

J. D. PEDERSEN.
FIREARM.

APPLICATION FILED JULY 12, 1917.

Patented Oct. 12, 1920.

3 SHEETS—SHEET 1.

1,355,420.

FIG. 1.

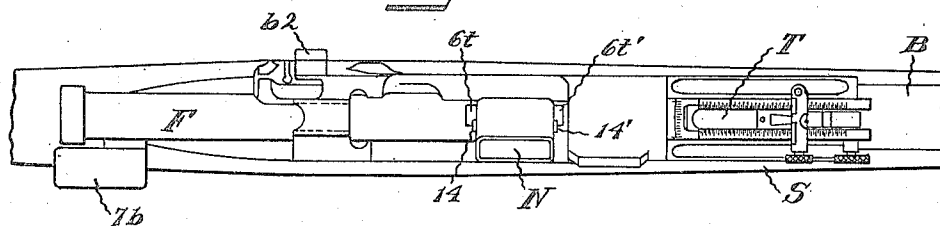


FIG. 2.

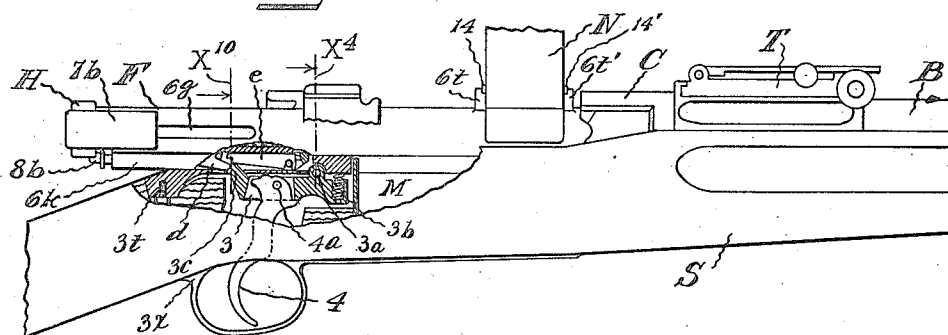


FIG. 3.

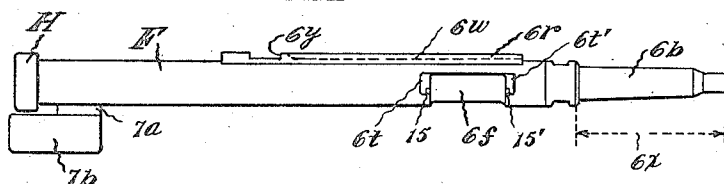


FIG. 4.

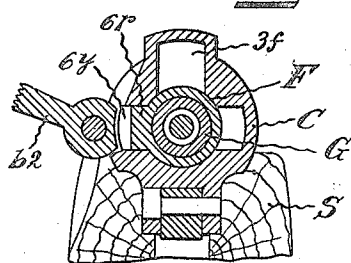
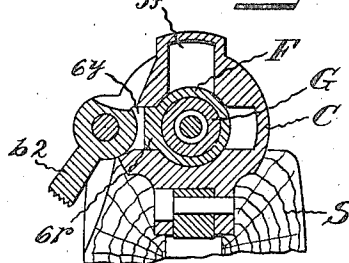


FIG. 4a.



Inventor:

