

A. F. SWAHN.

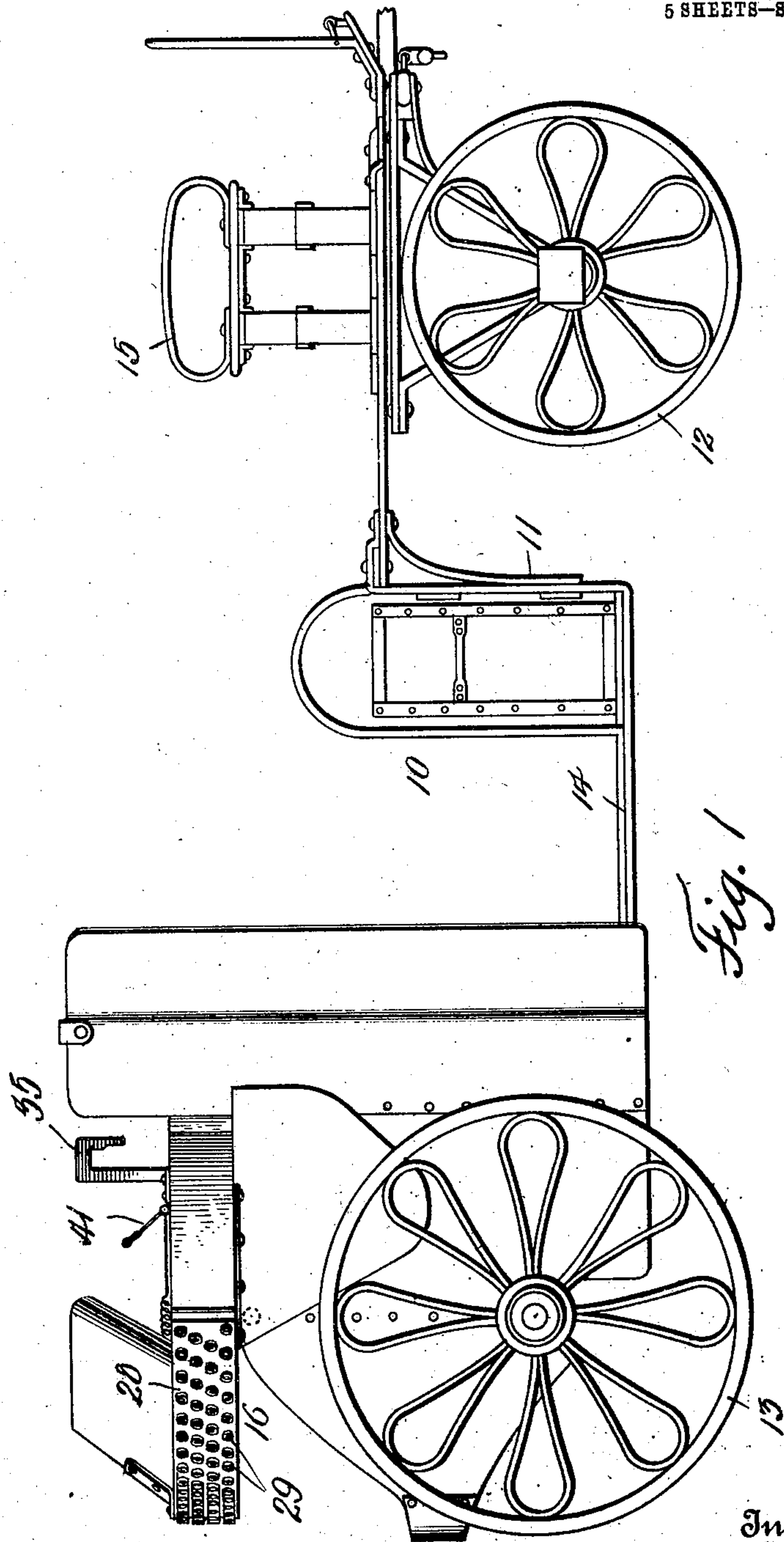
MACHINE GUN.

APPLICATION FILED MAR. 11, 1909.

928,344.

Patented July 20, 1909.

5 SHEETS—SHEET 1.



Witnesses

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H. M. Brooks.

