

No. 873,054.

PATENTED DEC. 10, 1907.

A. KRÜLL.
BAYONET AND SIDE ARM.
APPLICATION FILED DEC. 21, 1906.

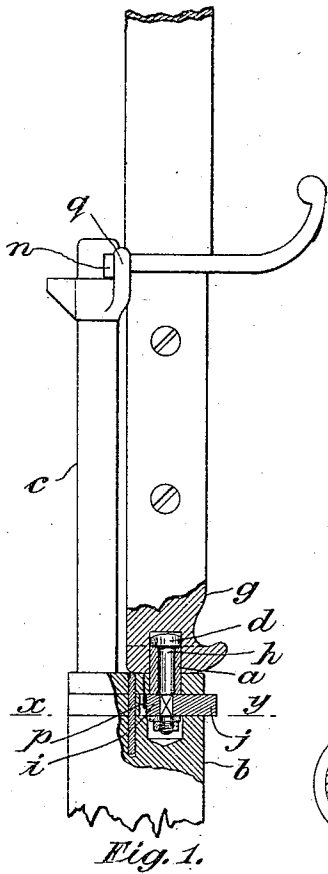


Fig. 1.

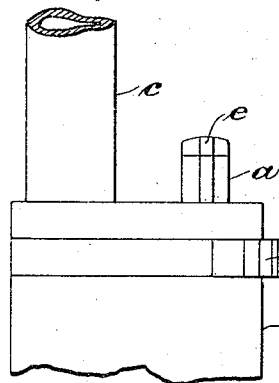


Fig. 2.

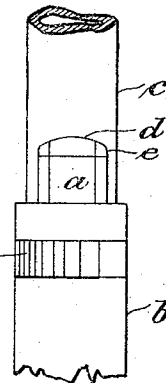


Fig. 3.

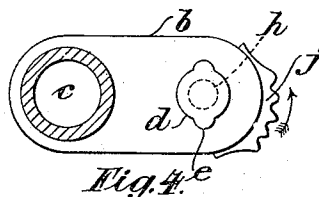


Fig. 4.

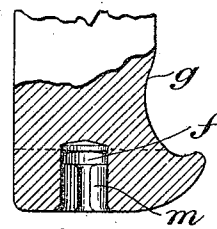


Fig. 5.

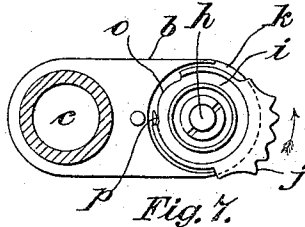


Fig. 6.

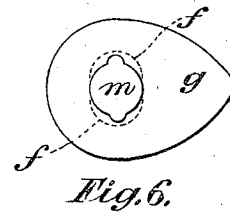


Fig. 7.

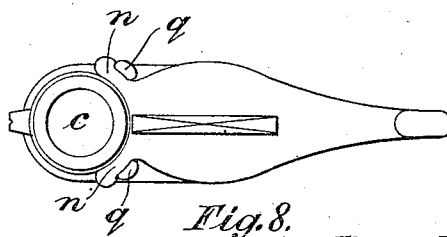


Fig. 8.

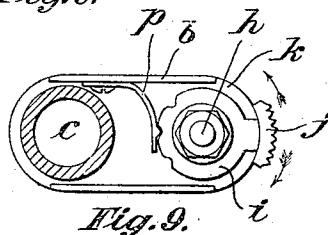


Fig. 9.

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UNITED STATES PATENT OFFICE.

AUGUST KRÜLL, OF ACTON, ENGLAND.

BAYONET AND SIDE ARM.

No. 873,054.

Specification of Letters Patent.

Patented Dec. 10, 1907.

Application filed December 21, 1906. Serial No. 348,935.

To all whom it may concern:

Be it known that I, AUGUST KRÜLL, a subject of the King of Great Britain and Ireland, residing at 7 Goldsmith road, Acton, in the county of Middlesex, England, have invented certain new and useful Improvements in and Relating to Bayonets and Side Arms, of which the following is a specification.

This invention relates to simple, secure and effective means for fastening bayonets or side-arms to gun barrels and stocks, and has for its object to secure bayonets and side-arms in position, so that their detachment during use of the weapon shall be precluded and so that the weapon shall be firmly retained in its position, while moreover the fitting shall involve the use of less metal and therefore contribute to the lightness of the weapon.

The invention is illustrated in the accompanying drawings, in which

Figure 1 is a cross sectional elevation on a reduced scale of a bayonet catch provided according to the invention in position on the rifle. Fig. 2 is a detail elevation of the locking device. Fig. 3 is a side elevation corresponding thereto. Fig. 4 is a plan corresponding to Fig. 2 showing the catch in the unlocked position. Fig. 5 is a sectional elevation of the extremity of the hilt of a bayonet provided according to the invention. Fig. 6 is an underview plan corresponding thereto. Fig. 7 is a sectional plan from underneath on the line *x y* Fig. 1. Fig. 8 is a plan of the bayonet secured in position on the rifle, and Fig. 9 is a view corresponding to Fig. 7 of a modified form of bayonet catch.

