sizes of projectiles or slingshots may be stored in a readily available and accessible manner.

A still further object of the invention is to provide an improved slingshot incorporating therein the objects of the preceding paragraphs, in which a novel and highly satisfactory arrangement is provided for retaining the various projectiles in their respective magazines, for selectively discharging or removing receptacles from selected magazines, and positioning them in a dispensing chamber; and for selectively dispensing projectiles from any of the plurality of dispensing chambers.

A still further important object of the invention is to provide an improved slingshot in which the sling of the same shall be specifically adapted for accommodating shot or projectiles of different sizes.

And a still further object of the invention is to provide an improved slingshot in which the sling is secured to the handle and fork of the slingshot in an improved and highly efficient manner.

These, together with various ancillary features and objects of the invention, which will later become apparent as the following description proceeds, are atttained by the present invention, a preferred embodiment of which has been illustrated, by way of example only, in the accompanying drawings, wherein:

Figure 1 is a side elevational view showing the manner in which the device is manipulated when it is desired to remove a shot from a magazine of the slingshot;

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Figure 2 is a perspective view showing the manner in which the device is held and the position of the finger guard during operation of the device;

Figure 3 is a front elevational view, upon an enlarged scale, of the embodiment shown in Figures 1 and 2;

Figure 4 is a fragmentary side elevational view of Figure 3;

Figure 5 is a bottom plan view of Figure 3, showing the position of the dispensing means for the various magazines forming a part of the invention;

Figure 6 is a horizontal sectional view taken substantially upon the plane indicated by the section line 6—6 of Figure 3;

Figure 7 is a horizontal sectional view taken substantially upon the plane indicated by the section line 7—7 of Figure 3, the shot retaining means being disclosed in an alternative position to permit the passage of shot through one of the magazines;

Figure 8 is a horizontal sectional view taken substantially upon the plane indicated by the section line 8—8 of Figure 3 and illustrating the position of the shot dispensing means in a position to permit the passage of shot through from one of the magazines of the invention;

Figure 9 is a horizontal sectional view taken substantially upon the plane indicated by the section line 9—9 of Figure 3;

Figure 10 is a fragmentary vertical sectional view through a portion of the sling of the device illustrating in particular the construction of the projectile receiving pocket or recess of the same; and

Figure 11 is an enlarged horizontal sectional detail view of a portion of the magazine constructions shown in Figures 7 and 8, with the resilient band removed therefrom.

Referring now more specifically to the accompanying drawings, wherein like numerals designate similar parts throughout the various views, it will be seen that the slingshot disclosed in the accompanying drawings and referred to hereinafter in the attached specification consists of a flexible band or strip of any suitable material such as rubber, elastic or the like, which is provided with a central portion 12 adapted to contain a recess or pocket for reception of the shot or projectiles which the device is adapted to discharge.

The frame of the slingshot preferably comprises a central tubular member 14 disposed between and in side-by-side relation with a pair of parallel side tubular members 16 and 18, these members being rigidly attached to each other intermediate their ends as by welding or the like 20, or by any other desired means. The tubular members 14, 16 and 18 may obviously be of any desired material; but it has been found to be especially advantageous to form the same of tubular sheet metal of any desired composition. The tubular members in accordance with this invention are utilized to provide a yoke to which is attached the sling 10, to provide a handle portion and to provide magazines for storing a plurality of shots or projectiles for use in the device.

Referring more specifically to Figure 3, it will be seen that the upper ends of the side tubular members 16 and 18 are curved upwardly and outwardly at their upper ends to provide a pair of arms 22 and 24 which form the yoke of the slingshot to which the sling 10 is attached.

Conveniently, as shown in Figures 2 and 4, the upper ends of the arms 22 and 24 are flattened and folded upon themselves to provide portions 26 and 28 between which the ends of the sling 10 are adapted to be clamped and retained. Conveniently, as shown best in Figure 4, one or both of the flattened surfaces of the portions 26 and 28 are provided with a plurality of ribs, projections or serrations 30 to enhance the secureness of the gripping action of the portions 26 and 28 upon the ends of the sling 10.

