

[54] WALL MOUNT DEVICE FOR GUNS

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[58] Field of Search .....248/203; 211/8, 64; 70/57, 70/259, 345, 371, 387, 403

[56] References Cited

UNITED STATES PATENTS

1,020,208 3/1912 Laughlin .....70/403 X  
 1,580,527 4/1926 Parmele .....70/259  
 1,982,813 12/1934 Jacobi .....70/371 X

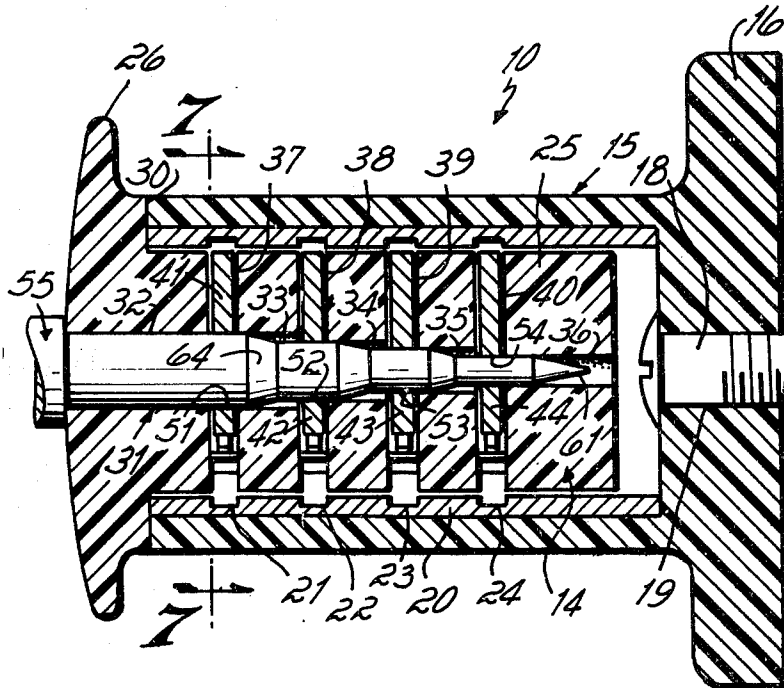
2,667,274 1/1954 Diebold .....211/64  
 3,291,317 12/1966 Bowen .....248/201 X

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[57] ABSTRACT

A device for mounting and locking a gun in place upon a wall. The device consists essentially of two parts, a cylindrical member having a base and means associated with the base for affixing the cylindrical member to the wall, plus a latch member adapted to be received within the cylindrical member. In place, the device projects through the trigger guard of the gun such that the gun rests upon the cylindrical member. A head at the outer end of the latch member, larger than the trigger guard, prevents removal of the gun. One of the features of the device is the manner in which it is locked and unlocked. For these purposes a key of simple design is provided. Mere straight in insertion of the key unlocks the device, whereas mere straight out withdrawal of the key locks the device.

