A. GRILLET.

Implement for Fire-Arms.

No. 47,715. Patented May 16, 1865.

Fig. 1.

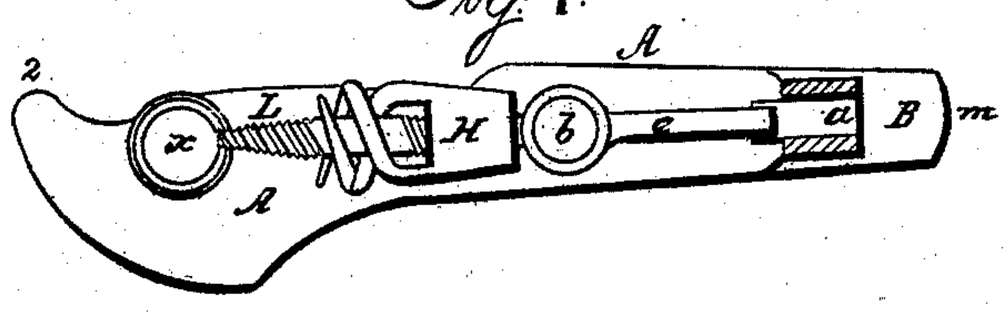


Fig. 2.

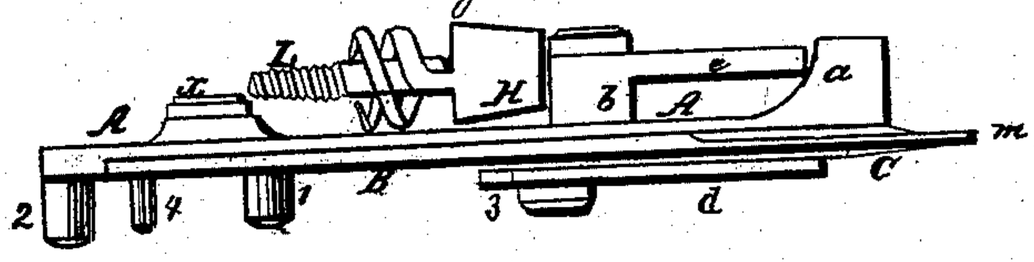


Fig. 3.

