3,057,337
SLING SHOT DEVICE
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12 Claims. (Cl. 124—20)

The present invention relates to a novel sling shot structure, and more particularly to novel sling shots of the class which may be used for hunting small game.

Sling shots of the general type contemplated herein include elastic sling means having opposite end portions connected with arms of a fork member or the like. When using such devices for hunting small game, it is frequently difficult to pull or stretch the elastic sling so that opposite end portions thereof are tensioned the same amount and this is particularly true when the hunter is attempting to shoot a moving target. When the opposite end portions of the sling are pulled or tensioned unevenly, pellets or other articles being shot will usually be projected along a path of travel diverging from the hunter's line of sight. It will be appreciated that a hunter may frequently wish to use different kinds or sizes of pellets or other articles for shooting different species of game. Thus, one problem with such a hunter is the provision of readily accessible supplies of the different pellets or articles to be shot and the provision of a sling shot structure adapted to project different articles such as pellets or arrows.

An important object of the present invention is to provide a novel sling shot structure which is constructed so as to promote the more accurate projection of an article being shot.

A more specific object of the present invention is to provide a novel sling shot structure having elastic sling means, which structure promotes even pulling or tensioning of opposite end portions of the elastic sling means whereby to facilitate shooting with improved accuracy.

Still another object of the present invention is to provide a novel sling shot structure which may be quickly and easily converted for use for shooting either pellets and the like or arrows.

Still another object of the present invention is to provide a novel sling shot structure of the above described type which is adapted to contain and dispense in a convenient manner a supply of pellets, and the like, of different sizes.

Another specific object of the present invention is to provide a novel sling shot structure which is of rugged and powerful construction for promoting accuracy and an increased working life.

Other objects and advantages of the present invention will become apparent from the following description in the accompanying drawings wherein:

FIG. 1 is a perspective view showing the manner in which the sling shot may be used;
FIG. 2 is an enlarged perspective view showing a sling shot structure incorporating features of the present invention;
FIG. 3 is an enlarged sectional view taken generally along line 3—3 in FIG. 2 and further shows in broken lines the manner in which a portion of the structure is adapted to pivot;
FIG. 4 is an enlarged fragmentary partial sectional view taken generally along line 4—4 in FIG. 2;
FIG. 5 is a sectional view taken along line 5—5 in FIG. 4;
FIG. 6 is a sectional view taken along line 6—6 in FIG. 4;
FIGS. 7 and 8 are similar to FIG. 6 but respectively show the manner in which an element of a dispensing mechanism may be manipulated in opposite directions for dispensing pellets and the like of different sizes;
FIG. 9 is an exploded perspective view showing a portion of a sling shot structure incorporating the features of the present invention;
FIG. 10 is an enlarged perspective view showing a portion of a dispensing mechanism included in the apparatus of the present invention;
FIG. 11 is a perspective view showing another of the dispensing mechanism;
FIG. 12 is an enlarged sectional view taken generally along line 12—12 in FIG. 9;
FIG. 13 is a fragmentary perspective view showing a portion of a fork member or device included in the apparatus of the present invention;
FIG. 14 is a fragmentary perspective view showing a modified form of the present invention especially suitable for use for shooting arrows and the like;
FIG. 15 is an enlarged partial sectional view taken along line 15—15 in FIG. 14;
FIG. 16 is similar to FIG. 12 but shows a modified form of the dispensing mechanism; and
FIG. 17 is a sectional view taken along line 17—17 in FIG. 16.

Referring now more specifically to the drawings wherein like parts are designated by the same numerals throughout the various figures, a sling shot structure incorporating features of the present invention is shown best in FIGS. 1—4 and 9. The sling shot 20 comprises a hand grip member 22 having an exterior surface contoured generally in the manner shown so as to fit the hand of an operator. A fork member 24 is connected with the hand grip member in the manner described below and extends upwardly therefrom. An elastic sling 26 is connected with the fork member.

The fork member 24 includes a pair of opposite arm portions 28 and 30 which are joined to or integrally formed with a stem element 32. The arms 28 and 30 initially extend laterally outwardly in opposite directions from the stem element. The arms respectively include outer portions 34 and 36 which extend upwardly from the generally horizontally extending portions thereof and terminal end sections 38 and 40 which are bent so as to extend rearwardly from the upper ends of the upstanding portions 34 and 36. As will be described more in detail below the elastic sling means is connected with outer end portions of the fork arms.

