

UNITED STATES PATENT OFFICE.

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GUN.

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To all whom it may concern:

Be it known that I, WILLIAM J. MOLLOY, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Guns; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

The invention relates to improvements in guns.

One of the objects of the invention is to provide improved adjustable means for balancing guns.

Guns that are brought to the shoulder to fire, such as shot guns, rifles and the like, should be properly balanced to suit the characteristics of the particular user of the gun. When such a gun has been properly balanced it seems to possess buoyancy and lends itself readily to ease of manipulation, contributing to accuracy and celerity of operation. Its muzzle does not droop and the gun is not sluggish in its movements when coming to place at the shoulder.

The poise of the gun in the hands of one man may not be suitable or agreeable to a man of different build and temperament. Therefore guns built with a fixed unchangeable balance are not at all adaptable for general or universal application for use by critical gun owners.

Other objects are to provide means for adjusting the balance of a gun which is not readily accessible; which is not visible in the general use of the gun and which serves as additional means for connecting the stock to the tang of the gun barrel.

Another object is the provision of means for balancing a gun which will not add materially to the total weight of the gun.

Other objects, advantages and benefits of the invention will become apparent, to persons skilled in the art, from a consideration of the following description when taken in connection with the drawings forming a part hereof wherein:

Figure 1 is a side elevation of a shot gun;

Figure 2 is a longitudinal central enlarged section of the stock of the gun;

Figure 3 is a section on line III—III of Figure 2;

Figure 4 is a detail section showing a tool in place for shifting the balancing weight longitudinally of the stock;

Figure 5 is a similar view showing the tool in place to adjust the weight in a desired position.

In all the views the same reference characters are employed to indicate similar parts.

The stock part 5 has a longitudinally extending bore 6 terminating at a shoulder 7, and open at the butt end of the gun. This bore is covered by the usual shoulder plate, fixed to the stock by screws. The rod 8 extends axially through the bore 6 and is provided with an enlarged threaded part 9. A reduced part 10 screws into the tang 11 of the barrel part 12. A shoulder 13 is provided on the rod and is for close contact with the shoulder 7 provided by the difference in the diameters of the bores in which the front and rear portions of the rod 8 is contained. The rod has an angular end 14 by means of which it may be threaded into the tang 11 by application of the tool 15.

A weighted balancing body 16 is preferably threaded upon the enlarged threaded part 9 of the rod 8. The outer end of the weighted body has a notch 17 into which the tool 15 enters in rotating the weighted body 16 to move it longitudinally of the threaded part 9 of the rod. The tool 15 has projections 18 that enter the notches 17 like a screw driver for rotating the weighted body 16. The weighted body may conveniently be made of lead, condensed or swaged by pressure to reduce its volume.

The amount of material that is removed from the stock of the gun in providing the bore 6 will weigh substantially the same as the part introduced into the bore for the purpose of balancing, and therefore the total weight of the gun is not increased materially.

A check nut 20 may be placed on the threaded portion of the rod 9 to hold the weight 16 in adjusted position. I have found, however, that a check nut is not necessary when the bore 6 is of such size that the weight 16 fits snugly in the bore, the friction of the weight 16 with the walls of the bore is sufficient to hold it in adjusted

position. If, however, it is desired, a nut 20 may be used to more positively hold the balancing weight in place.

The longitudinal movement of the weight 5 16 in the bore 6 has a very great influence in the act of balancing the gun. When the balance has been satisfactorily established the shoulder plate 18 may be replaced and the presence of the balancing mechanism is 10 not discernable upon visual inspection of the gun.

While I have herein shown a single embodiment of my invention for the purpose of clear disclosure, it will be manifest, to persons skilled in the art, that considerable 15 change may be made in the arrangement, location and configuration of the parts within the scope of the appended claims.

Having described my invention what I 20 claim as new and desire to secure by Letters Patent is:

1. A gun, of the character described, having a stock and a weighted body adjustable longitudinally of the stock while in said 25 stock.

2. A gun, of the character described, having a stock with a bore longitudinally thereof; a weighted body adjustable in said bore while in the bore, and means to hold the 30 weighted body in adjusted position.

3. A gun, of the character described, having a stock with a bore longitudinally thereof; a weighted body adjustable while in said

bore; means to hold said weighted body in adjusted position, and a plate covering said 35 bore.

4. A gun, of the character described, having a stock part and a barrel part, with a bore longitudinally of the stock; a rod in said bore extending through the front end 40 of the stock and connecting the barrel part and the stock part together; a weighted body on said rod and in said bore adjustable while therein to balance the gun; means to hold the said weighted body in adjusted position, 45 and a butt plate to cover said bore.

5. A gun, of the character described, having a barrel part and a stock part, said stock part having a bore extending longitudinally thereof; a threaded rod extending through 50 said bore connecting said barrel part and stock part together; and a weighted body movable in said bore and on said rod.

6. A gun, of the character described, having a barrel part provided with a tang projecting from the rear end thereof; a stock 55 part having a longitudinal bore in line with said tang; a rod concentric with said bore and screwed into said tang to hold the parts together; a weight mounted on said rod and 60 movable axially of said rod to adjustably balance the gun, and a butt plate covering said bore.

In testimony whereof I have hereunto subscribed my name.

WILLIAM J. MOLLOY.