

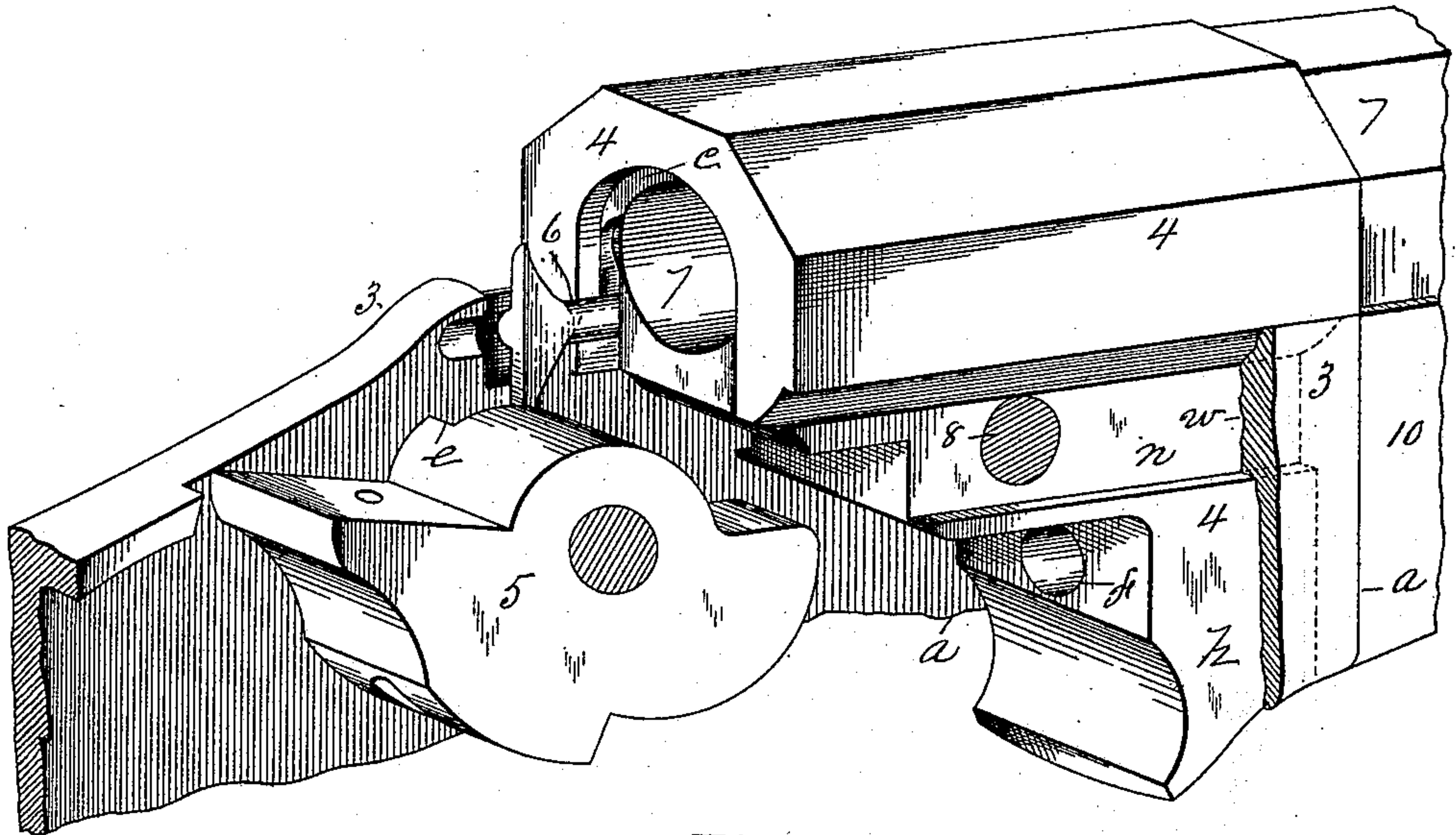
(No Model.)

