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RETRACTABLE SLING FOR GUNS

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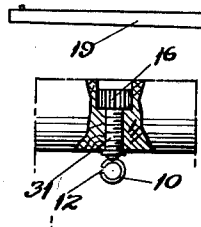


Fig. 2.

Fig. 1.

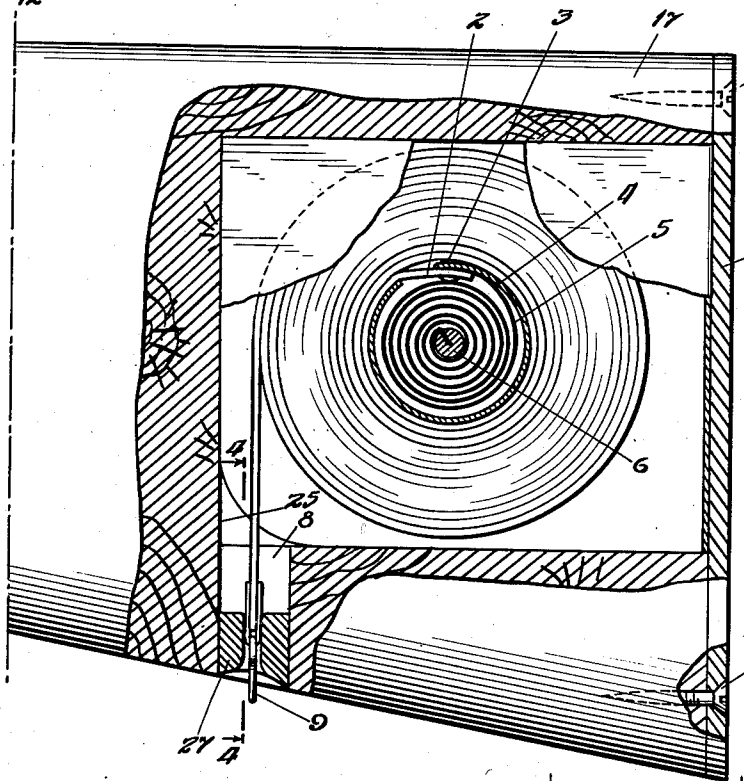


Fig. 2.

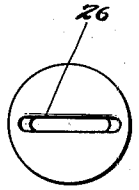


Fig. 5.

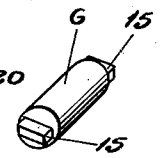
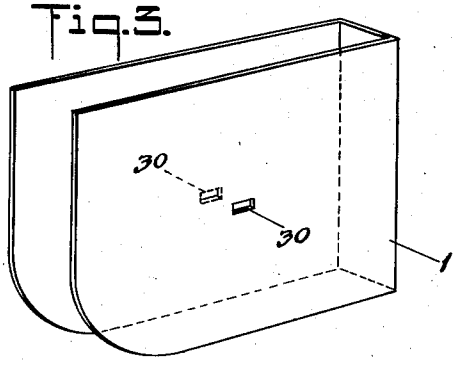


Fig. 6.

Fig. 3.



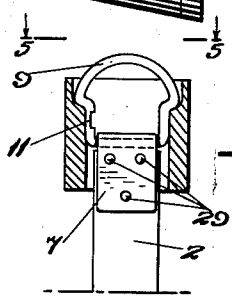


Fig. 4.

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RETRACTABLE SLING FOR GUNS

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2 Claims. (Cl. 42—85)

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The present invention relates to the art concerning slings for rifles, shotguns or the like and is especially concerned with the provision of a disappearing type of sling.

In the use of rifles, shotguns or the like considerable inconvenience is encountered in connection with the sling. Such slings as have been customarily used require readjustment each time the rifle or gun is changed from the carrying condition to a condition of use. According to the present invention this inconvenience is completely eliminated by the provision of a retractable sling. When the rifle or gun is to be used the sling may be disengaged and then automatically retracts itself into the stock of the gun and is thereby completely out of the way and offers no impediment to ready use of the gun. When the sling is desired to be used it may be readily withdrawn from its retracted position and, in a very simple manner, reattached and put in operative condition.

These and other advantages and objects of the present invention will become more apparent from the following detailed specification of a preferred embodiment of the invention, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevational view of a rifle showing the sling of the present invention in attached position;

Figure 2 is an enlarged fragmentary cross-sectional elevation view of the stock of the rifle of Figure 1 showing the sling in retracted position;

Figure 3 is a perspective view of the sling housing box used in Figure 2;

Figure 4 is a fragmentary cross-sectional view, partly in elevation, taken along line 4—4 of Figure 2;

Figure 5 is an end view of Figure 4 viewed in a direction 5—5 thereof;

Figure 6 is a perspective view of the bearing shaft and spring holder; and

Figure 7 is a fragmentary elevation view, partly in section, of the eyelet for attaching the sling to the gun forearm.

