May 20, 1930. A. M. GOODLOE 1,759,304

TOY MACHINE GUN

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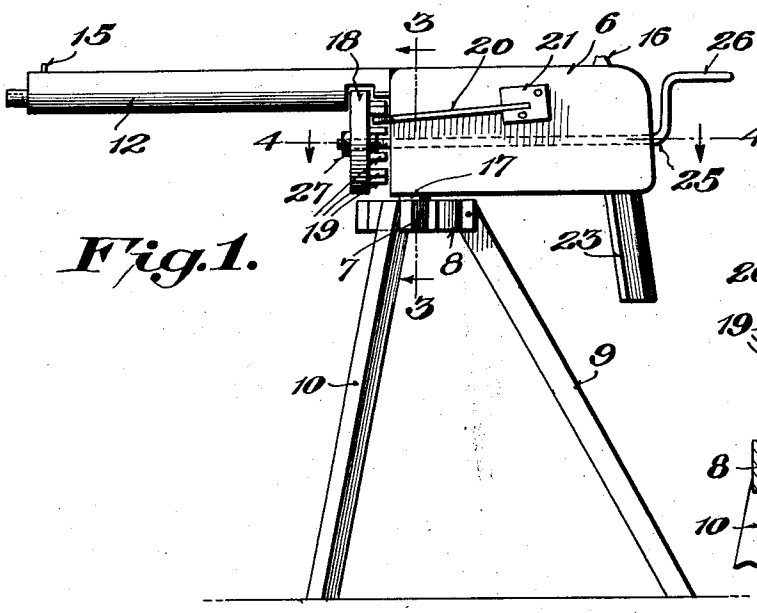


Fig. 1.

Fig. 3.

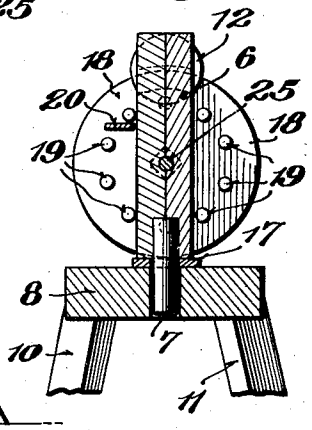


Fig. 2.

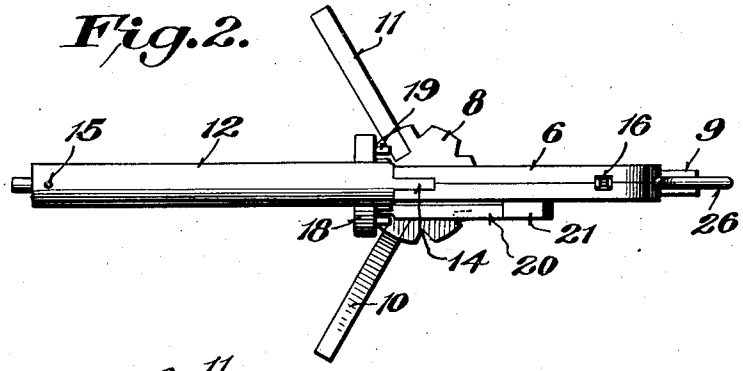


Fig. 5.

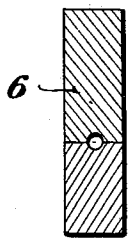
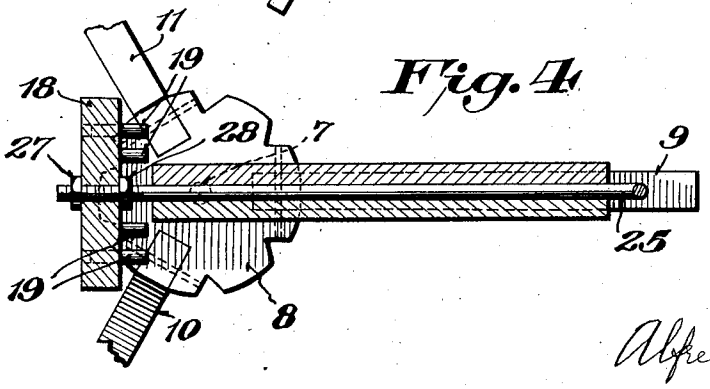


Fig. 4.