Inventor

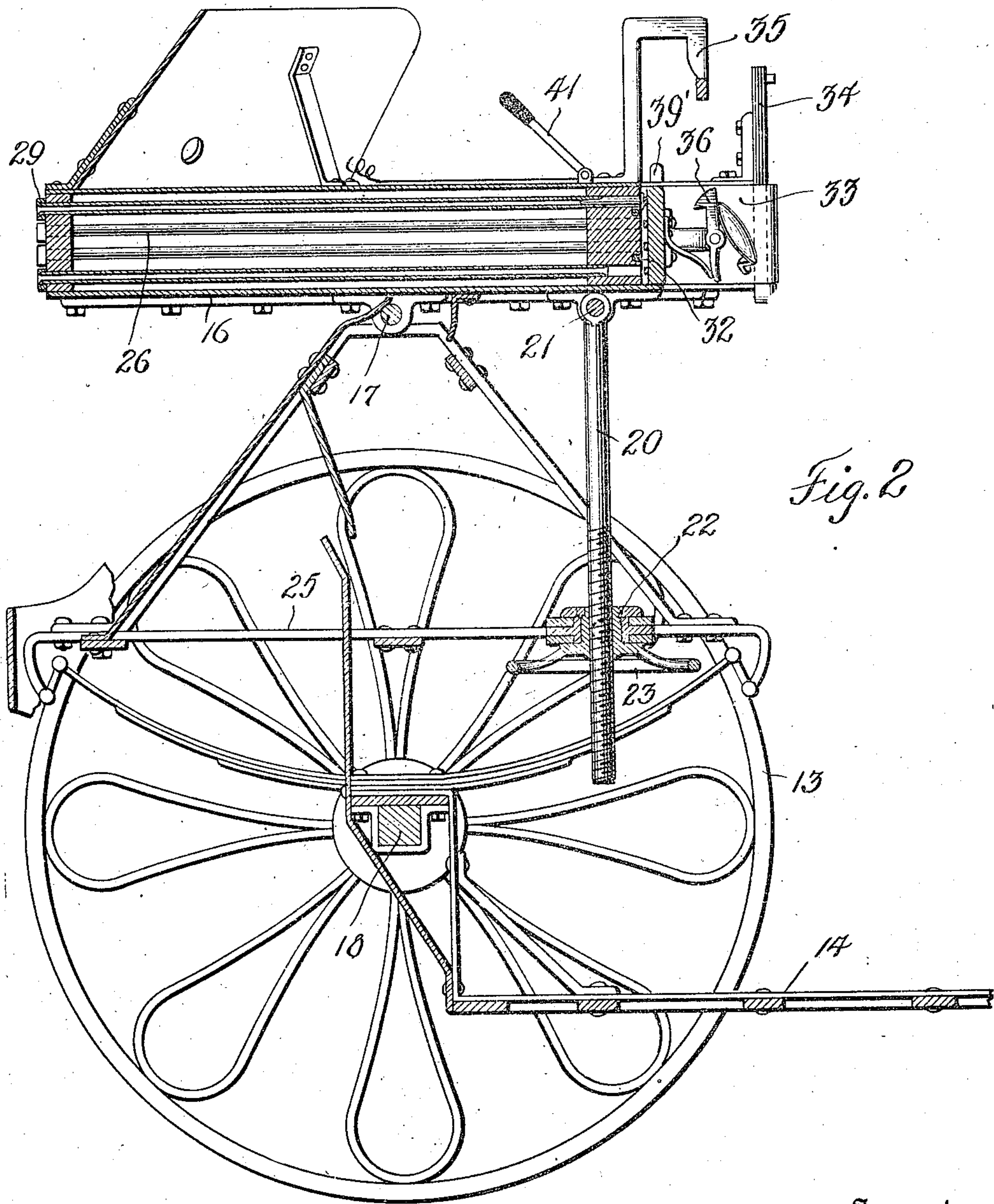
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