

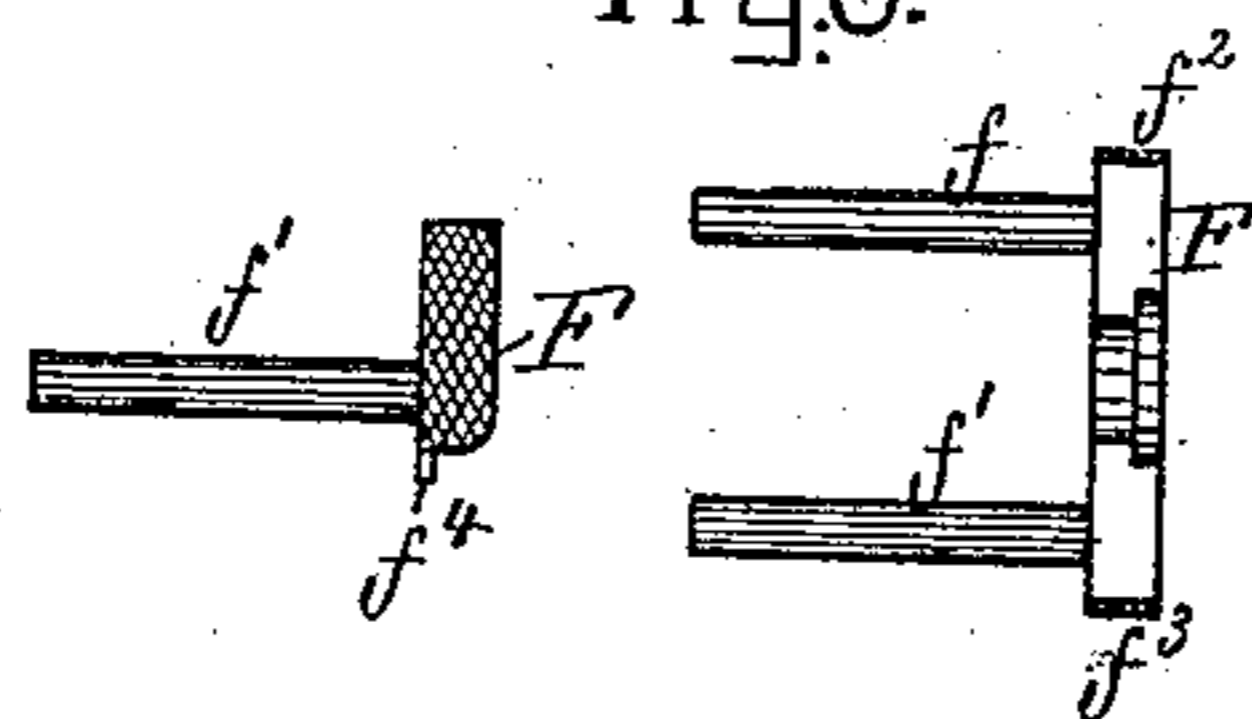
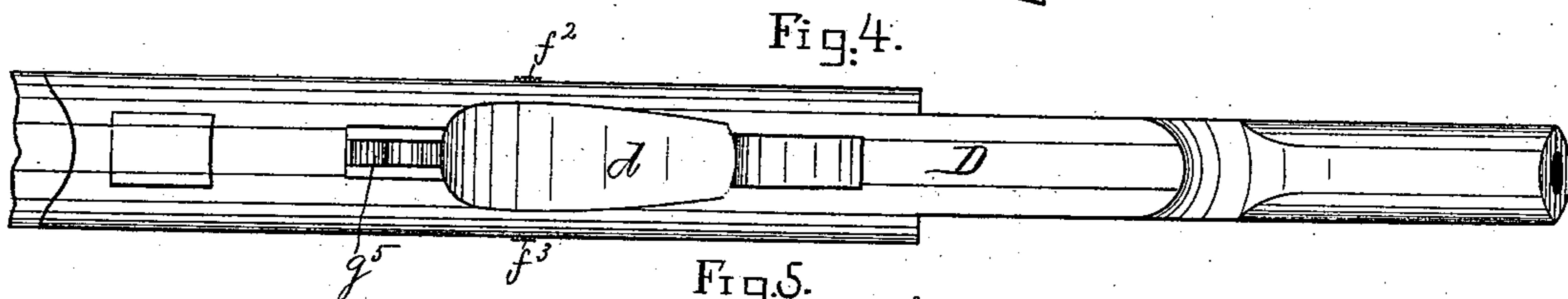
