

No. 726,187.

PATENTED APR. 21, 1903.

A. F. ODKOLEK VON AUGEZD.
LOCKING DEVICE FOR GUNS.

APPLICATION FILED JULY 23, 1902.

NO MODEL.

2 SHEETS—SHEET 1

FIG. 1.

FIG. 2.

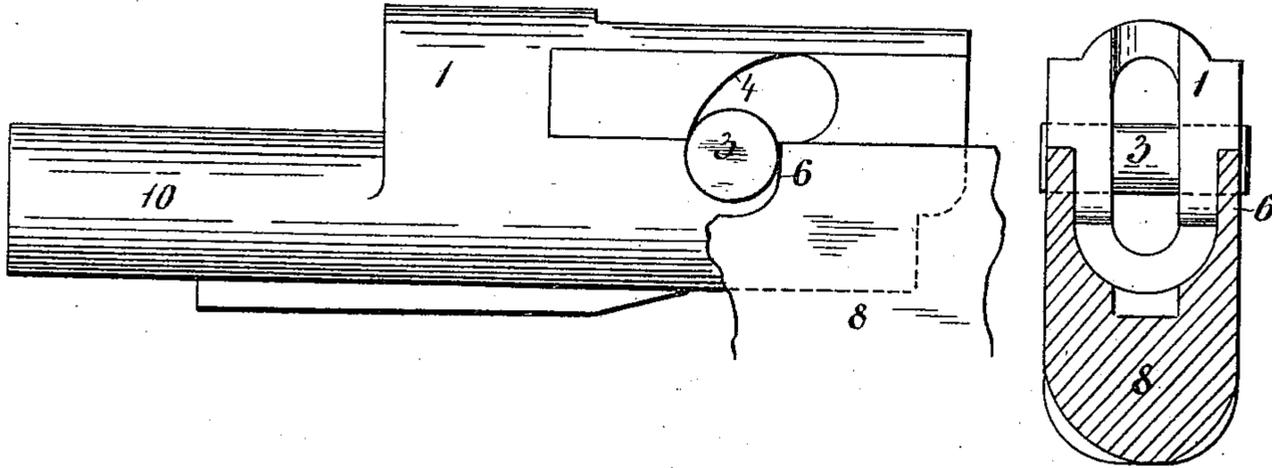


FIG. 3.

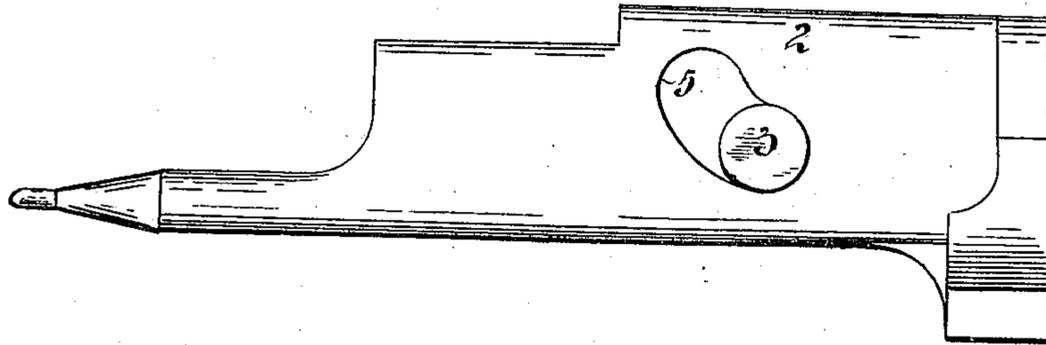
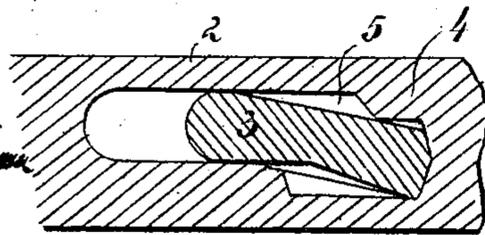
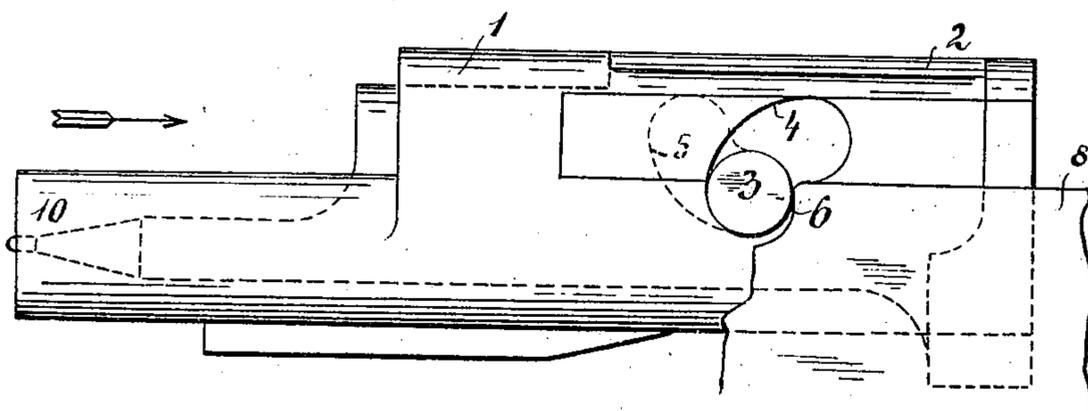


