No. 629,170. Patented July 18, 1899.

C. POHLIT.

HORIZONTAL WEDGE BREECH CLOSING MECHANISM FOR GUNS.

(No Model.) (Application filed Dec. 31, 1897.) 3 Sheets—Sheet 1.

Fig. 1.

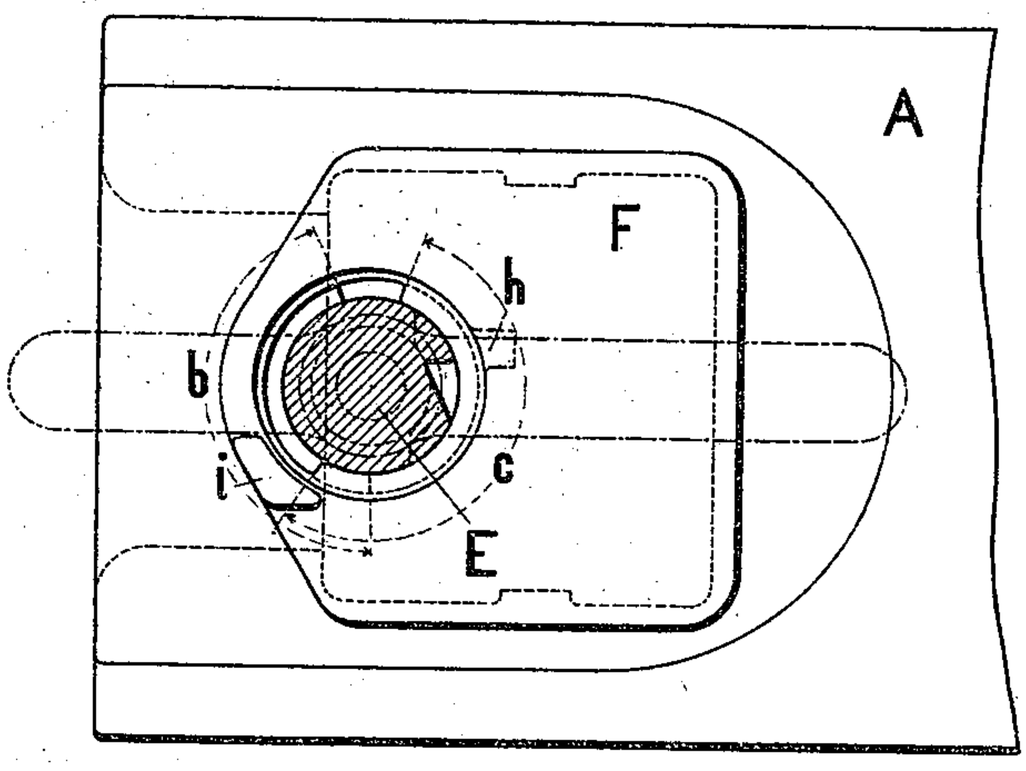

Fig. 2.