It will thus be apparent that when it becomes necessary to replace the sling 10, the clamped portions 26 and 28 may be spread apart to thus disengage the ends of the sling therefrom and a new sling may then be inserted and securely clamped in place.

At its upper end, the central tubular member 14 is flattened and extends upwardly into the yoke between the arms 22 and 24 and is then folded backwardly upon itself, as at 32, to thus provide an angularly disposed finger guard, as shown in Figure 2, which is adapted to overlie and protect the thumb of the user when the sling 10 is released.

The members 16 and 18 are hollow from their open lower ends to any desired portion of their length, as, for example, to the flattened end portions at the upper ends of the same, while the lower end of 14 is closed. These internal cavities are employed in accordance with the principles of this invention as magazines or reservoirs for the storage of shots or projectiles for use with the device.

Since a plurality of such magazines are provided, it will be evident that the same is ideally adapted to segregate and store projectiles or shots of different sizes, to thus enable the user to maintain convenient and accessible a variety of sizes of shots, best calculated to suit the needs of the user at any given moment.

The two outside tubular members 16 and 18 have their lower ends diverging outwardly and downwardly as at 34 and 36, while the lower end 38 of the central tubular member 14 extends straight downwardly and centrally of the members 34 and 36.

The present invention separates the interior of the tubular members 14, 16 and 18 into a relatively larger and upper chamber which constitutes the magazine proper, and into a lower chamber which constitutes a dispensing chamber. To control each of these chambers there is provided a yielding and releasable retaining means 40 which may conveniently comprise a rubber band or the like as illustrated in the drawings, and a dispensing means 42 of a similar construction.

For a clearer understanding of the construction, arrangement and functioning of the retaining means and the dispensing means, attention is now directed to Figures 7 and 8, in conjunction with Figures 2, 3 and 5. At any convenient point intermediate the ends of the members 34, 36 and 38, there is provided a chordal slot which is positioned upon one side of these members, as indicated at 44, 46 and 48. In addition, 38 is provided with a small slot 49. These slots are disposed in substantially the same transverse plane, and are adapted to releasably receive the flexible band 40 as shown in the drawings, it being noted that the slots 44 and 46 are on one side of the device while slots 48 and 49 are on the other side. In order to firmly retain and secure the flexible band 40, but permit easy removal or replacement of the same, the members 34 and 36 are provided with slotted portions which define slightly offset prongs or fingers 50 and 52 which serve as an anchor for and means for retaining the flexible band 40. When properly seated, the band will thus extend across the diametrical portions of each of the members 34, 36 and 38 as will now be readily understood from Figures 2, 3 and 7. When so disposed, those portions of the flexible band 40 which extend across the diameter of the members 34, 36 and 38 constitute a valve means which prevents downward passage of the shot or projectiles received within the magazine portions of the tubular members 14, 16 and 18 and thus serve to retain the shot in the upper or magazine section of these members. However, when either end of the flexible band constituting the retaining means is stretched, as indicated in Figure 7, the corresponding tubular member portion 34, 36 or 38 will be uncovered to permit passage of the shot or projectile downwardly from the corresponding magazine into the corresponding dispensing chamber in the lower portion of that member. By this means, the bulk of the shots will be maintained in the magazine; and a few shots at a time may be discharged from the magazine into the dispensing chamber of the tubular members.

The dispensing means for effecting discharge of the projectiles from the dispensing chamber is of a similar construction to that of the retaining means. Thus, the lower extremities of the members 34, 36 are provided with the chordally disposed slots 54, 56, as shown best in Figure 8. Similarly, the lower ends of the members 34 and 36 are slotted to provide fingers or prongs 60 and 62 which are similar to the fingers 50 and 52 and serve the same purpose. It will be noted that the fingers 60 and 62 are offset outwardly to permit the shot to flow freely when the band 42 is stretched. It will thus be apparent that when the flexible or resilient band 42 is in its normal position, as shown in Figures 2 and 3, the same will be disposed diametrically across the dispensing chambers of the portions 34 and 36 and prevent exit of the shot therefrom. However, when the band is twisted, as suggested in Figures 7 and 8, at either of the portions 34 or 36, the corresponding dispensing chamber will be opened so that the shot or projectile can be discharged therefrom.

