

No. 777,688.

PATENTED DEC. 20, 1904.

J. J. MURPHY.
SINGLE TRIGGER FOR DOUBLE GUNS.

APPLICATION FILED APR. 21, 1903.

NO MODEL.

Fig-1-

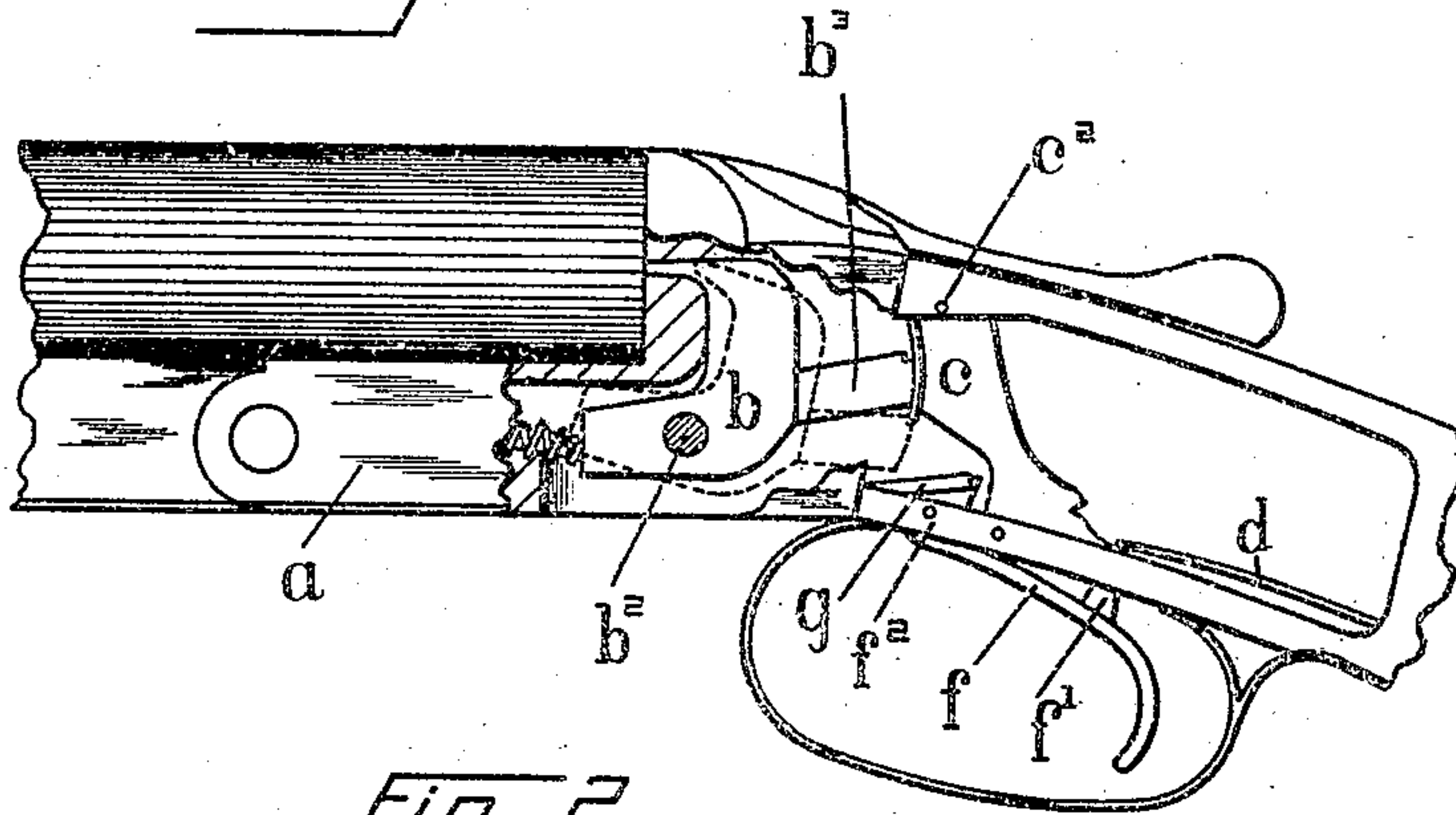


Fig-2-

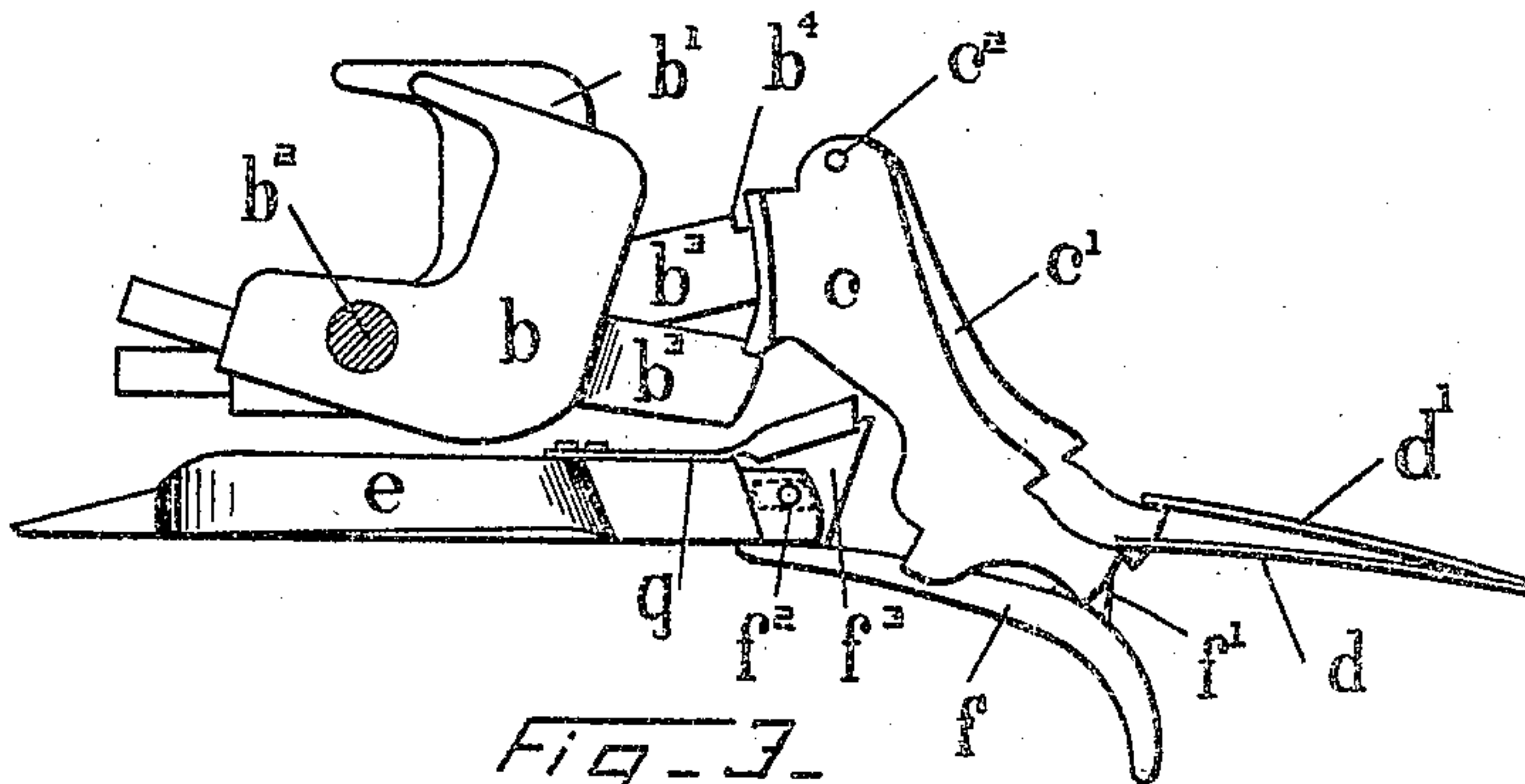


Fig-3-