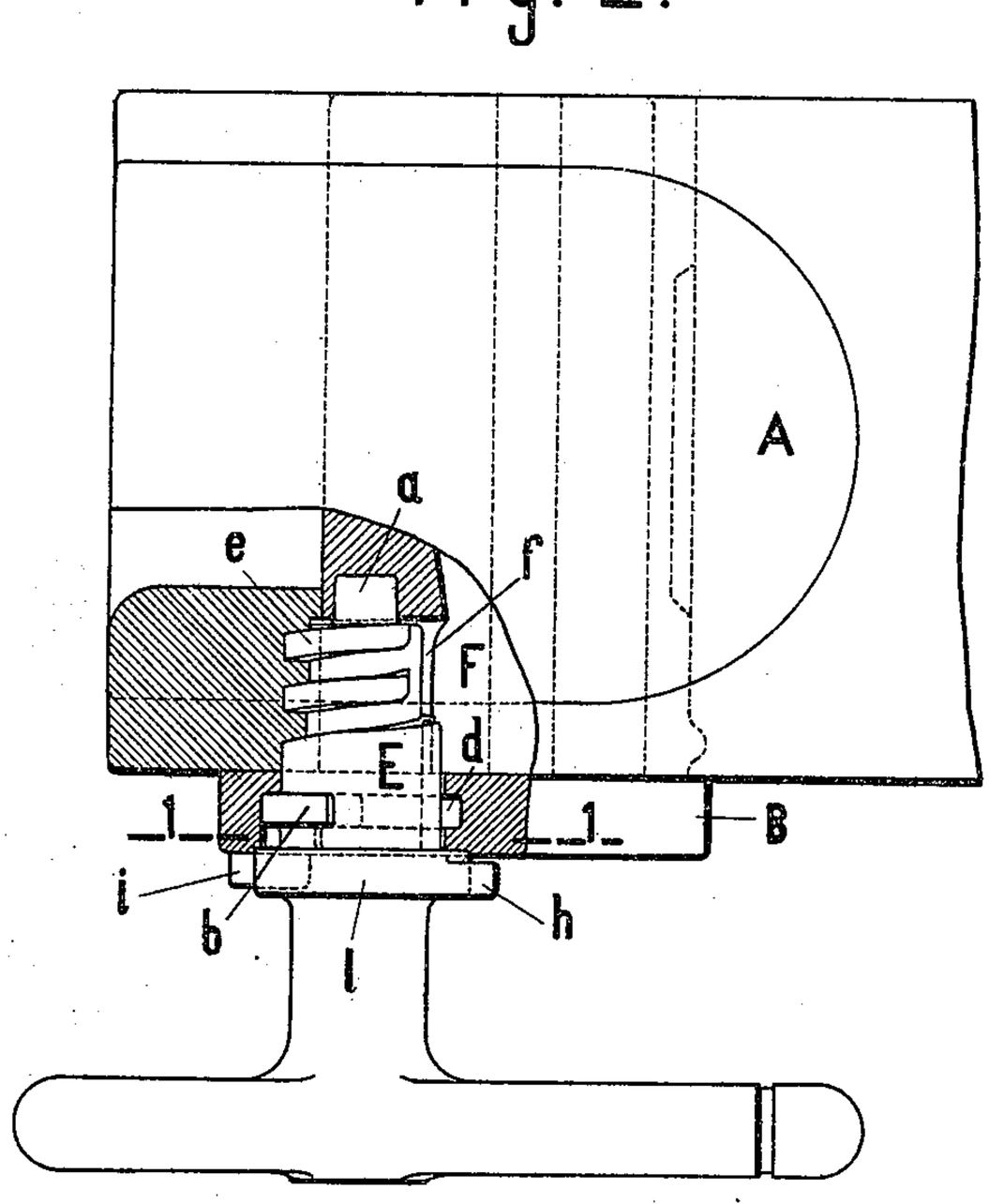

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Fig. 3.