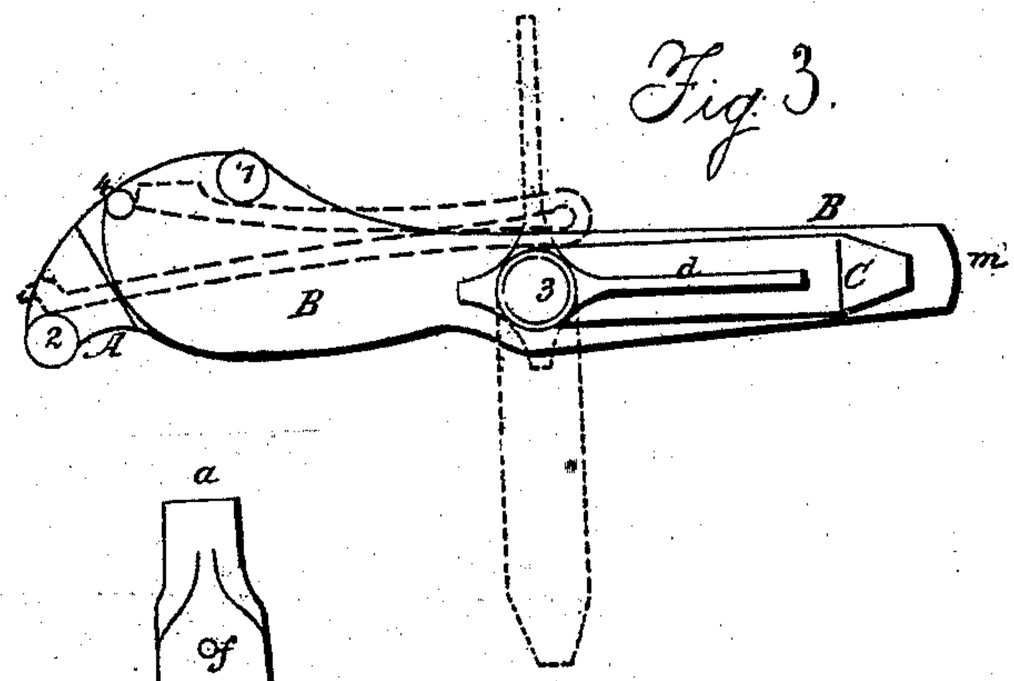
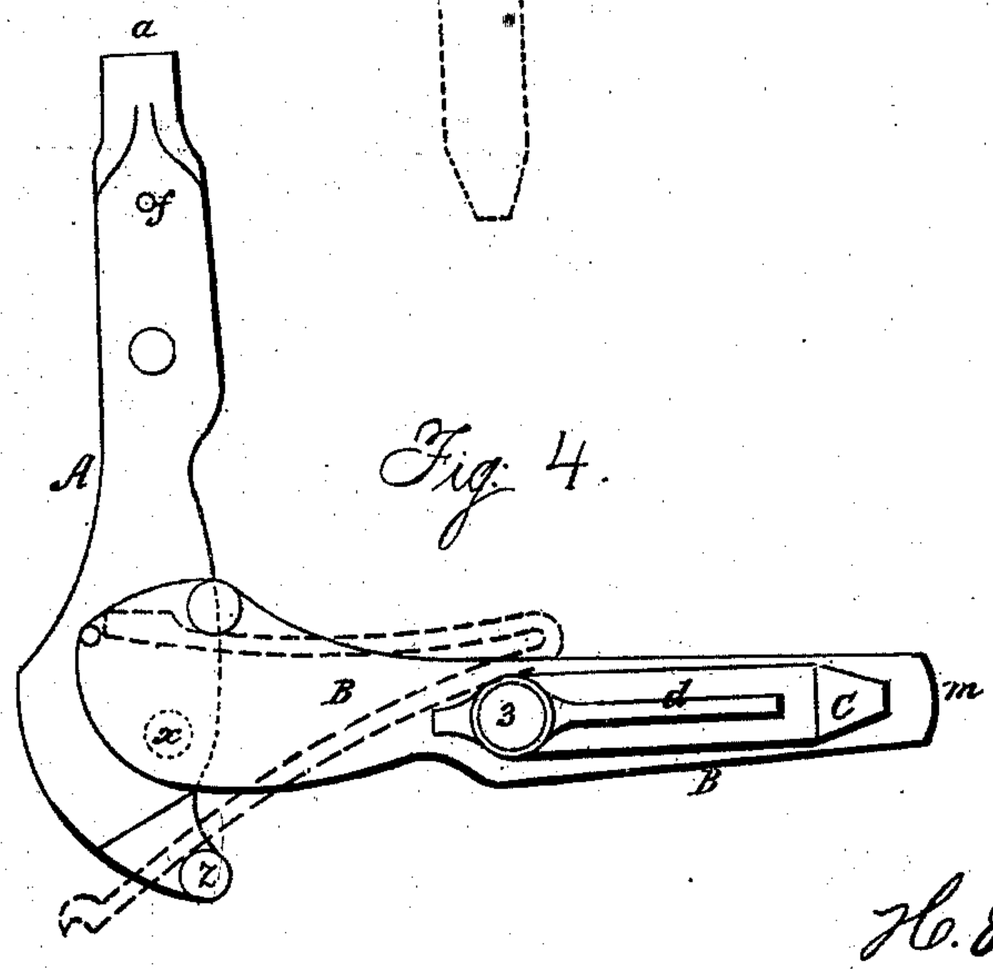


Fig. 4.



WITNESSES
C. Howson
W. R. Delany

INVENTOR
H. Howson
per Charles E. Foster
atty for A. Grillet.

UNITED STATES PATENT OFFICE.

ALEXANDER GRILLET, OF PHILADELPHIA, PENNSYLVANIA.

COMBINED IMPLEMENT FOR DETACHING AND REPLACING THE PARTS OF SMALL-ARMS.

Specification forming part of Letters Patent No. **47,715**, dated May 16, 1865; antedated May 1, 1865.