FIG. 4.



Witnesses.

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FIG. 8 Inventor:
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2 SHEETS—SHEET 2.

FIG. 5.

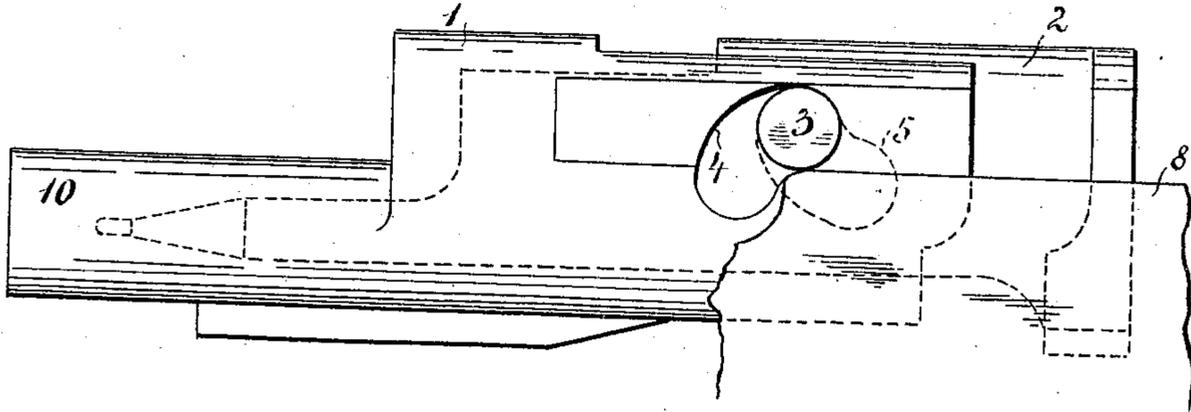


FIG. 6.