E. S. FIELD & S. K. HINDLEY.  
FIRE ARM.

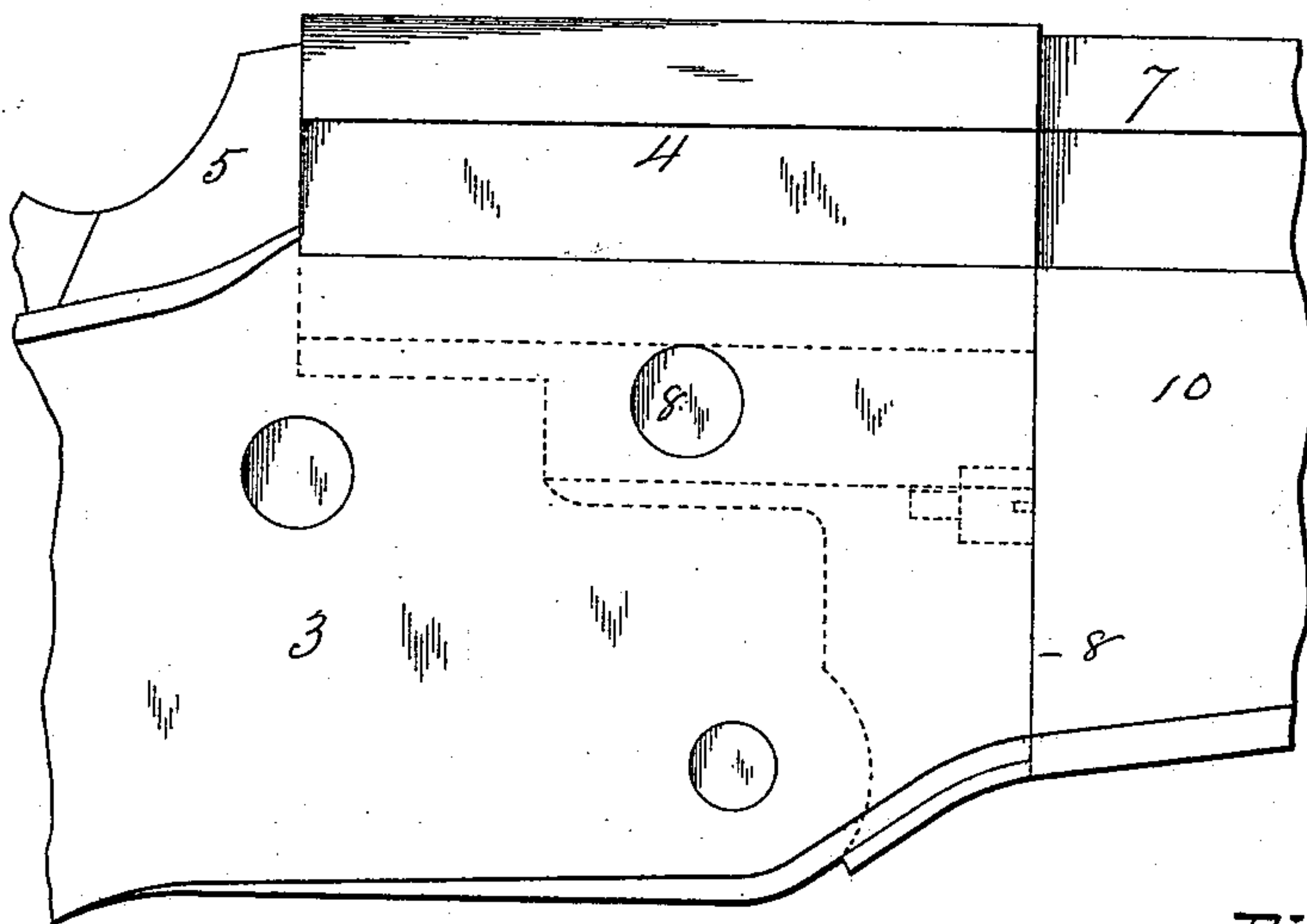
No. 391,953.

Patented Oct. 30, 1888.

