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Wild

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[54] **STOCK CAP FOR FIREARMS**

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Apr. 6, 1973 Germany ..... 7229543[U]

[52] **U.S. Cl.** **42/73**

[51] **Int. Cl.** **F41c 23/00**

[58] **Field of Search** ..... 42/73, 72, 71 R

[56] **References Cited**

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Attorney, Agent, or Firm—Nolte and Nolte

[57] **ABSTRACT**

A stock cap for guns of the military or sporting variety having a pivotal under-arm support for the stability and enhancement of aim or sighting of such weapon in a more effective manner thereby obtaining a relatively greater efficiency in the number of rounds used in such weapon for its designed purpose.

5 Claims, 2 Drawing Figures

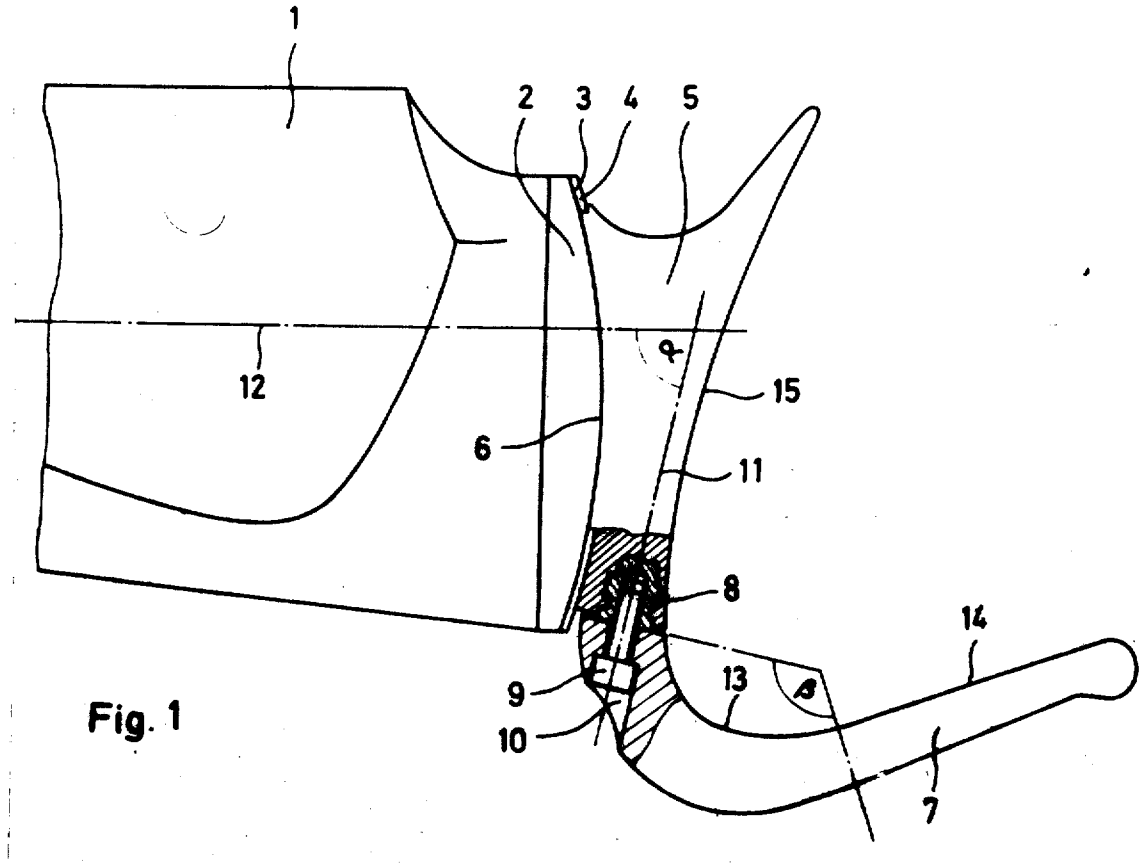


Fig. 1

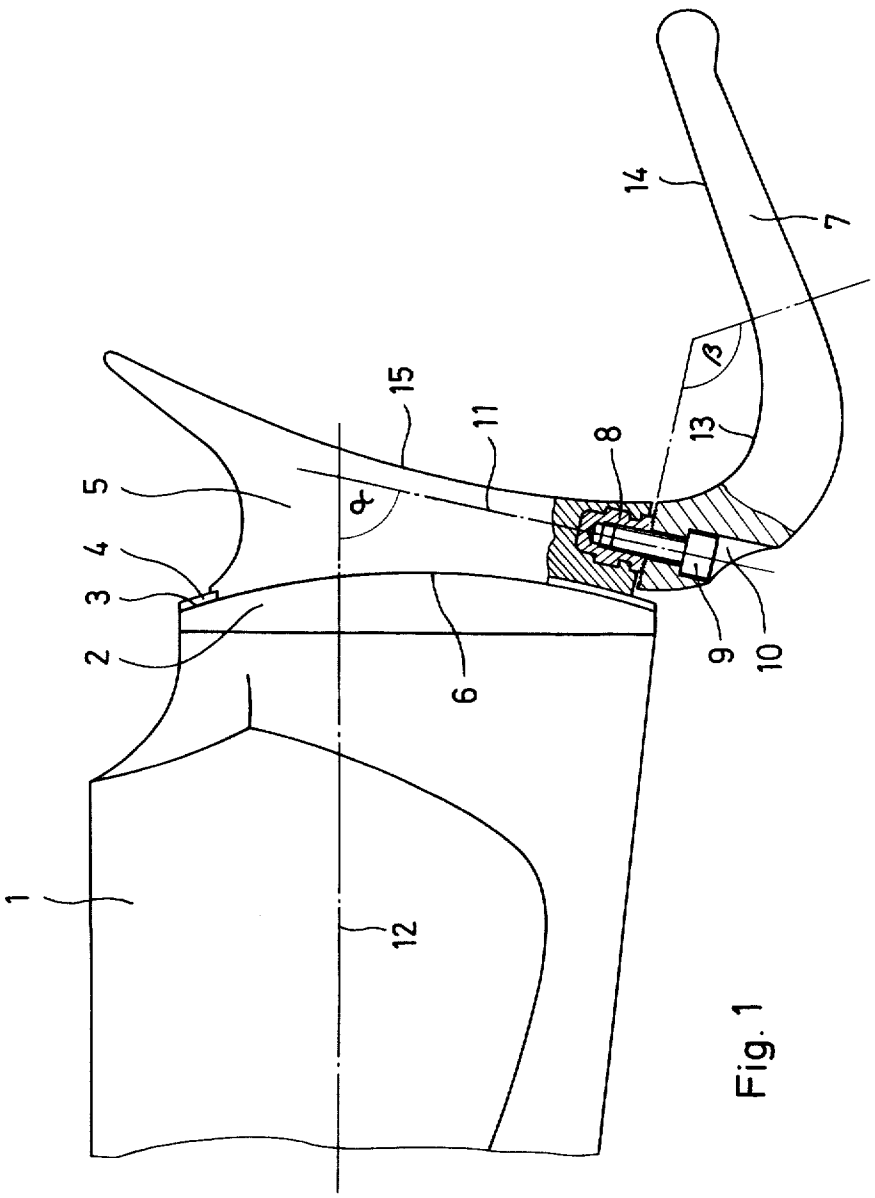


Fig. 1

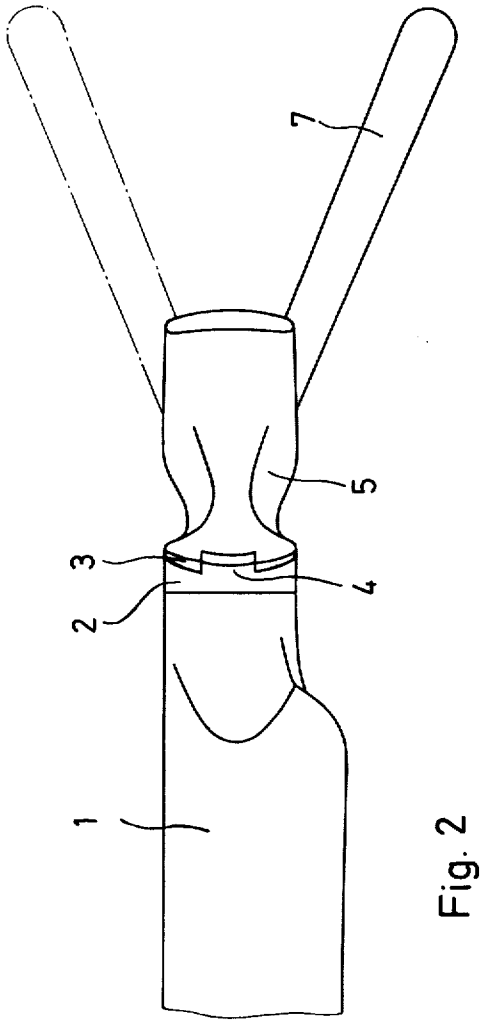


Fig. 2

STOCK CAP FOR FIREARMS

This invention relates to appendages for guns of the military or sporting variety.