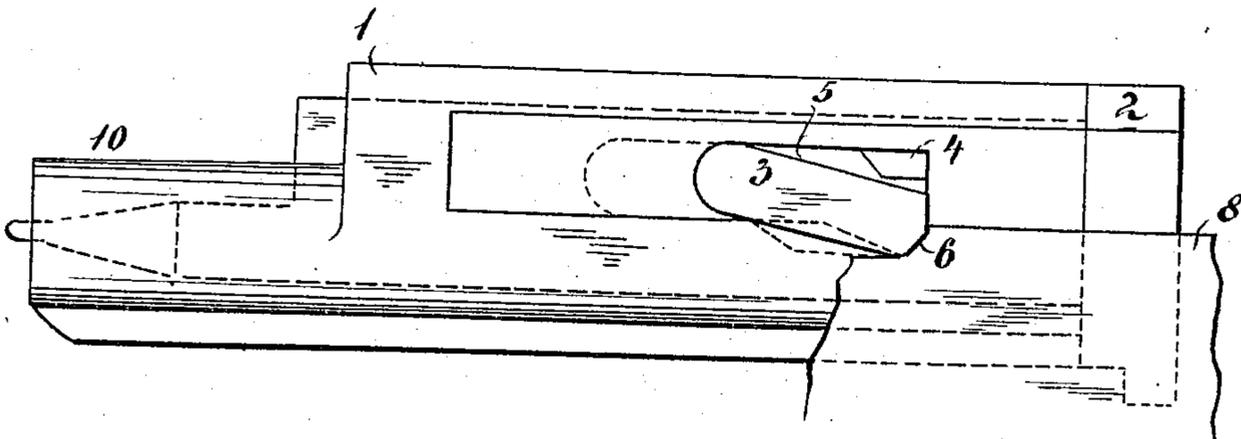
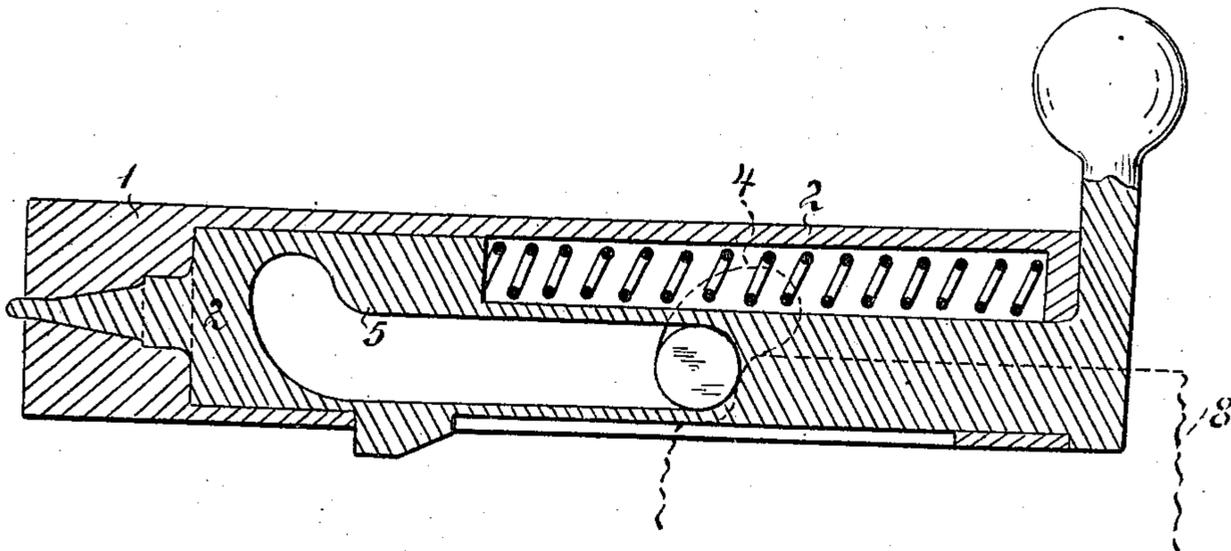


FIG. 7.

Witnesses.

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UNITED STATES PATENT OFFICE.

ADOLF FREIHERR ODKOLEK VON AUZEZD, OF VIENNA, AUSTRIA-HUNGARY.

LOCKING DEVICE FOR GUNS.

SPECIFICATION forming part of Letters Patent No. 726,187, dated April 21, 1903.

Application filed July 23, 1902. Serial No. 116,708. (No model.)

To all whom it may concern:

Be it known that I, ADOLF FREIHERR ODKOLEK VON AUZEZD, gentleman, a subject of the Emperor of Austria-Hungary, residing at No. 8 Opernring, in the city of Vienna and Empire of Austria-Hungary, have invented certain new and useful Improvements in Locking Devices for Guns; 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.

My invention relates to a locking device serving to couple and to lock in position parts of machinery; and although this locking device may be used in connection with parts of machinery in general it is particularly adapted for use in connection with firearms.

In the accompanying drawings I have shown the locking device constructed in accordance with my invention in connection with the breech-bolt of a breech-loading gun.