In accordance with an important feature of the present invention the fork member 24 is connected with the hand grip member 22 for pivotal movement about a vertical axis or at least an axis extending substantially longitudinally of the hand grip member. This feature enables the fork member to pivot from the full line position shown in FIG. 3 to and from either of the broken line positions shown in FIG. 3. Such pivotal movement will take place when the elastic sling means is pulled unevenly in the manner discussed more in detail below for tending to equalize the tension in opposite portions of the elastic sling means and thereby promote greater accuracy in the shot.

In order pivotally to connect the fork member to the hand grip member, a bore 42 is formed in the hand grip member for pivotally receiving a depending short portion 44 of the stem element 32. The bore 42 extends from the upper end of the hand grip member and longitudinally of the hand grip member so that, as indicated above, the fork member is adapted to pivot about an axis extending substantially parallel to the longitudinal axis of the hand grip member.

The stem element 32 includes an enlargement 46 which provides an annular downwardly facing shoulder 48 engageable with a bottom surface of a counterbore
in the top of the hand grip member for limiting downward movement of the fork member. As shown best in FIGS. 4 and 13 the enlargement 46 also has an arcuate notch 50 formed at least partially around the side thereof. Thus, an arcuate flange 52 is provided on the enlargement 46 of the element 32 for under-lying a retaining element 54 mounted on the hand grip member whereby the fork member is secured in assembled relationship with the hand grip member. The retaining element 54 is, in accordance with the feature of the present invention, formed and mounted so that it may be manipulated for enabling the fork member to be easily assembled with or removed from the hand grip member. More specifically, the retaining element 54 is in the form of a round disc secured to a pin 56 pivotally disposed in a bore 58 formed in the hand grip member parallel to the bore 42 and arranged so that a marginal portion of the retaining element or disc 54 is adapted to project into the notch 50 and over the flange 52. While a recess 68 is preferably formed in the upper end of the hand grip member, as shown best in FIGS. 3 and 9, for accommodating the disc 54, the hand grip member is cut away as indicated at 60 to expose an edge of the disc which is preferably knurled for enabling an operator to adjust or turn the disc with his thumb. It is to be noted that the disc 54 is formed with an arcuate notch or recess 62 having a diameter greater than the diameter of the flange 52 on the enlargement of the stem of the fork member so that when the retaining disc 54 is rotated or adjusted so as to align the recess 62 with the flange 52, the fork member may be removed from or assembled with the hand grip member. If desired, the stem element 32 may be formed so that the flange 52 extends completely therearound so that the fork member could be swiveled 360°. However, in the embodiment shown means is provided with specifically limiting pivotal movement of the fork member between the broken line positions shown in FIG. 3. This means comprises pin 64 secured to and extending forwardly from the enlarged portion 46 of the stem element. The upper end portion of the grip member is provided with another recess 66 for accommodating the pin 64. Opposite end portions 68 and 70 of the side wall of the recess 66 provide abutments or stops for engagement with the pin 64 to limit pivotal movement of the fork member.

The elastic sling means 26 comprises opposite end portions 72 and 74 which are preferably in the form of elongated tubes of rubber or other suitable tough elastic material. The elastic tubes are provided with an internal diameter which is less than the diameter of the arm portion. Thus, the elastic tubes may be quickly and securely connected to the opposite ends of the fork member arms by stretching terminal end sections 76 and 78 of the elastic members over the ends of the arms as shown in FIGS. 2, 4 and 9. It is to be noted that the end sections of the elastic tubes extend around the curved junction between the upstanding and rearwardly sections of the fork member arms and at least partially down the upstanding sections of the arms. When the elastic tubes are stretched in the manner shown in FIG. 1 during use of the device, there is a tendency to reduce the diameter of the tubes for causing the end sections of the tubes to grip the fork arms with increasing aggressiveness. This progressively increasing gripping action during stretching of the tubes in combination with the extension of the tubes around bends in the fork arms serves to eliminate any possibility of the tubes becoming accidentally disconnected from the fork arms.

The sling means 26 also includes a pouch member or projectile engaging and retaining element 80 connected between the elastic tubes. In this embodiment the element 80 is in the form of a relatively wide band of tough flexible material such as leather. Pin like connecting devices 82 and 84 are provided for securing opposite ends of the projectile engaging element or pouch 80 with adjacent ends of the elastic bands.