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UNITED STATES PATENT OFFICE

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TOY MACHINE GUN

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This invention relates to toy rapid fire or machine guns, and has for one of its objects to produce a toy of that description which more nearly resembles a real rapid fire or machine gun in appearance and in action than toys of the same sort as heretofore made.

Another and a leading object of the invention is to produce a toy of the kind referred to so designed and constructed that nearly all its parts can be made of the waste material of an ordinary lumber mill. The accomplishment of this object not only makes it possible to produce the toy at minimum cost, but also turns to profitable account a quantity of material which now is commonly burned as of no value, or is useful merely as firewood.

A further object of the invention is the production of a toy machine gun in which the noise-producing elements simulate parts of the gun itself. In toy machine guns as heretofore made the form of the gun has been copied in parts that have no function, the noise-making elements being merely adjuncts thereto, and usually hidden from view.

The accompanying drawings, which form part of this specification, illustrate the invention in what is regarded as the preferred embodiment thereof; but it is to be understood that modifications in the construction, form and combination of the several parts of the device may be made without a departure from the essential features of my invention.

Fig. 1 is a side elevation of a machine gun constructed according to the present invention;

Fig. 2 is a top plan view thereof;

Fig. 3 is a vertical section on line 3—3, Fig. 1;

Fig. 4 is a horizontal section on line 4—4, Fig. 1;

Fig. 5 is a detail in cross-section showing another way of making the stock of the gun.

Figs. 3, 4 and 5 are on a larger scale than Figs. 1 and 2.

The breech member or stock 6 of the gun is swivelled by means of dowel pin 7 in the body part 8 of a tripod, whereof the legs are pivoted to the body as usual, one leg 9, which extends rearwardly, being somewhat longer than the two front legs 10, 11. A metal washer 17 which surrounds the dowel pin 7 and is fastened to the under side of the stock provides a smooth bearing surface and facilitates the turning of the gun to point the same in different directions.

The barrel 12 is fastened to the stock preferably by a tenon and mortise joint 14, as shown in Fig. 2, and has at its forward end a sight 15, there being a rear sight 16 on the stock 6.

The disk-shaped member 18, which is made to imitate the revolving magazine of a rapid fire gun, is mounted for rotation at the front end of the stock in the position usually occupied by the revolving chamber or magazine of a real gun; and its upper edge extends a certain distance into a cut in the underside of the periphery of barrel 12, the object being to simulate still more closely the appearance of a real gun, in which, as the magazine rotates, each cartridge chamber is brought successively into registration with the bore of the barrel.

Projecting from the rear face of disk 18 are a series of pins or dowels 19, equally spaced apart and arranged in a circle concentric with the disk. These pins 19 by their shape and arrangement suggest a series of protruding cartridges. Functionally they act as a noise-producing element in cooperation with a strip 20, preferably of flexible resonant wood, such as maple, which strip is attached at one end to a block 21 fastened as by nails to the side of stock 6, the other end, which is free, being in the path of pins 19. Obviously when the disk 18 is rotated by means of crank handle 26, the free end of resilient strip or clapper 20 will make successive impacts with pins 19, snapping from one to the next, thus producing a succession of sharp concussions, not unlike the rattle of a machine gun; the rapidity of the successive impacts being proportional to the speed of the turning of the crank handle.

It will be seen that the rotating disk 18 with its series of cartridge-like pins 19 and its crank handle 26—which members constitute the principal noise-producing ele-

ments—form essential parts of the configuration of the gun itself.

The relative arrangement of the pins 19 and the spring strip or clapper 20 is such that the pins move transversely across the strip and off the edge thereof, instead of lengthwise of the strip and off the end thereof, as heretofore; that is to say, the spring strip or clapper instead of being arranged as heretofore to bear at its free end upon the periphery of a star-wheel at right angles to the axis of rotation thereof is approximately parallel with the axis of the rotating member and has its free end in the path of the pins 19, the latter being set in one side of the disk instead of being formed on the periphery thereof. By this arrangement the disk can be made and positioned in such manner as to resemble the cartridge chamber of a machine gun. Moreover, the arrangement is such that the crank can be turned in either direction for the purpose of functioning as a noise-maker.

