

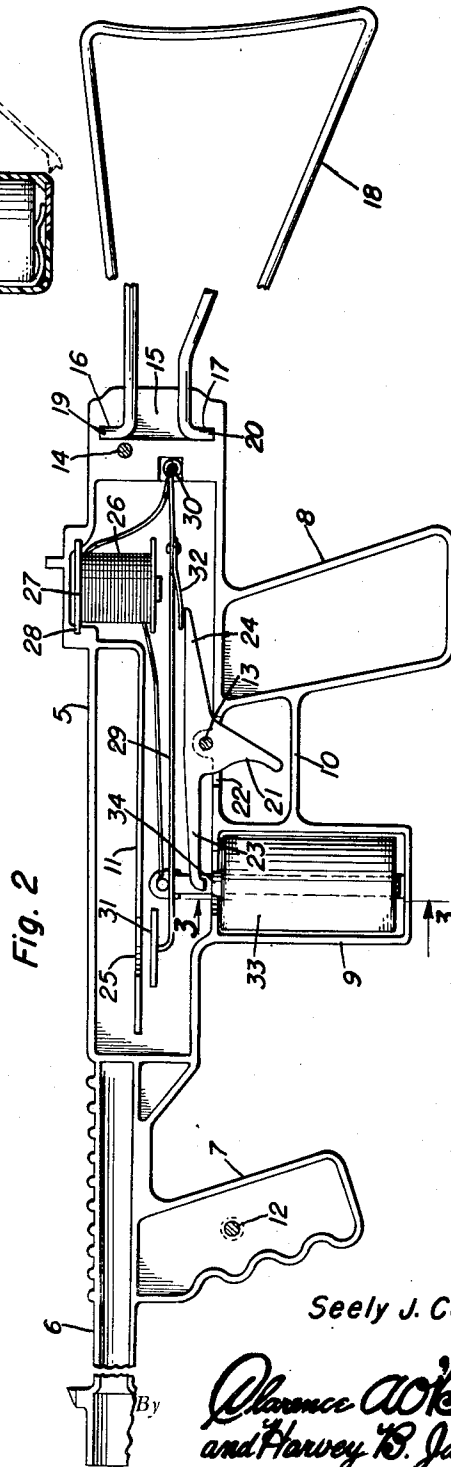
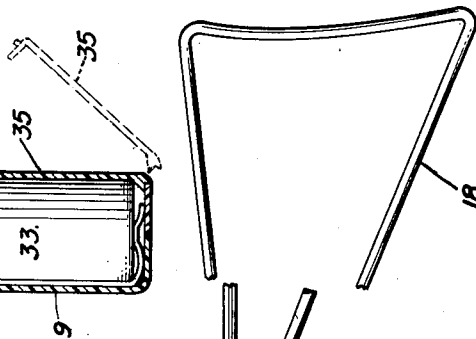
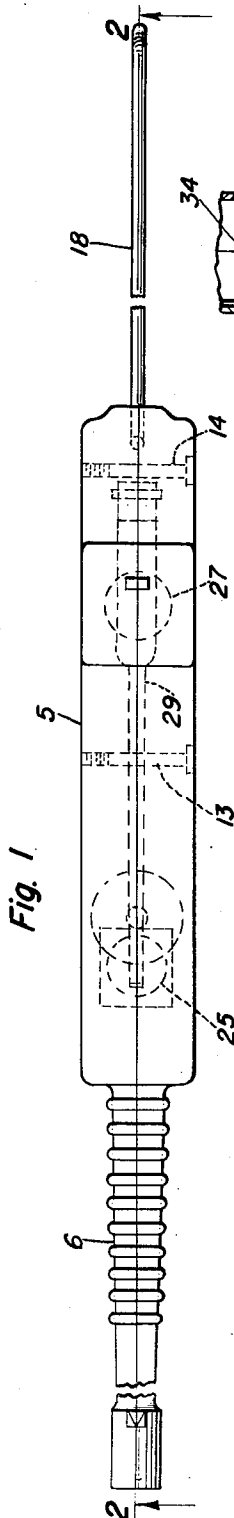
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S. J. CONOVER

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TOY MACHINE GUN

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TOY MACHINE GUN

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4 Claims. (Cl. 46-175)

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This invention relates to toy machine guns, and the primary object of the invention is to provide a toy gun of simple and practical construction which closely resembles an actual machine gun, and which may be caused to create a noise which simulates that made by the rapid firing of an actual machine gun.

A further object is to provide a durable toy gun of the above kind which may be inexpensively manufactured, and which is efficient in operation and safe for children to use.

The invention consists of the novel form, combination and arrangement of parts hereinafter described and shown in the accompanying drawing, in which:

Figure 1 is a top plan view, partly broken away, of a toy gun embodying the present invention;

Figure 2 is a central vertical longitudinal section taken on the line 2-2 of Figure 1;

Figure 3 is a fragmentary vertical transverse section taken on the line 3-3 of Figure 2.