The connecting devices 82 and 84 are identical so that only the device 84 will be described in detail. As shown in FIGS. 4, 4 and 9 the device 84 comprises an elongated pin like connecting device 82 adapted to engage from one end of the body to a point adjacent to but short of the opposite end so as to provide an integrally hinge like junction element 88 between the last mentioned ends of the body. Adjacent the integral hinge portion 88 there is formed a slot 90. When assembling the device 84 with the body section 92 and 94 of the opposite end sections 92 and 94 are amenable to pivot about the hinge section 88 and spread apart a distance preferably at least slightly greater than the normal width of the slot 90. Then one of the body sections is inserted through an aperture 96 provided in one end portion of the pouch element 80 until a web section 98 of the pouch element between the aperture and the end margin of the pouch element enters the slot 90. The body sections 92 and 94 are then pivotally disposed with opposite ends reaching back to spring back to their normal abutting positions. As indicated above, the device 82 is identical to the device 84 and therefore it is similarly assembled with the pouch element by inserting one section thereof through an aperture 99 formed in the pouch element.

The device 82 and 84 are such that the upper margin 120 of the body sections 92 and 94 are relatively larger than the normal internal diameter of the tubes 72 and 74. Thus, in order to connect the tubes to the devices 82 and 84, end portions 100 and 102 are stretched over the devices as shown best in FIGS. 2, 4 and 9. The devices 82 and 84 are respectively provided with annular grooves or reduced diameter portions 104 and 106 in which the end portions of the tubes contract themselves for engagement with rearwardly facing side or abutment walls of the annular grooves. Such engagement in combination with the inherent gripping action of the tubes substantially precludes any possibility of the tubes becoming accidently disengaged from the devices 82 and 84.

The sling shot structure is provided with a mechanism 108 combined with the hand grip member 22 for storing and dispensing a plurality of projectiles or pellets. Preferably, this mechanism is adapted to supply a plurality of pellets 110 having a first diameter and a quantity of pellets 112 which are greater in diameter. More specifically, a first chamber or bore 114 extends upwardly from the lower end of the hand grip member 22 for containing the small pellets 110. A second elongated chamber or bore 116 extends upwardly from the lower end of the hand grip member 22 for containing the larger pellets 112. It will be noted that the bore 116 is larger than and is axially aligned with the above mentioned bore 58 for the purpose described below.

In order to facilitate dispensing of the smaller pellets 110 by minimizing any possibility of the pellets becoming jammed in the supply chamber, a separator device 118 is located within the chamber or bore 114. As shown in FIGS. 4, 5 and 9 the device 118 is in the form of a sheet metal tube adapted to fit snugly within the bore 114 and having a length similar to but less than the length of the bore. The length of the device 118 is such that its upper margin 120 is spaced from the lower end of the bore a distance slightly greater than the diameter of the pellets 110. It will also be noted that the upper margin 120 of the device 118 is turned inwardly as shown best in FIG. 4 for providing a track for retaining a plurality of the pellets. In addition, one side of the sheet metal tube 118 is deformed inwardly to provide a longitudinal embodiment the passageway 122 having a width similar to but slightly greater than the diameter of the pellets 110. The passageway 122 is adapted to contain a plurality of the pellets which are arranged one after
the other without being wedged together, and the lower end of the passageway 122 is selectively closed or opened by means described below for enabling the pellets to be dispensed one at a time.

The majority of the original supply of the pellets 110 is initially contained within the main body of the tube 118. In order to separate such pellets from each other and direct the pellets into the passageway 122 from which they are to be dispensed, it is merely necessary for an operator to turn the hand grip upside down to enable the pellets to roll into the space between the end of the tube 118 and the end of the bore 114 whereupon the hand grip is turned to its normal upright position. Any pellets which have been caught between the intumet end portion 120 of the tube and the end of the bore will then be directed to the passageway 122.

A device 124 is also provided in the bore 116 for separating the pellets 112 in a manner which facilitates dispensing of the pellets by minimizing any possibility of jamming. In view of the larger size of the pellets 112, the device 124 preferably is in the form of a plurality of tubes 126, 128 and 130 which are soldered or otherwise secured together so that they are symmetrically disposed around and parallel to a central axis. Each of the tubes 126–130 has an internal diameter similar to but slightly greater than the diameter of the pellets 112 so that each tube is adapted to contain a series of the pellets.