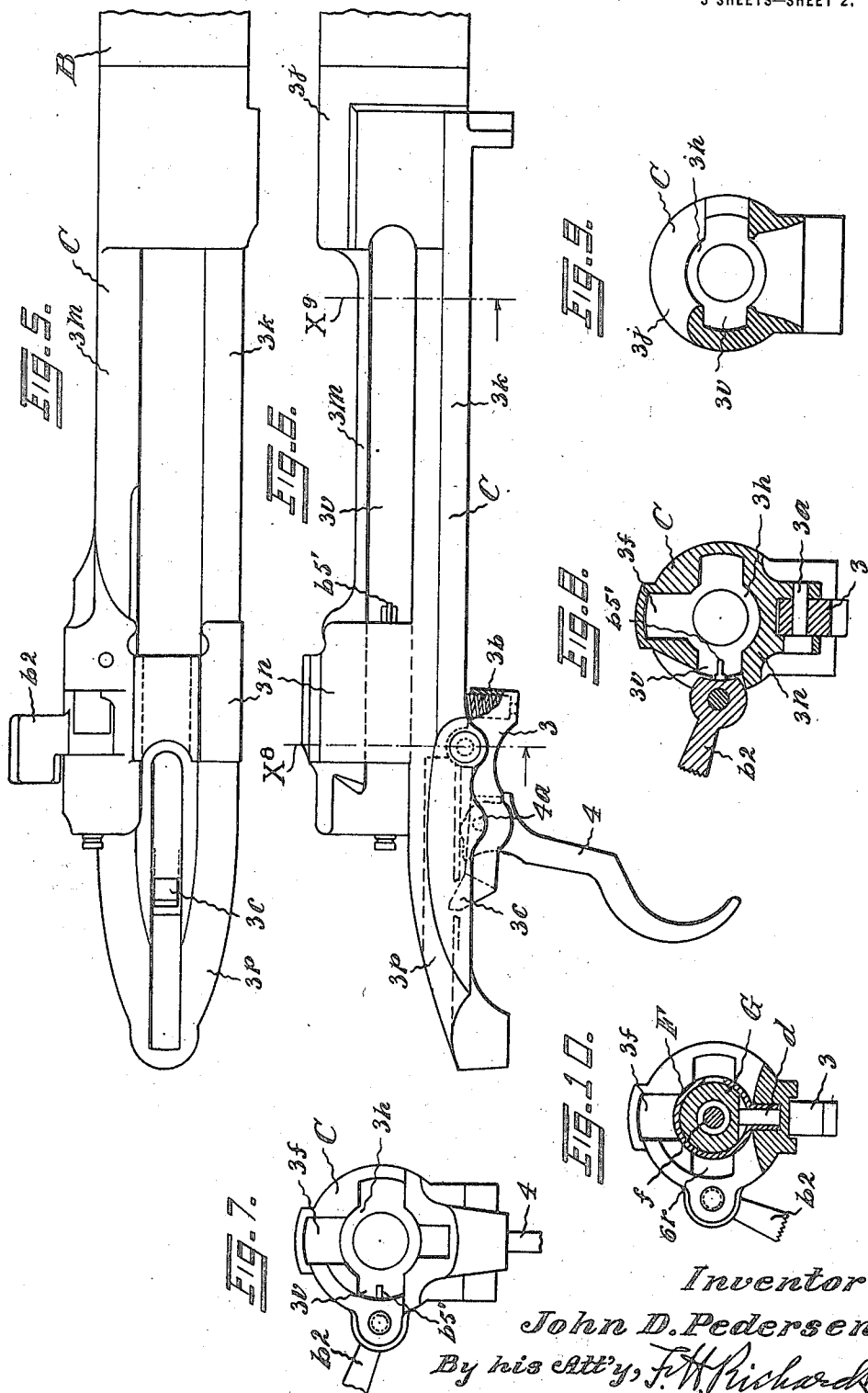
John D. Pedersen,

By his Atty, F. A. Richards.

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3 SHEETS—SHEET 2.



Inventor:
John D. Pedersen,
By his att'y, F. H. Richards.

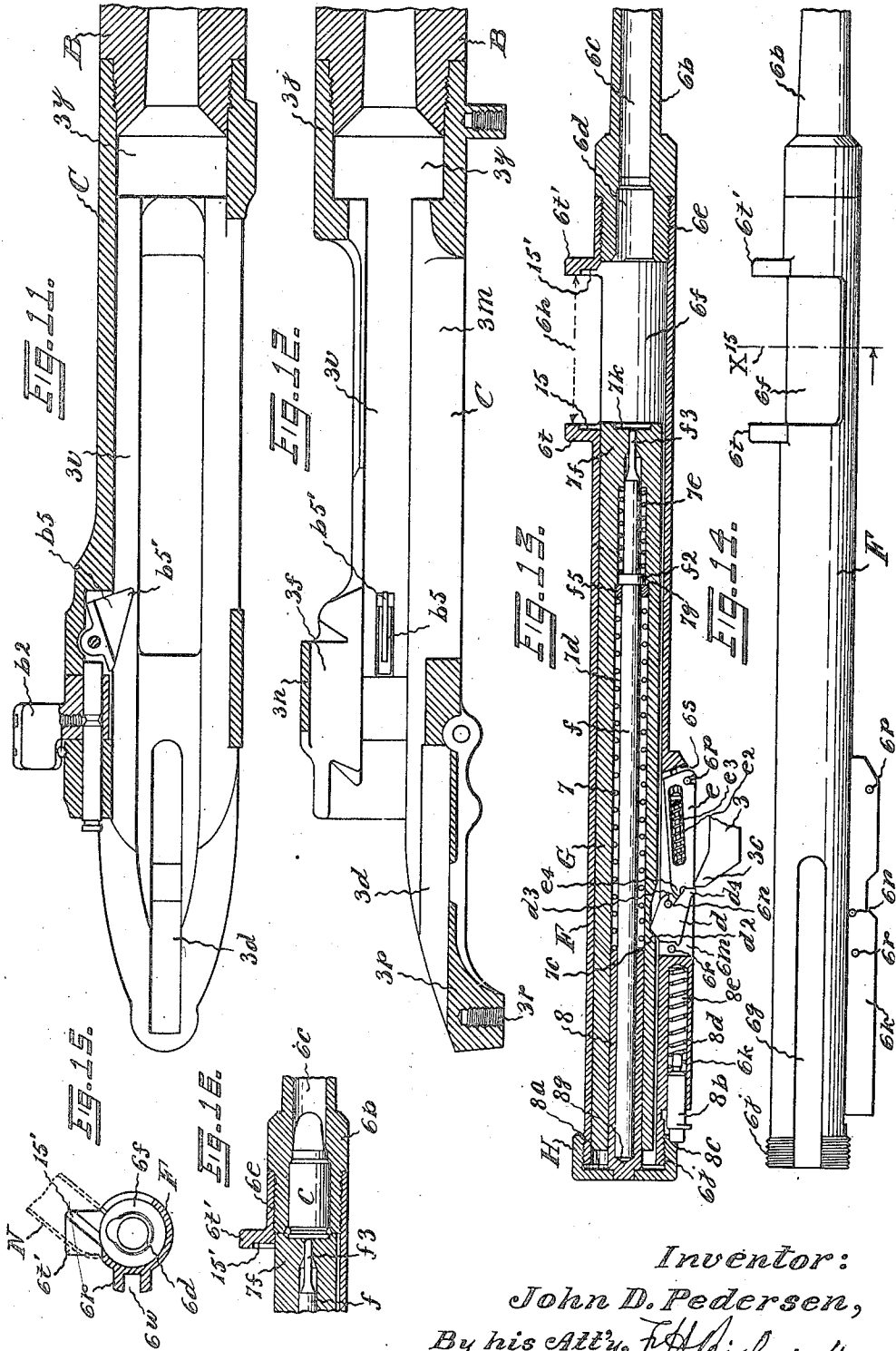
J. D. PEDERSEN.
FIREARM.

