

(No Model.)

F. E. HEINRICH.  
SHOOTING REST FOR FIREARMS.

No. 577,026.

Patented Feb. 16, 1897.

Fig. 1.

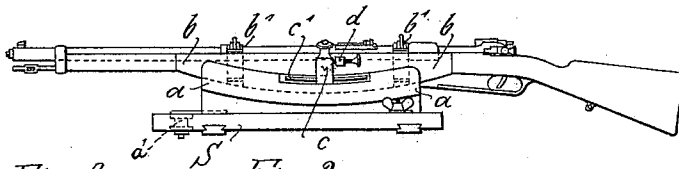


Fig. 3.

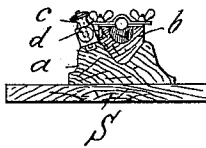


Fig. 2.

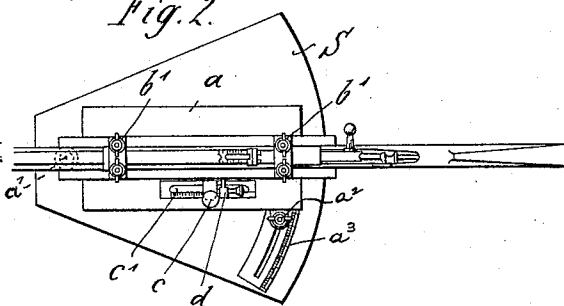


Fig. 4.

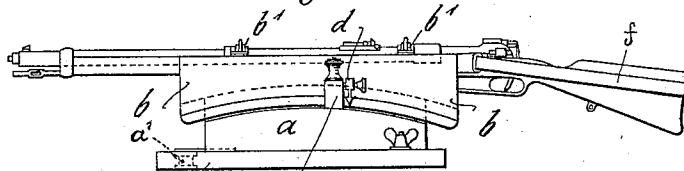


Fig. 6.

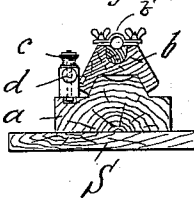
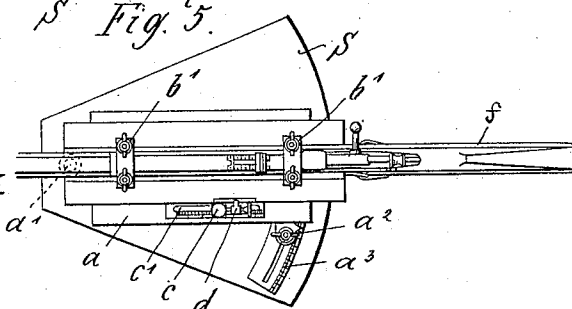


Fig. 5.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

FRIEDRICH EDUARD HEINRICH, OF STUTTGART, GERMANY.

## SHOOTING-REST FOR FIREARMS.

SPECIFICATION forming part of Letters Patent No. 577,026, dated February 16, 1897.

Application filed November 28, 1896. Serial No. 613,735. (No model.)

*To all whom it may concern:*

Be it known that I, FRIEDRICH EDUARD HEINRICH, merchant, a subject of the King of Prussia, German Emperor, residing at Stuttgart-on-the-Neckar, in the Kingdom of Würtemberg and Empire of Germany, have invented certain new and useful Improvements in Shooting-Rests for Firearms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention consists of a holder or stand for rifles and field and other guns by means of which the weapon may be reliably aimed or trained mechanically and independently of the capability of the person manipulating it, provision being also made for the kick or return shock after firing.

The device consists mainly of a horizontally-arranged guide-plate having a convex or concave guiding-surface and a slide or stock movable thereon to which the weapon is attached. An adjustable stop is provided on the guide, said stop being adjusted to a point on the slide corresponding to the presupposed distance of the object aimed at, so that when the slide with the weapon attached thereto is advanced along its guide until it strikes the stop the weapon will be aimed or trained and have the proper elevation to enable the shot to hit the mark without requiring adjustment from the person manipulating it. After the shot has been fired the weapon, together with the slide, may recoil freely on the guide and may then be pushed forward until it reaches the stop by hand, or mechanically in the case of heavy guns, in order to fire the next shot. When the weapon with its slide has reached the stop on the guide, it will be properly aimed and there will be no need to readjust it.

In order to render the present specification more easily intelligible, reference is had to the accompanying drawings, in which similar letters denote similar parts throughout the several views.