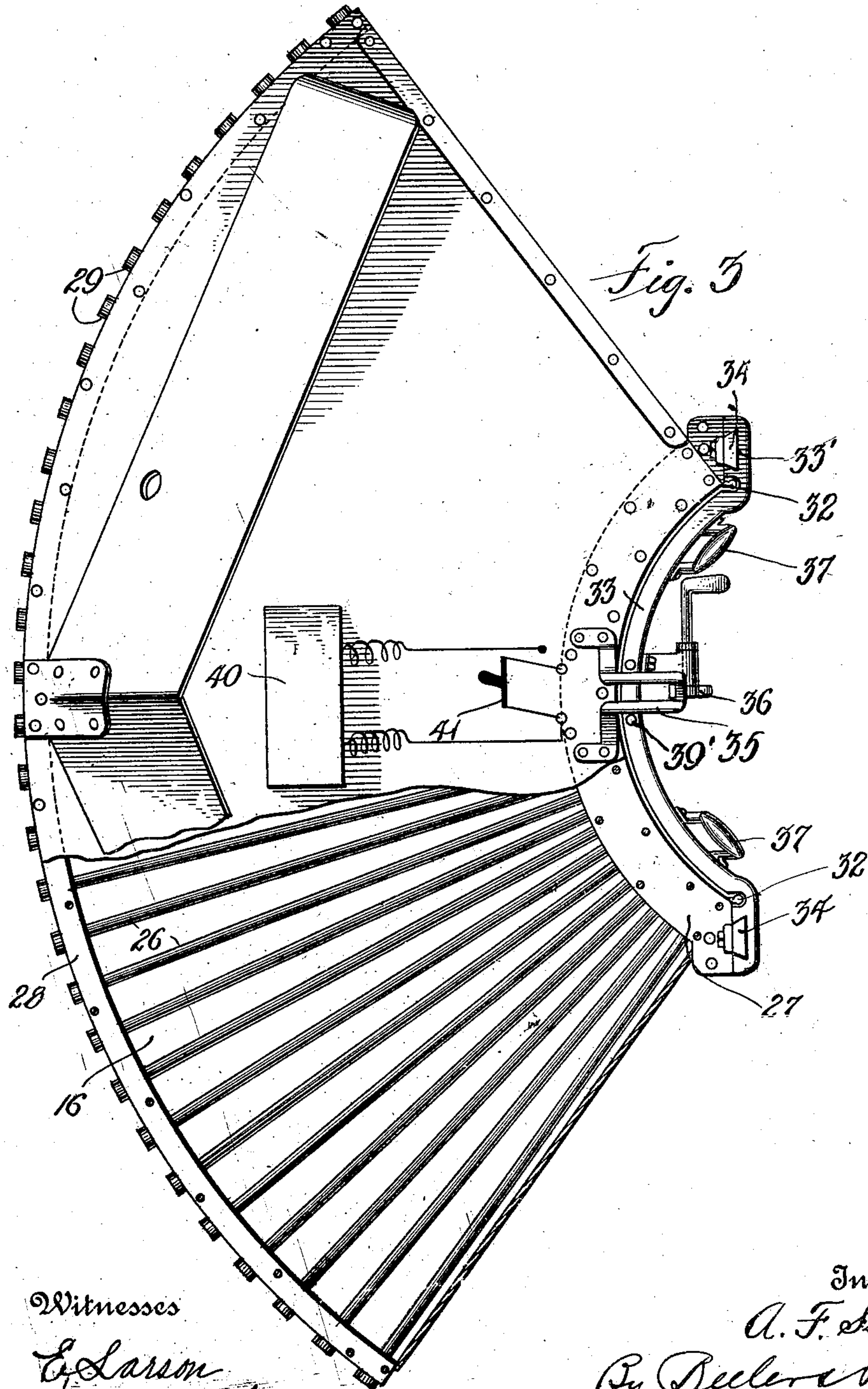
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6 SHEETS—SHEET 3.