A cross section of the lower end of the hand grip member as shown in FIGS, 4 and 9. This plate is adapted to close the lower ends of the bores 114 and 116. However, the plate 132 is provided with a first aperture 134 aligned with the passageway 122 and having a diameter slightly greater than the diameter of the pellets 110 for enabling the pellets to escape from the passageway 122. In addition, the plate is provided with a second aperture 136 through which the pellets 112 may pass. It will be appreciated that the aperture 136 can be aligned with only one of the tubes 126–130 at a time. Therefore, the aperture 136 can comprise the tubes 126–130 rotatably disposed within the bore 116 and is adapted to be turned for selectively aligning the tubes with the aperture 136. In order to accomplish such adjustment, the device 124 is secured to the lower end of the above mentioned pin 56. Therefore, the tubes may be turned to the desired position by manually turning the knurled disc 54 which serves the double purpose of retaining the fork member and providing means for adjusting the device 124.

In order to retain the device 124 in a desired adjusted position, a plurality of rounded seats 158, 140 and 142 are formed in and equally spaced around the undersurface of the disc 54 as indicated in FIG. 3. In addition, a spring biased ball detent 144 is mounted in the upper end of the hand grip member for cooperative engagement with the ball seats and releasably locking the disc 54.

The dispensing mechanism 108 also includes a dispensing spout 146 shown in FIGS. 4 and 6–12 and guide and retaining means 148. The guide and retaining means 148 in the embodiment shown, comprises an elongated hollow sheet metal member 150 having a generally rectangular cross-section. The member 150 may be secured by pins, screws or any other suitable means within a complementary recess formed at the lower end of the hand grip member so that the member 150 traverses the lower ends of the pellet supply chambers. A solid block 152 is provided within a central portion of the member 150, and apertures 154 and 156 are provided through the member 150 and the block 152 and are located so that they are aligned with the apertures 134 and 136.

The dispensing spout 146 may conveniently be formed from complementary sheet metal members 158 and 160 which may be crimped together. The members 158 and 160 combine together to form a box-like portion 162 which is adapted to embrace the member 150 in a manner which enables the spout to slide back and forth on the member 150. An upper panel of the box-like portion is provided with apertures 166 and 168 which respectively have diameters similar to the diameters of the apertures 154 and 156 and are adapted to be aligned with the apertures 154 and 156 when the dispensing spout member 146 is disposed a midportion of the member 150. Thus, when the spout member is in its central or centered position, pellets may pass through the apertures 134 and 136 in the plate member 132, through the apertures 166 and 168 and into the apertures 154 and 156. However, it will be noted that the lower portions of the complementary members 158 and 160 of the spout combine together to provide a discharge passageway 170 which is centrally located between the therefore not aligned with either of the apertures 166 and 168. As a result, the pellets will be trapped within the apertures 154 and 156 of the member 150 until the spout member 146 is shifted selectively in opposite directions along the member 150 to align the discharge passageway 170 with either the aperture 154 or the aperture 156.

The dispensing mechanism is provided with means for normally resiliently retaining the spout member 146 in the above mentioned central location which is shown best in FIGS. 6, 9 and 12. This means comprises first and second structure spring elements 172 and 174 which are disposed in a looped condition within opposite hollow end portions of the guide and support member 150. The spring element 172 is provided with a first hooked end portion 176 which extends through a slot 178 formed in a side of the member 150 for fixing one end of the spring element with respect to the member 150. An opposite end portion 189 of the spring element 172 also extends through the slot and is hooked around a margin of the box-like portion of the spout member 146. The spring element 174 similarly has a first hooked end portion 182 extending through a slot 184 in a side of the member 150 for engaging with the spring element to the member 150. A second hooked end portion 186 of the element 174 also extends through the slot 184 and is hooked around a margin of the spout member oppositely from the spring element 172.

It will be appreciated that when it is desired to dispense one of the larger pellets 112, the spout member is manually shifted along the guide and support member 150 from the central position shown in FIG. 6 to the position shown in FIG. 7 at which the dispensing passageway 170 is aligned with the passageway or aperture 156. This enables a pellet to fall from the passage 156 and out through the passageway 170. At the same time, the apertures 166 and 168 in the upper plate like portion of the dispensing spout are shifted out of alignment with the apertures 134 and 136 and the plate member 152 so as to prevent more than one pellet from being dispensed at a time. When the spout member is released, the spring elements automatically cause it to shift back to the central position shown in FIG. 6 so that the further dispensing of pellets is precluded while at the same time another pellet 112 may pass into the aperture 156 for subsequent dispensing. The smaller pellets 110 may be similarly dispensed by manually shifting the spout member from the central position to the position shown in FIG. 8 at which the discharge passageway 170 is aligned with the aperture 154.