Figure 1 is a side elevation of the device; Fig. 2, a plan; and Fig. 3, a transverse section, the slide carrying the rifle being adapted to move on a concave guide. Fig. 4 is a side elevation showing a convex guide; Fig. 5, a

plan of Fig. 4, and Fig. 6 a transverse section.

The base of the apparatus is formed by a sector-like plate S, which is supported by suitable means in an accurately horizontal position. On this base-plate is mounted the guide *a* on a pivot *a'*, said plate being adjustable on its pivot by means of a scale or register *a<sup>3</sup>* and a set-screw *a<sup>2</sup>*, to enable the weapon to be pointed in the desired direction in the horizontal plane. A slide *b* is movable on the concave surface of the guide *a*, the weapon being attached to the said slide in any suitable manner.

In the drawings the rifle is shown attached to the slide by means of metal strips *b' b'*, suitably screwed down. In the modification shown at Figs. 4 to 6 an additional strap *f* is provided, the ends of which are attached to the rear end of the slide, while the loop thus formed is passed round the end of the butt of the gun. This device effectually prevents an axial movement of the weapon on the slide. The slide *b* may also be provided with antifriction-rolls.

A stop *c* is provided on the slide *a*, which is adjustable thereon in a slot *c'*, having a scale, as shown. The slide is provided with a projection *d*, adapted to contact with the stop *c* and remain in contact with the same while the weapon is being fired off.

The device shown in Figs. 4 to 6 is exactly the same with the exception that the guide-surfaces for the slide are convex instead of concave.

The above-described device offers numerous advantages, which will be apparent from the following description of the various applications of the same. Thus, for instance, in the case of a siege the besieging party as well as the besieged could arrange a number of the holders or stands containing weapons aimed to cover certain important points, such as bridges, passes, and the like. For this purpose each stand or holder is properly adjusted to a horizontal position by means of a water-level and under suitable covering. Thus a number of the stands may be arranged on a horizontally-disposed block or beam as base, whereupon the guides *a* are turned on their pivots to the proper direction and secured in such position by means of the set-

screw  $a^2$ . The stop  $c$  is then adjusted in a position to give the weapon the proper elevation when the projection of the slide strikes or rests against the said stop. In firing rifles or  
5 working guns thus mounted it will only be necessary for the person manipulating the weapon to push the same forward until the projection of the slide strikes the stop  $c$  and then, after having loaded the gun, to discharge the same. After the recoil has taken  
10 place the weapon may be again advanced and again fired.

The above-described manipulation of the weapon enables the most rapid firing to be  
15 accomplished, combined with the most accurate aim possible, independently of the practice of the men.

One particular advantage of the device is that guns which have been previously adjusted to cover certain points can be worked  
20 just as well by night as by day.

The invention may be employed in the field as well as in connection with sieges in order to prevent the advance of an enemy at any  
25 particularly important point, the application of the device in such case being the same as above described. It is, however, advisable in such cases to substitute a sharpened stake or pole for the sector-like base-plate, which  
30 may then be rammed into the earth or into a hedge or mound and thus serve to support the holder.

The device may also be employed by day or night to fire upon points of varying distances  
35 without changing the position of the base-plate  $S$ . It will be sufficient if the direction

in the horizontal plane and the distance away of the object to be fired on are known, when it will only be necessary to instruct the men in each case to what extent the guide should  
40 be adjusted on the base-plate  $S$  and the stop  $c$  on the guide.

The device is particularly advantageous for use at shooting-ranges in trying new guns, since it enables each gun to be more reliably  
45 controlled than is the case with the devices hitherto employed for this purpose. The accuracy of the position of the sight and the nature of the barrel and the ammunition can be more accurately ascertained.  
50

The present device may be adapted for heavy guns, as also for all sorts of firearms, and particularly for torpedo-tubes, pistols, and revolvers and for letting off rockets. In the case of heavy guns it is advisable to brake  
55 the recoil by means of the well-known brake devices.

I claim as my invention—

A stand or holder for mechanically adjusting the position of firearms, consisting of a  
60 slide attached as specified to the firearm and supported loosely on a concave or convex guide, by the movement of which the elevation of the firearm supported may be varied, and simultaneously a free recoil enabled.  
65

In testimony whereof I affix my signature in presence of two witnesses.

FRIEDRICH EDUARD HEINRICH.

Witnesses:

WILHELM HEIDELMANN,  
ADOLF HEIDELMANN.