(No Model.)

L. SCHMEISSER.

GAS OPERATED FIREARM.

No. 561,617. Patented June 9, 1896.

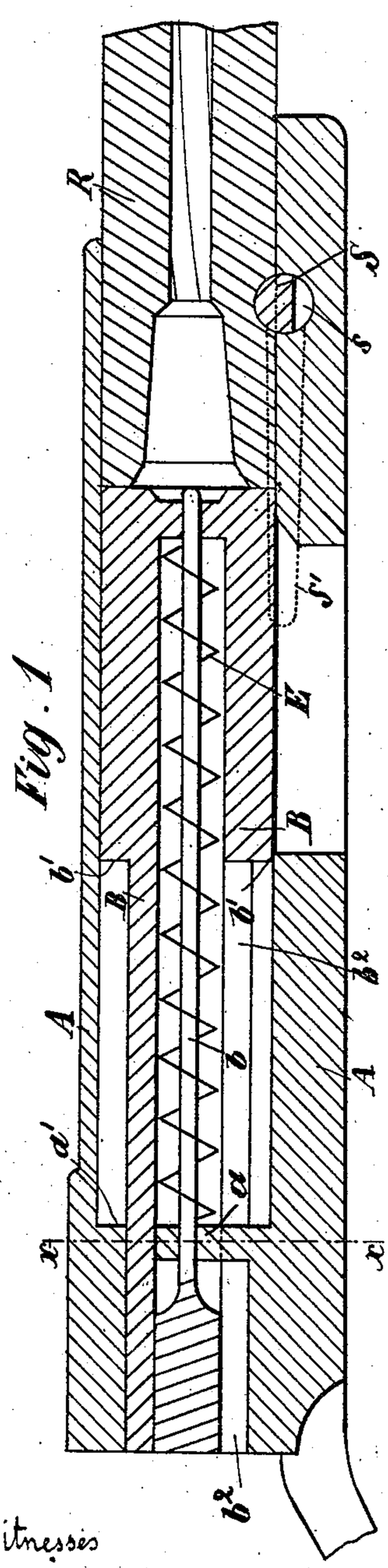

Fig. 1

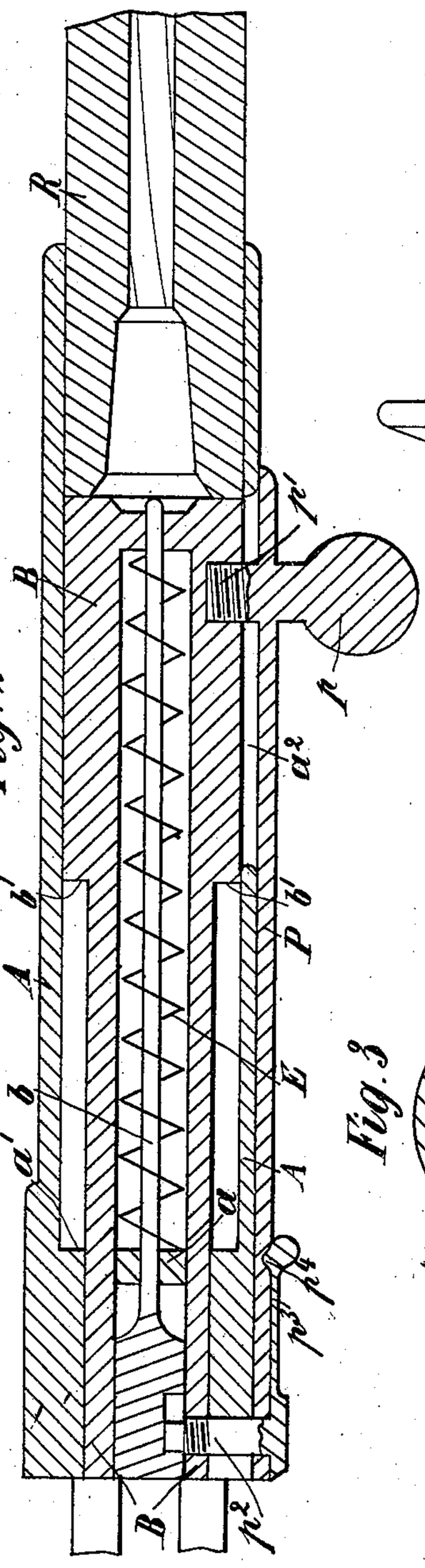

Fig. 2

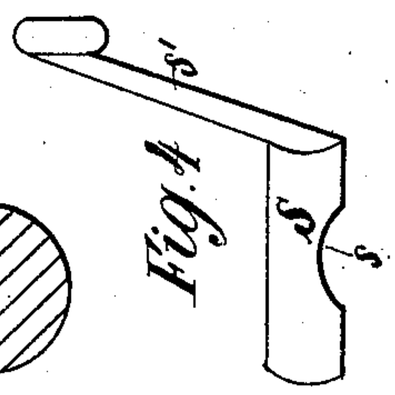

Fig. 4

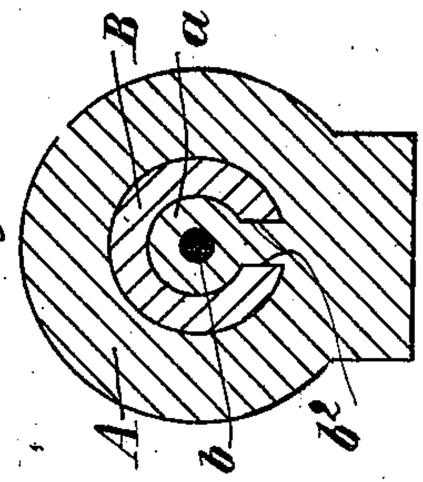

Fig. 3

Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS SCHMEISSER, OF SUHL, GERMANY, ASSIGNOR TO THEODOR BERGMANN, OF GAGGENAU, GERMANY.

GAS-OPERATED FIREARM.

SPECIFICATION forming part of Letters Patent No. 561,617, dated June 9, 1896.

Application filed October 14, 1895. Serial No. 565,549. (No model.) Patented in Switzerland May 13, 1895, No. 9,790.

To all whom it may concern:

Be it known that I, LOUIS SCHMEISSER, a citizen of Germany, and a resident of Suhl, Thueringen, Germany, have invented certain new and useful Improvements in Recoil-Operated Firearms, of which the following is a specification, this invention having been patented to me in Switzerland May 13, 1895, No. 9,790.

The object of my invention is to simplify the firearm made the subject of an application for a patent under Serial No. 497,523, in which the breech parts recede by the recoil produced by the firing, but the power of resistance is such as to make the receding slow, whereby the shot must leave the barrel before a backward effect of the generated gas is possible in order that during the complete receding of the breech-cylinder the shell be thrown out and the gun be cocked again, while during its forward motion a new cartridge be inserted in the gun-barrel. In this simplified firearm the breech-spring is placed in the breech-bolt instead of under the barrel, and the arrangement is such that the bolt, instead of being stopped in its backward motion by a striking-peg movable therewith, is stopped by a projecting surface of the frame. The latter improvement renders it necessary to have a removable barrel. The present firearm is, moreover, provided with a breech-cover, so that the receiver is closed hermetically on top, as well as at the sides.

In the accompanying drawings, Figure 1 is a vertical section of the new firearm; Fig. 2, a horizontal section thereof; Fig. 3, a section on the line $x\,x$ of Fig. 1. Fig. 4 is a perspective view of the removable lever connecting the barrel with the frame.