11 Claims, 7 Drawing Figures



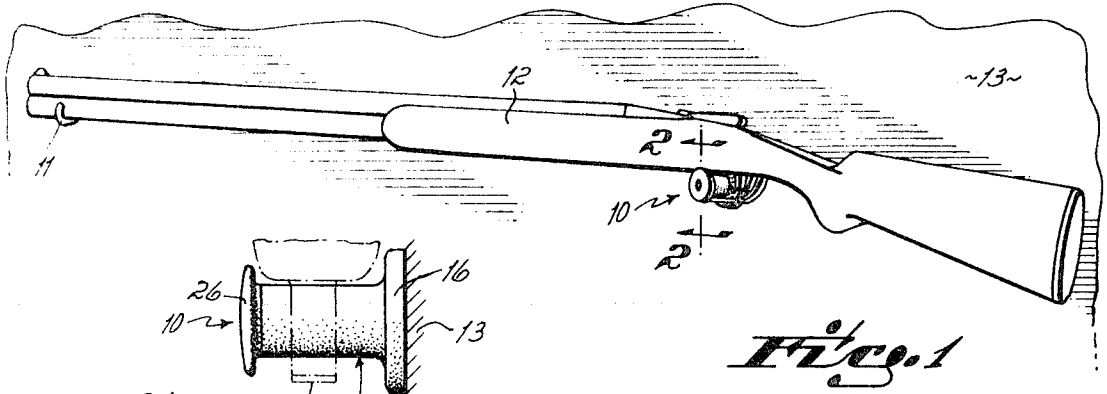


Fig. 2

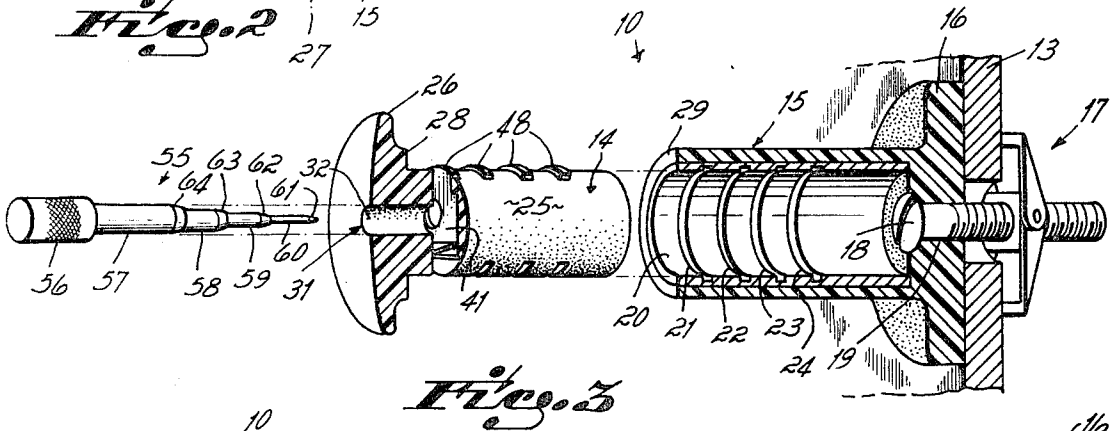


Fig. 3

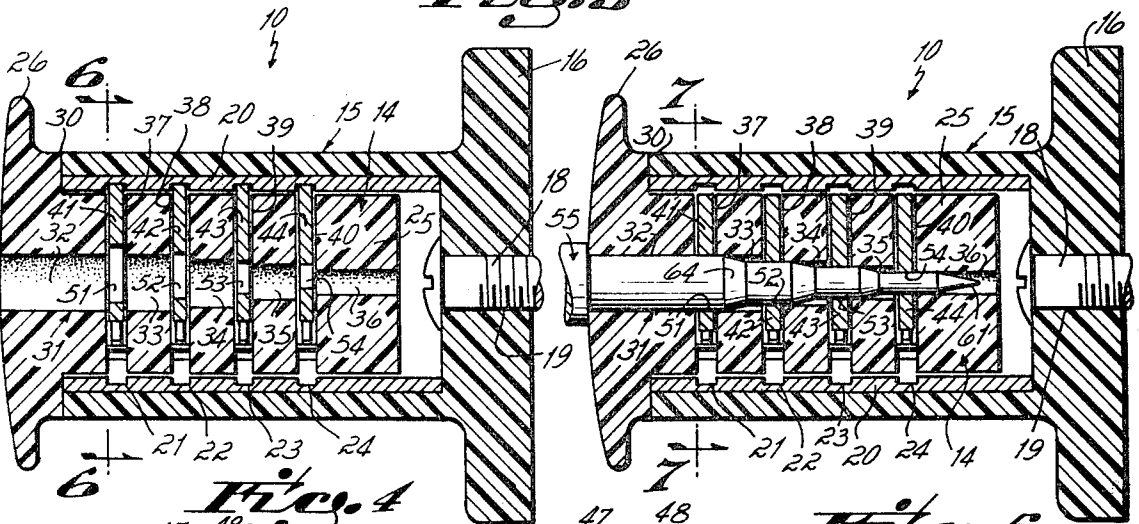


Fig. 4

Fig. 5

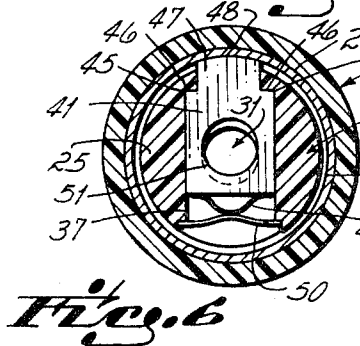


Fig. 6



Fig. 7

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## WALL MOUNT DEVICE FOR GUNS

This application is a continuation of U.S. Ser. No. 817,630 filed Apr. 18, 1969.