On the under side of the stock 6 is a grip handle 23 for turning the gun in different directions.

It will be observed that all the parts of the device thus far described may be made advantageously of wood; it being one of the chief objects of the invention, as already stated, to utilize the scraps and waste of an ordinary lumber mill.

The revolving disk 18 is secured as by nuts 27, 28 (Fig. 4) to the forward end of a metal rod 25 which passes through and is free to rotate in a hole extending lengthwise through the stock 6, and having its rear end bent to form a crank-handle 26.

To avoid the difficulty attending the boring of a hole through the stock lengthwise thereof it is preferred to make the latter of two pieces of wood with a semi-circular groove in each piece, the grooves being so located that they form a circular hole lengthwise of the stock when the pieces are matched and glued or otherwise fastened together.

The two pieces composing the stock 6 may be joined face to face as shown in Fig. 3, the plane of jointure being vertical; or they may be joined edge to edge, as shown in Fig. 5, the plane of jointure being horizontal. The latter construction is, for several reasons, to be preferred; but the size and shape of the available scraps may make it desirable to adopt the construction illustrated in Fig. 3.

The described manner of forming a bearing in the stock 6 for the crank shaft 25 not only obviates the necessity of drilling a long hole through the stock but also permits the utilization of smaller pieces of scrap in making the stock.

Other modifications may be made without departing from the invention as embraced within the scope of the following claims.

What is claimed is:

1. A toy machine gun comprising a stock or breech member, a barrel member projecting therefrom, and noise-producing elements consisting of a disk-shaped member at the rear of said barrel member mounted to rotate in a plane transverse thereto and having a series of spaced pins, and a clapper having its free end in cooperative relation with said pins for the production of a succession of sounds when said disk-shaped member is rotated.

2. A toy machine gun comprising a breech member or stock, a barrel projecting therefrom, a disk rotatably supported by said stock transversely to the barrel, a row of spaced pins arranged in a circle on one face of said disk, a resilient strip attached at one end to said stock and having its free end in cooperative relation with said pins, and means for rotating said disk.

3. In a toy machine gun comprising a stock and barrel, a disk-shaped member at the rear end of said barrel mounted to rotate in a plane transverse thereto, said disk being provided with a circularly arranged series of spaced pins, in combination with a clapper having its free end positioned for cooperation with said pins to make a succession of concussive sounds when said disk is rotated, and means for rotating said disk.

4. A toy machine gun as specified in claim 2 wherein the disk is so positioned that, as it rotates the pins come successively in line with the barrel.

5. A toy machine gun comprising a stock or breech member, a barrel member projecting therefrom, and noise-producing elements consisting of a disk-shaped member at the rear of said barrel member mounted to rotate in a plane transverse thereto and having a series of spaced pins, and a clapper having its free end in cooperative relation with said pins for the production of a succession of sounds when said disk-shaped member is rotated, said parts being all made of wood.

6. A toy machine gun as specified in claim 2 wherein the pins project at right angles to the face of the disk and the resilient strip extends approximately parallel with the axis of rotation of the latter.

7. A toy machine gun as specified in claim 2 wherein the free end of the resilient strip is so positioned with reference to the rotating disk and its pins as to cooperate therewith in noise-production whichever way the disk is rotated.

8. A toy machine as specified in claim 2 comprising also a tripod on which the said stock, barrel and noise-producing elements are swivelled.

9. A toy machine gun comprising a stock, a barrel projecting therefrom, a disk carried by a shaft extending through said stock, said disk being disposed transversely to said

barrel and having on one side a circular row of spaced pins, and a resilient clapper in co-operative relation with said pins, said stock being formed of two pieces of wood joined together, the hole for said shaft being formed partly in one of said pieces and partly in the other.

In testimony whereof I have signed this specification.

ALFRED M. GOODLOE.