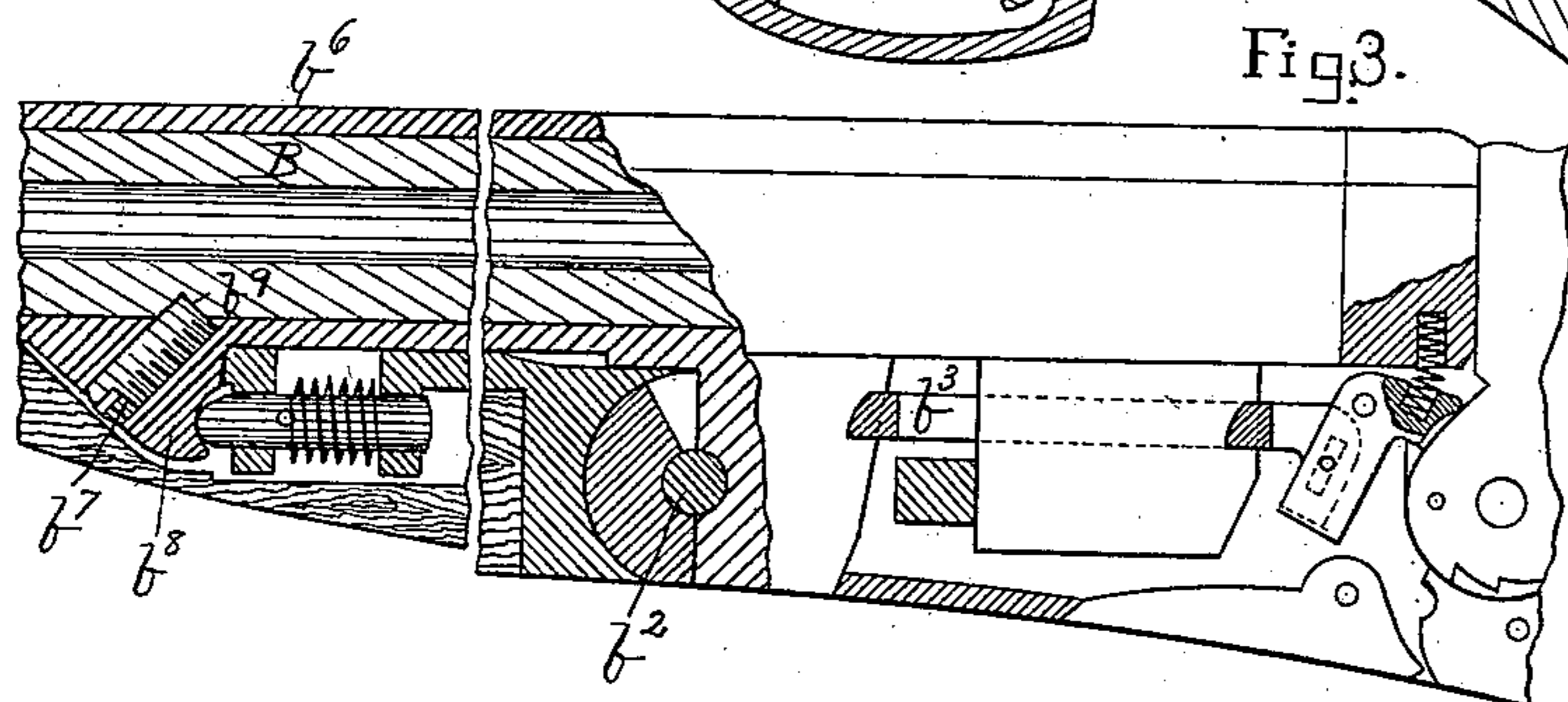
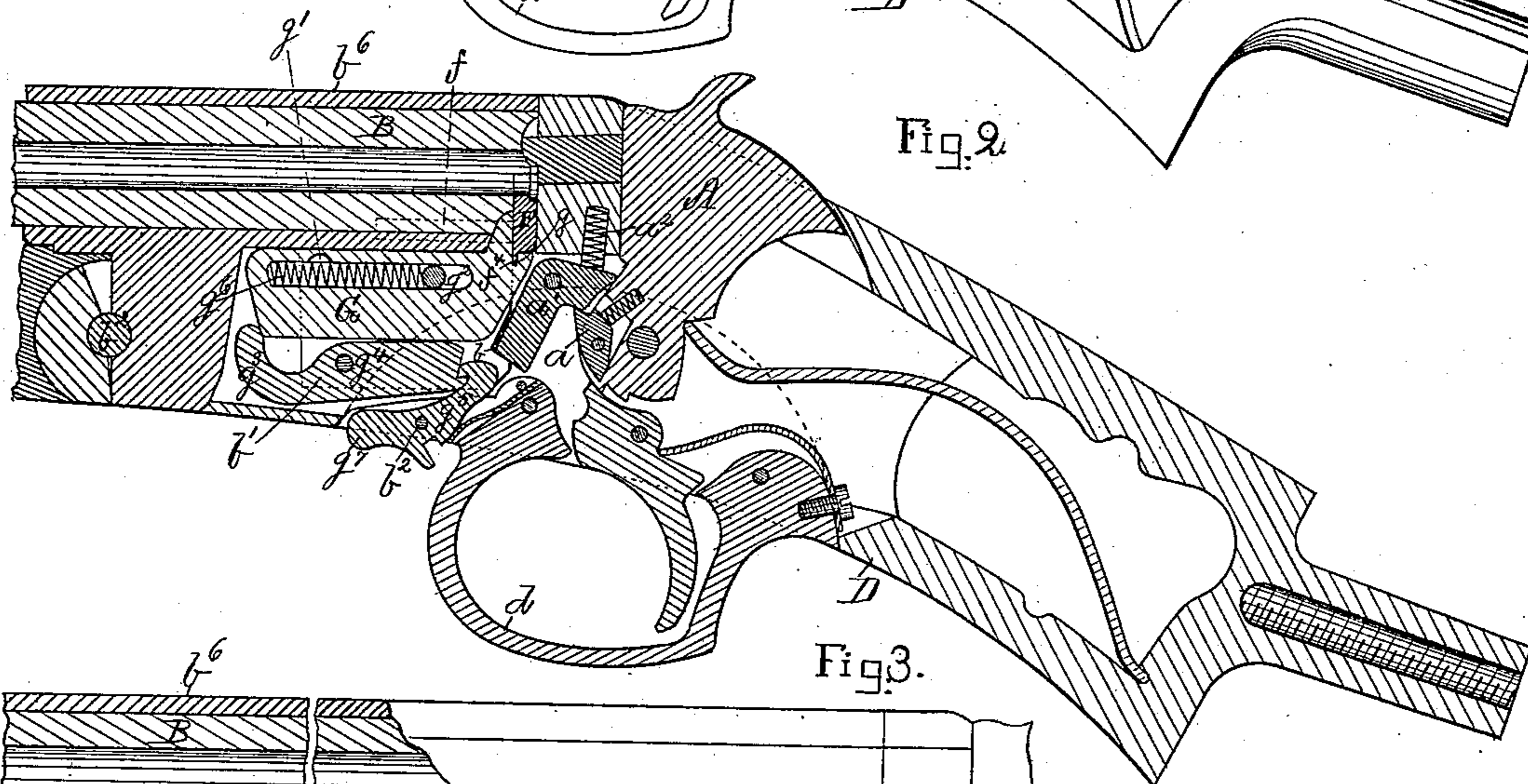
