May 13, 1952 S. T. WILLIAMS 2,596,456

GUN TRIGGER PULL GAUGE

Filed July 29, 1949

Fig. 5.

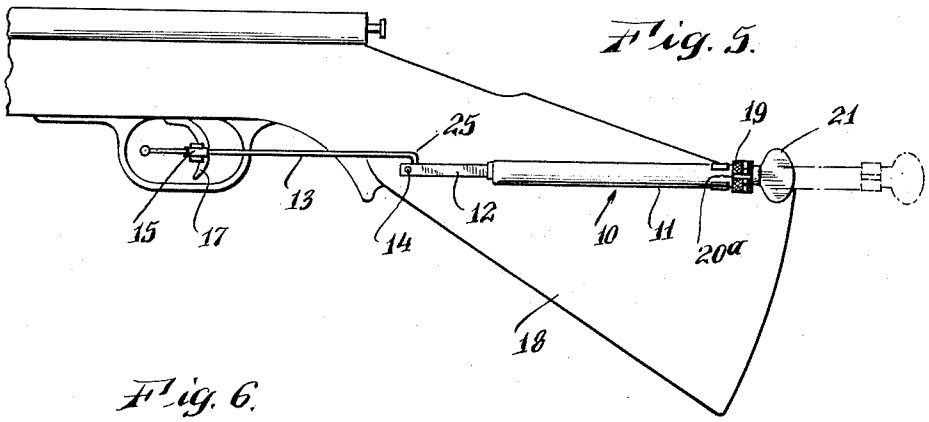


Fig. 6.

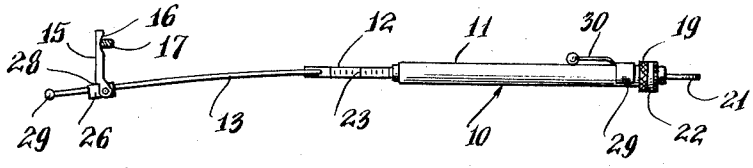


Fig. 1.

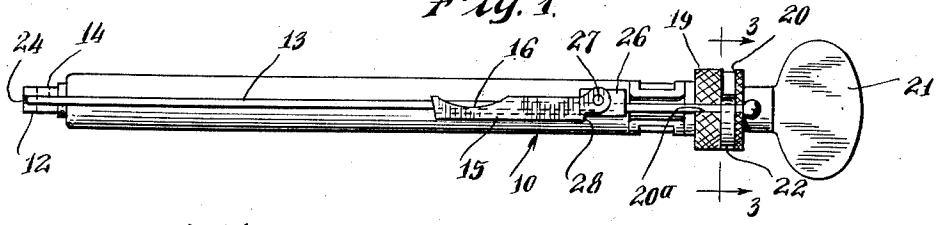


Fig. 2.

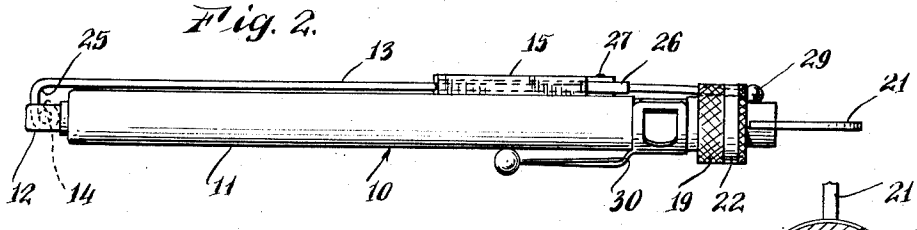


Fig. 3.

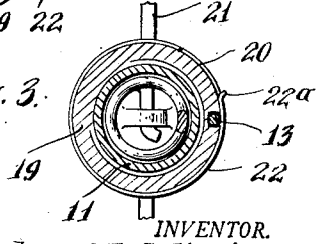
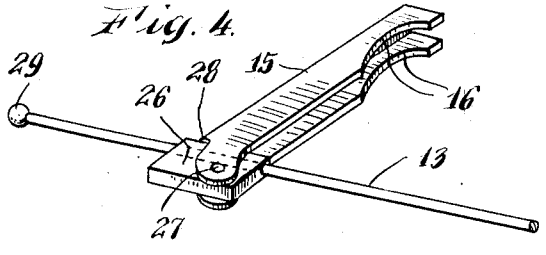


Fig. 4.



