No. 754,599. PATENTED MAR. 15, 1904.

F. NOVOTNY.

GUN.

APPLICATION FILED AUG. 24, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

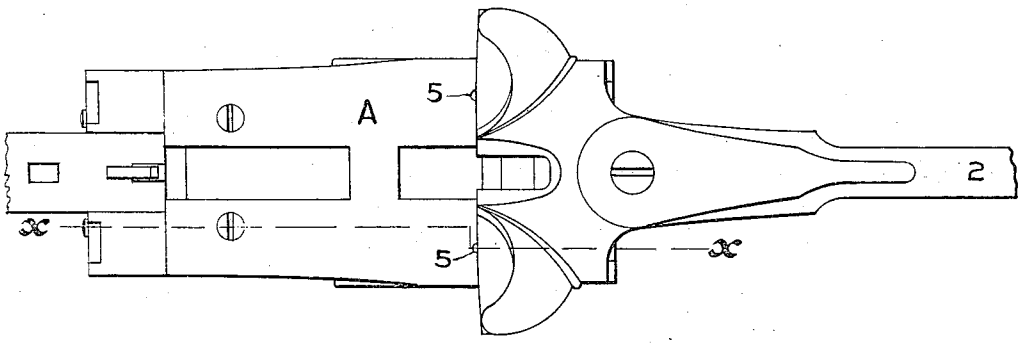


Fig. 2.

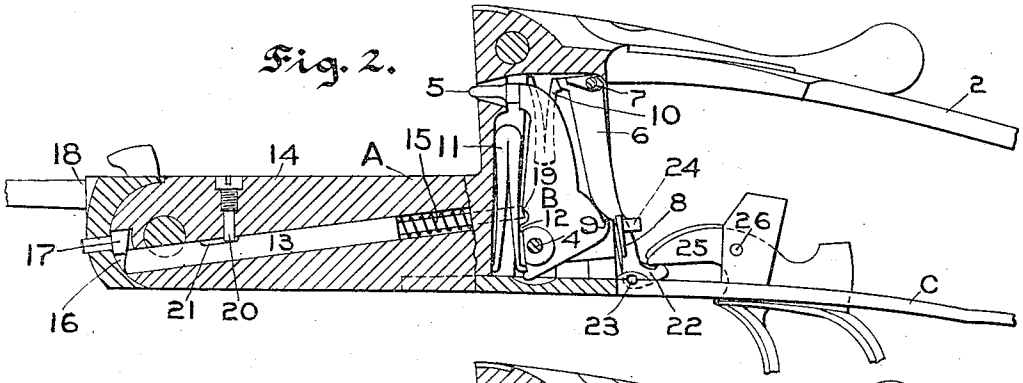
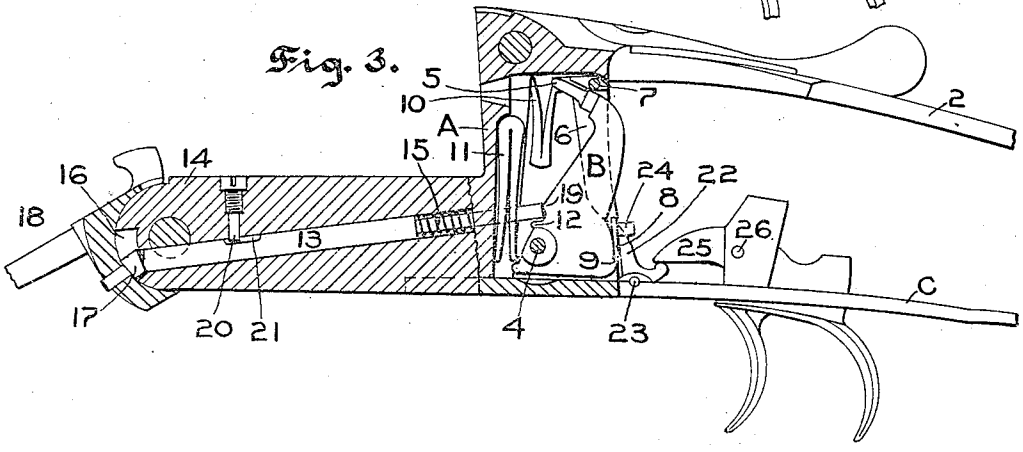


Fig. 3.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 4.