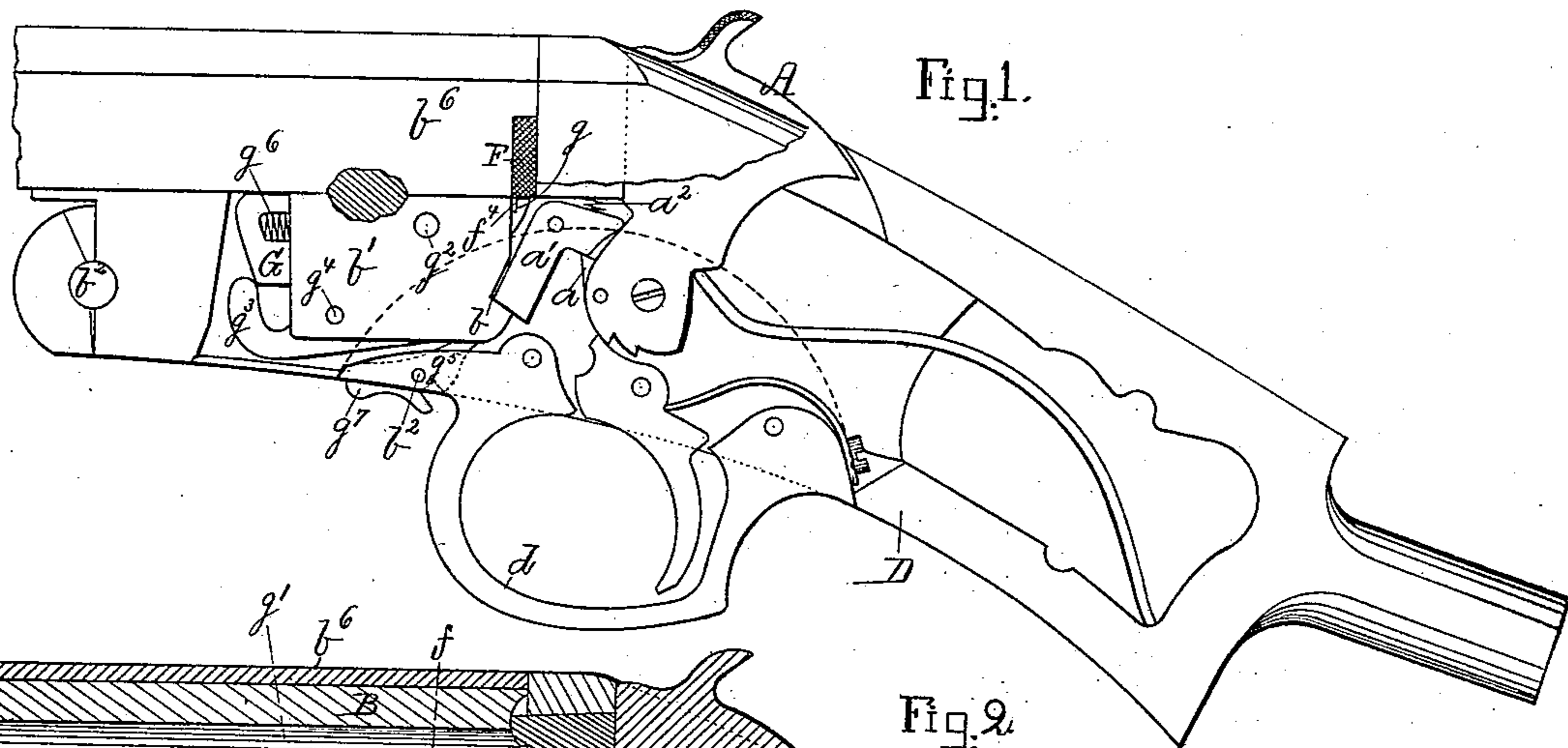
(No Model.)

