March 7, 1944. H. SUNDQUIST 2,343,341

FIREARM

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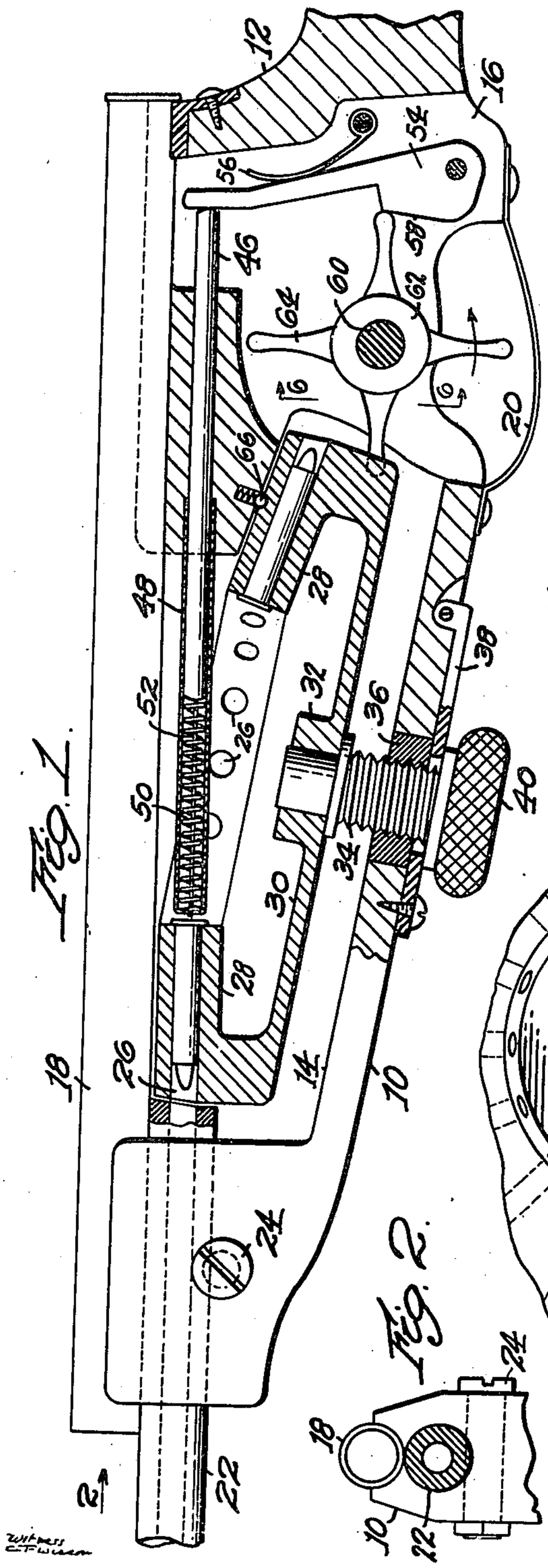