This invention is directed to a device for mounting and locking a gun in place on a wall for display purposes. The device projects through the trigger guard of the gun and thus supports the gun in the breech area thereof. A simple hook or peg may be used to support the barrel of the gun. The important consideration is the device itself.

Broadly, the objective of the invention has been to provide a gun mount that prevents unauthorized persons from removing a gun from its mount. Safety has been one consideration. Children, for example, cannot remove a gun from the mount. Security has been another consideration. The mount is designed to prevent removal of the gun by a housebreaker. It is pointed out, however, that the mount of this invention is not designed to resist the efforts of a knowledgeable picklock. Few locks are so resistant.

Another consideration has been to provide a gun mount that prevents people from removing a gun and handling it. A gun buff, who has a piece that he considers fine enough to display, seldom likes to see it handled by others, regardless of their intentions, if for no other reason than that the handprints and fingerprints that inevitably follow such handling have to be wiped off, otherwise they mar the gun's finish.

Another objective has been to provide a gun mount of the type set forth that is so designed that it does not detract from the overall appearance of a gun mounted upon it. The device is comparatively small and the only part of the gun hidden is the area around the trigger guard, leaving the stock, breech area, forepiece, and the barrel completely exposed to view.

Another objective, and a very important one, has been to provide a mount for a gun that incorporates a locking mechanism that is exceedingly simple in design and operation. In the preferred embodiment of the invention, the latch mechanism is so designed that it may be locked and unlocked by a simple pinlike key. Mere straight in insertion of this key unlocks the device to permit removal of the gun, whereas mere straight out withdrawal of the key locks the device.

Other features and objectives of the invention will be readily apparent to those skilled in the art from the following detailed description of the drawings in which:

FIG. 1 is a perspective view showing a typical over and under shotgun mounted upon a wall by means of the device of this invention;

FIG. 2 is a fragmentary view taken along the line 2--2 of FIG. 1;

FIG. 3 is an exploded view, partially in cross section, showing the component parts of the device;

FIG. 4 is a cross-sectional view showing the device in locked condition;

FIG. 5 is a view similar to FIG. 4 showing the device in unlocked condition;

FIG. 6 is a cross-sectional view taken along the line 6--6 of FIG. 4;

FIG. 7 is a cross-sectional view taken along the line 7--7 of FIG. 5.

As will be appreciated from FIG. 1, the mount device of this invention, shown generally at 10, is designed to be used in conjunction with auxiliary means such as a hook 11 for holding a gun 12 in the desired position upon a wall such as the one indicated at 13.

The device consists essentially of two parts, a latch member 14 and a hollow cylindrical member 15. The cylindrical member includes a base portion 16, in the form of a circular flange, that is designed to rest against the outer surface of the wall 13 to which the mount is to be attached. As shown in FIG. 3, the cylindrical member may be secured to a wall 13 by means such as a winged toggle bolt assembly shown generally at 17, this assembly being of known design. As shown, a bolt 18 of assembly 17 projects through a bore 19 that extends through the center of base 16. It will be appreciated that this type of arrangement encases the toggle bolt assembly so that it is not accessible.

More specifically, the cylindrical member 15 may be made of plastic material, as shown, and then a metal barrel, such as the one shown at 20, secured in place by means such as an adhesive compatible both to the metal of the barrel and the plastic material of the cylindrical member. As shown, the barrel has four internal, circumferential grooves 21, 22, 23 and 24 within it. In the instance shown, the grooves 21-24 are equally spaced longitudinally of the cylindrical member.

Latch member 14 comprises a cylindrical plug portion 25 that is designed to engage the barrel 20 internally in slip-fit relation. The outer end of the latch member has an enlarged head 26 upon it that is formed as an integral part of the plug portion 25. This head 26 should be larger than the trigger guard of the gun to be mounted upon the device and the outer diameter of the cylindrical portion 25 should be slightly smaller than the inner dimension of the trigger guard 27 so that the cylindrical member may project through the trigger guard as shown in FIG. 2. In this Figure, a typical trigger guard is shown by the dot-dash lines 27. Of course, the cylindrical member projects through the trigger guard just ahead of the trigger itself.

An annular shoulder 28 is provided where head 26 meets plug portion 25 of the latch member and it is preferred that this shoulder 28 match the outer rim 29 of the cylindrical member so that when the latch member is in place within cylindrical member 15 there is a smooth transition between the members as shown at 30 in FIG. 5. It will also be obvious that materials other than plastic may be used, both for the latch member and the cylindrical member, and that if desired the head 26 of the latch member may be made of a material different than the plug portion 25 of this member, for example walnut wood, for decorative purposes, the cap 26 then being affixed to the plug portion 25 by means such as an epoxy resin adhesive.