R. T. TORKELSON & I. JOHNSON.

BREECH LOADING FIRE ARM.

No. 379,257.

Patented Mar. 13, 1888.



Witnesses.

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UNITED STATES PATENT OFFICE.

REINHARD T. TORKELSON AND IVER JOHNSON, OF WORCESTER, MASSACHUSETTS; SAID TORKELSON ASSIGNOR TO SAID JOHNSON.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 379,257, dated March 13, 1888.

Application filed April 17, 1884. Serial No. 128,202. (No model.)

To all whom it may concern:

Be it known that we, REINHARD T. TORKELSON and IVER JOHNSON, both of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Fire Arms, of which the following is a specification.

Our invention relates to improvements in breech-loading fire-arms; and it consists in a novel arrangement of the locking-bolt and the hammer, whereby the bolt is withdrawn by partially cocking the piece; also, in the mechanism for actuating the extractor and means for rendering this mechanism inoperative.

In the accompanying drawings, Figure 1 is a side elevation, the stock and part of gun-body being removed. Fig. 2 is a longitudinal section through the parts shown in Fig. 1. Fig. 3 is a side elevation, partly in section, of a modified form of our invention, and also shows the screw for securing the barrel to the shell. Fig. 4 is a bottom view showing the trigger-guard. Fig. 5 shows the cartridge-extractor.