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GUN TRIGGER PULL GAUGE

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My present invention relates to a gun trigger pull gauge and aims to provide certain improvements therein.

Sportsmen who engage in hunting, trap shooting and analogous sports, and others who engage in manual firearms shooting competition, like to have the trigger of the gun or pistol so tensioned as to require a definite pull to trip the same and usually check the trigger pull with a testing device before using the firearm and make adjustment of the trigger tension, when necessary. Various devices have been proposed for testing the trigger pull of firearms but none, so far as I am aware, are so small and compact as to be carried about in the pocket of a person desiring to make use of such device.

Accordingly, an object of my invention is to provide a gun trigger pull gauge which can be conveniently carried about in the pocket of a garment. A further object is to provide a gun trigger pull gauge of a size and form to be held in the pocket of a garment by a clip in the manner analogous to holding a fountain pen or pencil. A still further object is to provide a device of the character set forth which is relatively simple in construction, inexpensive to manufacture and which, without any supplemental attachments, can be used for testing the trigger pull of various types of manual firearms.

The foregoing and other objects of my invention, not specifically enumerated, I accomplish by providing a pencil type gauge having means associated with the indicating member thereof for engaging the trigger of a manual firearm, said means being movable relatively to the indicating member and adapted when not in use, to be stowed in substantially parallel relation to the axis of the gauge casing and to be detachably held in said stowed relation.

The invention will be better understood from the detailed description which follows, when considered in connection with the accompanying drawings showing a preferred embodiment, wherein:

Figure 1 is an elevation of a gun trigger pull gauge embodying my invention, with the parts stowed to facilitate carrying the device in the pocket of a garment.

Fig. 2 is a view similar to Fig. 1 and taken at right angles thereto.

Fig. 3 is a section taken along the plane of the line 3—3 of Fig. 1.

Fig. 4 is a perspective view of a detail of the invention.

Fig. 5 is a side elevation showing the invention applied to testing the trigger pull of a gun.

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Fig. 6 is a top plan view of the device in operative position shown in Fig. 5, with only the trigger of the gun being shown.

Referring to the drawings, the firearm trigger pull gauge consists of a pencil type gauge 10 comprising an elongate cylindrical casing 11, an indicating member 12 controlled by a spring (not shown) and extensible through one end of the casing when subjected to a force in opposition to the spring, a resilient wire or hook 13 associated with the outer end of the indicating member, preferably through a pivotal connection 14, to which wire, in turn, is connected, preferably intermediate its ends, a lever 15 having a recessed portion 16 adapted to engage a trigger 17 of a gun or other manual firearm 18.

The gauge per se may be of any well known construction and, as herein shown, the casing 11 thereof is formed, adjacent its end opposite to that from which the indicating member is projectable, with an enlarged foot 19 having an annular groove 20 and an axial groove 20*a*, and a finger-engaging tab or enlargement 21. Rotatably mounted in the groove 20 is a split spring ring 22 provided with a finger-engaging lip 22*a* for a purpose to be presently explained. The indicating member 12 is preferably of polygonal cross-section and is swivelly mounted within the casing and has a scale 23 graduated in any desired units, preferably ounces. The outer end of the indicating member is bifurcated as indicated at 24, and pivotally mounted within said bifurcation by the pin 14 is one end of the resilient wire 13. Preferably the wire 13 adjacent its pivotal connection is formed with a substantially right angular bend 25 to enable the wire to be positioned parallel to the axis of the gauge casing 11.