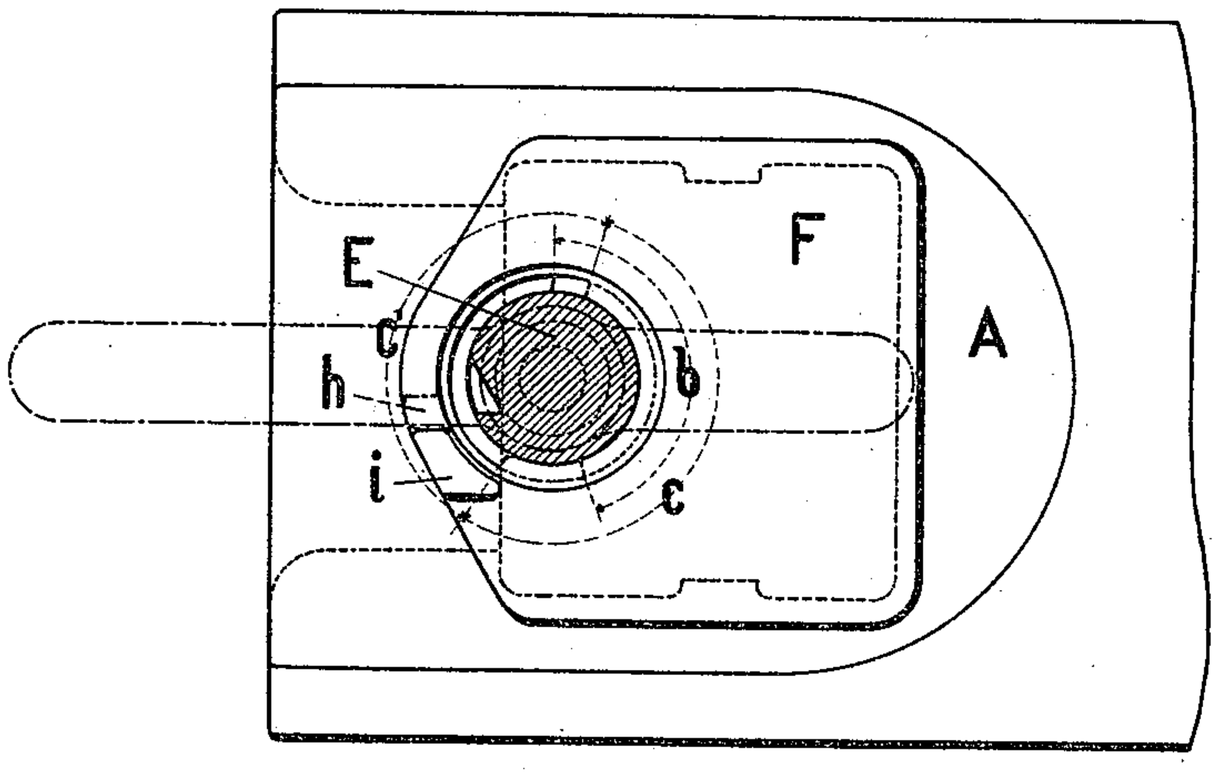

Fig. 4.