As best shown in FIG. 4, latch member 14 has a central bore extending axially through it. This bore, designated generally 31, in the instance shown varies in diameter inwardly from head 26 such that there are five bore sections 32, 33, 34, 35 and 36. Bore sections 32 and 33 are the same diameter. However, the others decrease in diameter going inwardly from bore section 33.

A cross-slot 37 is provided at the juncture of bore sections 32 and 33. A similar cross-slot 38 is provided at the juncture of bore sections 33 and 34. Another cross-slot 39 is provided at the juncture of bore sections 34 and 35 and a fourth cross-slot 40 is provided at the juncture of bore sections 35 and 36. These four cross-slots 37-40 receive four latch plates 41, 42, 43 and 44. As best shown in FIGS. 6 and 7 each latch plate is generally rectangular and fits in its cross-slot in slip-fit relation. Further, each latch plate is configured to provide shoulders 45-45 cooperable with matching abutments 46-46 formed within each of the cross-slots 37-40. Between shoulders 45-45 there is provided a tongue 47 that extends outwardly from each latch plate and the outer end of this tongue is rounded off as shown at 48 to conform to the curvature of the bottoms of circumferential grooves 21-24.

Normally, with the latch member in place and locked, each one of the tongues 47 of the four latch plates 41-44 are urged radially, outwardly and into the respective grooves 21-24 by means of leaf springs of the type shown at 49 in FIGS. 6 and 7. Each of these leaf springs is supported on a bridge such as the one shown at 50 in FIGS. 6 and 7. The ends of each bridge are seated within the sides of a cross-slot, being held therein by deforming the material of plug portion 25 of the latch member through the use of a heated tool. Obviously, other means may be provided to hold each of the bridges 50 in place. Each leaf spring 49 is generally arcuate as shown in FIG. 6 with its central area resting against the top of bridge 50 and with its ends in contact with the adjacent end of a latch plate.

Each latch plate has a circular hole in it. These holes going from latch plate 41 to latch plate 44 correspond in diameter to those sections of the axial bore 31 in the latch member that are designated respectively by the numerals 33 through 36.

These holes are identified by the numerals 51 for latch plate 41 through numeral 54 for latch plate 44.

The key, designated 55, is provided for locking and unlocking the device as best shown in FIG. 3. It includes a knurled head 56 and it is stepped down from head 56 to its opposite end to provide four cylindrical sections 57, 58, 59 and 60. The outer end of the cylindrical section 60 is conical, as shown at 61, and section 60 meets section 59 at a frustoconical part to provide a cam surface 62. The same type configuration is provided between the cylindrical portions 58 and 59 to provide a cam surface 63. The same thing occurs between cylindrical portions 57 and 58 to provide a cam surface 64. The various cylindrical sections 57 through 60 of the key are of a diameter to fit respectively the sections 33 through 36 of bore 31 in the latch member in slip-fit relation. This relationship is best shown in FIG. 5.

With the latch member in place and all latch plates urged radially outwardly into the respective grooves 21 through 24, the holes designated 51 through 54 in the respective latch plates are off center with respect to the central axis of the latch member by an amount equal to the dimension of that part of each tongue 47 that projects beyond the outer periphery of the plug portion 25. This relationship is shown in FIG. 4. However, when the key 55 is inserted into the axial bore 31 of the latch member, the pointed end 61 and the three cam surfaces 62, 63 and 64 are brought into contact with the sides of the openings in the respective latch plates and the latch plates are shifted inwardly to withdraw the outer ends of the tongue portions 47 of the respective latch plates from the grooves 21-24, freeing the latch member so that it may be withdrawn from the cylindrical member and thereby permitting the removal of a gun resting on the mount. Of course, it is necessary to have the key in place within the latch member in order to replace the latch member. Once it is in place within the cylindrical member, the key may be withdrawn, which frees all of the latch plates so that they move into the grooves within the cylindrical member to hold the latch member in place.