APPLICATION FILED JULY 12, 1917.

Patented Oct. 12, 1920.

3 SHEETS—SHEET 3.

1,355,420.



Inventor:
John D. Pedersen,
By his Att'y, F. H. Richards.

UNITED STATES PATENT OFFICE.

JOHN D. PEDERSEN, OF JACKSON, WYOMING.

FIREARM.

1,355,420.

Specification of Letters Patent.

Patented Oct. 12, 1920.

Application filed July 12, 1917. Serial No. 180,054.

To all whom it may concern:

Be it known that I, JOHN D. PEDERSEN, a citizen of the United States, residing in Jackson, in the county of Lincoln and State of Wyoming, have invented certain new and useful Improvements in Firearms, of which the following is a specification.

This invention relates to that class of breech-loading firearms which are primarily adapted for using a long-range ammunition, and are also adapted for the employment therein of an auxiliary firearm mechanism having a framework or mechanism casing that is removably fixable in the "receiver", or frame, of the primary breech-loading firearm. It will be remembered that among firearms of said class, the well-known "Springfield rifle",—as made for the use of the United States Army,—has been manufactured in very large numbers and with the parts thereof having a high degree of interchangeability. One of the principal objects, therefore, of my present invention is to provide, for use in the "Springfield" rifle,—or for use in other arms having the frames thereof of an analogous construction,—an auxiliary firearm mechanism having a framework constructed, arranged and furnished for being removably fixable in the frames of such primary arms as aforesaid.

In a copending application, Serial No. 165,171, filed April 28, 1917, my present improvements are partially illustrated and described in connection with a combined primary and auxiliary arm in which the primary arm is adapted for using high power and long range ammunition, and in which the auxiliary arm is adapted for firing with a relatively great rapidity, a short range ammunition, so that these arms may be used separately or in a combined arrangement at the election of the user. Taking such a firearm as the Springfield rifle for use as the primary arm, and the usual breeching-member, or "bolt" thereof being removed, the secondary or auxiliary firearm mechanism may then be inserted and removably fixed in working position, in place of the removed breeching-member, and thus make the combined or augmented firearm ready for use.

For convenience of illustration, the framework of the auxiliary arm is herein shown as being interiorly constructed or arranged for receiving, supporting and guiding a series or systems of cooperating mem-

bers or devices which substantially correspond with those illustrated in my said prior application. It should be understood, however, that within the purview of my present invention said framework of the auxiliary arm may be constructed and interiorly arranged for similarly receiving operable members and devices of different kinds, and organized to operate in different ways than those which are herein specifically set forth by way of showing one, and a preferred, embodiment of and mode of utilizing the present invention.

While the cartridges for use in the auxiliary mechanism should in accordance with the best practice, be very much shorter than the regular high-power cartridges for the primary arm,—this being, usually and preferably, a shoulder arm,—it will be convenient and desirable in many instances to have the respective projectiles of about the same diameter, so that the shorter ones will work properly in the barrel of the shoulder arm. This difference in the lengths of the respective kinds of cartridges favors the arranging of the proportions and details of the said secondary mechanism in such manner as to require only a short reciprocation or stroke of the breech-bolt member of this mechanism, so that this entire mechanism including the framework thereof, may, in practice, be so designed and constructed as to be for nearly the whole length thereof, contained within the space otherwise occupied by the relatively long-stroke bolt-member of the primary arm.

In addition to the foregoing, further objects and advantages are pointed out and explained in the course of the following detailed description of the preferred embodiment of my present improvements.

