

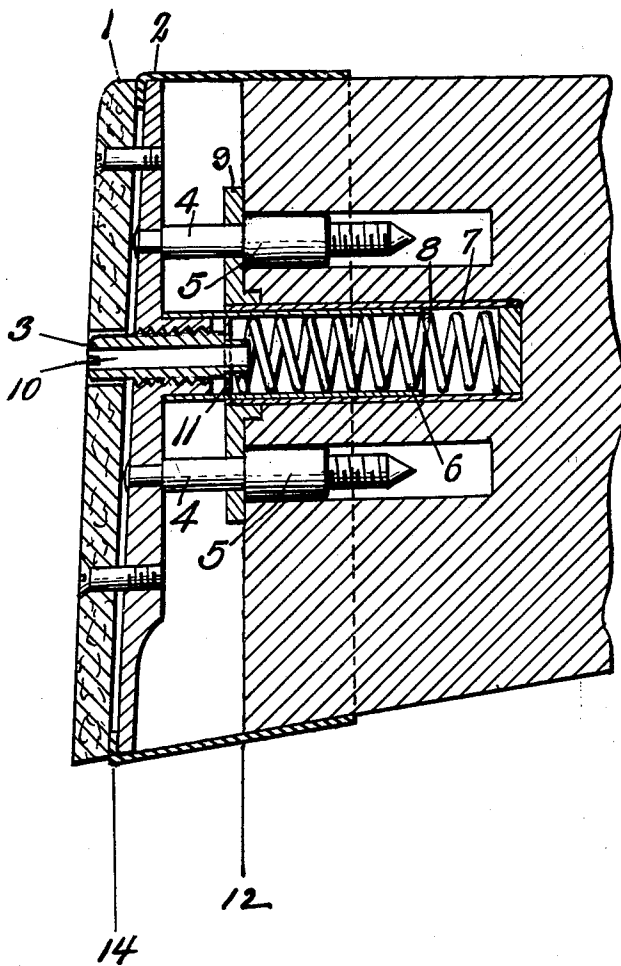
June 26, 1934.

S. L. STETSON

1,964,649

FIREARM

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UNITED STATES PATENT OFFICE

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FIREARMS

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5 Claims. (Cl. 42-74)

My invention is a "buffer" for shotguns to absorb the recoil. It will be found useful on any gun but more so on all light guns like 20-28-410 and those that shoot heavy loads.

head plate #2 and thereby absorbs the recoil. The tension spring then returns the device to its normal position or where it started from.

The butt plate #1 is naturally the same shape as butt end of the gun stock. The head plate therefore is same shape as butt plate but $\frac{1}{8}$ " smaller both ways to allow for turn in of jacket to make it conform to size of butt plate. Said head plate is made of aluminum with a raised beveled portion on side next to gun butt to bring the check rods at right angles, also a lug for attaching tube #6 to said plate, the lug is bored and tapped to receive adjusting screw #3 which acts directly on the tension spring #8 and is accessible through butt plate.

I claim

1. A buffer for attachment to a gun stock comprising a check plate adapted for attachment to the butt end of the gun stock, said check plate having apertures adapted to align with corresponding depressions in said gun stock, a buffer spring in one of said depressions, bearing means for one end of said spring mechanically associated with said check plate whereby pressure from said stock will be transmitted from said check plate to said one end of said spring through said bearing means, a head plate having rigid guide posts slidably extending through certain of said apertures in said check plate and into the corresponding depressions in said gun stock, means in said latter depressions limiting movement of said posts in one direction, means adjustable with respect to said head plate cooperating with the other end of said spring and coaxial therewith whereby recoil transmitted to said gun stock will be taken up by said spring.

2. A buffer as claimed in claim 1 in which said head plate is provided with a butt plate constructed and arranged to afford ready access to said means adjustable with respect to said head plate.