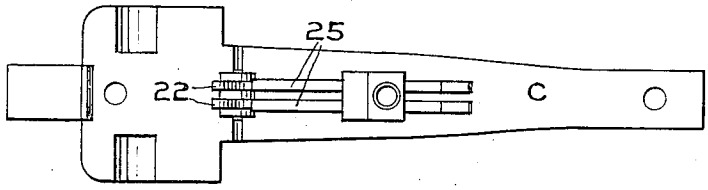


Fig. 5.

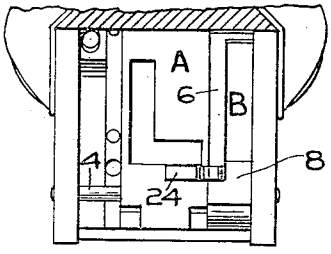


Fig. 6.

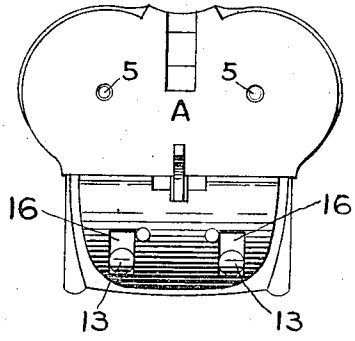
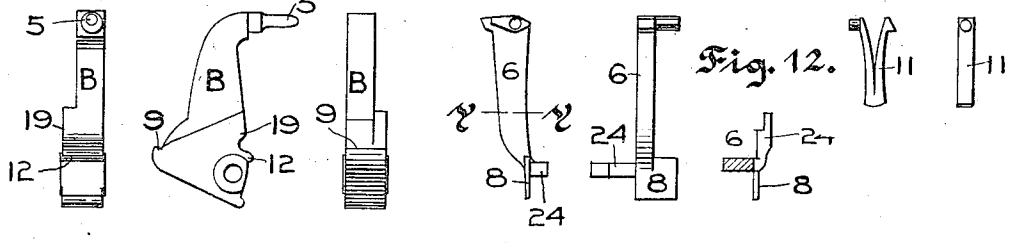


Fig. 7. Fig. 8. Fig. 9. Fig. 10. Fig. 11. Fig. 13. Fig. 14.



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No. 754,599. Patented March 15, 1904.

UNITED STATES PATENT OFFICE.

FRANK NOVOTNY, OF ST. PAUL, MINNESOTA.

GUN.

SPECIFICATION forming part of Letters Patent No. 754,599, dated March 15, 1904.

Application filed August 24, 1903. Serial No. 170,506. (No model.)

To all whom it may concern:

Be it known that I, FRANK NOVOTNY, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Guns, of which the following is a specification.

My invention relates to improvements in guns; and it consists particularly in the construction and arrangement of hammers and actuating parts whereby the effectiveness of the hammer action is increased and the parts are arranged in a smaller compass and within the main body of the frame to avoid the necessity of cutting away and weakening the stock or the forward extension of the frame.

To this end my invention consists in the features of construction and combination hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a top view of the gun-frame. Fig. 2 is a section on line *x x* of Fig. 1 with the parts in firing position. Fig. 3 is a similar view showing the hammers cocked. Fig. 4 is a view of the trigger-plate. Fig. 5 is a rear view of the frame, partly broken away. Fig. 6 is a front view of the frame. Figs. 7, 8, and 9 are detail views of one of the hammers. Figs. 10 and 11 are views of one of the sears. Fig. 12 is a section on line *y y* of Fig. 10, and Figs. 13 and 14 are detail views of one of the sear-springs.

In the drawings, A represents the gun-frame, provided with a rearwardly-extending tang 2, to which the stock (not shown) is secured.

B represents the hammers, each having pivotal support 4 in the frame of the gun and being provided with points 5, which strike the shells in the ordinary manner. The hammers are held in cocked position by means of sears 6, which have pivotal support 7 in the sides of the frame above and at the rear of the hammers and are each provided upon their lower ends with a thin flat lug 8, adapted to engage with a shoulder 9 upon the rear side of the adjacent hammer, as illustrated in Fig. 3, to hold the same in cocked position. Each of the sears is controlled by a split spring 10, interposed between the top of the sear and the adjacent front wall of the frame. Each of the hammers is actuated by a split spring 11, interposed between the hammer and the adjacent front wall of the frame, the ends of the spring bearing against the wall of the frame and the hammer below its pivot, respectively. Each hammer is formed upon its front side above its pivot with a boss 12, which strikes against the hammer-actuating spring when the gun is fired to cause rebound of the hammer from the shell.