To all whom it may concern:

Be it known that I, ALEXANDER GRILLET, of Philadelphia, Pennsylvania, have invented an Improved Gun Appendage; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My improved gun appendage consists of a compact instrument (fully described hereinafter) to be carried by a soldier and to be used by him for the purpose of operating on his fire-arm, the instrument being such that it can be used for withdrawing and replacing the mainspring, can be adjusted for use as a screw-driver, as a band or tumbler punch, a wrench for withdrawing and replacing the nipple, and as a medium for carrying the wiper and ball-screw.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a plan view of my gun appendage; Fig. 2, an edge view; Fig. 3, a plan view the reverse of that shown in Fig. 1, and Fig. 4 the same as Fig. 3 with the arms or plates open.

Similar letters refer to similar parts throughout the several views.

The instrument consists of two main plates or arms, A and B, which are hinged together at *x*, and which can be made to assume the two positions seen in Figs. 1 and 4.

On the outer end of the arm A is a projection, *a*, in which is a square opening adapted to the square portion of the cone or nipple, so that when the latter has to be screwed to or unscrewed from the gun the arm A acts as a wrench, of which the arm B forms the handle, the two arms being in the position shown in Fig. 4. A stud, *b*, is secured to and arranged to turn on the outer surface of the arm A, and from this stud project two pins, the long pin *e* consisting of a plain cylindrical rod of steel, and serving as a tumbler-punch, and the shorter pin having screw-threads adapted to similar threads in an opening in the neck of the wiper H, the ball-screw L being also screwed into the neck of the wiper.

The end *m* of the arm B serves as a large screw-driver, and when used as such the arm A, occupying the position seen in Fig. 4, forms the handle.

To a pin projecting from the outer face of the arm B are hinged the small screw-driver *c* and band-punch *d*, which together form, at the point where they are connected to the arm, a hub or stud, 3, alluded to hereinafter.

It will be seen that two pins or studs, 1 and 4, project from the outer face of the arm B, and that a stud, 2, projects from the arm A. The object of these studs and the duty they have to perform will be best observed on reference to Figs. 3 and 4, in which the mainspring of the gun is shown in red lines.

When the mainspring has to be withdrawn from the lock, it is in the first instance compressed by operating the hammer, so as to assume the form seen in Fig. 3. The instrument is then so applied to the lock that the studs 1, 2, 3, and 4 shall occupy the position in relation to the spring seen in the said Fig. 3. The hammer of the lock is then released, so that the spring may be distended and bear against and be controlled by the above-mentioned studs, when on moving the instrument away from the lock it will carry with it the mainspring, which can be readily detached from the instrument after the two arms have been moved to the position shown in Fig. 4, and the spring thereby permitted to become distended.

It will be understood without explanation how the instrument can be manipulated for the purpose of restoring the mainspring to the lock.

When the two arms are folded together, as seen in Fig. 3, they are locked to each other, a pin, *f*, on one arm entering a hole in the other. This lock is so light, however, and the arms are so thin that by wedging the end of the thumb between the arms near the end of the same one arm can be easily unlocked from the other.

When a ball has to be withdrawn from the barrel of a fire-arm, the ball-screw L is unscrewed from the neck of the wiper H and attached to the ramrod, and when the wiper has to be used it can be readily unscrewed from the pin which projects from the stud *b* and attached to the ramrod.

When the instrument is not required for use,

the several parts occupy the relative position illustrated in Figs. 1, 2, and 3, and are contained in so small a space that the instrument can be carried in the pocket without inconvenience.

The manner in which the instrument has to be adjusted to operate on the screws, band, nipple, and tumbler of the fire-arm will be readily understood without further explanation.

I claim as my invention and desire to secure by Letters Patent—

1. The two arms A and B, hinged to each other and provided with the studs herein described, or the equivalents to the same, the whole being arranged for acting on the mainspring of a fire-arm, substantially as described.

2. The two arms A and B, in combination with the movable stud *b*, its screw for carrying the wiper and ball-screw, and the tumbler-punch *e*.

3. The combination of the two arms A and B with the cone or nipple wrench *a* at the end of the arm A.

4. The screw-driver C and band-punch *d*, hung to a pin on the arm B, as set forth.

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

ALEX. GRILLET.

Witnesses:
JOHN WHITE,
CHARLES HOWSON.