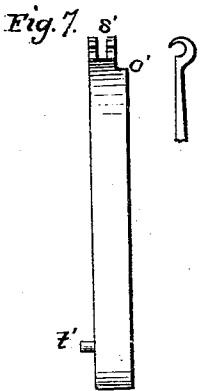
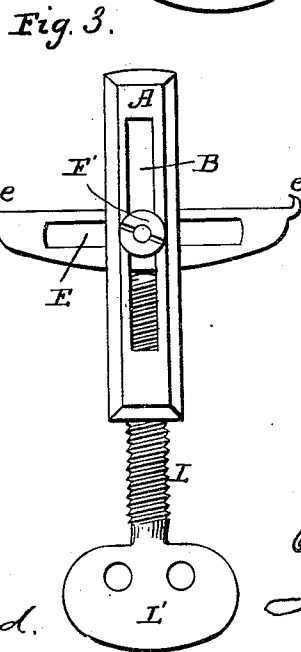
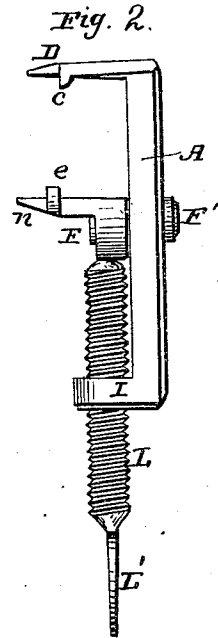
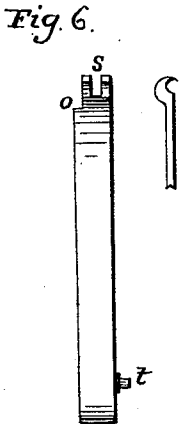
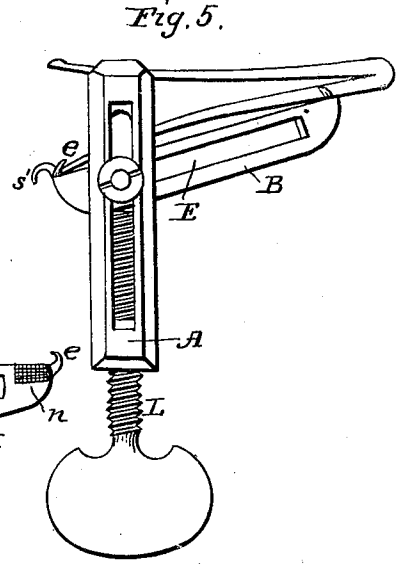
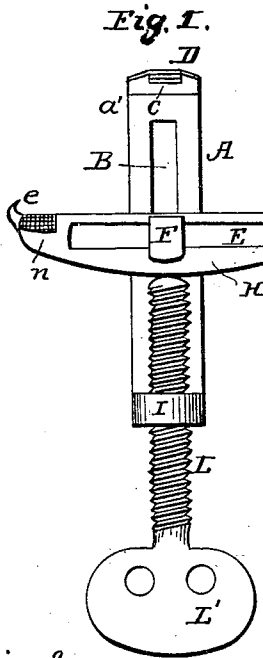
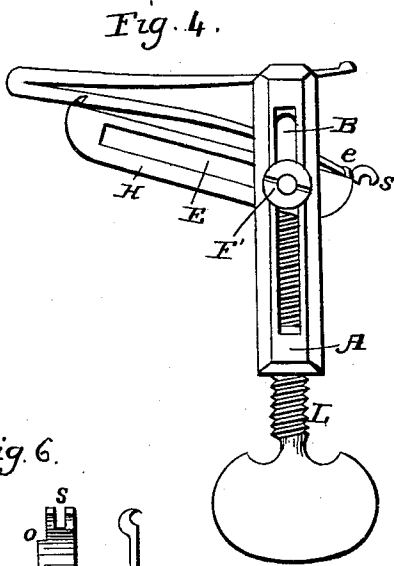


STOKES & BENNETT.  
Spring Vise for Gun Locks.

No. 101,937.

Patented April 12, 1870.



Witnesses:

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Inventor:

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# United States Patent Office.

JOHN STOKES, OF SPRINGFIELD, MASSACHUSETTS, AND THOMAS BENNETT, OF HARTFORD, CONNECTICUT.

Letters Patent No. 101,937, dated April 12, 1870.

## IMPROVEMENT IN SPRING-VISE FOR GUN-LOCKS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, JOHN STOKES, of Springfield, in the county of Hampden and State of Massachusetts, and THOMAS BENNETT, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Improved Device for Setting Mainsprings into gun-frames; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a front view of our invention.

Figure 2 is a side view of the same.

Figure 3 is a rear view of the same.