Figure 1 is a side elevation, Fig. 2 a rear elevation of the breech-bolt. Fig. 3 is a side elevation of the firing-pin. Fig. 4 shows the breech-bolt and firing-pin in the coupled and locked position. Fig. 5 is a similar view showing the parts in the unlocked position. Fig. 6 shows a modification of my locking device in longitudinal central section. Fig. 7 is a side elevation, and Fig. 8 a section, of further modification of my locking device.

1 is one of the two parts to be coupled by my improved locking device. As shown in the drawings, it constitutes a breech-bolt for a breech-loading firearm and is suitably shaped and guided in a suitably-constructed breech-bolt casing.

2 is the second of the two parts to be coupled by my improved locking device, and, as shown in the drawings, it constitutes the firing-pin and is suitably inserted into and guided in the breech-bolt 1.

The breech-bolt 1 is provided on both sides with curved slots 4, and the firing-pin 2 is provided with a curved slot 5. Through the slots 4 and 5 a transverse coupling and locking bolt 3 is passed, which projects laterally from both sides of the breech-bolt 1. The slots 4 and 5, in both of which the bolt 3 is guided, are, as shown, so curved that by pushing the firing-pin 2 forward in the breech-

bolt 1 the bolt 3 is caused to descend, while by pulling backward the firing-pin in the breech-bolt the bolt 3 is caused to rise. In other words, by moving the firing-pin to and fro in the breech-bolt the bolt 3 is caused to move to and fro positively in a direction at right angles to the movement of the firing-pin.

The coupling and locking bolt 3 on being lowered by pushing forward the firing-pin engages by its projecting ends with an abutting surface 6 on the breech-bolt casing 8, as shown in Fig. 4, whereas by pulling back the firing-pin 2 in the breech-bolt 1 the bolt 3 is raised, and thus disengaged from the abutting surface 6, as shown in Fig. 5. In the former case any axial force acting upon the front end 10 of the breech-bolt 1 and tending to move the same in the direction of the arrow, Fig. 4, will be resisted by the coupling and locking bolt 3 then engaging with the lower end of slots 4 and with the abutting surface 6. In the latter case, however—that is to say, when by pulling back the firing-pin 2 the coupling and locking bolt 3 has been raised, so as to be out of engagement with the abutting surfaces 6—any pressure exerted upon the front end 10 of the breech-bolt in the direction of the arrow will drive back the breech-bolt, together with the firing-pin, as will be clearly seen from Fig. 5.

The details of my improved locking device may be varied without departing from the essence of my invention.

Thus while in Figs. 1 to 5 the coupling and locking bolt 3 is circular in cross-section it is substantially rectangular in cross-section in Figs. 7 and 8; but it may be oval or wedge-shaped in cross-section, provided that the slots 4 and 5 in the two parts 1 and 2 to be coupled are suitably shaped.

In Fig. 6 the slot 5 is for a part of its length straight and horizontal, the coupling and locking bolt 3 being circular in cross-section, while in Figs. 7 and 8 the slots are oblong, as adapted for the substantially rectangular cross-section of the coupling and locking bolt.

The advantages obtained by my improved locking device are that except the abutting surfaces 6 on the casing 8 no other connecting and engaging parts on such casing are required for the operativeness of this device

and that the coupling and locking bolt is loosely held and safely and exactly guided in the slots without requiring any fixing. The construction of the locking devices is consequently much more simple and reliable than that of the locking devices heretofore proposed and is particularly adapted for automatic fire-arms.

I claim—

10 In a locking device the combination of a casing, a first part movable lengthwise therein and a second part guided and movable lengthwise in the first part with curved slots in both of the said parts, a coupling and locking bolt
15 passed through and guided in such slots and projecting beyond the said parts and adapted to be displaced on shifting the second part

lengthwise relatively to the first part, along the said curved slots in a direction at right angles to the direction of the lengthwise relative movement of the two parts, a fixed abutting surface or surfaces on the casing adapted to be engaged by the coupling and locking bolt in one of its extreme positions in the slots and means for moving the second part
25 lengthwise relatively to the first part, substantially as and for the purpose hereinbefore described.

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

ADOLF FREIHERR ODKOLEK VON AUGERD.

Witnesses:

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