The small pellets may be loaded into the magazine by removing the fork and dropping the pellets into the bore 42 which is connected with the bore 114 by aperture 171. The larger pellets are loaded through the dispensing spout when the device is held in an inverted position.

FIG. 14 shows a portion of the slanting slot structure incorporating a modified form of the present invention as indicated by the application of reference numerals with the suffix "a" added to elements corresponding to those of the above described structure. This embodiment differs in that the fork member 24a and the elastic sling
means 26a are particularly adapted for projecting an article such as an arrow 188 rather than the pellet. It will be appreciated that the fork member 24a may be readily assembled with the hand grip structure described above in place of the fork member 24. One difference in the fork member 24a is that a seat orguide element 190 is provided between the fork arms 28a and 30a for guiding and supporting the arrow, and a string 192 which is adapted to engage a notch at the trailing end of the arrow shaft is connected between the elements 84a and 82b rather than the above mentioned leather pouch.

It also is to be noted that in this embodiment the fork member is formed from sheet metal and is provided with parallel tubular bearing sections 194 and 196 at outer ends of the arms. Pins or short shafts 198 and 200 are respectively rotatably disposed in the bearing sections 194 and 196, which pins have enlarged head portions for limiting axial movement thereof in a rearward direction. The tubular sliding elements 72a and 74a are assembled over the rearwardly extending end portions of the pins 198 and 200. With this structure any tendency for the elastic tubes 72a and 74a to become twisted during use of the device is eliminated since any twist in the elastic tubes will be relieved by rotation of the pins 198 and 200 within their associated bearing sections of the fork member. In many situations this action will eliminate the time consuming and annoying need of time to untwist the elastic members after a shot whereby rapid loading and shooting is facilitated.

It is to be understood that the fork member 24a may also be made without the arrow guide so that it may be used with slings means adapted for pellets and the like, rather than arrows.

FIGS. 16 and 17 show a slightly modified dispensing mechanism which is similar to the structure described above as indicated by the application of identical reference numerals with the suffix "d" added to corresponding elements. This mechanism differs from that described above in that the members 158b and 160b of the dispensing spout are provided with lip portions 202 and 204 at the lower end of the dispensing passageway 170b and projecting below adjacent lower edges of the spout members. These lips provide a clearance for a pellet or pellets for facilitating entry into the pouch of a slingshot. In other words, the lips create a pocket in the pouch into which the pellets may fall without obstruction. The lips will prevent an operator from accidentally squeezing and closing the space within the pouch where the shot is to be received until after the shot has been deposited therein.

It will also be noted that the modified dispensing mechanism is adapted to deposit a plurality of the smaller sized shots at one time. Thus, the mechanism is provided with a tube 206 secured to and depending from the block 152b and providing a continuation of the aperture 154b for receiving and retaining a plurality of the shots or pellets 110b. At the same time portions 208 and 210 of the dispensing spout members 158b and 160b are formed outwardly to provide clearance for the tube 206 and also to provide a bottom surface 212 for closing the lower end of the tube until the spout member has been shifted so as to align the passageway 170b with the tube.

While the preferred embodiments of the present invention have been shown and described herein, it is obvious that many structural details may be changed without departing from the spirit and scope of the appended claims.

The invention is claimed as follows:

1. A structure of the type described comprising: hand grip means; fork means mounted on said hand grip means for pivotal movement relative to the hand grip means about an axis extending generally longitudinally of the hand grip means; said fork means including a radially projecting flange; quick release means detachably secur-

5. A structure, as defined in claim 3, wherein said first and second apertures are of different sizes for respectively accommodating pellets.

10. A structure, as defined in claim 5, which includes a device in said first mentioned chamber means for separating the pellets for passage one at a time through said first mentioned aperture, said separating means comprising an elongated passageway aligned with and extending into said fork means in assembled relationship with said hand grip means; said quick release means including a retaining member pivotally secured to said hand grip means for overslying said flange, said retaining member having a relieved peripheral portion for enabling the retaining member to pivotally move from the flange upon pivotal movement of the retaining member to a predetermined position; and elastic slings means having opposite end portions connected to said fork means, said fork means pivoting in response to any uneven pull by an operator on said opposite end portions of the elastic slings means for tending to equalize the pull on said opposite end portions.

