March 11, 1924. 1,486,403

W. J. WATKINS

SLING GUN

Filed May 7, 1923

Fig. 1.

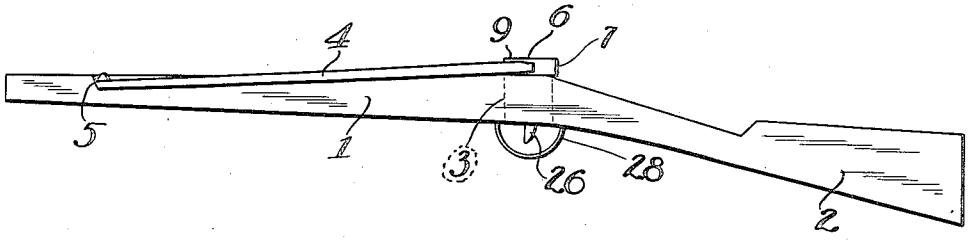
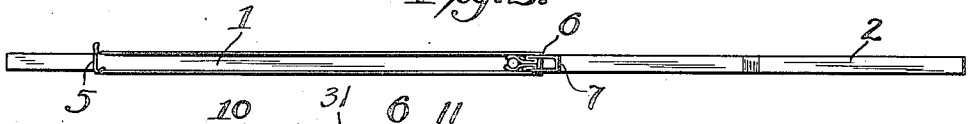


Fig. 2.



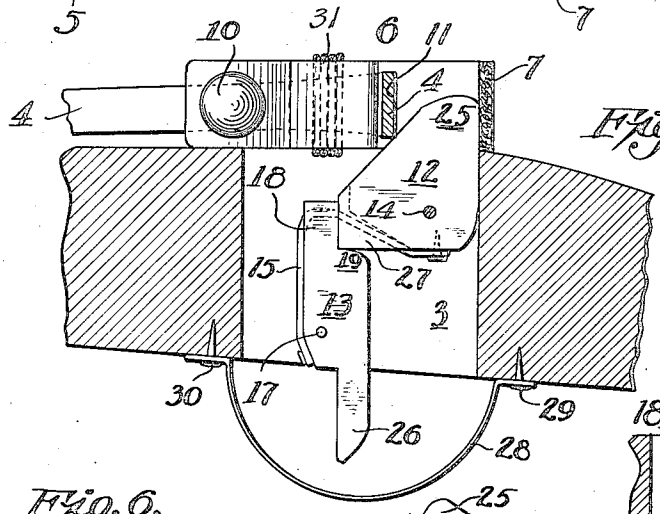


Fig. 3.

Fig. 4.

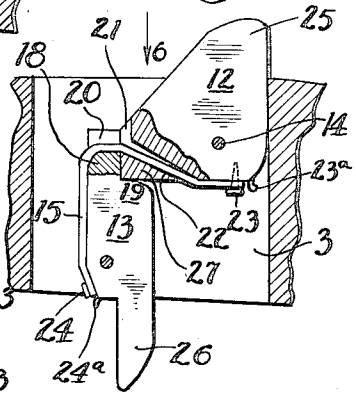


Fig. 6.

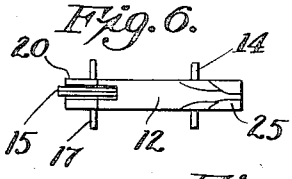


Fig. 5.

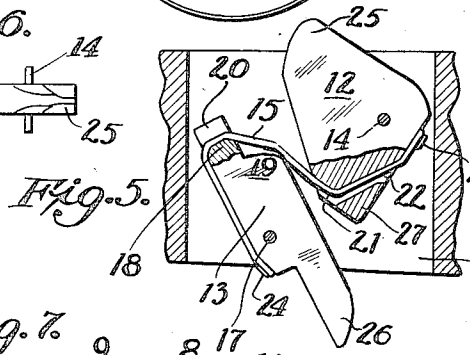
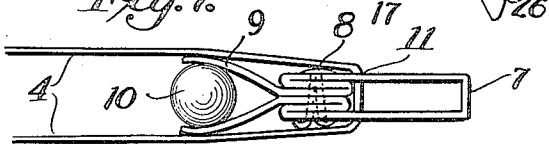


Fig. 7.



Inventor

W. J. Watkins

by Hazard & Miller

Att'ys

Patented Mar. 11, 1924. 1,486,403

UNITED STATES PATENT OFFICE.

WILBUR J. WATKINS, OF SOUTH PASADENA, CALIFORNIA.

SLING GUN.

Application filed May 7, 1923. Serial No. 637,253.

To all whom it may concern:

Be it known that I, WILBUR J. WATKINS, a citizen of the United States, residing at South Pasadena, in the county of Los Angeles and State of California, have invented new and useful Improvements in Sling Guns, of which the following is a specification.

My present invention being a sling gun, it is an object of this invention to simplify and improve the construction of such guns, producing an attractive toy arm, which, although durable, can be made and sold at a low price.