In the accompanying drawings forming a part of this specification, Figure 1 is a plan view and Fig. 2 a side elevation of the middle portion of a breech-loading shoulder arm of the well-known "Springfield" type, and having in place in the frame or "receiver," as C, the auxiliary or secondary firearm mechanism, the framework or casing, F, of which is inserted into the main frame or "receiver," C, and thus for nearly the whole length thereof is contained within the breeching-member chamber or space otherwise occupied by the usual breech-bolt of the arm,—not herein shown; in these views, the operable mechanism within the

framework F is understood to be in firing position. In Figs. 1 and 2, the rear sight, T, is shown of a form and arrangement as commonly employed on the "Springfield rifle," and hence it need not be described in detail; this sight is shown herein in the folded-down position thereon, and the usual front sight is not shown.

Fig. 3 is a plan view of the auxiliary arm; in this view the frame F is shown on the same scale and is shown in the same position relative to the line of sight, as in Fig. 1.

Figs. 4 and 4^a are similar sectional views on line X⁴ of Fig. 2, for showing two positions, respectively, of the locking device, or "bolt-lock," b² of the primary arm, whereby this or an analogous device when in one position, Fig. 4^a, engages and thus holds in place the frame, F, of the secondary mechanism, and when in another position, Fig. 4, releases said member F, and thus permits the secondary mechanism to be withdrawn,—bodily and without disassembling of any parts thereof,—from the primary arm; these views, Figs. 4, 4^a, are drawn on an enlarged scale corresponding to Figs. 5 to 14, inclusive.

Figs. 5 and 6 are, respectively, a plan view and side elevation of the receiver, or main frame, C, of the form of primary arm (this being a Springfield rifle) shown in Figs. 1 and 2.

Fig. 7 is an end elevation of the receiver C, as seen from the left-hand in Fig. 6.

Figs. 8 and 9 are sectional views, taken on the lines X⁸ and X⁹, respectively, of Fig. 6; and, Fig. 10 is an end view similar to Fig. 7, but showing some parts broken away, as hereinafter more fully explained.

Fig. 11 is a horizontal longitudinal section, and Fig. 12, a vertical longitudinal section of the receiver, C; these views, similar to Figs. 5 and 6, are drawn side by side and in alinement, to facilitate comparison of the details thereof.

Fig. 13 is a vertical longitudinal section of the auxiliary arm, and is drawn on a scale corresponding to Figs. 5 to 12, inclusive.

Fig. 14 is a side elevation of the framework, F, of the auxiliary arm; in this view the frame F is seen in the same direction as in Fig. 2, but is shown on the same scale as in Fig. 13.

Fig. 15 is a section in line X¹⁵, Fig. 14; and, Fig. 16 is a fragmentary sectional view similar to a portion of Fig. 13, but showing certain parts in a different position.

Similar characters designate like parts in all the figures.

Referring to the drawings, it will be remembered that, as indicated in Figs. 1 and 2, the "Springfield" rifle,—which, of course, is a military arm,—comprises the "receiver"

or main frame C, having therein a breeching member chamber; the barrel, B, removably fixed in the forward end of the receiver; a reciprocable breech-bolt operable in said chamber (but not herein shown); and the stock S, comprising the usual fore-stock and the shoulder portions,—(not herein fully shown). The barrel B also carries the usual, or some suitable sights, as the rear sight T and a fore sight (not shown). The stock, frame and barrel are held assembled by the customary releasable fastenings,—which do not require particular description here,—and an ordinary magazine is indicated at M from which to supply the regulation service cartridges through the usual bottom opening of the frame C to the required position forward of the breech-bolt (when this is retracted), all in a well-known manner. Said magazine M is partially shown in Fig. 2, but the spring and follower usually arranged therein are here omitted, since those parts are not only well-known, but when in place are not operable in connection with my present improvement. In this connection, it should be understood that the parts and features illustrated in Figs. 5 to 9, and 11, 12, being already well-known, need not be described herein, further than is convenient for the purpose of explaining my present invention.

Said primary-arm frame, C, is in the nature of a standard part or element, and it has a relatively complex structural formation which is well adapted without change to the requirements of my present invention. As clearly indicated in the aforesaid views thereof, the member C is a frame having centrally and longitudinally therein an interior space,—as 3^h, Figs. 7, 8,—into which the auxiliary frame F may be slid into place, as in Figs. 1 and 2. At the forward end thereof, said member or frame, C, has a portion, as 3^j, (Figs. 6, 12), which as seen in section, is continuous, and which thus forms a rigid block to which the barrel B is attached; but in some instances, if desired, the barrel may be formed integral with the frame C, in accordance with a former practice now generally discarded. Said forward block-end, 3^j, is connected by side-bars, 3^k, 3^m, with the rear block-end, 3ⁿ, which is also continuous circumferentially of the bolt-chamber as seen in section,—see Fig. 8. Rearwardly of said frame-block 3ⁿ, the frame C is extended to form a base portion, 3^p, which is herein shown provided with a threaded hole, 3^r, for the usual holding screw, (as 3^t, Fig. 2), whereby said extension 3^p and the rearward end of the usual guard-frame, as 3^x, may be clamped onto the stock S in a well-known manner.