15. A structure, as defined in claim 1, which includes detent means for releasably securing said retaining member in a desired adjusted position.

20. A slit shot structure of the type described comprising hand grip means adapted to be held in a generally upright position, fork means connected to said hand grip means, first chamber means in and extending from a lower end of said hand grip means for containing a first supply of pellets, second chamber means in and extending from a lower end of said hand grip means for containing a second supply of pellets, means connected with and traversing a lower end of said hand grip means and substantially closing lower ends of said chambers and having first and second apertures there-through respectively registering with said first and second chambers for permitting first and second members for inflating the shot between said first and second chambers, said apertures being laterally spaced apart, a dispensing member mounted for manual movement along said last mentioned means and including portions for closing lower ends of said apertures when said dispensing member is at a predetermined first position, said dispensing member including a dispensing passageway extending between said portions and selectively alignable with said first and second mentioned apertures upon selective movement of the dispensing member along said last named means in opposite directions, and elastic slings means having opposite end portions connected to said fork means.

25. A structure, as defined in claim 3, wherein said first and second apertures are of different sizes for respectively accommodating pellets.
upwardly from said first aperture to a point adjacent but spaced from an upper end of said chamber means, said last mentioned passageway having a diameter similar to but slightly greater than the diameter of pellets to be stored within said first chamber means and the upper end of said last mentioned passageway being spaced from said upper end of the first chamber means a distance at least as great as said diameter, said last mentioned passageway being adapted to receive a series of the pellets when an operator turns the hand grip means first upside down and then right side up.

7. A structure, as defined in claim 6, wherein said separator means includes means providing an annular track adjacent the upper end of said first chamber means for catching a plurality of pellets when the hand grip means is turned upside down and directing the pellets to said last mentioned passageway when the hand grip means is again turned right side up.

8. A structure, as defined in claim 5, which includes means disposed in said second chamber means for separating pellets therein for facilitating passage of the pellets through said second aperture, said separating means comprising a plurality of elongated tubes each adapted to contain a series of pellets, said tubes being secured together symmetrically around a central axis, and means connected with an upper end of said tubes and extending to an upper end portion of said hand grip means for enabling the tubes to be manually rotated within said second chamber means for selectively aligning the tubes with said second aperture.

9. A structure, as defined in claim 8, wherein said means for rotating said tubes comprises a manually turnable disc at the upper end of said hand grip means, said fork means being detachably connected with said hand grip means and including a flange portion projecting beneath a margin of said disc for retaining the fork means in similar relationship with the hand grip means, said disc having a relieved peripheral section which may be aligned with said flange upon rotation of the disc for releasing the flange and permitting the fork means to be removed.

10. A structure, as defined in claim 3, wherein said means traversing a lower end of said hand grip means and having first and second apertures therethrough includes elongated tube means defining said first aperture and having a length sufficient for receiving and retaining a plurality of pellets from said first supply of pellets, said plurality of pellets being dispensed substantially simultaneously when said dispensing member is shifted for aligning said dispensing passageway with said tube means.

11. A structure of the type described comprising hand grip means adapted to be held in a generally upright position, fork means joined with said hand grip means and including spaced apart arm portions, said fork means also including first and second bearing means on outer ends of said arm portions, first and second elements rotatably supported in said first and second bearing means and fixed against axial displacement in a direction extending rearwardly from said fork means, and sling means including opposite elastic end portions respectively connected to said first and second elements, substantially any tendency of said opposite end portions of the sling means to become twisted during use of the structure being relieved by rotation of said elements within their respective bearing means.

12. A structure of the type described comprising: hand grip means; fork means connected to said hand grip means and having oppositely extending arms; sling means including opposite elastic tubular end portions connected to said fork means at said arms, said elastic tubular portions having normal internal diameters lesser than the diameters of said arms, said sling means further including an intermediate projectile engaging element connected between said elastic tubular end portions; and connecting devices between said tubular end portions and opposite ends of said intermediate projectile engaging element, each of said connecting devices comprising elongated complementary body sections having a combined diameter greater than the internal diameter of an associated tubular end portion and being integrally joined at one pair of adjacent ends, said projectile engaging element having a portion extending between said body sections and being retained by the integral junction between said adjacent ends, opposite end portions of said body section being inserted into an associated tubular end portion.

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