Figure 4 shows the device with a right-hand mainspring secured therein, as it is placed in the frame of a gun.

Figure 5 shows a left-hand spring in position to be placed in a gun.

Figure 6 shows more in detail a right-hand spring; and

Figure 7 shows the detail of a left-hand spring.

Our invention relates to a device to be used for placing mainsprings in their proper position in gun-frames, and it consists of two bars of metal having longitudinal slots therein, through which passes a bolt with a head upon one end, and a screw-thread and nut upon the other, whereby the two bars are swiveled or secured together in such manner that they may move freely, one upon the other, to any desired position. One of said bars has two projections thereon, one at each end, and upon each projection is made a small hook or point. Upon one end of the other bar is another projection, having a shoulder upon the under side, and the other end of this said piece has another projection, through which is made a threaded hole, through which hole is inserted a screw, the end of which impinges against the sliding bar, which is placed transversely across the bar having the screw therein, forcing said sliding bar to any desired position upon the other bar.

The device is designed more particularly for use in setting mainsprings in the frames of double-barreled guns, although it may be used in setting springs in single guns.

That others skilled in the art may be able to make and use our invention, we will proceed to describe its construction and mode of operation.

In the drawings—

A represents the main bar having the longitudinal slot B made therein, upon one end of which bar is the projection I, having a threaded hole made therein, into which is turned the thumb-screw F. Upon the other

end of the bar A is a projection or prong, D, the end of which may be made somewhat narrower than the main part of said prong, and near its end is a small shoulder, c.

H represents the other bar having the longitudinal slot E made therein, and upon the ends of this bar H are the projections *n* and *n'*, having the small hooked projections *e* and *e'* thereon, made perpendicular to the projections *n* and *n'*.

This bar H may be secured to the bar A by means of the small bolt F, having a head upon one end, and a screw-thread upon the other, upon which turns the nut F'. This bolt is shown more fully in fig. 2.

The lower edge of the bar H may be made somewhat curved to permit the bar to accommodate itself to the disposition of the mainspring it is operating upon.

Fig. 6 represents a right-hand mainspring, in which *s* is the slotted hook upon the end of one of the arms, and *o* is a shoulder upon one side of said hook.

A left-hand spring is made in a similar manner, except that the small shoulder is made upon the opposite side of the hook, as shown in fig. 7, in which *s'* is the hook, and *o'* is the shoulder. The small stud or pin *t* is also made upon the opposite side or edge of the spring in the latter case.

We do not, however, claim any peculiarity in the mainsprings, as both right and left springs have long been known and used, and we only show and explain the different springs to make the use of the setting device more clearly understood.

The operation of the device is as follows:

One of the arms of the mainspring is placed upon the two projections *n* and *n'* of the bar H, one end of said arm resting upon the projection *n*, and the small shoulder *o* placed within and against the hook *e*, the other end of said arm resting upon the projection *n'*, and the upper side of the other arm of the spring bears against the end of the projection D.

The bar H is now moved endwise across the bar A until the ends of the arms of the spring are nearly over the end of the screw, and the spring is then firmly pressed in edgewise against the hooks *e* and *e'*, and also against the shoulder *o*, and at the same time the screw L is turned in against the bar H, forcing it along the bar A towards the projection D, until the two arms of the spring are forced together sufficiently, when it may be set in its place in the gun-frame, and the screw L turned out, and the device is then freed from the spring.

A left-hand spring may be set in precisely the same manner, only, to clasp the spring in the setting device, it is necessary to place the spring therein in an op-

posite direction, the shoulder *o'* being in placed within and against the small hook *e'*, the small pin or stud *t* projecting outward in either case.

It will thus be seen that the device is applicable for setting either right or left-hand springs with equal facility, which is not the case with the devices now in common use for setting springs, and it is also particularly adapted for frame work, or setting springs in frame guns, as the projections *n n'* upon the bar *H*, and the projection *D* upon the bar *A* are made long, with the hooks *e* and *e'* and the shoulder *c* near their outer ends, in order that the spring may be held sufficiently far from the bar *A* to facilitate its placement in the frame.

Having thus described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The slotted bar *A* having the projection *D* thereon, in combination with the slotted bar *H*, having the hooked projections *n* and *n'* thereon, the same being operated by means of the screw *L*, and constructed substantially as described.

2. In a device for setting mainsprings in gun-frames, the slotted bar *H* having the hooks *e* and *e'* upon the projection *n* and *n'*, by means of which the device may be used for setting either right or left-hand springs, substantially as described.

JOHN STOKES.  
THOMAS BENNETT.

Witnesses:

T. A. CURTIS,  
MARY L. BOYNTON.