B is the breech-bolt, having two different diameters, in whose axial boring the striking-pin b and the breech-spring E are placed in such a manner that the spring E does not interfere in any way with the motion of the pin b. The spring E is located at one end in the boring and at the other end bears against the inside projection a of the receiver A. By the recoil of the breech-bolt B, caused by the powder-gas, the spring E is compressed, so that after the powder-gas has finished its work the breech-bolt will be brought back into its original position. The recoil is limited by the cheek of the shoulder b' upon the inside projecting surface a' of the receiver A.

In order that the motion of the breech-bolt B be not interfered with by the projection a inside the frame A, it is provided at its lower side with a slit b^2, Figs. 1 and 3.

In order to maintain easier and to increase the moment of inertia of the breech-bolt B, and also for closing the ejection-opening a^2, a plate P, with a button or other handle p, is arranged upon the outer surface of the frame, which is connected with the breech-bolt B and forms a solid whole therewith by means of the threaded peg p' and the screw p^2. For securing the screw p^2, which prevents the striking-pin b from falling out, but does not interfere with its motion, the somewhat flexible pin p^3 has a projection p^4, which catches in a corresponding notch of the plate P. Thus the receiver is closed on top and at the sides. The peculiar construction of the breech-bolt renders it necessary that the barrel R be introduced in the front of the frame A, and thus, also, that it be removable. In order to adapt the barrel easily and quickly to the frame A and to remove the same again, a pivot S, provided with an indent s in one side mounted to rotate, is located partly in the frame A and partly in the barrel R. If the pivot S takes the position of Fig. 1, it locks the barrel with the frame A, but if by means of the handle s' it be turned one hundred and eighty degrees the indent or cut-out part s makes it possible to remove it from the breech part.

I claim—

1. In combination, the receiver-frame, the breech-bolt having a hollow interior and a slot along its lower side, the projection a within the breech-bolt and connected with the receiver-frame through the slot of the breech-bolt, and the spring bearing on the projection, substantially as described.

2. In combination, the receiver, the breech-bolt, the plate P secured to the breech-bolt, the firing-pin, the pin p^2 for preventing the same from falling out, and the spring-arm p^3 connecting the pin with the plate P, substantially as described.

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

LOUIS SCHMEISSER.

Witnesses:

REINHOLD SOMEGELMILCH,

STEPH. AUGUST SCHILLING.