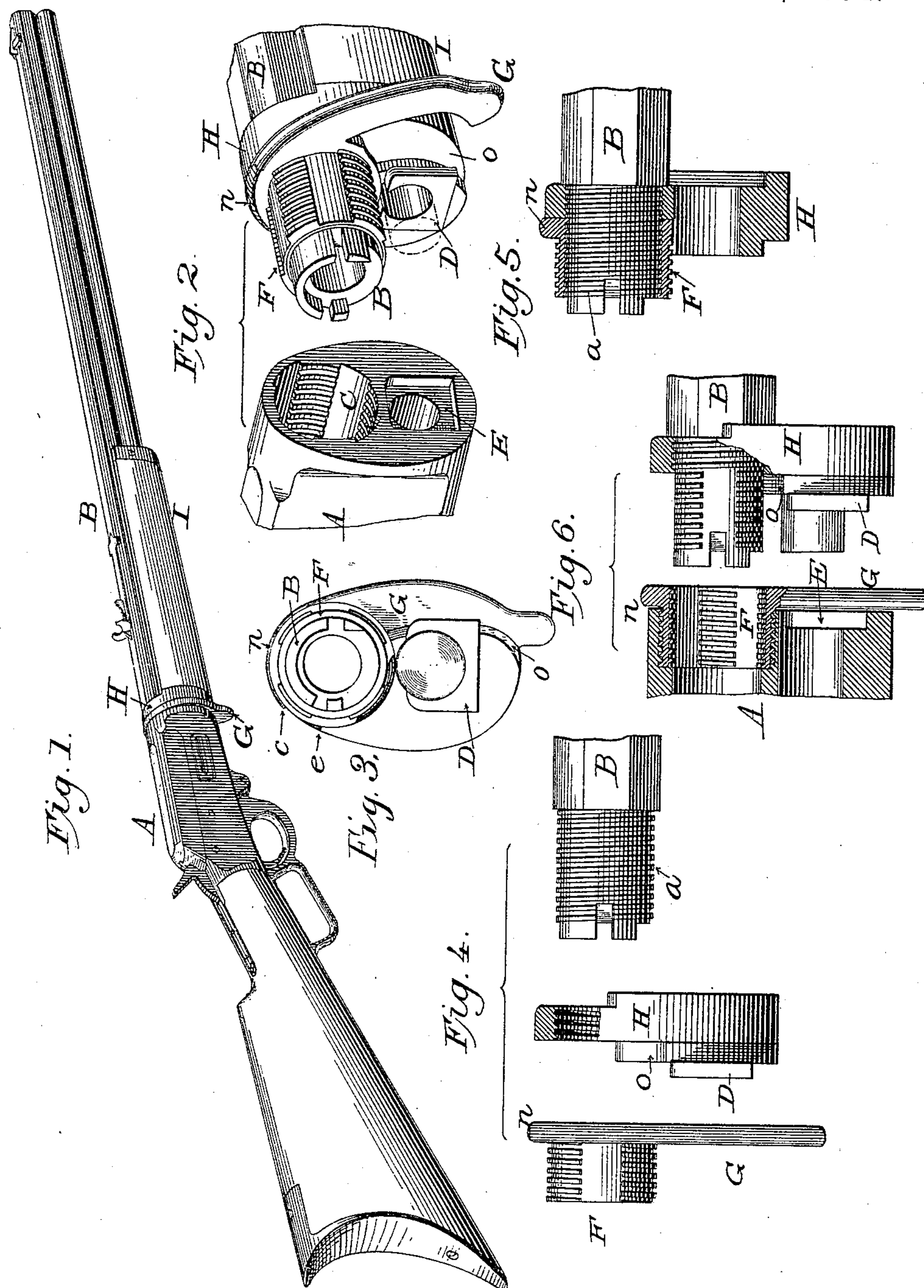


(No Model.)

J. M. MARLIN.  
DETACHABLY SECURING GUN BARRELS TO STOCKS.  
No. 529,455. Patented Nov. 20, 1894.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN M. MARLIN, OF NEW HAVEN, CONNECTICUT.

## DETACHABLY SECURING GUN-BARRELS TO STOCKS.

SPECIFICATION forming part of Letters Patent No. 529,455, dated November 20, 1894.