13 represents cocking-bars passing through the forwardly-extending portion 14 of the frame and normally held in restrained position by surrounding coil-springs 15. The forward ends of the cocking-bars project into the recesses 16 in the forward end of the frame and are adapted to be engaged by lugs 17, carried by the rear end of the fore-end iron 18 to force said cocking-bars rearwardly to cock the hammers when the gun is broken, as illustrated in Fig. 3, the rear end of each cocking-bar bearing against the outwardly-extending lug 19 upon the inner side of the adjacent hammer. Pins 20 project into slots 21 in the upper sides of the cocking-bars to limit the movement of said bars and prevent their turning. Suitable sear-releasing mechanism is employed, such as the trips 22, having pivotal support 23 upon the trigger-plate, the downwardly-projecting ends of said trips standing in front of the lateral arms 24 upon the sears. The rearwardly-projecting ends of said trips are adapted to be engaged and actuated by the triggers 25, which have pivotal support 26 upon the trigger-plate.

In operation the breaking of the gun, as illustrated in Fig. 3, will force the cocking-rods rearwardly to turn the hammers into cocked position, the hammers being held in such position by engagement of the sears 6 with the shoulders 9 upon the rear sides of the hammers, the cocking of the hammers compressing the hammer-actuating springs 11. Upon the sears being released from the hammers by the trigger mechanism the mainsprings 11 will actuate the hammers to carry them into firing position.

It will be noted that the hammers and sears, as well as the hammer and sear-actuating

springs, are all arranged forward of the sear-releasing mechanism and in the body of the frame.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a gun, in combination with the frame, a pair of hammers pivotally supported in said frame, vertically-arranged split springs interposed between the fronts of said hammers and the adjacent wall of the frame, the ends of each spring bearing against the adjacent wall of the frame and the adjacent hammer below its pivot, sears having pivotal support above said hammers and means for engagement with said hammers, and vertically-arranged split springs interposed between said sears and the adjacent front wall of the frame, the ends of each spring bearing against the front wall of the frame and the adjacent sear, as and for the purpose set forth.

2. In a gun, in combination with the frame provided with a forward extension, hammers pivotally supported within the body of the frame, vertically-arranged split springs arranged between the fronts of said hammers and the adjacent front wall of the frame, the ends of each spring bearing against said front wall and against the adjacent hammer below its pivot, sears pivotally supported in said frame above said hammers and having means for engagement with said hammers, and a vertically-arranged depending split spring interposed between each sear and the adjacent front wall of the frame, the ends of said spring bearing against said front wall and against the adjacent sear in line with its pivot.

3. In a gun, in combination with the frame provided with a forward extension, hammers having pivotal support within the body of the frame, vertically-arranged split springs interposed between said hammers and the adjacent front wall of the frame, the ends of each spring bearing against said front wall and against the adjacent hammer below its pivot, a forwardly-extending boss upon each hammer above its pivot in position to engage with its spring when the gun is fired, depending sears having pivotal support above said hammers and having means for engagement with said hammers, and a vertically-arranged inverted split spring interposed between each sear and the front wall of the frame, the ends of said spring engaging with said front wall and with the pivoted end respectively of the adjacent sear.

4. In a gun, in combination with the frame provided with a forward extension, hammers having pivotal support within the body of said frame, vertically-arranged split springs interposed between said hammers and the adjacent front wall of the frame, the ends of each spring engaging with said front wall and with the adjacent hammer below its pivot, a lug upon the inner side of each hammer furnishing an engaging surface for a cocking-rod alongside said spring, depending sears pivotally supported above said hammers and having means for engagement therewith, and a vertically-arranged split spring interposed between each sear and the adjacent front wall of the frame, the ends of said spring engaging with said front wall and with the adjacent sear in line with its supporting-pivot.

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

FRANK NOVOTNY.

Witnesses:
H. S. JOHNSON,
EMILY F. OTIS.