For the purposes of the said "Spring-

field" rifle, the receiver or member C is provided with a number of surfaces, faces, chambers and channels,—and with other means and accessory features,—of which several are herein employed in connection with parts or features of the frame F that are specially formed, positioned and arranged to be cooperative with such details of the member C. On the left-hand side, a guide channel, 3^v, extends from the usual bolt-lugs-space 3^v, (Figs. 11, 12), along the side-bar 3^m and through the rear block-end 3ⁿ, as illustrated in Figs. 5 to 12. The well-known form of "Springfield" ejector, as 6⁵, is shown located for the point 6^{5'} thereof to project into said channel 3^v, (Figs. 8, 11, 12); while this device, 6⁵, is not directly utilized or employed in my present improvements, the frame F has means whereby the removal of said ejector 6⁵ is rendered unnecessary, so that this frame may be slid into place without interference from that ejector. This important result is herein accomplished by making a channel, 6^w, (Figs. 3, 15), in the rib 6^r for receiving said point 6^{5'} when the frame F is slid into its working position, Fig. 1, without dismounting the ejector. Said ejector is usually and preferably supported in a pivotal manner as shown, so that it may swing to and from a position in which the ejector point extends into said channel 6^w when the frame F is in working position.

In said block-end portion 3ⁿ of the main frame, this member is shown provided with the well-known form, 6², of pivotally supported bolt-stroke-limiting device which I herein employ as a means for releasably locking the frame F in working position; it should be understood, however, that in some instances, if desired, other suitable and well-known releasable holding devices may be substituted, within the purview of my present invention, for said device 6². Said block-end 3ⁿ also has in the upper portion thereof, the passage-way channel 3^c which I employ for the passage of the magazine guides, as 6^t, 6^v, of the frame F. In the standard form of the main frame C, the frame-extension 3^p has therein a groove or channel 3^a, and this channel I employ as the receiver-space, or recess, for the depending and rib-like lower portion 6^k of the frame F. Said portion 6^k has therein a mortise, 6^m, which constitutes a chamber-space for receiving a sear or other fire-control device. For convenience of illustration, I have shown herein for said purpose the same sear-and-lock device which is described in my aforesaid application Serial No. 165,171; this device, however, constitutes in part a mechanical movement which is described and claimed in my copending application Serial No. 171,663, filed May 29, 1917.

It being one of the leading purposes of the invention described and claimed in said application Serial No. 165,171 to provide for using the breech-loading shoulder arm with two kinds of ammunition and also to enable the user to quickly change from either one to the other, as occasion may require, therefore, it is one of the purposes of the present improvements to provide for the secondary or "auxiliary" mechanism, a framework, as F, having a construction especially adapting the same for use in combination with the said receiver C as a primary-arm-frame, and to cooperate with details or features thereof which in the primary arm have, respectively, different purposes or functions. Accordingly said framework, F, is herein shown with the forward portion thereof made of a tubular and bolt-form construction (Figs. 3, 13, 14) whereby it may be slid forwardly into the receiver or main frame C, and into a working position relative to the barrel, B, and to other parts of the primary arm. When thus inserted and locked in place, said secondary frame constitutes a retractable breeching-member for the barrel B.

The tubular forward end of the frame F is shown provided with a forward extension, 6^b, which constitutes a barrel for the secondary firearm mechanism, and which for a portion of its length,—as 6³, Fig. 3,—is shown of a size and shape to fit closely within the usual cartridge chamber of the main barrel B. When thus made, the short barrel 6^b not only forms,—when in place,—a rearward extension of the main barrel, but also the main barrel so incloses said short barrel as to serve as a container and reinforcement therefor.

Thus it may be said that a forward part or extension of the frame F of the secondary arm, forms, also,—or has therein,—a rearward extension of the bore of the main barrel B; also, that the short bore 6^c connects and is in alinement with, the bore of the main barrel B, and with the cartridge chamber 6^d, (see Figs. 13, 15, 16), of the secondary firearm mechanism. Said forward extension, 6^b, therefore, in one sense, constitutes an "adapter," while it also constitutes the short barrel for the secondary arm, so that said extension 6^b serves as a combined adapter and barrel-extension for the primary arm while serving as the barrel of the secondary arm. In practice, said secondary barrel 6^b may be made as a separate piece and removably-fixed in the forward end of the secondary frame F, or, in some instances, if preferred, said short barrel may be made integral with said frame. However, the said separate construction, arranged about as herein illustrated, is believed to be generally preferable, and accordingly said barrel 6^b is shown provided with a threaded end

6° screwed into the frame F similarly as the main barrel B is fixed to the receiver C.