As shown clearly in Figure 8, it may be found convenient to form the tubular members of differ-

ent diameters in order that each may accommodate different sizes of projectiles or shots. Thus, the member 36 is of a sufficient diameter to snugly accommodate a medium size shot; the member 34 is of a large diameter to accommodate a large shot; while the member 38 is of a diameter to accommodate a plurality of the smallest sized shot. Thus, while a single shot or a plurality of shot may be sequentially and successively dispensed from the dispensing chambers of the portions 34 and 36, it is contemplated that a plurality of shot shall be dispensed at one time from the portion 38.

In view of the relatively small size and relatively large number of the shot employed from the member 38, it is deemed advisable to provide the closure cap for the same.

This closure member comprises a sleeve-like cap 64 having a closed bottom wall 66 and having a dispensing opening 68 in one of the side walls of the same. At its upper end, the cap 64 is snugly and rotatably received upon the lower closed end of the portion 38 and is provided with longitudinally extending slots 70 which, at their lower ends, are provided with lateral slot extensions 72. The arrangement is such, as shown in Figures 3 and 8, that the flexible band 42 may be received in a pair of adjacent slots 70 and disposed in the horizontal slot 72 and suitable slots 58 in the portion 38, whereby the band will serve to retain the closure cap 64 upon the lower end of the portion 38 and resiliently hold the cap in a predetermined angular position. It will now be evident that by merely rotating or oscillating the cap 64 about its longitudinal axis against the tension of the rubber band 42, the opening 68 may be brought into registry with an opening 69 in the side of portion 38 to dispense shot therefrom. Obviously, upon release of the cap, it will turn to a normal position closing the opening 69.

Alternatively, as shown in Figure 11, either the retaining means 40 or the dispensing means 42 may be adjustably secured and positioned in their slots in the portions 34, 36 by means of a plurality of projections or fingers 74 in place of the single projection or finger 50, 52 and 60, 62 previously described. This permits lateral adjustment of the members 40 or 42 with respect to the hollow interiors of the portions 34 and 36 to enable the same to accommodate different sizes of shot in these tubular members.

Referring now more specifically to Figure 10, it will be apparent that the pocket portion 12 of the sling 10 has a relatively thickened part 76 which may be integrally formed with the sling and pocket 12; or may be separately constructed of any suitable material and then applied to the sling as desired. In the preferred construction, the pocket portion 12 is of a resilient material, and is so formed that the sides thereof immediately adjacent the junctures with the sling 10 are biased towards each other into substantially the configuration of the same as shown in Figure 2. In any event, the portion 76 is provided with a pocket or recess 78 in the form of a series of stepped shouldered portions 80, 82, 84 and a bottom recess or depression 86. These stepped shouldered portions adapt the pocket or recess of the sling to readily accommodate different sizes of shot with the aforementioned resilient formation of the pocket portion 12 yieldingly retaining the shot within the pocket; and to enable the placing of the pocket about the dispensing ends of the tubular sections 34, 36 and 38.

It is an important feature of this invention

that shot may be accurately extracted from a selected dispensing chamber of the magazines with ease, certainty and without danger of dropping the desired or the following shot. Thus, as intimated in Figure 1, the sling may be pulled downward so as to position the selected tubular member 34, 36 or 38 in the pocket portion 12 and in the appropriately sized shouldered recess 80, 82, or 84 and with a single motion of the hand the rubber band may be twisted and permit the selected shot to fall from the dispensing chamber into the pocket while the pocket is held upon the end of the dispensing chamber. By then releasing the rubber band, the shot, gripped in the pocket, may then be withdrawn and is ready for discharge as suggested in Figure 2.

Each of the tubular members 14, 16 and 18 is provided with a series of apertures or inspection diametrical openings 90 which are disposed in longitudinally spaced relation along these members and which thus permit the quantity of shot retained in the magazine to be accurately gauged and estimated.