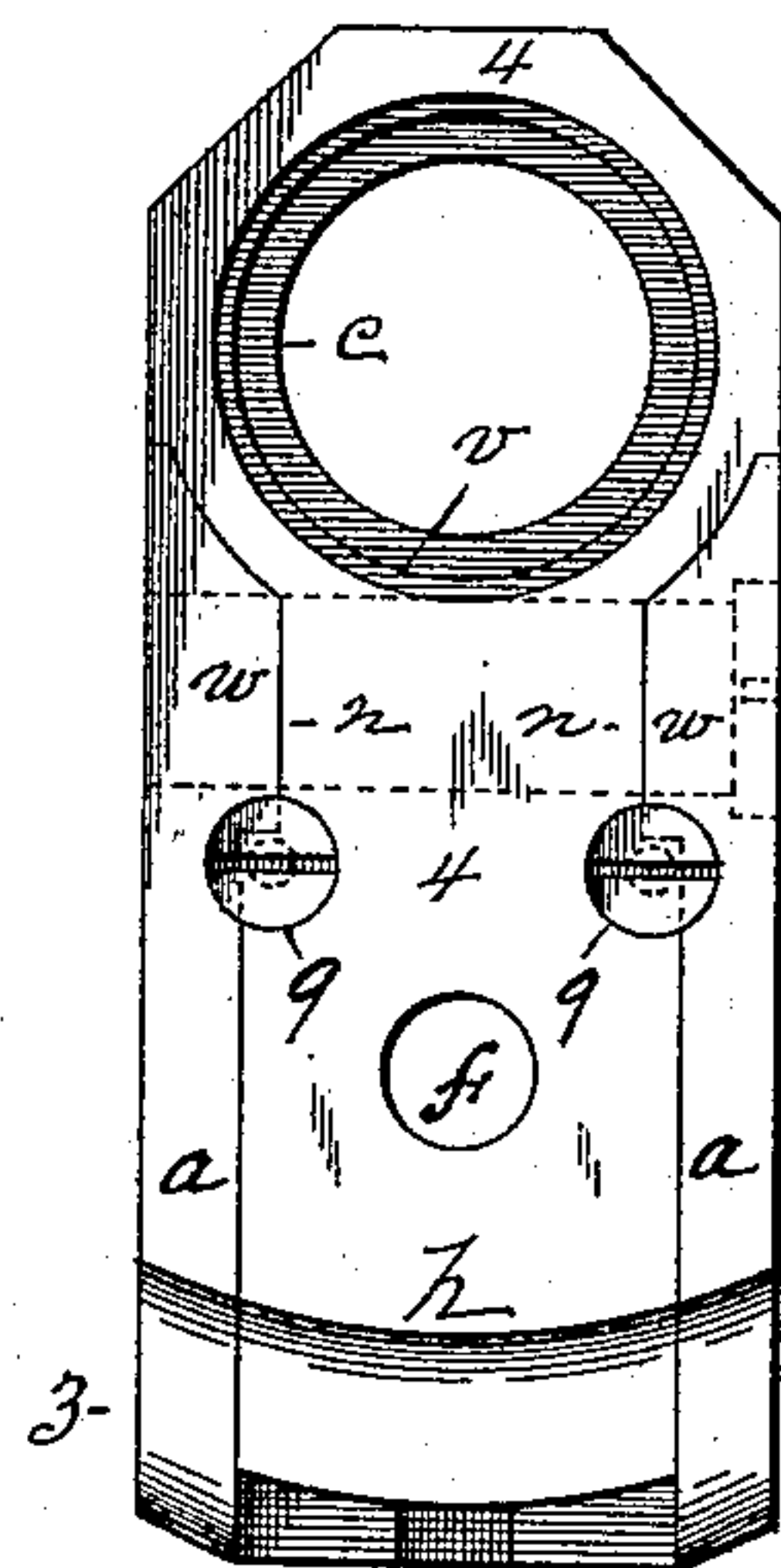
*Fig. 1.*



*Fig. 2.*

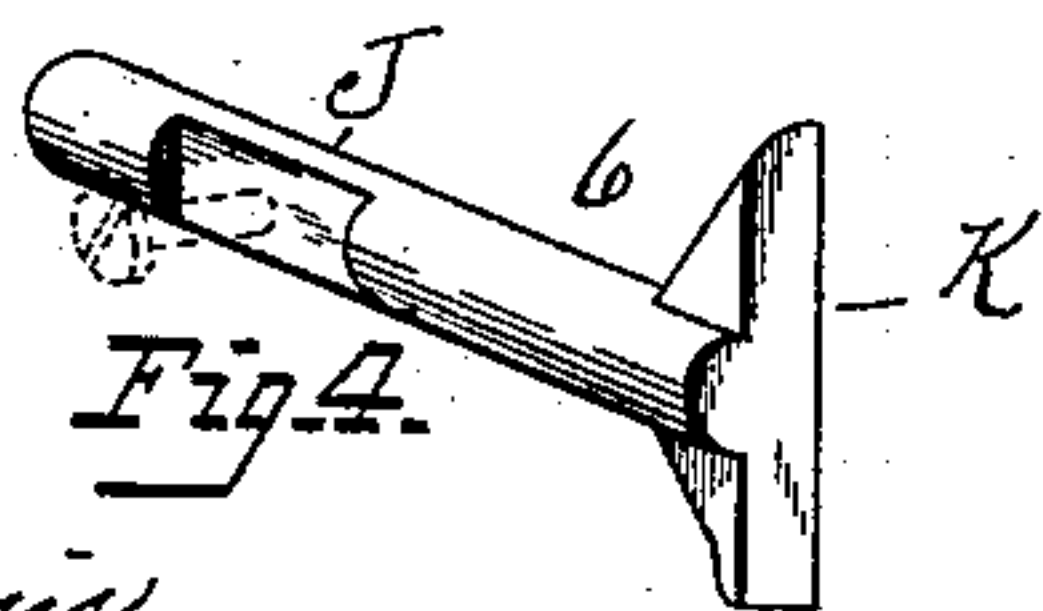


*Fig. 3.*

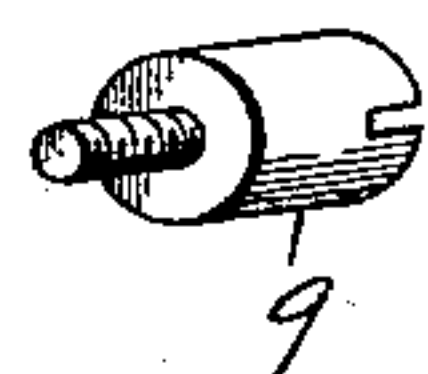


*Fig. 5.*

Witnesses,  
Curtis Cooper,  
G. W. Chamberlain.



*Fig. 4.*



Inventors,  
Edwin S. Field,  
Solomon K. Hindley.  
By their Attorneys  
Chapman & Co.



# UNITED STATES PATENT OFFICE.

EDWIN S. FIELD AND SOLOMON K. HINDLEY, OF SPRINGFIELD,  
MASSACHUSETTS.

## FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 391,953, dated October 30, 1888.

Application filed May 9, 1887. Serial No. 237,523. (No model.)

*To all whom it may concern:*

Be it known that we, EDWIN S. FIELD and SOLOMON K. HINDLEY, citizens of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Detachable Barrel-Connections for Fire-Arms, of which the following is a specification.

This invention relates to breech-loading fire-arms, and pertains to improvements in detachable barrel-connections therefor, the object being to provide a receiver or frame for a fire-arm adapted to receive and hold a detachable breech secured to the end of a barrel whereby several barrels may be used in succession with one receiver; and the invention consists in the peculiar construction and arrangement of the receiver, the barrel-breech, and means for securing the latter in the receiver, all as herein-  
after fully described, and pointed out in the claim.

In the drawings forming part of this specification, Figure 1 is a perspective view of a gun-receiver or frame having a detachable barrel-breech applied thereto, said receiver and breech being constructed according to our invention, said figure showing the rear end and a part of the side of the receiver broken off and a part of a barrel and its fore-arm, a breech-block, and an extractor. Fig. 2 is a side elevation of the front end of the receiver or frame (the rear end being broken off) with the detachable barrel-breech therein, said figure showing a part of a barrel connected with said breech and a portion of the fore-arm thereunder, and a portion of the breech-block in position against the rear end of said breech. Fig. 3 is a front end elevation of the receiver with the detachable breech secured therein. Fig. 4 is a perspective view of the extractor, and showing in dotted lines the position of a securing-screw. Fig. 5 is a perspective view of one of the screws employed to attach the detachable breech to the receiver.