It is an object of this invention to provide a gun comprising but few moving parts, which parts may be inexpensively made from wood or metal, and in which no springs need be employed, rubber bands, or the like, being preferably used not only to impart movement to an arrow, or bullet, or other projectile, but also to connect and return the elements constituting the "lock" of my gun—these being ordinarily a trigger and a catch controlled thereby. In this invention I provide not only a simple and effective lock for sling guns but also a novel projectile carrier or sling of leather or equivalent material, this element being provided not only with a holder for a projectile but with means for securing the carrier to a heavy rubber band, or the like, and also with means for engaging the catch releasable by a trigger, the entire gun requiring no metallic parts, although a couple of brads, a rivet, and a few tacks, and a metallic guard for the trigger may be used to advantage.

Other objects of my invention will appear from the following description of a preferred embodiment thereof, and from the appended claims, taken in connection with the accompanying drawings, in which—

Fig. 1 is a side elevation of a sling gun embodying my invention.

Fig. 2 is a top plan view of the same gun.

Fig. 3 is an enlarged detail view showing in elevation the lock of my gun.

Figs. 4 and 5 are similar views showing different relative positions of the parts comprising the mentioned lock.

Fig. 6 is a top plan view which may be regarded as taken in the direction of the arrow 6, Fig. 4, and showing only the trigger and the catch elements of my lock and the rubber bands by which they are connected.

Fig. 7 is an enlarged detail view showing the sling hereinafter referred to and comprising a projectile pocket and a catch-engaging loop by which the same is retained in position preparatory to "firing" of my gun.

It is believed that the general character and mode of operation of my gun will be readily understood from the following description of a preferred embodiment thereof, in which 1 is a gun "barrel," and 2 is a gun stock, these elements being preferably made integral and from wood, and a transversely or vertical channel 3, constituting a lock opening, being cut therethrough.

A contractile strip, which may ordinarily be merely a large rubber band 4, may be secured in any suitable way at or near the front end of the barrel of my gun; and, for this purpose, I find it satisfactory to employ a transverse and backwardly inclined slot or kerf 5. I find that, if the cut ends of a rubber band of suitable character are inserted in a slot such as is shown in Fig. 1, this slot being so narrow that the band must be placed under high tension before the two ends can be inserted therein, the ends may be self-retaining, although they may be easily removed when a new band is to be inserted. In order to use the contractile band 4 in the "firing" of my gun I may secure thereto any suitable projectile carrier; and, for this purpose, I prefer to employ a carrier 6 of the general character best shown in Fig. 7, this carrier being formed of a strip of leather or equivalent material shown as folded at or near its center to form a catch-engaging loop 7, the lateral portions of the strip being shown as folded upon themselves and secured together by means of a rivet 8, in such manner that the forwardly projecting ends 9 of the strip or strap constitute a pocket for a projectile 10; and the described carrier may be secured to the contractile band 4 in any suitable way, as by means of apertures 11, through which the contractile band may be threaded in a continuous manner before its ends are inserted and retained as shown by overlapping in the mentioned slot at or near the end of the gun barrel.

Although the features of construction already described are capable of independent use, I prefer to associate therewith a "lock" comprising a catch 12 for retaining the projectile carrier in its retracted position, and

the trigger 13 by which the mentioned catch may be released, to throw a projectile 10, which may be buckshot, or an arrow, or the like, in the direction in which the gun may be pointed.

Although a lock of any preferred design may be employed, I prefer to employ a lock consisting of a catch 12 having the form of a right triangle whose corners are blunted, this catch being preferably a block of wood pivoted at 14, in such manner that one of the legs of its triangular body shall extend above the top of the lock opening 3, to permit an engagement of the catch-engaging loop 7, the catch 12 being moreover preferably secured to the trigger 13 by an elastic element such as the rubber band 15, and being so positioned that the rear wall of the lock opening 3 shall constitute a stop 16 determining the normal position of said catch.

It will be understood from an inspection of Figs. 3, 4 and 5 that the catch 12 will be retained in the position shown in Figs. 3 and 4 by means of its contact with the trigger 13, pivoted at 17, and provided with an upward prolongation 18 and a shoulder 19, the mentioned prolongation being provided with a groove 20 extending longitudinally of the gun, and the catch 12 being provided with a groove 21 and a channel 22, through which extends the mentioned elastic element 15, optionally secured by means such as tacks 23 and 24, the tendency of the band or elastic element 15 being to restore both the catch 12 and the trigger 13, through which this elastic element passes, to their normal positions.

It will be obvious that, assuming the elements of my lock to have been returned to the positions shown in Figs. 3 and 4, and assuming the loop 7 of my projectile carrier to have been drawn back over the upwardly extending leg 25 of the catch 12, and assuming a projectile 10 to have been placed in position, the effect of a retraction of the projecting end or finger piece 26 of the trigger 13 will be a disengagement of the leg 27 of the catch 12 therefrom, in the manner best shown in Fig. 5, the loop 7 being consequently and suddenly released in such manner as to throw the projectile 10 with a force depending upon the power of the contractile band 4, the elastic returning means 15 being, however, effective, as already mentioned, to restore the trigger and the catch to their normal positions as soon as the finger piece 26 shall be released, the leg 27 becoming again substantially horizontal.