Fig. 1

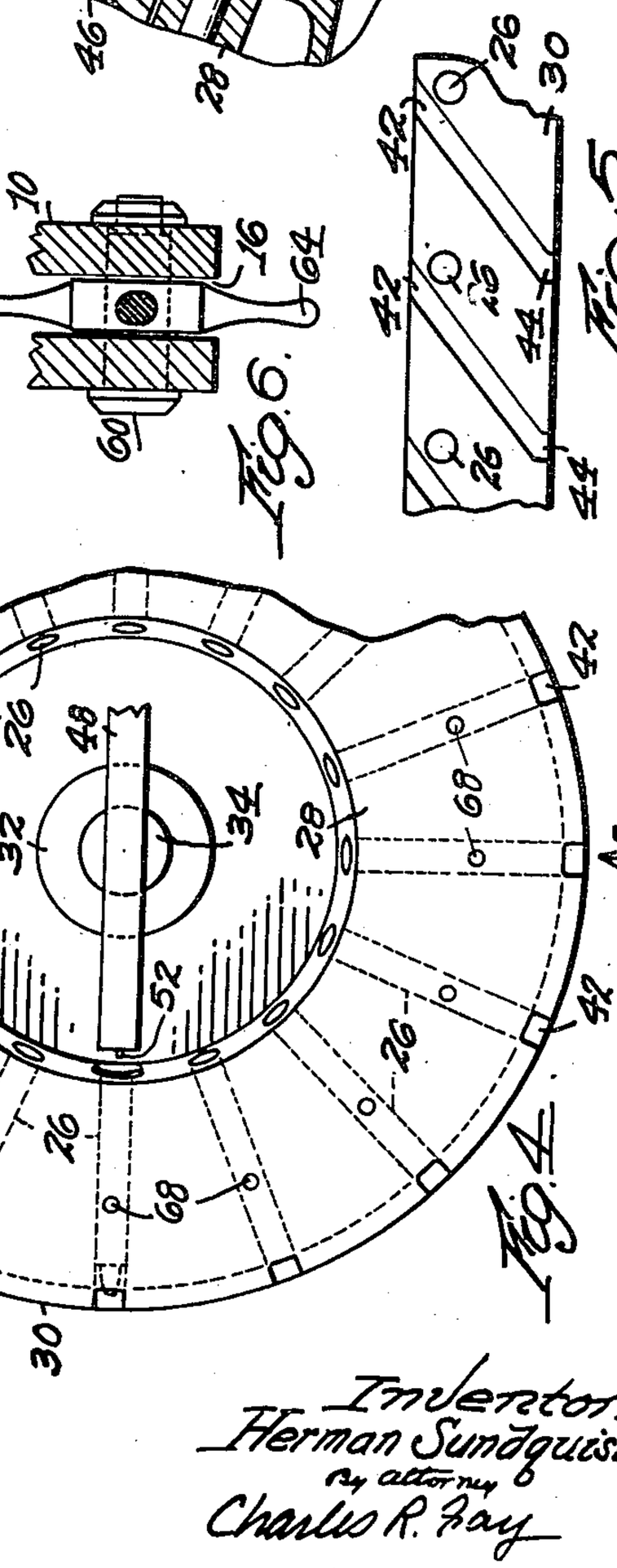

Fig. 3

Fig. 6

Fig. 5

Fig. 4

Fig. 2

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FIREARM

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3 Claims. (Cl. 42—59)

The objects of the invention include the provision of a firearm including a rotatable holder for the reception of a plurality of shells, the latter being located generally radially in the holder which is located to rotate on an axis at an angle to the firearm barrel, there being a multiple trigger located in a plane at right angles to the holder to rotate in a position in combination with said holder to rotate the latter into successive firing positions of the shells contained therein, and to retract and release a spring pressed hammer for actuating a firing pin aligned with the firearm barrel.

Other objects of the invention include the provision of a firearm having a rotary shell holder located at an angle to the barrel of the firearm and having generally radially arranged shells therein, and means comprising a trigger element for successively advancing the holder through successive shell positions in alignment with the barrel; said trigger element comprising a rotatable member provided with radially arranged fingers which cooperate with angular slots in the periphery of the rotatable holder to advance the same, said fingers being arranged to succesively engage successive slots; and the provision of a firearm of the type described which is inexpensive to manufacture and simple in construction.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a view in side elevation of a firearm embodying the present invention, parts being in section;

Fig. 2 is a front view of the firearm looking along arrow 2 in Fig. 1, parts being broken away;

Fig. 3 is a fragmentary view similar to Fig. 1 but showing the trigger and hammer parts in firing position;

Fig. 4 is a plan view of the rotary shell holder and firing pin, parts being broken away;

Fig. 5 is a fragmentary side view of the shell holder looking along arrow 5 in Fig. 4; and

Fig. 6 is a sectional view on the line 6—6 of Fig. 1.

The present firearm embodies a construction which is located almost entirely in the forepiece 10 of the gun stock 12. This forepiece may be made of wood or any other material and is deeply and oppositely recessed at 14 and 16 for the accommodation of the firing and shell advancing mechanism. The recess 14 is open at the top of the forepiece and may be bridged by an enclosed sight 18 secured at both ends of the recess by any convenient means, so that the sight 18 will act as a structural strengthening member for the forepiece. The recess 16 is bridged oppositely to sight 18 by means of a trigger guard 20 which also acts to strengthen the forepiece at this point.

The barrel of the firearm is indicated at 22 and is clamped to the forepiece by means of a through bolt 24. The breech end of the barrel extends into the recess 14 as shown in Fig. 1 for cooperation with the rotary holder 30 having individual or successive shell receiving bores 26 which are generally radially arranged in an inwardly turned flange 28 in the shell holder. It will be noted that the bores 26 are located at a slight angle to the bottom of the shell holder for a reason which will be described below.

The circular shell holder 30 is provided with a central bearing hub 32 which is rotatably mounted on a pin 34, the latter being screw threaded through a loose bushing 36 in the forepiece 10. This bushing is welded or otherwise secured to a pivot plate 38 which may be secured by any convenient means to the forepiece as by the screw shown in Fig. 1. A thumb piece 40 is provided for the pin 34 for axial adjustment thereof, and it will be noted that the entire rotary holder 30 may be dropped from its operative firing position shown in Fig. 1 a considerable distance to rest on the bottom of recess 14 in the forepiece. The periphery of the rotary holder 30 is provided with a series of angular slots 42, there being a slot between each bore 26; and it is to be noted that the top of each slot is positioned directly above a bore 26 and the bottom of each slot is positioned directly below the succeeding bore 26. Also the bottom of each slot has a short straight angle 44 arranged parallel to the axis of the holder.