3. A buffer as claimed in claim 1 in which the said bearing means includes a tubular member secured to said check plate at one end and a member secured internally of said tubular member at its other end, inclosing said spring and forming a thrust bearing for the first mentioned end of said spring.

4. A buffer as set forth in claim 1 in which said head plate and said check plate are each provided with a tube secured thereto respectively and projecting forwardly, the tube of said head plate telescoping in said check plate tube and housing said buffer spring and said latter tube forming the mechanical association between said

5. An object of my invention is to provide an improved buffer and one in which the length of the stock is not changed with changes in the adjustment of the tension of the spring means that takes up the recoil.

10 The figure of the drawing is a cross section of my buffer and a portion of the gun stock to which it is shown attached.

My invention consists of an aluminum lead plate #2 with an inner tube #6 attached thereto also check rods #4-4 attached thereto overlapping check nuts #5-5 thereon and the adjusting screw #3 that extends through headplate #2 and butt plate #1 for easy and quick adjustment of recoil. The adjusting screw #3 acts directly on the tension spring #8 and does not alter the length of stock. Innertube #6 telescopes into outer tube #7 and is held in its proper position by the check rods #4-4 passing through check plate #9 and held in position by the overlapping nuts #5-5 thereon. The check plate #9 is rigid on outer tube #7 and rests up against the end of stock when tube #7 is inserted in hole in stock. The spring #8 fits into the tubes #6 and 7 between a bearing on the end of tube #7 and a washer 11 that fits on a shoulder on the end of adjusting screw #3 which passes through a hole in the butt plate #1 thereby being convenient for quick adjusting of spring #8 to conform to recoil.

35 A red rubber jacket 12 turns over the edges of headplate #2 about $\frac{1}{4}$ " and is held in place by the butt plate #1 screwing up tightly thereon. It is about 2" wide over all and overlaps the stock about 1". The butt plate #1 is red fiber and the red rubber jacket gives the gun a very nice appearance. The adjusting screw #3 has a vent hole through its entire length to relieve the air pressure which acts more or less. #14 on the drawing is the space between #1 and #2 for turn-over of jacket 12. The vent hole in the adjusting screw is indicated by 10, and #11 is a washer on end of adjusting screw.

Operation

50 At the moment of discharge the recoil starts the gun backwards against your shoulder and at this point the tube 7 and check plate 9 start sliding on tube 6 and check rods 4-4 respectively. This causes the coil spring #8 to contract and increase in tension as plate 9 moves along toward

bearing means and said check plate as and for the purpose set forth.

5. A buffer for attachment to a gun stock comprising a check plate adapted for attachment to the butt end of said gun stock, said check plate having apertures adapted to align with corresponding depressions in the gun stock, a tubular member having a bearing means at one end and secured at the other end in one of said apertures of said check plate, a head plate having rigid guide posts slidably extending through certain of said apertures in said check plate and into the corresponding depressions in said gun stock, means in said latter depressions limiting move-

ment of said posts in one direction, a second tubular member secured to said head plate and telescoping in said first tubular member, adjustable means threaded through said head plate having an air vent longitudinally therethrough, a buffer spring in said tubular members cooperating at one end with said bearing means and at the other end with said adjustable means whereby recoil transmitted to said gun stock will be taken up by the joint action of said spring and the air cushion afforded by the tubular members and air vented adjustable means.

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CERTIFICATE OF CORRECTION.

Patent No. 1,964,649.

June

SAMUEL LESTER STETSON.

It is hereby certified that error appears in the printed specification above numbered patent requiring correction as follows: Page 1, line 1 "lead" read head; and that the said Letters Patent should be read with correction therein that the same may conform to the record of the case Patent Office.

Signed and sealed this 11th day of September, A. D. 1934.

Leslie Frazer

(Seal)

Acting Commissioner of

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Patent No. 1,964,649.

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SAMUEL LESTER STETSON.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 1, line 13, for "lead" read head; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 11th day of September, A. D. 1934.

Leslie Frazer

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Acting Commissioner of Patents.