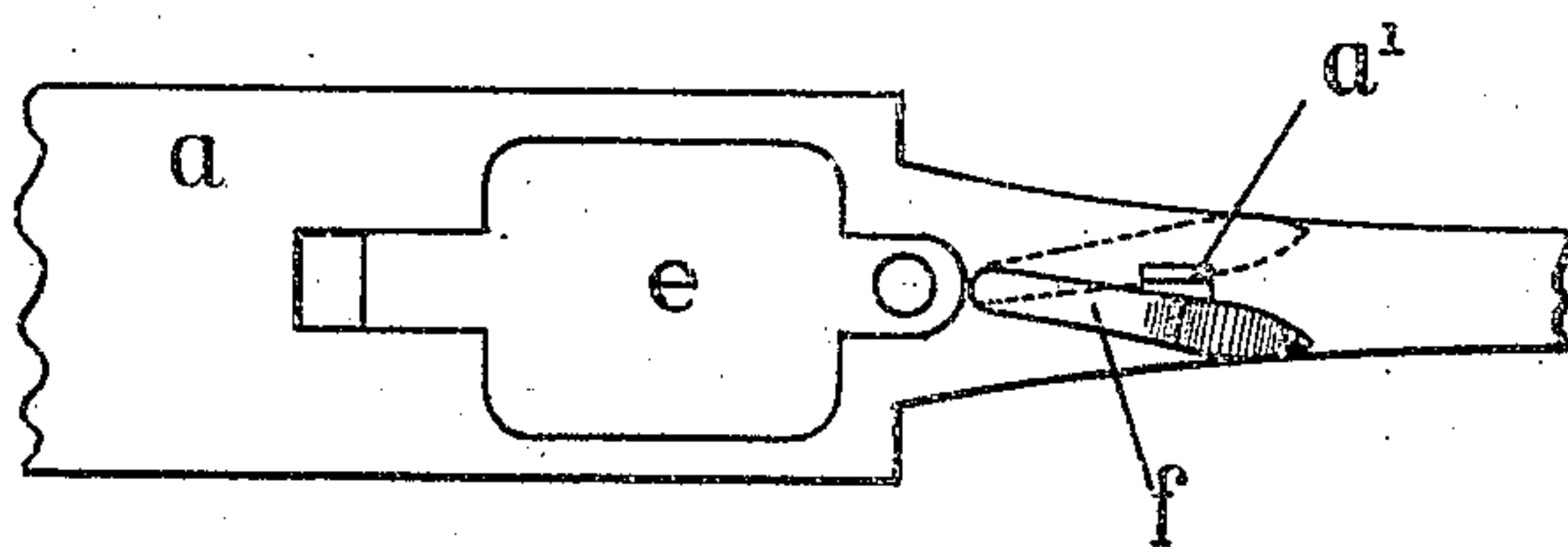


Fig-4-

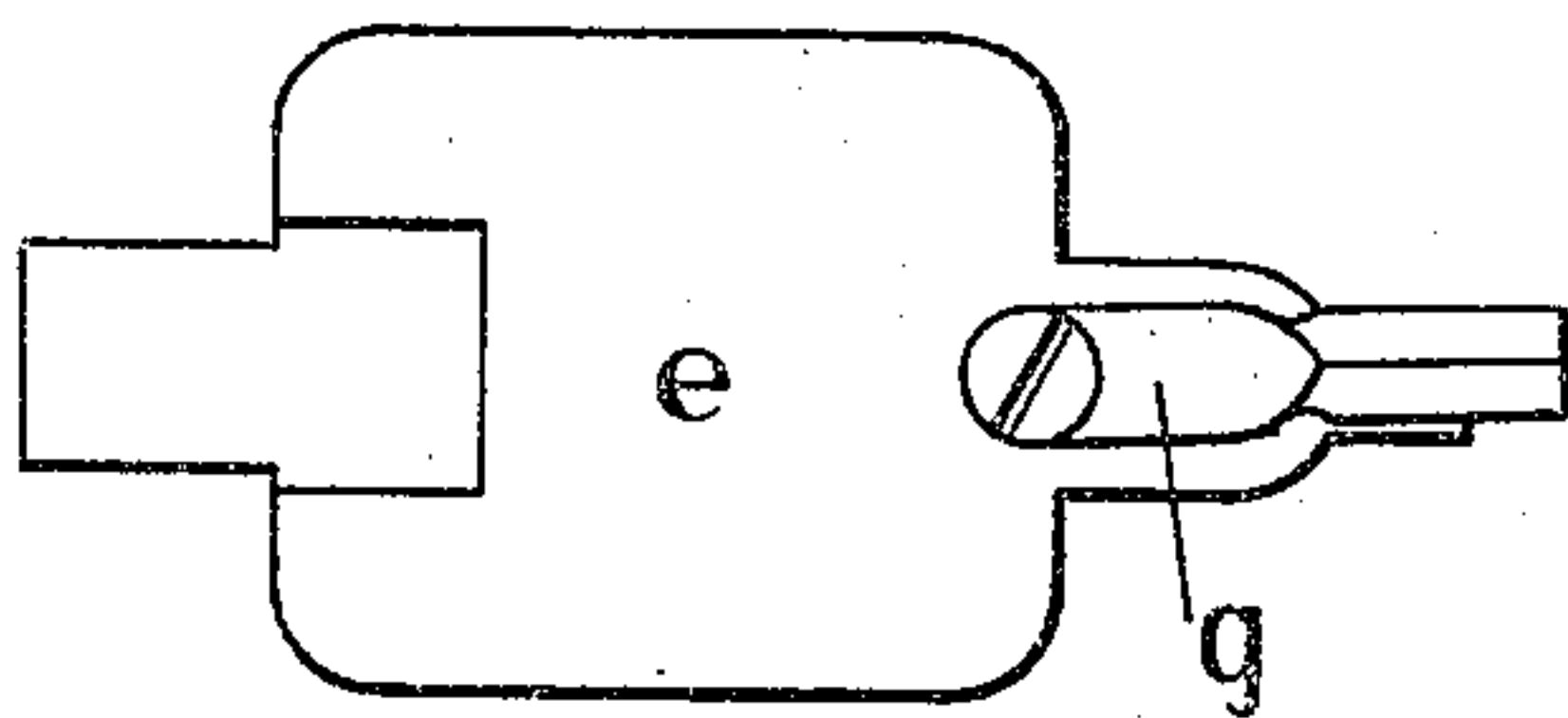
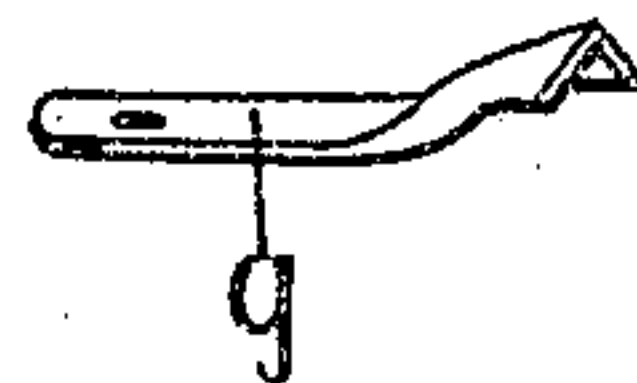