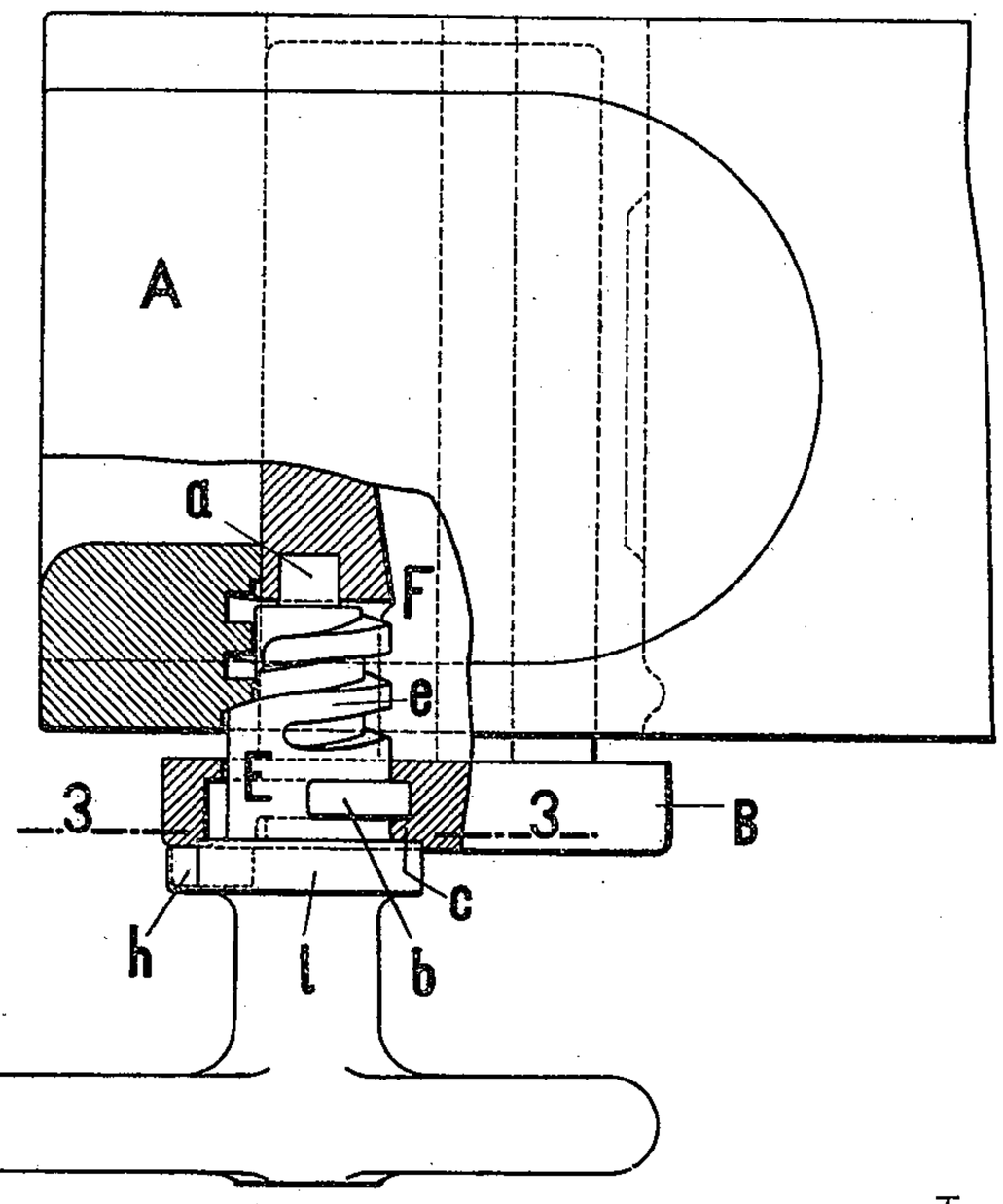

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Fig. 5.

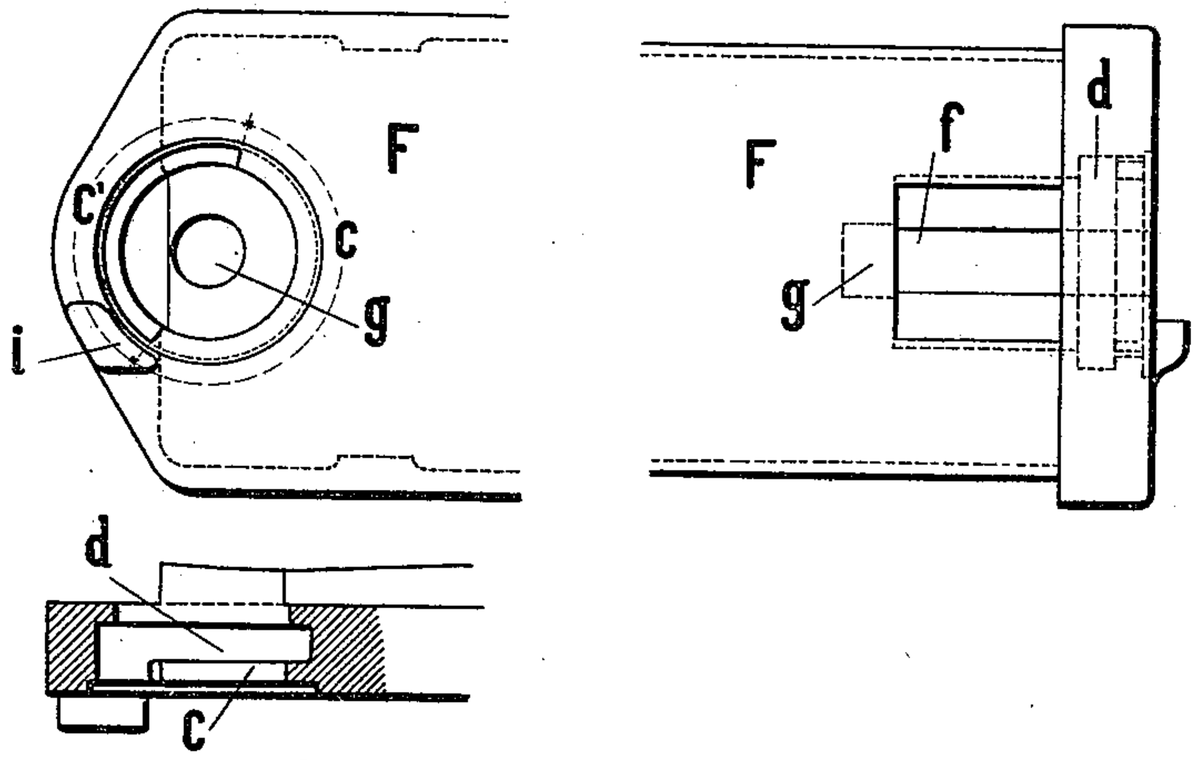
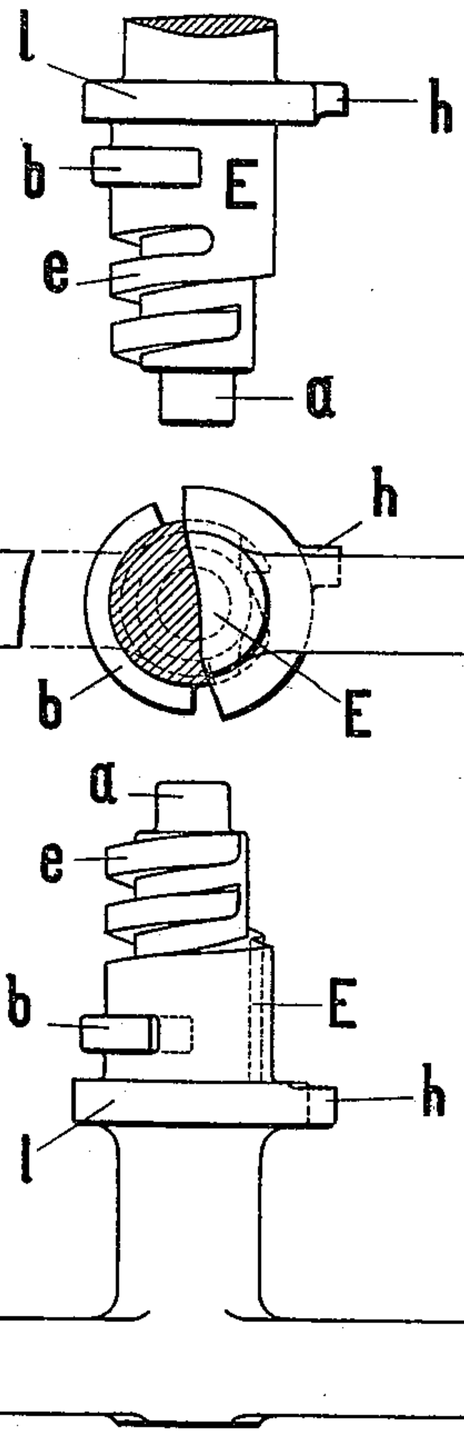