Application filed October 14, 1893. Serial No. 488,151. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN M. MARLIN, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Means for Attaching and Detaching Gun-Barrels, of which the following is a specification.

This invention relates to firearms, and the invention consists in a sleeve having screw threads thereon as a means of uniting the barrel to the receiver, and readily detaching the barrel from the receiver and stock when desired, as hereinafter more fully described.

Figure 1 is a perspective view of a gun showing the parts united and ready for use. Fig. 2 is a perspective view of the front end of the receiver, and of the rear end of the barrel with the band and fastening sleeve thereon, said parts being shown of full size. Fig. 3 is a rear face view of the barrel with the band and sleeve on the barrel. Fig. 4 is a side elevation showing the rear portion of the barrel, the band partly in section, and the locking sleeve, all detached or separated. Fig. 5 is a side view of the rear portion of the barrel with the band and sleeve thereon, partly in section, in order to show the screw thread on the barrel; and Fig. 6 is a side elevation, partly in section, showing the locking sleeve seated in the receiver instead of on the barrel, as a modification of the plan shown in the other figures.

The object of this invention is to render the barrel of a gun detachable from the receiver and stock, and at the same time provide means for fastening them securely and rigidly together when wanted for use; and to so construct and arrange the fastening device that it need not be detached, and so that a slight movement of the same by the hand will serve to lock or unlock the parts, and enable the operations to be quickly performed, and when locked, to render the union secure and accurate, and to provide for taking up or compensating for the wear of the parts by the fastening sleeve itself.

This invention is applicable to any style of gun, but in the drawings I have shown it applied to a magazine gun; and in the several figures A indicates the receiver, and B the

barrel of the gun, while I indicates the fore end of the stock, and H the band or collar which secures the rear end of the fore end and the magazine tube to the barrel.

As shown in Fig. 2, the rear end of the barrel B projects an inch or more through the band H, and as shown in the drawings, has a screw thread  $a$  cut thereon, the band H being provided with a corresponding thread, as clearly shown in Figs. 4 and 5, so that the band can be screwed onto the barrel and made to fit snugly against a shoulder on the barrel, as shown in Figs. 2 and 5. I then provide a sleeve F, which has on its inner surface a screw thread corresponding to that on the barrel, so that it too can be screwed on to the projecting end of the barrel, the same as the band, as shown in Fig. 3, this sleeve at the end adjoining the band being provided with a radially projecting shoulder or collar  $n$ , from one side of which projects an arm or lever G, by which the sleeve can be turned on the barrel as far as necessary to lock or unlock the barrel and receiver, as hereinafter explained.

The rear face of the band H is recessed or cut away as at  $o$  to provide a space or seat for the collar  $n$  and lever G, as shown in Figs. 2 and 3, and at its lower portion it is provided on its face with a projection D to fit into a correspondingly shaped recess E, made in the front end of the receiver A, as shown in Figs. 2 and 6. The front end of the receiver is faced off flat and true, so that when the parts are put together it will bear true and firmly against the face of the band, and the collar and lever when the latter is adjusted to tighten up the joint, the interlocking projection D and recess E serving to align the barrel and its sights properly in relation to the receiver and stock, and prevent any movement or turning of the barrel after the parts are locked or fastened together.

The sleeve F is provided on its exterior surface with an interrupted screw thread as shown in Fig. 2, and the hole C in the front end of the receiver, into which the end of the barrel and the sleeve fits, is provided with a corresponding interrupted screw thread, as is also shown in Fig. 2. In order to bring these interrupted threads of the sleeve and the re-



ceiver into the proper position to permit the end of the barrel and sleeve to be inserted into the hole C, and the projection D to be at the same time inserted into the recess E, a shoulder *c* is formed on the collar *n* as shown in Fig. 3, which, when the lever G is thrown outward to the position shown in Fig. 2, strikes against a shoulder *e* on the band, thus forming a stop to limit the movement of the sleeve, these shoulders *c* and *e* being so arranged as that when in contact, the segments of the screw thread on the sleeve will be in line with the spaces between the segments of the screw thread in the receiver, when, as is obvious, the barrel with its sleeve can be slipped or shoved into the hole C, the projection D at the same time entering the recess E. The moment this is done, the interrupted threads of the sleeve and the receiver are caused to interlock by simply swinging the lever G inward, thereby turning the sleeve on the barrel, and locking the parts firmly together; a reverse movement of the lever serving to unlock the parts, when of course they can be instantly separated by simply drawing them apart.

