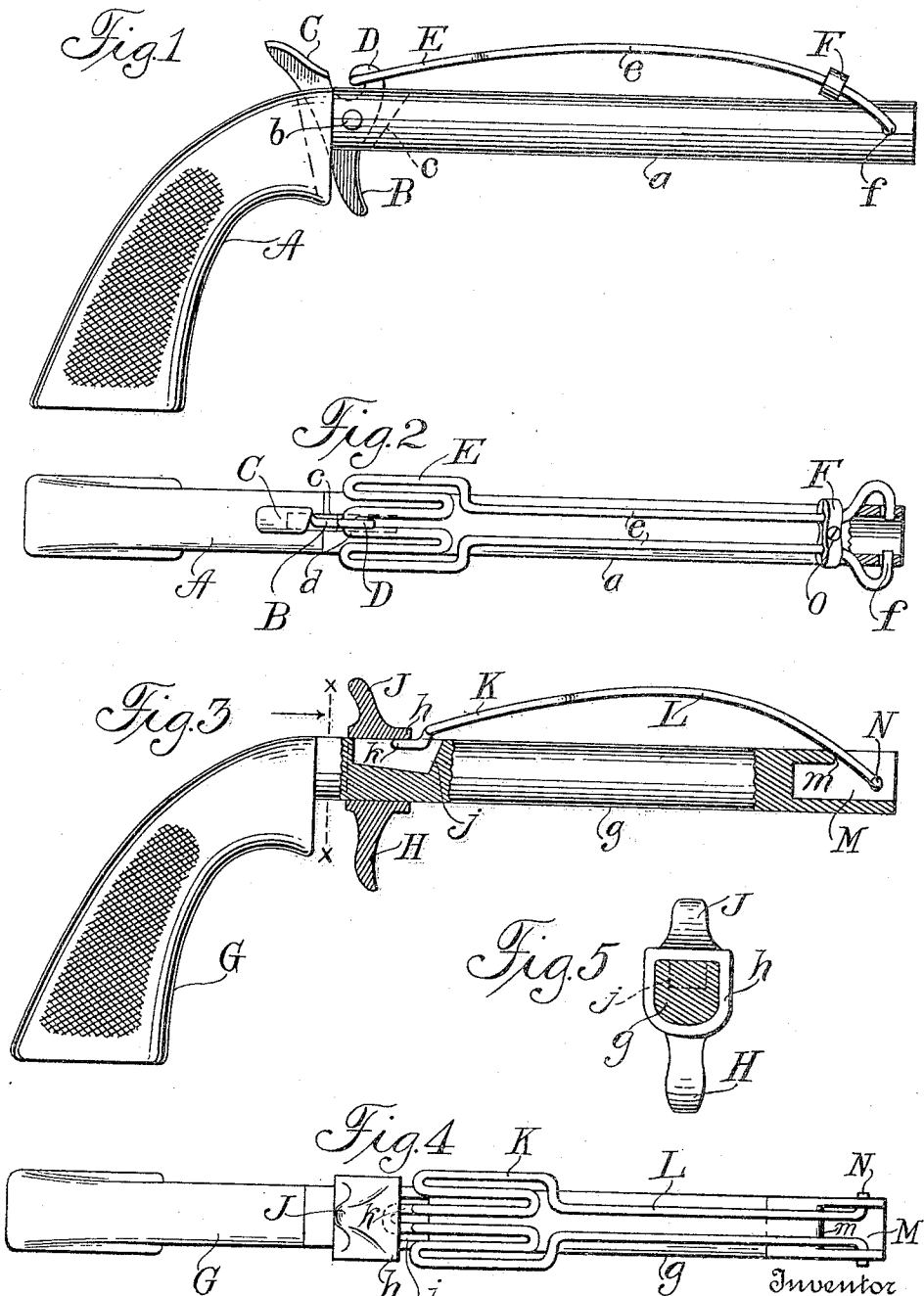


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TOY PISTOL FLY SWATTER.
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By

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TOY-PISTOL FLY-SWATTER.

1,206,773.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HOMER L. BOYLE, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Toy-Pistol Fly-Swatters, of which the following is a specification.

This invention relates to toy pistol fly swatters, and belongs to that class of devices intended for killing insects by means of the sudden release of a spring-impelled or resilient paddle-shaped member directed to strike the insect. The support for the striking member, and by which it is aimed, is designed to be held in the hand and is customarily given the general form of a firearm.

The object of this invention is the production of a mechanical implement for killing insects, the parts of the invention being of special construction and arrangement whereby it is believed the manufacture is rendered very cheap, and the effectiveness of the invention with respect especially to accurately directing the throw or slap of the striking member, is materially increased.

In the accompanying drawings the construction and arrangements of the parts of this invention are set forth, and Figure 1 represents a side view of the preferred form of this invention, showing all parts thereof assembled. Fig. 2 is a top plan view. Fig. 3 is a side view of a modified form of this invention, partly sectional, and all parts being shown assembled. Fig. 4 is a top plan view of the modified form shown in Fig. 3. Fig. 5 is a cross-section on the vertical broken line $x-x$ of Fig. 3.

Throughout the drawings and description the same part is referred to by the same letter.

Considering Figs. 1 and 2, the handpiece or pistol grip A and barrel a , are provided with a trigger catch B that has a pivot pin b , with the usual fingerpiece below the pivot, and a thumbpiece C and a hook catch D above the pivot. The trigger device occupies movably a suitable slot c .