Referring in detail to the drawing, the present gun includes a hollow frame or breech portion 5, a tubular barrel 6, hollow front and rear hand grips 7 and 8, a hollow magazine portion 9 depending from the portion 5 near and in front of the rear hand grip 8, a trigger guard bar 10 connecting the hand grip 8 and magazine portion 9, and an anvil or sounding plate 11 located within the portion 5. These parts are formed by two longitudinal half sections secured together by transverse bolts 12, 13 and 14 or the like, and each integrally formed of plastic or other suitable material. The bolt 12 extends through the parts of the front hand grip 7, the bolt 13 extends through the intermediate portions of the parts of the frame or breech portion 5 directly over the trigger guard bar 10, and the bolt 14 extends through the rear ends of the parts of said frame or breech portion. At their rear ends, the parts or half sections of the frame or breech portion 5 have mating recesses forming a slot 15 and sockets 16 and 17 respectively extending upwardly and downwardly from the inner or forward end of said slot.

The gun also includes a stock 18 consisting of a rod having a shape corresponding to the outline of the usual wooden stock of a gun and having its ends extending through the slot 15 and provided with terminals 19 and 20 which respectively extend upwardly and downwardly and are engaged in the sockets 16 and 17 to firmly connect the stock to the frame or breech portion 5.

A trigger 21 is pivoted on the bolt 13 and pro-

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jects through a slot 22 provided in the bottom of the portion 5, said trigger having a forwardly projecting arm 23 and a rearwardly projecting arm 24 at its upper pivoted end located below the anvil or sounding plate 11 within the portion 5. The anvil or sounding plate 11 has an opening 25 therein.

An electromagnet 26 is vertically mounted in the upper rear end portion of the frame or breech portion 5 by engaging its upper end flange 27 in an internal groove 28 provided in the wall of said portion 5. An armature 29 is disposed in the portion 5 between the plate 11 and electromagnet 26 and the arms 23 and 24 of the trigger, and is hinged to the rear end of portion 5 at its rear end as at 30 for vertical swinging movement. At its forward end, the armature has a plate 31 fixed thereto in position to contact the anvil or sounding strip 11 about its opening 25. A light leaf spring 32 is attached at one end to the armature 29 near its pivoted end, and the free end of this spring bears on the free end of arm 24.

A dry cell battery 33 is disposed in the magazine portion 9 and has its shell electrically connected in a conventional way to one side of the coil of electromagnet 26, whose other side is electrically connected to the armature 29. The free end of arm 23 is arranged to contact the central terminal 34 of the battery upon pressing the trigger rearwardly, said trigger being swung forwardly by the weight of the armature when the latter lowers by gravity after being released by de-energization of the electromagnet. The magazine has a removable section 35 at one side which closes an opening through which the battery may be inserted or removed.

The arrangement is such that when the trigger 21 is pressed rearwardly, the arm 23 engages the battery terminal 34 and closes the circuit of the electromagnet so that it attracts and raises the armature and causes the plate 31 to strike the anvil or sounding plate 11 so as to create a sharp sound or tap which is augmented or enhanced by the provision of the hole 25. When the armature is thus attracted, the spring 32 disengages from arm 24 and opens the circuit, allowing the armature to lower and close the circuit again. This operation is rapidly repeated as long as the trigger is held in the rearward position, thereby simulating the noise of a rapidly firing machine gun.

From the foregoing description, the construction, operation and advantages of the invention will be apparent. Modifications and changes in

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details of construction are contemplated within the spirit of the invention as claimed.

Having described the invention, what is claimed as new is:

1. In a toy machine gun, a trigger pivoted at its upper end and having forwardly and rearwardly extending arms rigid with its pivoted end, a dry cell battery having its central terminal disposed directly beneath the free end of the forwardly extending arm, a vertically swingable armature pivoted at its rear end and located over said arms, said armature having a part normally engaging the free end of said rearwardly extending arm to provide an electrical connection therebetween and to press downwardly on the latter arm to swing the trigger forwardly and disengage the forwardly extending arm from the central terminal of the battery, an electromagnet mounted over the armature near the pivoted end of the latter and in position to attract said armature and disengage it from the rearwardly extending arm when the trigger is pressed rearwardly to engage the forwardly extending arm with the central terminal of the battery, the coil of said electromagnet being electrically connected at one side to the armature and at the other side to the shell of the battery, and a sounding plate mounted over and adapted to be tapped by the free end of the armature when the latter is attracted by the electromagnet.

2. The construction defined in claim 1, wherein the gun further includes a hollow breech portion

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in which the arms and the sounding plate are disposed and in which the electromagnet and the armature are mounted, and a hollow magazine portion depending from said breech portion and having the battery removably positioned therein, said trigger projecting through the bottom of said breech portion.

3. The construction defined in claim 1, wherein the sounding plate has an opening, and a plate fixed to the free end of the armature and arranged to marginally contact the sounding plate about said opening.

4. The construction defined in claim 1, wherein the part of the armature which bears on the rearwardly extending arm consists of a light leaf spring attached at one end to the armature proper and bearing at its free end on the latter arm.

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