It should be emphasized that the continuous bands 40 and 42 may be assembled with the device without it being necessary to cut the same. It will also be appreciated that the device will be loaded by simply reversing the unloading or dispensing procedure. Referring to Figures 7 and 8, it will be seen that the shots are so disposed that shot may be charged into and dispensed from any of the portions 34, 36 and 38 without disturbing the shot in the other portions.

From the foregoing, it is thought that the construction and operation of the invention together with its many advantages will be readily apparent, and further explanation is believed to be unnecessary. However, since numerous modifications and equivalents will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawings, it is not intended to limit the invention to the exact embodiment shown and described, but all suitable modifications and equivalents may be resorted to which fall within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A slingshot including tubular side members, one end of each of said side members being curved outwardly to constitute arms of a yoke, a tube positioned between and fixedly securing said side members together to form a handle portion, the other ends of each of said tubular members comprising shot magazines.

2. A slingshot including tubular side members, one end of each of said side members being curved outwardly to constitute arms of a yoke, a tube positioned between and fixedly securing said side members together to form a tube, a finger shield on said handle portion extending into said yoke, each of said tube and said tubular members comprising shot magazines, means yieldingly retaining shot in said magazines.

3. A slingshot including tubular side members, the upper ends of said side members being curved outwardly to constitute arms of a yoke, a tube disposed between and fixedly securing said side members together to form a handle portion, the lower ends of said side members being curved outwardly, said tube and side members comprising shot magazines, means for withdrawing shot from the lower ends of said magazines.

4. A slingshot including tubular side members, one end of said side members being curved out-

wardly to constitute arms of a yoke, means fixedly securing said side members together to form a handle portion, said last means comprising a tube disposed between and rigidly fastened to said side members, the lower portion of said tube and of said side members constituting shot magazines, a common means retaining shot in said magazines, means dispensing shot from said magazines.

5. A slingshot including tubular side members, the upper and lower ends of said side members being curved outwardly, a tube disposed between and fixedly securing the mid-portions of said side members together to form a handle portion, the lower portion of said tube constituting a shot magazine, the upper portion of said tube having an angulated portion thereon extending between said upper ends and comprising a finger guard.

6. A slingshot including tubular side members, one end of said side members being curved outwardly to constitute arms of a yoke, means fixedly securing said side members together to form a handle portion, said last means comprising a tube disposed between and rigidly fastened to said side members, the lower portion of said tube constituting a shot magazine, means retaining shot in said magazine, means dispensing shot from said magazine, said tube having axially spaced, chordally extending slots, flexible bands extending through said slots to normally prevent passage of shot through said tube, one band retaining shot in said magazine, the other band preventing passage of shot from said tube, said bands being selectively movable to permit passage of shot from said magazine and from said tube.

7. A slingshot comprising a yoke and a handle with a sling secured to said yoke, said handle comprising tubular side and central members rigidly connected together, a magazine in each tubular member, a single resilient means for retaining shot in each magazine, a second resilient means for dispensing shot from each tubular member.

8. A slingshot comprising a yoke and a handle with a sling secured to said yoke, said handle comprising tubular side and central members rigidly connected together, a magazine in the lower portion of each tubular member, means for yieldingly retaining shot in each magazine, means for dispensing shot from each tubular member, said dispensing means comprising chordally disposed slots in each magazine, a resilient band extending through all of said slots and normally preventing passage of shot from the tubular members.

9. A slingshot comprising a yoke and a handle with a sling secured to said yoke, said handle comprising tubular side and central members rigidly connected together, a magazine in each tubular member, means for retaining shot in each magazine, means for dispensing shot from each tubular member, said dispensing means comprising chordally disposed slots in each magazine, a resilient band extending through said slots and normally preventing passage of shot from the tubular members, a closure cap for the central tube member, retaining notches in said cap for engagement with said band to thereby retain said cap upon said central tube member.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
502,389	Whitten et al.	Aug. 1, 1893
1,487,973	Preston	Mar. 25, 1924
1,496,491	Ringler	June 3, 1924
2,324,201	Donaldson	July 13, 1943
2,483,039	Davis	Sept. 27, 1949
2,532,798	Wright	Dec. 5, 1950
2,585,663	Laubly	Feb. 12, 1952