In practice I prefer to make the screw thread *a* on the barrel run in the opposite direction from that on the exterior of the sleeve; that is to say, one is a left handed and the other a right handed thread, as thereby I lessen the movement of the lever and sleeve required to bring the parts together, just one-half; as the sleeve when turned moves forward on the barrel, while at the same time its exterior thread draws the receiver and barrel toward each other.

The threads are so cut, and the parts so adjusted, that when the face of the receiver has been drawn tight up against the face of the barrel and the collar, the lever G will still have room for a little further movement; and by this means I provide for taking up any looseness in the joint that may result from continued wear or use, and that too by the sleeve itself, and without the addition or use of any other device.

While I prefer to mount the locking sleeve on the barrel, it is obvious that it may be mounted or seated in the receiver instead, as shown in Fig. 6. In that case the continuous screw threads will be made on the exterior of the sleeve and on the walls of the hole C in the receiver, and the interrupted threads will be made on the interior of the sleeve and on the barrel, as shown in Fig. 6, the operation and result being the same. It is also obvious that the arm or lever G may be located at any point desired, and be made longer or shorter, but I prefer to construct and locate it as shown, as by so doing it is made to swing downward and inward into the recess to lock the parts, thereby making a neat finish and leaving its end only projecting at the under side, just sufficient to enable it to be pushed outward to unlock the parts.

In the case of an ordinary gun, where no

magazine or fore end is used, the band H may be dispensed with, by simply welding or otherwise securing a lug to the under side of the barrel where it abuts against the receiver, and forming a projection thereon to fit in the recess in the receiver; or, for a cheap style of gun, even the lug may be dispensed with, it only being necessary to exercise care in turning the barrel so as to bring the sights to the proper position before turning the sleeve, to lock the parts together. It is also obvious that the projection D and the recess E may be reversed; that is to say, that the projection may be made on the receiver and the recess in the band, and operate the same, and that they may be of any form in outline that may be preferred. By these means I am enabled to make a gun in which the barrel can be quickly attached and detached, and by which the parts can be firmly united, and compensation made for the wear of the parts without the use of set screws, hinged latches, springs or any similar devices, other than the locking sleeve itself.

I am aware that gun barrels have been made detachable from their receivers or frames for many years, and that various devices, and among others a sleeve, have been patented for that purpose, and therefore I do not claim such broadly; but,

Having fully described my invention, what I claim is—

1. The combination in a gun, of a barrel, a band secured to the barrel, an oscillatory sleeve provided with an interrupted screw thread and mounted on the barrel, and a receiver provided with a hole for the reception of the rear end of the barrel and its sleeve having a corresponding interrupted screw thread, said band and receiver being provided on their abutting faces with an interlocking projection and recess, all arranged to operate substantially as shown and described.

2. In combination, the receiver provided with a hole for the reception of the rear end of the barrel and its sleeve, said hole having an interrupted screw thread on its walls, an oscillatory sleeve having an interrupted screw thread on its exterior and a continuous screw thread on its interior, and a barrel provided with a continuous screw thread to engage with that of the sleeve, the thread on the barrel running in the reverse direction from the interrupted thread, substantially as and for the purpose set forth.

3. The combination in a gun, of a receiver provided with a hole having an interrupted screw thread, a barrel with a sleeve mounted thereon and provided with a corresponding interrupted screw thread and a handle or lever, with the band H provided with the recess for the lever to rest in when the parts are locked together, substantially as shown and described.

4. The combination in a gun, of the band provided with a shoulder, and the oscillatory sleeve provided with a corresponding shoul-



der, said shoulders being arranged in relation  
to the sections of the interrupted screw threads  
of the receiver and the sleeve as shown and de-  
scribed, whereby the movement of the sleeve  
5 is so limited as to cause not only the sections  
and intervening spaces of said threads, but  
also the interlocking projection and recess  
of the band and receiver to register, so the

parts can be slipped into place preparatory  
to locking them as described.

In witness whereof I hereunto set my hand  
in the presence of two witnesses.

JOHN M. MARLIN.

Witnesses:

M. H. MARLIN,

M. E. WARD.