The frame F may have,—as herein shown in Fig. 13,—a tubular construction from the chamber 6^d to the rearward end thereof, and the interior space which thus constitutes the mechanism chamber of the auxiliary arm, may be provided with a cartridge-operating and firing mechanism. For this mechanism, I prefer to use an auto-loading mechanism having a construction and arrangement which may be briefly described as follows: The cartridge-chamber 6^d is extended rearwardly and enlarged to form a loading and breech-bolt chamber, 6^e, in which the bolt G is reciprocable, forwardly by the power-spring 7, (to the closed position in Fig. 16) and rearwardly,—when a cartridge is fired,—by cartridge actuation to the retracted or loading position, as in Fig. 13. The bolt G is shown provided with an arm or projection, 7^a, which extends through the frame-slot 6^e and there carries a weight 7^b which also serves as a handle whereby the bolt may be retracted by hand for engaging the retaining face 7^c (Fig. 13) rearwardly of a sear-face, as 7^d, formed on some suitable sear-device. Thus the arm 7^a is a means for preventing the bolt G from turning (partially rotating) within the frame F.

When the bolt G is retracted to the loading position, (Fig. 13), the forward end, 7^e, thereof comes rearwardly of the opening 6^h in the frame, F, (Figs. 1, 2, 3, 13), so that a cartridge will be lowered or drop down in the magazine N and stand partially forward of the bolt G, and thus on the release of the bolt, will be pushed forward,—or “placed,”—into firing position as shown in Fig. 16. During the forward movement,—which in practice will be rapidly completed by said spring 7,—the relatively heavy firing-pin *f* lies loosely in a fully-retracted position in the bore 7^d of the bolt G, and will at first be held back by its own inertia and the light spring 7^e, with the collar *f*² of said pin resting against the shoulder at 7^e in the breech-bolt. On the bolt G stopping suddenly at the end of the forward stroke, the momentum of the firing pin *f* compresses said pin-retracting spring 7^e and thus the point *f*³ of the pin is driven against the primer and fires the cartridge in a manner already well-known in the art.

The chamber 6^e is shown extended to the rear end of the frame F, so that the operative members may be readily assembled therein and removed therefrom. A suitable cap, as H, may be removably fixed on the frame F, in any convenient manner, for closing the rearward end of said chamber 6^e, and also to furnish a support for the abutment tube 8, and also an abutment face at 8^a, (Fig. 13), for stopping the rearward movement of the bolt G. Similarly the re-

traction of the firing pin in the bolt is stopped by the end, 8^a, of the tube 8 before the bolt G has been fully retracted. Said cap H is shown screwed onto the threaded rear-end portion 6ⁱ of the frame F; the cap may be locked in place by a spring-actuated retractable pin or detent, 8^b, engaging in notches, as 8^c, formed in the periphery of the cap. By this means, said cap may be screwed onto the frame a greater or lesser distance, and so be locked in a selected position, as may be required for effecting a slight adjustment of the precise working position of the breech-bolt G and firing pin *f*. The detent pin 8^b may be actuated by a spring, 8^d, located in a bore, as 8^e, formed in the rearward part of the depending rib 6^k of the frame F.

In the particular sear-trigger apparatus of the auxiliary mechanism selected for illustration herein, the fire-control device or means consists of a sear-and-lock device comprising the two coacting members, the sear *d* and the lock *e*; these are or may be contained within the aforesaid mortise-space 6^m of the said depending part 6^k, and these members should each be spring-actuated in one direction, or to the locking position thereof. Thus said depending portion 6^k of the frame F, is provided or adapted for carrying the fire-control device in a position for coöperating with a trigger device (of the primary-arm frame) that is shiftable to and from a position in which this device projects into the recess 3^a; this recess, it will be noted, is shown located in the frame C, and at the rearward end and lower side of the bolt-chamber thereof.

In the present instance, the sear, *d*, is actuated on its pivot 6ⁿ by the sear-lock-actuating spring *e*² acting through the sear-lock member, *e*, which is also appurtenant to the breech-loading auxiliary arm. The spring *e*² is or may be carried on a guide rod, *e*³, slidably mounted in the lock member *e*, and bearing against the frame face 6^o, which thus serves as an abutment. The sear-lock *e* being pivoted on the pin 6^p, the spring *e*² therefore tends to continuously force down the sear-engaging end *e*⁴, which thus bears on the face *d*³ of the retracted sear for thereby turning the sear to the position thereof in Fig. 13; this stroke of sear *d* is limited by a stop, as 6^r. When this operation takes place, the lock-end *e*⁴ comes forward of the face *d*⁴ of the sear *d*, thereby blocking (or “locking”) the sear in the slide-engaging position thereof until the lock *e* shall be raised to a position, for unlocking the sear *d*; when thus released, however, the lock *e* (unless otherwise controlled) will be quickly raised by a rotation of sear *d*, since the faces 7^c and *d*² are,—in the preferable form herein shown,—so inclined or shaped as to operate as a sear

retracting means, whereby the sear d will be actuated toward its bolt-releasing position by the forwardly-acting pressure of bolt or slide G . For limiting the downward movement of the lock e , this may be provided with any suitable stopping means, such, for instance, as the stop-face e^4 which strikes the face d^3 when the parts are in the positions shown in Fig. 13.