Fig-5-



Witnesses
Frank S. Sewire.
May F. Ritchie.

John J. Murphy, Inventor,
Frank W. Allen
by
Attorney.

UNITED STATES PATENT OFFICE.

JOHN J. MURPHY, OF NORWICH, CONNECTICUT, ASSIGNOR OF ONE-HALF
TO ALVA E. GRIMES, OF NORWICH, CONNECTICUT.

SINGLE TRIGGER FOR DOUBLE GUNS.

SPECIFICATION forming part of Letters Patent No. 777,688, dated December 20, 1904.

Application filed April 21, 1903. Serial No. 153,693.

To all whom it may concern:

Be it known that I, JOHN J. MURPHY, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented a certain new and useful Improvement in Single Triggers for Double Guns, which improvement is fully set forth and described in the following specification, reference being had to the accompanying sheet of drawings, in which—

Figure 1 is a side view of a gun-frame having mounted therein lockwork embodying my present invention, the side of said frame being broken away to disclose the said lockwork more clearly. Fig. 2 is a detached view of the hammers, sears, and single trigger about full size. Fig. 3 is a view of the under side of the gun-frame. Fig. 4 is a view of the top side of the plate, and in Fig. 5 I have shown a perspective view of the trigger-spring.

The chief object of this invention is to provide extremely simple, cheap, and effective mechanism whereby the barrels of a double gun may be successively fired by means of a single trigger, either of said barrels being discharged first at the option of the hunter. This desirable result I accomplish without multiplying the parts of guns of this class.

Briefly described, my invention consists in a trigger that is so pivoted in the gun-frame that it (the trigger) may be swung laterally so as to engage and actuate either of the sears.

My invention also includes novel means for holding the said trigger normally in alignment with one of the sears, the said holding means being, however, of a yielding nature, so that the hunter may if he so chooses select the barrel to be first discharged, as I shall explain more in detail later.

Referring to the drawings, the letter *a* indicates the frame of a breakdown gun. *b* *b'* denote the hammers, suitably pivoted in said frame at *b*². Extending rearward from each hammer is an integral arm *b*³, that is notched, as at *b*⁴, to engage the sears, said sears being indicated by letters *c* *c'* and pivoted in the upper portion of the frame at *c*². The lower ends of the sears *c* *c'* extend downward and slightly rearward, and said ends are engaged

by springs *d* *d'*, that operate to hold the sears in engagement with the rear ends of the hammer-arms *b*³.