What is claimed is:

1. A device for mounting and locking a gun in place upon a wall, said device comprising
  - a hollow cylindrical member having a base and means associated with said base for affixing the cylindrical member to said wall, said cylindrical member being dimensioned to extend through the trigger guard of a gun to be mounted thereon,
  - a latch member including a head that is larger than said trigger guard and a plug portion dimensioned to be received within said cylindrical member in slip-fit relation,
  - said hollow cylindrical member having at least one internal groove therein,
  - said plug portion of the latch member having at least one cross-slot therein,
  - a latch plate slideably mounted within said cross-slot,
  - spring means normally urging said latch plate into a position in which its outer end projects beyond the periphery of said plug portion such that said outer end is engageable in said groove to lock said latch member in place in said hollow cylindrical member,
  - said latch member having an axial bore therein that traverses said cross-slot,
  - said latch plate having a hole therein that is in communication with said bore but normally off-center with respect to the axis of said bore, and
  - a key member having a cam surface thereon engageable with the side of said hole in said latch plate to withdraw the end of said latch plate from said groove and thereby free said latch member for removal from said cylindrical member, said cam surface configured to effect said withdrawal upon the mere straight in insertion of said key into said axial bore.

2. A device as set forth in claim 1 in which the interior of said hollow member, said plug and said key are all circular in cross section and in which said groove extends around the entire circumference of the inside of said hollow cylindrical member.

3. A device as set forth in claim 1 in which said plug portion of said latch member has a plurality of cross-slots therein, said latch member having a plurality of internal grooves, therein corresponding in number to said cross-slots, a latch plate slideably mounted in each of said cross-slots, said axial bore having sections therein corresponding in number to the number of said cross-slots, said sections decreasing in diameter from one to the next progressively inwardly from cross-slot to cross-slot, the latch plates in said cross-slots having holes in them that decrease in diameter from one to the next progressing inwardly, and said key having a plurality of cam surfaces thereon engageable with the respective holes in the latch plates to withdraw the outer ends of said latch plates from said grooves.

4. A device as set forth in claim 3 in which said internal grooves and said cross-slots are equally spaced axially of the respective members in which they are located.

5. A device as set forth in claim 4 in which said key has cylindrical sections, the respective sections decreasing in diameter progressively toward the inner end of said key, the inner end of said key being conical, and a frustoconical section between the respective adjacent cylindrical sections.

6. A device as set forth in claim 1 in which said spring means comprises a leaf spring, and means bridging said cross-slot to support said leaf spring.

7. A device for mounting and locking a gun in place upon a surface, said device comprising
 

- a hollow member having a base and means associated with said base for affixing said hollow member to said surface,
- said hollow member being dimensioned to extend through the trigger guard of a gun to be mounted thereon, and

said hollow member having at least one internal groove therein,

a latch member including a head that cannot be drawn through said trigger guard and a plug portion dimensioned to be received within said hollow member in slip-fit relation,

said plug portion of said latch member having at least one cross-slot therein,

a latch plate slidably mounted within said cross-slot, a spring normally urging said latch plate into a position in which its outer end projects beyond the periphery of said plug portion such that said outer end is engageable in said groove to lock said latch member in place in said hollow member,

said latch member having a bore therein that traverses said cross-slot,

said latch plate having a hole therein that is in communication with said bore but normally off-center with respect to the axis of said bore, and

a key having a cam surface thereon engageable with the side of said hole in said latch plate to withdraw the end of said latch plate from said groove and thereby free said latch member for removal from said hollow member.

8. A device as set forth in claim 7 wherein said cam surface is configured to effect the withdrawal of said latch plate upon the mere straight in insertion of said key into said bore.

9. A device as set forth in claim 7 wherein the interior of said hollow member, said plug and said key are all circular in cross section, wherein said groove extends around the entire circumference of the inside of said hollow cylindrical member, and wherein said hollow member is cylindrical in configuration.

10. A device as set forth in claim 7 wherein

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said plug portion of said latch member has a plurality of cross-slots therein, each of said cross-slots having a latch plate slideably mounted therein, said latch member having a plurality of internal grooves therein corresponding in number to said cross-slots, and said bore having sections therein that correspond in number to the number of said cross-slots, and that decrease in diameter from one to the next progressively inwardly from cross-slot to cross-slot, said latch plates in said

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cross-slots having holes in them that decrease in diameter from one to the next progressing inwardly, and said key having a plurality of cam surfaces thereon engageable with the respective holes in said latch plates to withdraw the outer ends of said latch plates from said grooves.

11. A device as set forth in claim 7 wherein said spring means comprises a leaf spring, and including means to bridge said cross-slot to support said leaf spring.

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