The hammer A is provided with a projection, a , which, on the first movement of the hammer when being cocked, engages one arm of a bell-crank lever, a' , provided with a spring, a^2 , that tends to depress the arm next the hammer and throws the other arm into a notch, b , in the lug b' . The further movement of the hammer A raises one arm of the lever a' against the spring a^2 and withdraws the other arm from the notch b , thereby leaving the barrel B free to turn on its pivot b^2 , so as to bring its breech in position for receiving a cartridge. The lug b' serves also as a support for parts of the cartridge-extractor mechanism hereinafter described, and is preferably employed for receiving the bolt—in this instance an arm of the lever a' —for locking the barrel in position for firing. When the usual sliding locking-bolt, b^3 , is desired, it may be connected to the arm of the lever a' by a suitable device, such as a pin and slot, as shown in Fig. 3.

The trigger-guard d is inserted in a slot made in the under side of the body D. To make this slot without filing or other hand-finish we use a circular cutter, which cuts it at one operation and makes its ends arcs of a circle. The

dotted lines in Figs. 1 and 2 indicate that part of the periphery of the circular cutter that enters the body in cutting the slot.

The guard d is shaped on a milling-machine, so that its surfaces which come in contact with the slot in the body D are also arcs of the same circle, and consequently fit the slot accurately.

The cartridge-extractor consists of a plate, F, shaped on one edge to correspond with the lower half of the bore of the barrel and provided with pins $f f'$, which enter holes drilled lengthwise of the barrel and serve to guide the extractor. The plate F extends on each side of the barrel to form projections $f^2 f^3$, by means of which it may be pulled out. A projection, f^4 , on plate F enters notch g in the end of the extractor-slide G, thereby causing the extractor to move in both directions with its slide G. By means of a groove, g' , in the upper bar of the slot coming in line with the pin g^2 in its slot, the slide G is rendered capable of being tipped sufficiently to allow the edge of the notch g to come below the projection f^4 and release the plate F, so that the extractor may be withdrawn.

By making the extractor detachable different styles of barrels may be used with one body, D. The slide G is actuated by a lever, g^3 , pivoted at g^4 between the lugs b' . One end of the lever g^3 bears on the end of the slide G, and is caused to move the slide rearward by means of a spring hook, g^5 , pivoted at g^6 to the guard d . The hook g^5 catches the other end of the lever g^3 as the barrel is tipped, and causes the lever to turn on its pivot until its end is withdrawn from the hook g^5 by reason of its movement in a circle having its center in the pivot b^2 . A spring, g^6 , located in the slot in the slide G, draws back the slide and the extractor as soon as the hook releases the lever g^3 . A tail, g^7 , to the hook g^5 extends outwardly, so that by pressing on it with the thumb or finger the hook may be thrown into an inoperative position, so as to allow the barrel to be tipped without expelling the cartridge.

In the arm shown the rear portion, b^5 , of the barrel B is made to fit snugly but detachably in the shell b^6 , so that when in place the shell and barrel are practically one. A screw, b^7 , fitted in the fore lug, b^8 , at an angle, as shown

in Fig. 3, enters a notch, b^9 , in the barrel and serves to draw the barrel and the shell together, and effectually prevents any turning or displacement of the barrel.

We claim as our invention—

1. The barrel B, pivoted at b^2 , and its lug b' , in combination with the locking-bolt a' , catch a , and hammer A, the locking-bolt a' being pivoted and the hammer A bearing against the catch a , also pivoted, to trip the locking-bolt a' , substantially as and for the purpose specified.

2. The barrel B, pivoted at b^2 , its lug b' , and extractor-slide G, in combination with lever g^3 , fulcrumed at g^4 , and spring-hook g^5 , fulcrumed in the fore part of the frame, the lever g^3 acting upon slide G to force it rearward,

and the spring-hook g^5 engaging the rear end of lever g^3 , substantially as and for the purpose specified.

3. The barrel B, its lug b' , and extractor-slide G, in combination with lever g^3 , fulcrumed at g^4 , and spring-hook g^5 , provided with tail-piece g^7 , and fulcrumed in the fore part of the frame, the lever g^3 acting upon slide G to force it rearward, spring-hook g^5 engaging the rear end of lever g^3 , and tail-piece g^7 extending outside the frame, substantially as and for the purpose specified.

REINHARD T. TORKELSON.

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Witnesses:

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