Fig. 6.



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UNITED STATES PATENT OFFICE.

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HORIZONTAL-WEDGE BREECH-CLOSING MECHANISM FOR GUNS.

SPECIFICATION forming part of Letters Patent No. 629,170, dated July 18, 1899.

Application filed December 31, 1897. Serial No. 665,058. (No model.)

To all whom it may concern:

Be it known that I, CARL POHLIT, a citizen of the German Empire, residing at Essen, Germany, have invented new and useful Improvements in or Connected with Horizontal-Wedge Breech-Closing Mechanism for Guns or Ordnance, (for which I have obtained Letters Patent in Austria, No. 47/4,687, dated November 9, 1897; in Belgium, No. 130,667, dated September 15, 1897; in Germany, No. 96,180, dated February 26, 1897; in France, No. 270,517, dated September 16, 1897; in Italy, Reg. Gen., XXXIV, No. 45,948, Reg. Atti., XC, No. 349, dated December 31, 1897; in Spain, No. 21,563, dated November 16, 1897; in Sweden, No. 8,866, dated October 8, 1897; in Norway, No. 6,102, dated October 12, 1897; in Denmark, No. 1,848, dated October 7, 1898; in England, No. 25,616, dated November 4, 1897, and in Switzerland, No. 15,147, dated September 29, 1897,) of which the following is a specification.

My invention has reference to a transverse fermeture for breech-loading guns in which the breech-block is locked by means of a screw. Heretofore the lock-screw was held within the wedge by a separate plate. According to my present invention I dispense with this separate plate and hold the lock-screw directly within the wedge by means of a segmental collar on the shank of the screw, which collar interlocks with a corresponding groove in the wedge, forming substantially a bayonet-joint so arranged that for the purpose of locking or unlocking the screw is turned through an angle of one hundred and eighty degrees and is secured against axial motion in the breech-block during this operation.