A firing pin 46 is slidably located in the forepiece 10 in aligned position with the barrel 22. The firing pin is arranged at its forward end to slide in a tubular housing 48, the latter having a closed end adjacent the inner periphery of flange 28 of the holder 30, and a spring 50 is tensioned between the forward end of the firing pin and the closed end of housing 48 to act as a retracting means for the firing pin. A pin 52 is arranged at the forward end of the firing pin and extends through the closed end of housing 48 to engage the cap end of the shell located in the bore 26 aligned with the barrel 22.

Recess 16 is provided with a hammer 54 pivoted at one end and spring pressed forwardly at its free end by a leaf spring 56. The hammer is

provided at its forward edge with a cam forming shoulder 58. It will be seen that the spring 56 normally tends to pivot the hammer into engagement with firing pin 46 for the purpose of advancing the latter to fire the shell in holder 30 which is aligned with barrel 22 and that spring 50, becoming loaded by the forward action of the firing pin, will tend to urge the latter and the hammer reversely to retracted position.

A pivot pin 60 is mounted in the forepiece 10 to extend through recess 16. A rotary hub 62 is mounted to rotate on pin 60, and is provided with a plurality of radial fingers 64 which are of a length to extend into the area of trigger guard 20, cam shoulder 58 on hammer 54, and into engagement with the inclined slots 42.

In the operation of the device the shell holder 30 may be removed from the firearm by removing the fastener for plate 38 and pivoting the latter downwardly in Fig. 1 so as to disengage pin 34 from the hub 32. When this is done the holder may be slid sideways and thus removed from the firearm for loading shells in bores 26. Also, however, it will be noted that with the holder in its operative position, the pin 34 may be backed off by means of its screw threaded connection with bushing 36 so as to drop the holder from the area of the tube 48, and it is possible to load the holder in this position. When the holder has been loaded and returned to its operative position so that thumb piece 40 engages plate 38, the holder may be pivoted on pin 34 until a spring pressed detent 66 engages in any one of the recesses 68 in the top surface of the flange 28 of the holder. This will position the holder in correct alignment position of the bores 26 with respect to barrel 22 and upon rotation of fingers 64 one of the latter will engage in the top of a slot 42, while at the same time a finger 64 at right angles to the slot-engaging finger will impinge on cam shoulder 58 and retract the hammer against its spring. Further rotation of the fingers 64 results in a single step rotation of holder 30 by reason of the movement of a slot-engaging finger in its slot 42. When the finger in the slot reaches the straight portion 44 at the bottom thereof, the finger which is in engagement with cam 58 will drop off the latter past the shoulder formed by the cam. The hammer then snaps forwardly actuating the firing pin to explode the shell, and at the same time the finger in the straight portion 44 of the slot will maintain the holder 30 in stationary position wherein the shell to be fired is correctly aligned with the barrel 22. The spring pressed detent 66 also aids in this action and the detent will likewise maintain the holder stationary until the next successive finger 64 advances far enough to engage the next successive slot 42.

Fingers 64 are spaced far enough apart to provide an interval wherein the holder 30 may be freed of the fingers for removal or adjustment of the holder.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A firearm of the class described comprising a barrel, a stock, a forepiece for said stock, a recess in said forepiece, an adjustable and removable pin in said forepiece extending into said recess at an angle to said barrel, a rotary shell holder on said pin, a series of substantially radial bores in said holder for successive alignment with said barrel, a central recess in said holder with which said bores communicate, said holder being in the form of a flat cup having its major plane at an angle to said barrel, a firing pin extending into said holder recess in alignment with said barrel, a hammer pivoted in said stock and having a free end in normal engagement with said firing pin to urge it to firing position, a spring urging said hammer into engagement with said firing pin, a shoulder on said hammer, a series of separate angular slots in the periphery of said holder, a rotary trigger having a plurality of radial fingers adapted to rotate in a plane at right angles to said holder, each finger engaging in successive angular slots to rotate said holder as the trigger is rotated, said fingers also successively engaging said hammer shoulder to retract the latter against its spring as the holder is rotated, means effective to provide successive pauses in the rotation of said holder at firing stations thereof regardless of the rotation of said trigger, and means to retract said firing pin as said hammer is retracted.

2. A firearm as recited in claim 1 including a sight bridging said recess.

3. A firearm as recited in claim 1 wherein said bores communicate with said periphery and wherein there is a slot between each bore.

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