The use of the trigger guard 28, shown as secured by tacks 29, 30, must be regarded as optional; and it will be obvious that an external wrapping, such as is suggested at 31 in Fig. 3, may be substituted for the rivet 8, best shown in Fig. 7, or securing means may be entirely omitted, or any desired form of projectile carrier, if such is employed, may be substituted for that shown, although, for obvious reasons, it is advantageous that this carrier shall be longer than the opening 3, across which it extends, in order that a projectile 10 may be suitably supported by the barrel 1. It will also be obvious that any equivalent means, such as the integral projections 23^a and 24^a, suggested in Fig. 4, may be substituted for the tacks 23 and 24 shown as extending into the blocks 12 and 13, to secure the elastic band 15 thereto.

Although I have described in detail one complete embodiment of my invention, it will be understood that various parts thereof might be independently employed, and also that various modifications might be made therein without departure from the spirit and scope of my invention as the same is indicated above and in the following claims.

What I claim is:

1. In a sling gun, a lock consisting of two pivoted elements adapted releasably to engage one another and secured to one another by an elastic band contacting only with said elements and tending to pull them toward one another.

2. In a sling gun, a lock consisting of two pivoted elements adapted releasably to engage one another and secured to one another by elastic means whose ends are in contact with said pivoted elements, tending to pull them toward one another.

3. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger and said catch being connected by an elastic band.

4. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, and an elastic band connecting said trigger and said catch.

5. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, and an elastic band connecting said trigger and said catch and tending simultaneously to restore said trigger and said catch to sling-retaining position.

6. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger being provided with a longitudinally grooved upward prolongation adapted to contact with said catch, and to retain an elastic element extending therethrough.

7. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger being provided with a prolongation adapted to contact with said catch and having a groove in the top thereof adapted to receive an elastic returning means.

8. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger being provided with elastic returning means and with a longitudinally grooved upward prolongation limiting its return and retaining said elastic returning means.

9. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger being provided with elastic band returning means secured to said catch and with a prolongation limiting its return under the pull of said band by contact with said catch.

10. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger being provided with elastic band returning means secured to said catch and with a prolongation limiting its return under the pull of said band and with a shoulder adapted releasably to engage said catch.

11. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said catch being substantially in the form of a pivoted right triangle whose corners are blunted and said trigger being pivoted in advance of said catch and secured thereto by a rubber band.

12. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said catch being substantially in the form of a pivoted right triangle whose corners are blunted and one of whose legs may swing to a substantially vertical position releasably to retain a sling and said trigger being pivoted in advance of said catch and secured thereto by elastic means tending to pull the top of said trigger toward said catch.

13. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said catch being substantially in the form of a pivoted right triangle whose corners are blunted, and one of whose legs may swing rearwardly, in setting into contact with the stock of said gun as a stop, said trigger being pivoted in advance of said catch.

14. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said catch being substantially in the form of a pivoted right triangle whose corners are blunted, and one of whose legs may swing into a substantially horizontal position upon a shoulder of said trigger, said trigger being pivoted in advance of said catch and connected thereto by a tension returning means.

15. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said catch being substantially in the form of a pivoted right triangle whose corners are blunted, and one of whose legs may swing into a substantially horizontal position upon a shoulder of said trigger, said leg being provided with a channel for an elastic returning means.

16. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger and said catch being provided with elastic tension returning means in the form of a rubber band connecting the same.

17. In a sling gun, a lock consisting of a pivoted trigger and a catch engaged thereby and adapted releasably to retain a sling, said trigger and said catch being provided with elastic returning means secured thereto and passing therethrough.

18. In a sling gun, a projectile carrier of flexible material, and a contractile band secured thereto, said carrier being provided with a catch-engaging loop at the rear thereof and with a projectile pocket at the front thereof, said loop and said pocket being formed from a single strip of material provided with apertures to receive said band.

19. In a sling gun, a projectile carrier of flexible material, and a contractile band secured thereto, said carrier being longer than the lock-opening across which it extends.

20. In a sling gun, a projectile carrier of flexible material, and a contractile band secured thereto, said carrier comprising a strap folded near its middle to form a rear catch-engaging loop, and having its lateral portions secured together at an intermediate point to form a projectile pocket between its forwardly extending ends.

21. In a sling gun, a projectile carrier of flexible material, and a contractile band secured thereto, said carrier being provided with a catch-engaging loop at the rear thereof, separate ends of said contractile band being retained by overlapping in a transverse and inclined cut.

22. In a sling gun, an elastic contractile element retained by overlapping in an inclined cut.

23. A sling gun comprising a body, two elastic bands, two blocks, and two brads, said blocks being pivoted upon said brads and connected to one another by one of said elastic bands, the other elastic band being secured to said body.

In testimony whereof I have signed my name to this specification.

WILBUR J. WATKINS.