Referring more in detail to the drawings, there is shown a rifle having a barrel 19, a forearm 18, generally of wood, and a stock 17. Stock 17 is hollowed, as shown in Figure 2, to contain a housing box 1 at whose center is fixed a shaft 6 serving as a bearing and spring holder. Anchored to the shaft 6 is a spiral spring 5 similar to the conventional clock spring. The outer end of spring 5 is fixed to a spool 4 to which is also fixed the sling strap or rifle carrying strap 2, such as of leather or other suitable material.

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In manufacture a bore 25 is formed, as by drilling, in the stock from the lower part thereof perpendicularly to the axis of the barrel 19 and extending only partially through the stock for a distance less than the width of the stock at that point. The opening for the accommodation of the housing box 1 is then formed by cutting out the portion of the stock between the bore 25 and the righthand edge or butt of the rifle, the bore 25 thereby serving to define the extent of the hollowing out of the stock. After housing 1 is inserted within the stock it is retained in place by means of a butt plate 21 fastened to the stock 17 by suitable butt plate screws 20.

A cylindrical plug 8 of outer configuration conforming to the bore 25 and having therein a slot 26 adapted to accommodate the strap 2 is then force fitted into the bore 25. Plug 8 is generally concave at its outer end, as shown at 27, to permit grasping of a ring 9 which is fastened to the end of the strap 2 as by a metal clip 7 and rivets 29. Plug 8 serves both as a guide for the strap and as a stop by engaging ring 9 which is larger than the width of the slot 26. It will thus be apparent upon pulling ring 9, strap 2 will be drawn from its place within the housing 1 against the tension of spring 5 and upon release of the strap 2 and ring 9 the spring 5 will retract the strap within the stock.

To hold the strap in its useful position an eyelet 10 is utilized which is fastened to the forearm 18. Eyelet 10 is preferably fastened to a machine screw 31 which is screwed into an escutcheon 16 suitably anchored in the wood forearm 18. If desired, screw 31 may be tapped directly into barrel 19. Eyelet 10 has a gap 12 therein which cooperates with the thin section 11 in ring 9. The major part of ring 9 is too large to pass through gap 12. However its thin portion 11 will easily pass through gap 12. Therefore in fixing the ring 9 to eyelet 10 ring 9 is manipulated until the flat spot 11 passes through eyelet gap 12. Since this thin spot 11 is on the side of ring 9, and since the tension on spring 5 causes the end portion of ring 9 to abut eyelet 10, it will be apparent that the ring 9 cannot disengage itself of its own accord.

In fabrication and assembly the stock 17 is first bored as at 25 and then hollowed out to accommodate the housing 1. Plug 8 may be inserted in bore 25 at this point. The spring 5 is fixed to the shaft 6 and both strap 2 and spring 5 are fixed to the spool 4. This subassembly is then mounted within the housing 1, the shaft 6 being splined as at 15 to fit within corresponding slots 30 of housing 1 to retain shaft 6 against rotation. Spring

5 is given the desired tension at this time and the subassembly is then inserted into the stock 17 and the strap 2 is fed through the slot 26 of plug 8. If necessary the tension of spring 5 is overcome by holding the strap 2 in its extended position while the ring 9 is fixed to strap 2 by clip 7 and rivets 29. There is thus provided a readily manufactured and assembled retractable strap or sling for rifles or the like which does not add materially to the weight or balance of the rifle since the parts added merely replace material removed from the stock itself. The strap or sling may be readily placed in operative position or easily detached and then automatically retracted as desired, thereby affording greatly increased convenience of use of the rifle.

It will be understood that the above description represents merely one illustrative embodiment of the invention and that other equivalent construction could also be employed. The present invention therefore is not to be considered limited by the present description but is defined solely by the appended claims.

We claim as our invention:

1. In a rifle with retractable sling having a hollow stock, a housing having an end and two sides contained within said hollow stock, a coiled flat spring having its inner end fixed relative to said housing, a spool mounted in said housing surrounding and fixed to the outer end of said spring, a sling strap coiled about said spool, said stock having a cylindrical bore extending from its hollow portion to the bottom edge of said stock, a plug fixed within said bore and having a flat slot extending transversely of said rifle stock, suitable for accommodating said strap, said plug having a concave recess at its end adjacent the bottom edge of said stock, the end of said slot forming a shoulder within said recess, said strap extending through said slot and having a ring at its end exterior to said stock, said ring being of a larger width than the width of said slot whereby said shoulder serves as a stop for said ring.

2. In a combined rifle and retractable sling comprising a rifle having a stock with a hollow communicating with the butt end thereof, a housing mounted in said hollow, and a cylindrical bore connecting said hollow with the lower edge of said stock, a cylindrical plug within said bore, said plug having a flat slot extending transversely of said stock, a resiliently retained normally coiled strap mounted within said housing, an end of said strap passing through said slot, cooperating means comprising a ring on said strap end and a shoulder at the end of said slot within the outer opening of said plug for preventing said strap end from passing through said bore, and a retaining element on the fore part of said rifle for detachably holding said strap end.

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