More particularly, this invention relates to a device for use on the stock of a gun for the enhancement of the effectiveness of such weapon.

In the field, it has been found that many times the arms become relatively weakened from carrying a weapon for a substantially long period of time. Consequently, if the occasion arises during the terminal portion of such period wherein the use of such weapon is desired, required or dictated, the effectiveness and necessarily the efficiency of such weapon is relatively less than that conventionally needed for the use of such weapon for its designed purpose, whether it be for a sporting activity, military usage or the like. The military have attempted to overcome this disadvantage by providing the rifleman with light and highly automatic weapons that may be used to control a desired sector in the form of an arc by automatic fire. However, although the basis of the latter concept is highly motivated viz. the protection and safety of the rifleman in the field, there is one disadvantage to the concept, the relatively great waste of ammunition that may be ultimately required to sustain such action in the field for a relatively long span of time. As for the sportsman, the need for the conservation of ammunition during an outing may not be as great for a hunt or just practice relative to target shooting. However, the frustration and anxiety of the sportsman during a poor showing, relative to the aforesaid sports, during a relatively long period of time is impossible for a lay man to describe.

What is needed in the art is a provision on such weapon which will enhance the effective usage of the same in a highly efficient manner no matter how fatigued a rifleman may be.

The subject invention answers the needs of the art with special emphasis on an appendage for a rifle in the form of an improved cap for separable engagement with the stock of such weapon, the appendage being for use on the rifle of both a left or right handed person, for a substantial increase in the effectiveness and efficiency of such sportsman, rifleman and the like.

It is therefore an object of this invention to provide an improved appendage in the form of a cap for use on such rifles, shot-guns and the like to accomplish the aforesaid purpose.

Another object is to provide such a device in the form of a support of the swiveling variety which may be adjusted to a rigid state for use by a rifleman who is either left or right handed.

A further object is to provide a device in the form of a support which fits the under-arm of a rifleman for use in easily obtaining and maintaining the so-called "bead" on the desired target no matter how fatigued a rifleman may be.

Other objects and many of the attendant advantages of this invention will become more apparent to one skilled in the art from a reading of the following detailed specification taken with the drawings, wherein;

FIG. 1 is a side view of the device of this invention appended to the stock of a weapon such as rifle or shot-gun; and

FIG. 2 is a top plan view of this invention.

The present innovation or invention concerns an improved cap for a stock of a rifle, shot-gun and the like, such device being provided with a swiveling supporting hook which is hereinafter described in greater detail. The latter supporting device may be mounted in either an adjustable or rigid manner on the rear side of a gun butt. When it is desired to use the weapon with such appendage, the rifleman merely places the supporting hook attached to the lower part of the stock cap under his arm and uses it as a pivot for bringing such weapon on target. Additionally, the weapon can be held much more loosely and steadily with the aid of such a supporting hook as when compared to like appendages of the art. The reason for this being that the present hook, when in position, creates an additional support for itself on the body of the rifleman.

In the art, there are caps provided with hooks for use on stocks of the aforesaid weapons and these are either rigid or adjustable. The advantage of the adjustable type hooks as against the rigid type is that the former is well suited for either a right or left handed rifleman and more readily adjustable to the body of a number of different riflemen. However, all supporting hooks known to date have the disadvantage that they exert pressure on the strained muscles of the rifleman, particularly on the muscles at the edge of the underarm. This is not only uncomfortable, but also interferes with the use of such muscles and this can result in a partial cramp of the supporting arm. The latter result is highly undesirable because the hand of the arm in question must be very sensitive to touch for triggering the gun when on target.