The nature of my invention will best be understood when described in connection with the accompanying drawings, in which—

Figure 1 represents a side view of the closed fermeture with the breech-screw in section on the line 1 1, Fig. 2. Fig. 2 is a plan view of Fig. 1, partly in section. Fig. 3 is a side view similar to Fig. 1, but showing the wedge unlocked, the screw-shank being in section on the line 3 3, Fig. 4. Fig. 4 is a plan view of Fig. 3, partly in section. Fig. 5 is a detail view of part of the wedge. Fig. 6 is a detail view of the lock-screw.

Similar letters of reference designate corresponding parts throughout the several views of the drawings.

Referring to the drawings, the letter A designates the breech end of the gun, F the breech block or wedge, and E the lock-screw. The shank of the lock-screw, as shown in Fig. 6, is provided with the usual segmental locking-thread *e* and with a gudgeon *a*, as well as with a segmental collar *b* and a flange *l*, provided with a nose *h*. A stop *i* on the flange B of the wedge limits the throw of the lock-screw E in opening, the nose *h* striking against the stop *i*.

As shown in Fig. 5, the wedge F has a recess *f* for the screw-shank, a socket *g*, which forms a bearing for the gudgeon *a*, and a groove *d*, receiving the segmental collar *b* of the screw-shank. The outer wall *c* of the groove *d* is cut away for a length *c'* equal to or a little in excess of the length of the collar *b*.

The lock-screw E is placed into the wedge in the following manner: The breech being open the shank of the lock-screw is pushed into the recess *f* in the wedge and the collar *b* through the cut-away part *c'* of the wall *c* and into the groove *d* until the collar strikes the inner wall of the groove *d* and the gudgeon *a* is within the socket *g*. The lock-screw is then turned in a direction opposed to the motion of the hands of a clock until its nose *h* strikes against the stop *i* on the wedge, as shown in Fig. 3. When now the breech-wedge is pushed home and locked by turning the lock-screw one hundred and eighty degrees in the direction of the motion of the hands of a clock, the segmental threads of the lock-screw engaging the threads in the rear wall of the wedge-chamber, the several parts are in the positions shown in Figs. 1 and 2, a small portion of the segmental collar *b* only being situated within the part of the groove *d* closed by the outer wall *c*. When after firing the breech is to be opened, the breech-screw is turned one hundred and eighty degrees in a direction opposed to the motion of the hands of a clock until the nose *h* strikes the stop *i*, as shown in Fig. 3, when the segmental collar *b* of the breech-screw is situated almost wholly within the part of the groove *d* closed

by the wall *c*, and the breech-wedge can be pulled out, Fig. 4.

The lock-screw E can only be withdrawn from the breech-wedge when the breech is open, and the lock-screw is then turned until the whole of the segmental collar *b* comes opposite the cut-away part *c'* of the collar *c*, so as not to be obstructed in its outward motion by the outer collar *c*.

What I claim as new is—

1. In a transverse fermeture of breech-loading guns, the combination with the breech-chamber, of the breech-wedge F; the lock-screw E provided with segmental locking-threads *e*, engaging corresponding threads in the rear wall of the breech-chamber, a segmental collar *b* and a flange *l;* a recess *f* and socket *g* in the breech-wedge for the reception of the lock-screw and its gudgeon *a;* and an annular groove *d* in the breech-wedge engaged by the collar *b*, the outer wall *c* of said groove being cut away, substantially as and for the purpose specified.

2. In a transverse fermeture of breech-loading guns, the combination with the breech-chamber of the breech-wedge F; the lock-screw E provided with segmental locking-threads *e*, engaging corresponding threads in the rear wall of the breech-chamber, a segmental collar *b* and a flange *l* provided with a nose *h;* a recess *f* and socket *g* in the breech-wedge for the reception of the lock-screw and its gudgeon *a;* an annular groove *d* in the breech-wedge engaged by the collar *b*, the outer wall *c* of said groove being cut away; and a stop *i* on the outer flange of the wedge F, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL POHLIT.

Witnesses:
WILLIAM ESSENWEIN,
ADOLF RECOW.