It will be remembered that the main trigger, 4, of the primary arm is pivoted at 4^a (see Fig. 6) for operating in a well-known manner the main sear-lever 3, which is shown pivoted at 3^a to the receiver or frame C, and is strongly actuated by a spring usually arranged as shown at 3^b . The point 3^c is thus normally kept raised up to its position in Fig. 2, and is thus in position when the ordinary breech-bolt (not herein shown) is in use, to catch and hold retracted the usual firing pin thereof, all in a well-known manner. In order to secure certain advantages by the employment of said lever 3 in connection with the secondary firearm mechanism, the sear d and sear-lock e are shown so located, arranged and connected in or appurtenant to the frame F as to bring each of said members d and e into a direct coaction with said lever point 3^c ; by this means, I secure a peculiar, and in some respects a relatively automatic mode of operation of the combined firearm, as more fully explained in my said prior application Serial No. 165,171.

On the firing of a cartridge, the bolt C, by reason of its weight and consequent momentum, compresses the power spring 7, and the mechanism is thus made ready for again driving forward the bolt when the sear, d , shall be again retracted to the point of disengagement. In such operation, however, the firing-pin point f^3 , serves as an ejector, in cooperation with any ordinary extractor hook (not shown) with which the breech-bolt G should be provided in some suitable or well-known manner.

Since the aforesaid primary arm is organized for using relatively long cartridges, and the secondary arm is organized for using short cartridges, therefore in combining the two arms, (Figs. 1, 2), a short-stroke breechaction is substituted for the original long-stroke breechaction, with the result of bringing the sear-device of the secondary mechanism in proper position for direct coaction with the trigger-sear device of the primary firearm, so that while the trigger-sear device is in position for coacting in the usual direct manner with the firing-pin (not herein shown) of the primary arm, and it is also in proper position for coacting in the different manner herein illustrated, with the entire breechaction of the secondary arm. Thus the trigger-sear device of the primary arm is brought into a combination

with and into a position for coacting with the sear-device of the secondary arm, thereby producing for use in the combined arms a compound trigger-sear mechanism which comprises two sear-devices, of which one is appurtenant to the primary, and the other to the secondary, arm.

For supplying the cartridges to the chamber 6^t , any suitable and well-known magazine may be employed, but I prefer to use for such purpose an ordinary straight-tube cartridge-holder, as N. This form of magazine as herein shown may be provided with the wings, or ribs, 14, 14', which enter grooves 15, 15', formed in the projecting magazine-guides, 6^t , 6^v , respectively, of the frame F. Said projections are shown of a size and form which permits them to pass through the usual space 3^r of the frame C of the "Springfield" bolt-gun, when the frame F is being withdrawn from or inserted into said frame C.

Since the forward part of frame F is necessarily limited in size by the dimension of the bolt-chamber of the main-frame C, and since it is also desirable to make the bolt G as large as practicable, therefore the wall, or tube, of the frame F is made thin, and then as a means for reinforcing that tube, the frame F is provided with the integral guide-rib 6^r which slides into said main-frame channel 3^v . Said rib 6^r is shown (Fig. 3) extending to the auxiliary barrel 6^b , and thus extends forwardly of the cartridge-receiving opening 6^a , for strengthening the frame F at that place. The guide-rib 6^r also has a notch therein, with the forward face thereof, 6^v , in position for coacting with, and engaging forward of,—the bolt-lock b^2 of the frame C, for thereby releasably holding the auxiliary frame into the main frame,—the locking position of the device b^2 is shown in Figs. 4^a and 10 and the frame-releasing position thereof is shown in Figs. 4, 7 and 8.

Thus the auxiliary firearm framework is slidable into said bolt-chamber and has a combined guide and reinforcing rib which is in a position thereon for resting in said channel, and is provided with a lock-engaging face in position for coacting with said bolt-lock of the primary arm. Also, it may be seen that the frame C is centrally provided with a longitudinal bolt-chamber having on one side thereof a longitudinal channel which is provided with a bolt-lock that is shiftable to and from a position in which this lock extends into said channel. The frame F on being thus unlocked, may be withdrawn rearwardly by a sliding movement, and this operation may be accomplished with extreme celerity; prior to releasing the stop or lock b^2 , of course the magazine N, if then in place, should be removed. Thus the same lock, or stop, as b^2 ,

which is used in the primary arm to limit the rearward stroke of a bolt-mechanism, is also employed in the combined arm for the different purpose of holding the frame F of the auxiliary arm from having while in use any rearward movement.

Having thus described my invention, I claim:—

1. In a framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having on one side thereof a longitudinal channel, and also provided with a bolt-lock shiftable to and from a position in which this lock extends into said channel, of an auxiliary firearm framework slidable into said bolt-chamber and having a combined guide and reinforcing rib slidable in said channel, and having a lock-engaging face in position for coacting with said bolt-lock of the primary-arm frame.

2. In a framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having on one side thereof a longitudinal channel, and also provided with a bolt-lock shiftable to and from locking position, of an auxiliary firearm framework slidable into said bolt-chamber and having a combined guide and reinforcing rib slidable in said channel, and also having a lock-engaging face in position for coacting with said bolt-lock of the primary-arm frame when said bolt-lock is in locking position.