The subject invention is a cap for a stock having an adjustable hook so that, if possible, the supporting hook does not touch, function or act on the aforesaid strained muscles even when the gun is aimed. The subject invention accomplishes this task by having the supporting hook, at its mounting end, bent into an arc having a central angle β of substantially of about 120°, the rotating axis 11 of the hook being vertical to one side of such central angle β, and also being substantially flush with the longitudinal section of the stop cap. As a result, there is formed an angle of less than about 90° (α) with the longitudinal axis 12 of the stock to accomplish the aforesaid function of support without engagement of the aforesaid muscles.

Also, the far downward swing of the aforesaid arc of the supporting hook causes its free linear end to rise again and this therefor aids in providing the desired unincumbered touch of the aforesaid muscles. The slant of the rotating axis 11 to the linear axis 12 of the gun allows the free outer end of the supporting hook to rest against the body of the rifleman. This is accomplished in such a way that not only is the point so rested but rather the entire length of the hook is substantially rested even to the region where the aforesaid arc begins. This action succeeds in moving the area at which the supporting hook rests on the body of the rifleman to the region of the shoulder blade where a large and less sensitive Delta muscle is located. In comparison to the latter, the hooks of the art rest on the edge of the underarm, where the ligaments and muscles which are sensitive to pressure are located.

In the preferred embodiment, as shown in FIG. 1, a guide plate 2 is separably engaged to the rear side of the butt 1 of the weapon. When the weapon is to be used, the curved slide 3 which is provided with rectangular guide 14 is easily adjusted in the vertical direction on the curved guide plate 2. A stock cap 5 is separably engaged to the guide plate 2 and both are shaped in a

complimentary interfitting manner, one to the other, as shown. A conventional manner utilized to engage the latter two elements is by means of a screw and slide ring and therefore no need exists to further describe this engagement. Thus, stock cap **5** can be moved on guide plate **2** within a certain range and then clamped tight at the desired spot.

Referring again to FIGS. **1** and **2**, a pipe shaped supporting hook **7** at the bottom of stock cap **5** is attached in such a way that it can be swiveled sideways from butt **1** and fastened in the desired position. As shown in FIG. **1**, the fastening elements may be a threaded bushing **8** cast into stock cap **5** which is engaged by a screw **9** provided with an hexagonal recess. The circular slot **10** for receipt of the latter screw is made by step drilling and is slanted against the curved surface of supporting hook **7**. The linear axis **11** of the threaded bushing **8** and screw **9** intersect the linear axis **12** of the gun at an angle which is slightly smaller than 90°. The surface of the device may be also corrugated to facilitate a torsion proof mounting.

Supporting hook **7** is provided with a central angle β formed by arc **13**, the latter itself being formed by the upper surface of the hook **7** from its point of attachment to a point halfway up the length thereof. Angle β is substantially about 120°. As a result, only the straight end **14** of the hook **7** comes in contact with the body. The resting surface **15**, arc **13**, and the end **14** have the profile of a parabolic outline which has actually been proven to be highly favorable during experimentation. Also, the axis of the parabolic and linear axis **12** of the gun form an angle of about 45°.

Referring again to FIG. **2**, the swivel action of the hook **7** can be clearly seen. The respective position of

the hook **7** relative to stock cap **5** can be controlled by line marking which may be placed on both elements next to the clamping joint formed between them. These markings can also aid or serve as aiming devices. Naturally, it is sufficient to apply one mark to one of the elements to serve as a reading mark line against a marked scale on the other.

What is claimed is:

1. In an improved hook stock cap for a gun having a butt, said cap mounted at one end in an adjustable manner on the rear side of said butt of said gun, and said hook attached to said cap in a swiveling way relative to said butt of said gun, the improvement comprising having the body of said hook curved from its mounting on said cap into an arc having a central angle of about 120°, the pivotal axis of said hook being vertical to a side of said central angle, and the longitudinal section of said cap forming an angle of less than 90° with the linear axis of said gun.

2. The hook stock cap of claim **1** wherein the angle between said pivotal axis of said supporting hook and said linear axis of the gun amounting to between about 70° and 90°.

3. The hook stock cap of claim **2** wherein the rear surface of the stock cap and the supporting hook form a parabolic contour therebetween.

4. The hook stock cap of claim **3** wherein the arc of the supporting hook linearly changes into a substantially straight end on the side opposite said mounting end.

5. The hook stock cap of claim **4** wherein said hook and said cap have abutting surfaces of which at least one is corrugated.

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