The invention consists of an improved lock for securing the hilt of the bayonet or the end of the side-arm, so as to preclude longitudinal movement as well as means for securing the cross piece or upper part of the hilt to the gun barrel, or muzzle so as to insure against its lateral movement. These effects are realized by the provision of a projection *a* upon the end of the stock or upon the nose-cap *b* at the end of the stock which projection *a* is disposed in parallel with the gun barrel *c*, and is provided of an irregular cross sectional form but preferably of cylindrical form with longitudinal external ribs as shown in the drawings. This projection *a* is provided with one part, advantageously the upper part *d*, so as to be capable of slight rotary movement, so that the parts of the ribs *e* carried by it may be displaced with reference to the

ribs upon the stationary part, and so that thus the ribs *e* upon the movable part, may engage in an annular recess, recesses or slots *f* formed within the end of the hilt *g* of the bayonet, and thus secure it against displacement.

The movable part *d* of the projection is formed integral with a pin *h* passing through the stationary part thereof and carrying at its lower extremity a collar or an arm *i* upon which a button or thumb piece *j* is provided, which is disposed upon the face of the nose-cap *b* or of the end of the stock, a slot *k* being formed within the nose-cap or the stock to permit of the slight movement of the button for the displacement of the movable part of the projection *a* and the ribs *e* provided upon it as aforesaid. I further provide upon the inner edge of the collar or arm *i* an eccentric recess *o* within which engages a spring *p*, so that the thumb piece *j* and consequently the movable part *d* of the projection *a* is pressed by the spring *p* into either the closed or open position and retained there thereby.

In the modified form of catch shown in Fig. 9 I provide in the collar or arm *i* three notches or recesses instead of the eccentric recess before referred to. By this means the collar *i* and the movable part *d* of the projection *a* can be retained in either of three positions, the middle position corresponding to the open position of the catch. It will be understood that the ribs or the irregular parts of the projection may be disposed in diametrically opposite positions, and normally in alinement with the axis of the gun barrel, so that the plane of the hilt and bayonet may, when in position, pass through the axis of the barrel. It will however be understood that the bayonet may be disposed at the side of the barrel, or in any other position in which event the ribs or irregular parts of the projection would be correspondingly disposed.

It will be understood that the end of the hilt *g* of the bayonet would be provided with a hole or aperture *m* of a sectional shape corresponding to that of the projection aforesaid, and that an annular recess or annular recesses or slots *f* will be formed within this hole or aperture *m* for the reception of the ribs or irregular portions of the movable parts *d* of the projection when such is turned by the movement of the button as aforesaid. The projection and the hole or aperture aforesaid need not have a greater height than 3/8".

The cross piece may be provided of the usual shape with a lug, within which a hole is formed for passing upon the muzzle, but with a view to insure the absolute lateral rigidity of the bayonet or side-arm when fixed in position, the cross piece, instead of being provided with a lug of circular shape and provided with a hole therein, is formed with two curved arms *n* which are shaped to closely embrace the muzzle *c*, and have their extreme edges thickened or extended outwards.

The muzzle is provided with two fingers *g* which are disposed parallel to the center of the muzzle and at a slight distance away, being so disposed that, when the bayonet is fixed in position, they come to lie behind the arms *n* on the cross piece aforesaid, and thus firmly retain it laterally fixed in respect to the muzzle and yet permit of the expansion and contraction of the muzzle with reference to it. Instead of providing finger pieces on the muzzle to engage with the arms as aforesaid, a segmental recess might be formed within a boss integrally formed or secured to the muzzle, which recess is open towards the end of the muzzle, so that the arms aforesaid or the part of the cross piece of corresponding shape will be brought into position and held against lateral displacement. It will thus be understood that the invention is not confined to the actual form of the cross piece and of the lock as hereinbefore specifically described, as the form may be substantially modified without departing from the invention, with a view to secure the respective effects described.

What I claim as my invention and desire to secure by Letters Patent is:

1. A bayonet catch consisting of a projection on the gun engaging with a hole or

aperture within the bayonet hilt the projection being formed of two parts of irregular section, the upper part being capable of rotary movement so as to lie within a recess in the upper part of the hole or aperture substantially as described.

2. A bayonet catch consisting in combination of a projection on the gun engaging with a hole or aperture having an enlarged recess at its upper end within the bayonet hilt the projection being formed of two parts of irregular section the upper part being capable of rotary movement so as to lie within said recess in the upper part of the aperture, a thumb piece fixedly connected to the upper part of the said projection and provided with recesses and a spring adapted to engage in one or other of said recesses so as to retain the thumb piece in position substantially as described.

3. A bayonet catch consisting in combination of a projection on the gun engaging with a hole or aperture having an enlarged recess at its upper end within the bayonet hilt the projection being formed of two parts of irregular section the upper part being capable of rotary movement so as to lie within said recess in the upper part of the aperture, a thumb piece fixedly connected to the upper part of said projection and provided with three recesses and a spring adapted to engage in one or other of said recesses so as to retain the thumb piece in position substantially as described.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

AUGUST KRÜLL.

Witnesses:

WILLIAM EDWARD EVANS,
FREDERICK COLLINS.