The lever 15 is preferably of channel formation and is pivotally connected to the resilient wire 13 through the medium of a block 26 which is fixedly mounted on the wire in any preferred manner, the lever being pivotally connected to the block at 27 so as to extend in a plane which is substantially at a right angle to the plane passing through the hooked end of the wire containing the right angular bend 25. The base of the channel in the lever 15 adjacent its pivotal connection 27 is cut away so as to provide a shoulder 28 adapted to engage the block 26 and limit the outward movement of the lever in relation to the wire to an angle of approximately 90°, as best shown in Figs. 4 and 6. The pivotal connection 27 is also such as to permit the lever 15 to lie substantially parallel to the wire 13, in which position the side walls of the lever straddle the wire, as best shown in Figs. 1 and 2. The wire 13

at its outer end is provided with an enlargement such as a ball 29 to give both a finished appearance to the wire and prevent disengagement of the wire when in stowed relation to the gauge.

In the use of the device in testing the trigger pull of a firearm, the wire 13 is positioned to extend beyond the indicating member 12 in the general direction thereof and the lever 15 is articulated to extend at an angle to the wire. With the gauge parts in said relation the recessed portion 16 of the lever is engaged over the trigger 17 of the firearm which may be suitably supported in a horizontal position in the left hand of the person making the test, and with the parts in the general relation shown in full lines in Fig. 5 a pulling force is applied to the gauge casing with the right hand in a direction to trip the trigger. As pulling force is applied to the gauge casing, the resilient wire 13 bends to bring the indicating member 12 and trigger in substantial alignment with the pull and the indicating member is watched as such pulling force is applied, and the gauge reading at which the trigger trips is noted. If the noted reading of the force is not the ideal one for the firearm user, the tension on the trigger spring can be adjusted so as to suit the desire of the user. After the gauge has served its test purpose the lever 15 is moved inwardly about its pivot 27 to straddle the wire 13 and the latter is then moved about its pivot 14 to position the wire and the lever in overlying parallel relation to the gauge casing 11, after which the free end of the wire is positioned within the axial groove 20*a* and the spring 22 is rotated in its groove by engagement of the lip 22*a* to stow the parts in the last recited relation. To conveniently carry the gauge device in the pocket of a garment it may be provided with a conventional clip 30 of the general type employed on fountain pens and pencils.

While I have shown and described a preferred embodiment of my gun trigger pull gauge, it is to be understood that I do not wish to be limited to the details of construction disclosed, since changes may be made therein within the range of engineering and mechanical skill without departing from the spirit of the invention as defined in the appended claims.

What I claim is:

1. A manual firearm trigger pull gauge comprising in combination, an elongate casing having therein an indicating member, spring means normally holding said indicating member within the casing, said indicating member being extensible through one end of the casing when subjected to force in opposition to the spring means, a resilient wire pivotally connected to the indicating member, a lever carried by said wire and

adapted in one position to extend at an angle to the wire to engage the trigger of a firearm and in another position to extend in close, parallel relation to the wire, said wire and lever being positionable to lie in close, substantially parallel relation to the casing, and means for detachably holding the wire and the lever in said last recited relation.

2. A trigger pull gauge according to claim 1 wherein the lever is mounted to pivot transversely to the resilient wire.

3. A trigger pull gauge according to claim 1 wherein the lever is bifurcated and is mounted to pivot transversely to the resilient wire and, when positioned to lie parallel to the wire, straddles said wire.

4. A manual firearm trigger pull gauge comprising in combination an elongate casing having therein an indicating member, spring means normally holding said indicating member within the casing, said indicating member being projectable through one end of the casing when subjected to a force in opposition to the spring means, a member carried by the outer end of the indicating member adapted in one position to extend beyond said end in the general direction of the indicating member and having means thereon for engaging the trigger of a firearm, and in another position to overlie the casing, and a split spring ring carried by the casing for detachably holding the parts in said last recited relation.

5. A trigger pull gauge according to claim 4 wherein the member carried by the outer end of the indicating member is pivotally connected thereto.

6. A trigger pull gauge according to claim 4 wherein the member which is carried by the indicating member is of a length substantially equal to the length of the gauge casing.

7. A trigger pull gauge according to claim 4 wherein the split spring ring is rotatably mounted in an annular groove formed in a part on the casing, said part having an axially extending groove for accommodating the member carried by the indicating member.

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