In the drawings, 3 is the metallic receiver or frame of the arm, to which are attached the stock, the breech mechanism, and the barrel; but instead of making said receiver as is ordinarily done to adapt it to have the barrel  
screwed directly to the end thereof, it is con-

structed with the sides or "cheeks" *a a* thereof extending parallel with each other toward the forward end of the receiver and left separated at that point, as shown in Fig. 3, and having their inner opposite sides properly formed and finished, as below described, to receive between them the barrel-breech 4. At the rear of the barrel-breech 4 the usual breech-block 5 is hung between the sides of the receiver, and any suitable lock mechanism may be used in connection with said breech-block. Fig. 1 shows the barrel-breech 4 not quite back to its place in the receiver 3, and it is left in that position to more clearly show the manner of applying the shell-extractor 6 to the rear end of the barrel and the manner of engaging the extractor (which is shown in said figure partly drawn out) with the breech-block 5. The said detachable barrel-breech 4 is a metallic block bored longitudinally and internally screw-threaded from its front end to provide for screwing the rear end of the barrel 7 into it, the rear end of the barrel being screwed against an annular collar, *c*, at the rear end of the breech 4, the border of said collar being in a plane with the bore of the rear end of the barrel, as shown. The letter *v*, Fig. 3, indicates the plane of the screw-thread in breech 4.

In practice each of these several barrels which it may be desired to use in the gun, whether shotgun or rifle barrels, has one of said breeches 4 firmly screwed onto its rear end, and the several barrel-breeches are interchangeably fitted into the receiver 3 between its cheek-pieces *a*. The breech 4 has a longitudinal groove, *n*, in each side thereof, in which engage two longitudinal ribs, *w*, on the inner opposite sides of the cheek-pieces *a* of the receiver, and the end of said breech, being entered between the ends of said cheeks, is easily pushed back to its position in the receiver, as shown in Fig. 2, and is then secured in the receiver by a screw or pin, 8, passing transversely through the receiver and the under side projecting part of the breech. As an additional precaution against any possible motion of the barrel-breech 4 in the receiver when the gun is fired, two screws, 9, are put in the end of said breech, which serve as keys



to aid in preventing any upward movement of the forward end of the breech or that end nearest the muzzle of the barrel. The downhanging portion *h* under the barrel-breech serves  
5 no purpose but to fill the space between the ends of the receiver, and its inner side is made of a form to adapt it to the contents of the latter.

An extractor, 6, having a shank, J, with a  
10 notch in one side, as shown, and a head, K, thereon, is fitted to slide in a cylindrical perforation between the outside of the barrel and the inner side of the breech 4, Fig. 1 showing said extractor in that position and partly  
15 drawn out. A screw (indicated by dotted lines in Fig. 4) passes through the side of the breech 4 and has its point engaging in said notch in the side of the extractor-shank, whereby the extractor, while allowed to move lon-  
20 gitudinally, is retained between the barrel and its breech.

In practice the head K of the extractor is let into the side of the barrel so that it comes to a proper position behind the rim of the cartridge when the latter is put in the barrel, and  
25 one end of the head K (the lower end shown in Fig. 4) engages with the end of a recess, *e*, (see Fig. 1,) on one side of the pivoted breech-block 5, so that when said block is swung to

the position shown in said figure after the arm 30 has been fired the extractor is drawn out and the shell is extracted from the barrel. Each barrel and breech used in the receiver is provided with an extractor adapted to the bore of the barrel.

The perforation *f* in the pending part of the breech 4 is made to provide convenient means for attaching the fore-arm 10 (portions of which are shown in Figs. 1 and 2) under the  
40 barrel.

What we claim as our invention is—

The frame of a breech-loading fire-arm, having its parallel sides *aa* extending toward the barrel and separated at their forward termination, and each having a longitudinal rib, *w*,  
45 on its inner side, combined with a barrel-breech, 4, substantially as described, to enter between said sides of the frame, having longitudinal grooves *n* in its outer sides, in which said ribs engage, and a fastening pin passing  
50 transversely through said frame and breech, substantially as set forth.

EDWIN S. FIELD.

SOLOMON K. HINDLEY.

Witnesses:

G. M. CHAMBERLAIN,

WM. H. CHAPIN.