The resilient striking member E is best made of wire. As ordinarily constructed it has two parallel stem pieces e , to both of which is secured the fulcrum block F. The ends f of the stem pieces e pivotally engage small holes in the sides of the barrel near

the outer end thereof, and it will be noted that those portions of the wire striking member between the fulcrum block F and the end of the barrel a are bent or bowed outwardly in U-shape. That construction is followed in order that the striking member may turn over the end of the barrel when operated. Block F is adjustable along the member E.

In the modification of this invention shown in Figs. 3, 4, and 5, the handpiece G and barrel g , carry a trigger catch H that is constructed with a hollow sleeve portion h and slides back and forth, the trigger catch H is thus movable bodily along the barrel g . The fingerpiece below the barrel is used to draw the sleeve catch H rearwardly, that is, toward the handpiece G, and the thumbpiece J is pressed upon to move the same forwardly. It is not desired that the trigger or sleeve catch H shall turn around upon the barrel g , and, therefore, the rear end of the barrel is given a cross-section as shown in Fig. 5. It is flat on top, and the sleeve h has a corresponding shape. The intention is that the sleeve h may be easily drawn back by means of the fingerpiece beneath it, or with equal ease pushed forwardly by the thumbpiece J.

The sleeve h of the trigger slide or catch moves over a recess j in the barrel, and the resilient wire striking member K has an extended end, or nose k which may be pushed into the recess j in order that the sleeve h may be moved over and engage it.

The wire striking member K of the modified form of this invention has two parallel stem pieces L. There is no fulcrum block as in the first form of this invention, but the barrel g is provided at the end with a recess M, and the ends N of the two stem pieces L are passed movably through suitable holes in the sides of the recess M, from the inside out as usually arranged. The outer end of the barrel g where the recess M is formed, may advantageously have the sectional form shown in Fig. 5 for the rear portion, that is to say, flat on top, and as shown, the edge m of the top of the barrel at the back of the recess M in the modified form constitutes the fulcrum for bending the striking member K to the rear in order that it may be engaged by the trigger slide H.

The operation of this invention in the form illustrated in Figs. 1 and 2 may be ex-

plained by assuming the handpiece or pistol grip A to be grasped in the right hand, with the forefinger upon the fingerpiece below the pivot *b* and the thumb upon the thumbpiece C above the pivot. Now, with the left hand turn the striking member E rearwardly. The fulcrum block F will bear upon the barrel *a* and the striking member will bend toward the catch hook D. Pressure upon the fingerpiece below the pivot *b* will move the hook D forwardly until the loop *d* may be passed over it. Then, pressure of the thumb upon the thumbpiece C draws the hook D to the rear and the striking member is engaged and held. To strike an insect upon any surface, such as a table, it is not necessary that the barrel shall be accurately aimed. The striking member E turns or throws over or beyond the outer end of the barrel by reason of the construction explained, and the widened inner end of the striking member will slap the surface even if the barrel be aimed slightly too high or too low. In this invention the width or area of the widened inner portions of the striking members are not intended to be at all restricted by the illustrations.

The operation of the modification of this invention set forth in Figs. 3, 4, and 5, is in a general way the same as already explained. The striking member K is bent rearwardly upon the edge *m* as a fulcrum, until the nose *k* is within the recess *j*. Then by means of the thumbpiece J the sleeve *h* is pushed forwardly over the nose *k* and the striking member is held in operating position. A pull by the finger exerted upon the fingerpiece below the sleeve will slide the sleeve to the rear and release the striking member. The construction explained enabling the striking member to turn or throw over or beyond the end of the barrel *g*, the conditions and results with respect to aiming the barrel are the same as before.

It will be observed in Fig. 2 that the fulcrum block F is split, and is clamped upon the stems of the member E by the screw O. The block is adjustable along the striking member, thus varying the distance between the block and the trigger device. By moving the block F more toward the trigger device, the stems *e* are correspondingly shortened and stiffened and the throw of the member E is made somewhat quicker and stronger.

Having now described this invention and explained the mode of its operation, what I

claim and desire to secure by Letters Patent of the United States is:—

1. In a device of the character described, the combination with a handpiece and barrel, of a movable trigger catch, a resilient striking member having one end pivotally connected with the outer end of the barrel, the other end of said striking member being constructed and arranged to engage the said trigger catch, and a fulcrum block connected with the said striking member near the outer end of the said barrel and arranged to bear upon the barrel when the said striking member is bent rearwardly to engage the said trigger catch.

2. In a device of the character described, the combination with a handpiece and barrel, of a movable trigger catch, a resilient striking member made of wire and having two parallel stem pieces, the ends of the said stem pieces being pivotally connected with the outer end of the barrel, the said striking member having its other and inner end constructed to engage the said trigger catch, and a fulcrum block secured to both of the said stem pieces of the striking member near the outer end of the barrel and arranged to bear upon the barrel when the striking member is bent rearwardly to engage the said trigger catch.

3. In a device of the character described, the combination with a handpiece and barrel, of trigger catch movable bodily with respect to the barrel, a resilient striking member made of wire and having two parallel stem pieces, the ends of the said stem pieces being pivotally connected with the outer end of the barrel, the said striking member having its other and inner end constructed and arranged to engage the said trigger catch, and means located near the outer end of the barrel and constructed to form a fulcrum for bending the said striking member rearwardly to engage the said trigger catch.

4. In a device of the character described, the combination with a handpiece and barrel, of a resilient striking member having one end connected with the outer end of the barrel, a trigger catch bodily movable with respect to the barrel, the said catch being constructed to engage the end of the said striking member when moved in one direction, and to release the said striking member when moved in another direction.

In testimony whereof I affix my signature.
HOMER L. BOYLE.