3. In a compound framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having at the rearward end and lower side thereof a recess and also provided with a trigger device shiftable to and from a position in which this device projects into said recess, of an auxiliary framework slidable into said bolt-chamber and having a depending portion which is in a position thereon for resting within said recess and is provided for carrying a fire-control device in a position for cooperating with said trigger device of the primary-arm frame, and means for releasably locking the auxiliary frame in said bolt-chamber.

4. In a compound framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having at the rearward end and lower side thereof a recess and also provided with a trigger device shiftable to and from a position in which this device projects into said recess, of an auxiliary framework slidable into said bolt-chamber and having a depending portion which is in a position thereon for resting within said recess and is pro-

vided for carrying a fire-control device in a position for cooperating with said trigger device of the primary-arm frame, guiding means arranged for preventing the rotation of the auxiliary frame during the sliding thereof into the bolt-chamber, and means for releasably locking the auxiliary frame in said bolt-chamber.

5. In a framework for combinable primary and secondary firearms, the combination with a primary frame which is provided with a longitudinal bolt-chamber having on one side thereof a longitudinal guide-channel, and also having on the upper side thereof a passage-way channel, of an auxiliary framework slidable into said bolt-chamber and having a projecting guide in a position thereon for resting within said guide-channel and provided on the upper side and near the forward end thereof with magazine-guides in a position thereon for passing through said passage-way channel during the withdrawal of the auxiliary frame and while this frame is guided by said guide and guide-channel.

6. In a framework for combinable primary and secondary firearms, the combination with a primary frame which is provided with a longitudinal bolt-chamber having on one side thereof a longitudinal guide-channel, and also having on the upper side thereof a passage-way channel, of an auxiliary framework slidable into said bolt-chamber and constituting when in forward position a breeching-member for the primary arm and having a projecting guide in a position thereon for resting within said guide-channel and provided on the upper side and near the forward end thereof with magazine-guides in a position thereon for passing through said passage-way channel during the withdrawal of the auxiliary frame and while this frame is guided by said projecting guide engaging within said guide-channel, and means for releasably holding said auxiliary frame in said forward position thereof.

7. In a compound framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having on one side thereof a rib-receiving channel, and also having at the rearward end and lower side thereof a recess, said frame being provided with a bolt-lock shiftable to and from a position in which this lock extends into said channel and also provided with a trigger device shiftable to and from a position in which this device projects into said recess, of an auxiliary framework slidable into said bolt-chamber and having a rib in a position thereon for resting within said rib-receiving channel, and said rib being provided with a lock-engaging face in position for

coacting with said bolt-lock of the primary-arm frame, said auxiliary framework also having a depending portion which is in a position thereon for resting within said recess and is provided for carrying a fire-control device in a position for coöperating with said trigger device of the primary-arm frame.

8. In a compound framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having on one side thereof a rib-receiving channel, and also having at the rearward end and lower side thereof a recess, said frame being provided with a bolt-lock shiftable to and from a position in which this lock extends into said channel and also provided with a trigger device shiftable to and from a position in which this device projects into said recess, of a tubular auxiliary framework slidable into said bolt-chamber and having a combined guide and reinforcing rib in a position thereon for resting within said rib-receiving channel, and also having a lock-engaging face in position for coacting with said bolt-lock of the primary-arm frame, said tubular framework also having a depending portion which is in a position thereon for resting within said recess and is provided for carrying a fire-control sear-device in a position for coöperating with said trigger device of the primary-arm frame.

9. In a framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having on one side thereof a longitudinal rib-receiving channel, said frame being provided with an ejector having an ejector point and operable to and from a position in which the ejector point extends into said channel, of an auxiliary framework slidable into said bolt-chamber and having an outwardly extending integral rib in a position thereon for resting within said rib-receiving channel, said rib having thereon a point-

receiving channel for receiving the ejector point when the auxiliary framework is slid into a working position in the primary-arm frame without dismounting the ejector.

10. In a framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having on one side thereof a longitudinal rib-receiving channel, said frame being provided with an ejector having an ejector point and operable to and from a position in which the ejector point extends into said channel, of an auxiliary framework slidable into said bolt-chamber and having an outwardly extending integral rib in a position thereon for resting within said rib-receiving channel, said rib having therein a point-receiving channel for receiving the ejector point when the auxiliary framework is slid into a working position in the primary-arm frame without dismounting the ejector, and means for releasably locking the auxiliary framework in said working position.

11. In a framework for combinable primary and secondary firearms, the combination with a primary-arm frame which is provided with a longitudinal bolt-chamber having on one side thereof a longitudinal channel, said frame being provided with a pivotally-supported ejector having an ejector point and arranged to swing to and from a position in which the ejector point extends into said channel, of an auxiliary framework slidable into said bolt-chamber and having an outwardly extending integral rib in a position thereon for resting within said channel, said rib having therein a channel for receiving the ejector point when the auxiliary framework is slid into a working position in the primary-arm frame without dismounting the ejector.

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Witnesses:

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