Fitted within the lower portion of the frame *a*, as here shown, is a plate *e*, in which is pivoted my single trigger *f*, the rear portion of said trigger being formed with an upwardly-projecting horn *f'*, that is adapted to engage the sears *c* *c'* when the trigger is pulled rearward. This trigger is loosely mounted on its pivot *f*², so that its rear or free end may be swung laterally (see Fig. 3) in order that the horn *f'* may be made to engage either of the sears, and the lower portion of the frame is slotted transversely, as at *a'*, to receive the trigger-horn *f'* and to permit the described lateral movement of said horn.

It will now be understood that when the trigger is swung to one side it may engage and raise the right-hand sear, and when it is swung to the other side it may engage and move the left-hand sear.

I have provided a novel form of trigger-spring that forms one of the features of my invention, inasmuch as it permits the trigger to be readily swung from side to side; yet it holds the said trigger normally in vertical alinement with one predetermined sear, preferably the right-hand sear, for the reason that it is most common for sportsmen to discharge the right-hand barrel first. This trigger-spring is secured to the plate *e*, as here shown, and is indicated by the letter *g*. The free end of said spring is angular in cross-section, as is best seen in Fig. 5 of the drawings, and the cupped or grooved end thus provided rests upon an upwardly-projecting portion *f*³ of the trigger and acts with a constant tendency to force the free end of the trigger downward. The said spring is located slightly out of alinement with the longitudinal center of the arm (see Fig. 4) and so as to cause the trigger to be thrown to one side when not in use, (see full lines, Fig. 3;) but whenever sufficient lateral pressure is given to the free end of the trigger said trigger may be moved laterally sufficiently to engage the opposite sear, the limit of such lateral movement being determined by the length of the slot *a'*—that is

to say, when the horn f' engages one end wall of said slot the said horn is in proper position to engage the right-hand sear, and when the said horn engages the other end wall of said slot it (the horn) is properly located to engage the left-hand sear.

I have already stated that the trigger is held normally in alinement with one certain sear by the spring g . Whenever the trigger is swung out of its normal position, the angular end portion of the said spring yields; but so soon as pressure of the sportsman's finger is removed from said trigger the spring immediately forces the trigger back to its normal position. It will thus be seen that one barrel may be discharged by manipulating the trigger in the ordinary manner and that the second barrel may then be discharged by first swinging the trigger laterally and then pulling it rearward.

Inasmuch as the laterally-movable trigger is under the perfect control of the sportsman, he may elect which barrel shall be discharged first.

The essential feature of my invention is a trigger that is movable so as to engage either one of a pair of sears. The particular arrangement of the sears and hammers may be as here illustrated or otherwise; but the present arrangement of the lockwork elements serves to explain my invention very clearly.

My described single-trigger mechanism combines extreme simplicity with positive action and makes it possible for the sportsman to elect at the instant of firing the arm which barrel shall be discharged first.

Having thus described my invention, I claim—

1. In combination, a pair of sears, a trigger operable with either of said sears, and having an upwardly-projecting portion, and a spring having an angular free end engaging said portion, said spring serving to depress the trig-

ger when released and swing it laterally to its normal position, said spring being normally out of alinement with the longitudinal center of the barrel, and a horn on the trigger working in a transverse slot in the frame.

2. In combination, a pair of sears, a trigger operable with either of said sears, and having an upwardly-projecting horn at one end and an upwardly-projecting portion at the other, a spring having an angular free end resting on said portion, said spring serving to depress the trigger when released and swing it laterally to its normal position, said spring being normally out of alinement with the longitudinal center of the barrel, and a plate having a slot through which said horn projects.

3. In combination, a pair of sears, a trigger operable with either sear and having an upwardly-projecting portion f^3 at one end, the sears having their lower ends extended downward and rearward, springs acting on said lower ends, said trigger mounted loosely on a pivot, and having an upwardly-projecting horn adapted to engage the sears when the trigger is pulled rearward, a plate on which the trigger is mounted and having a slot through which said horn projects, and a spring mounted at one end on said plate and having an angular free end resting on said upwardly-projecting portion and holding the trigger normally in alinement with one of the sears and serving to depress the trigger when released and to swing it laterally and constructed to automatically return the trigger to its normal position when pressure thereon is released.

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

JOHN J. MURPHY.

Witnesses:

FRANK H. ALLEN,
ALFRED MOFFITT.