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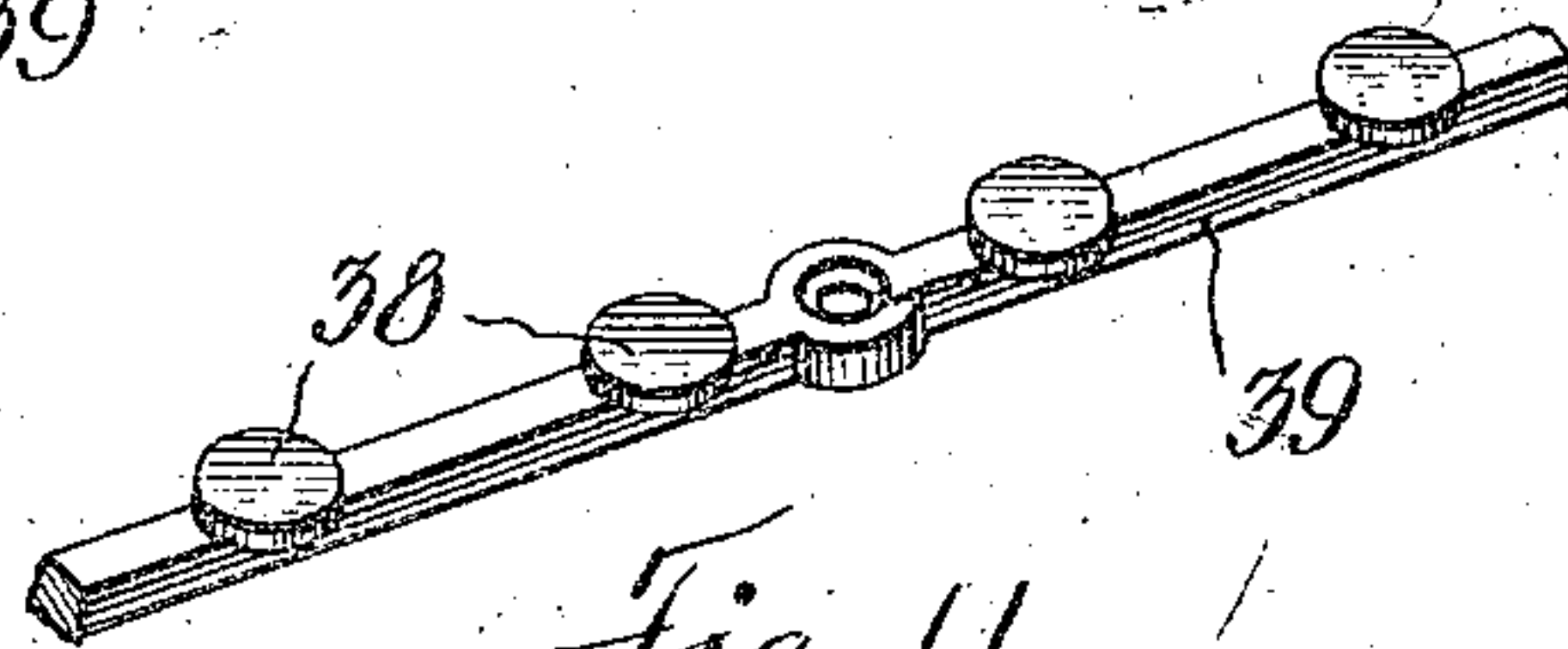
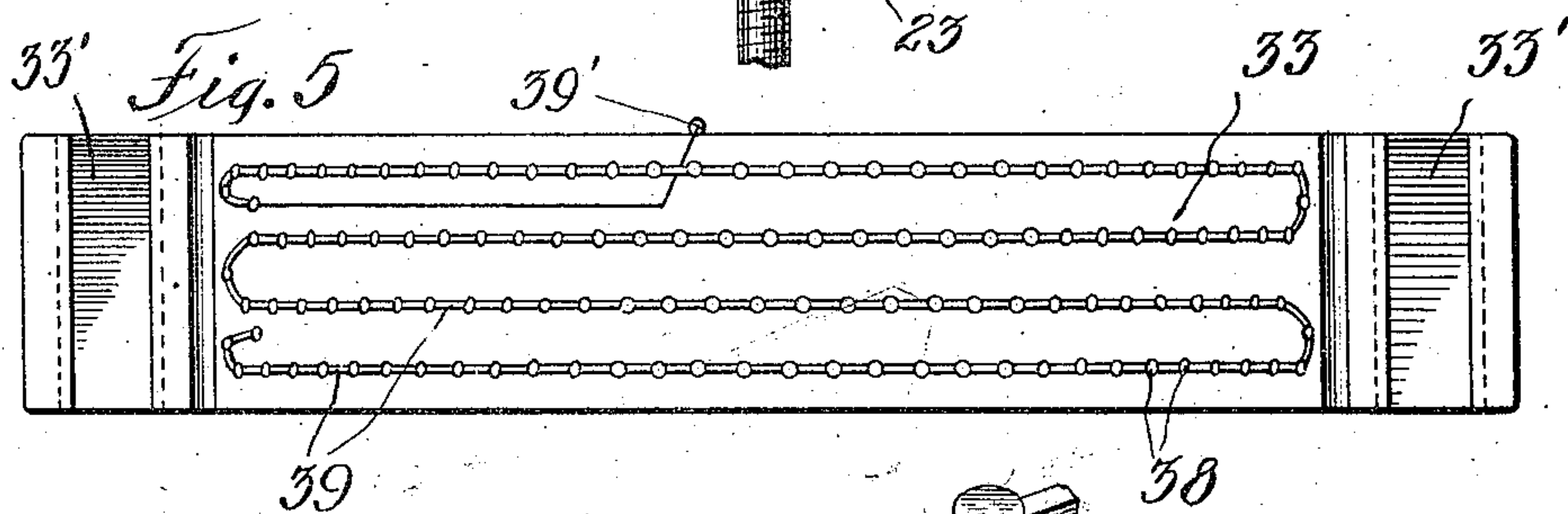
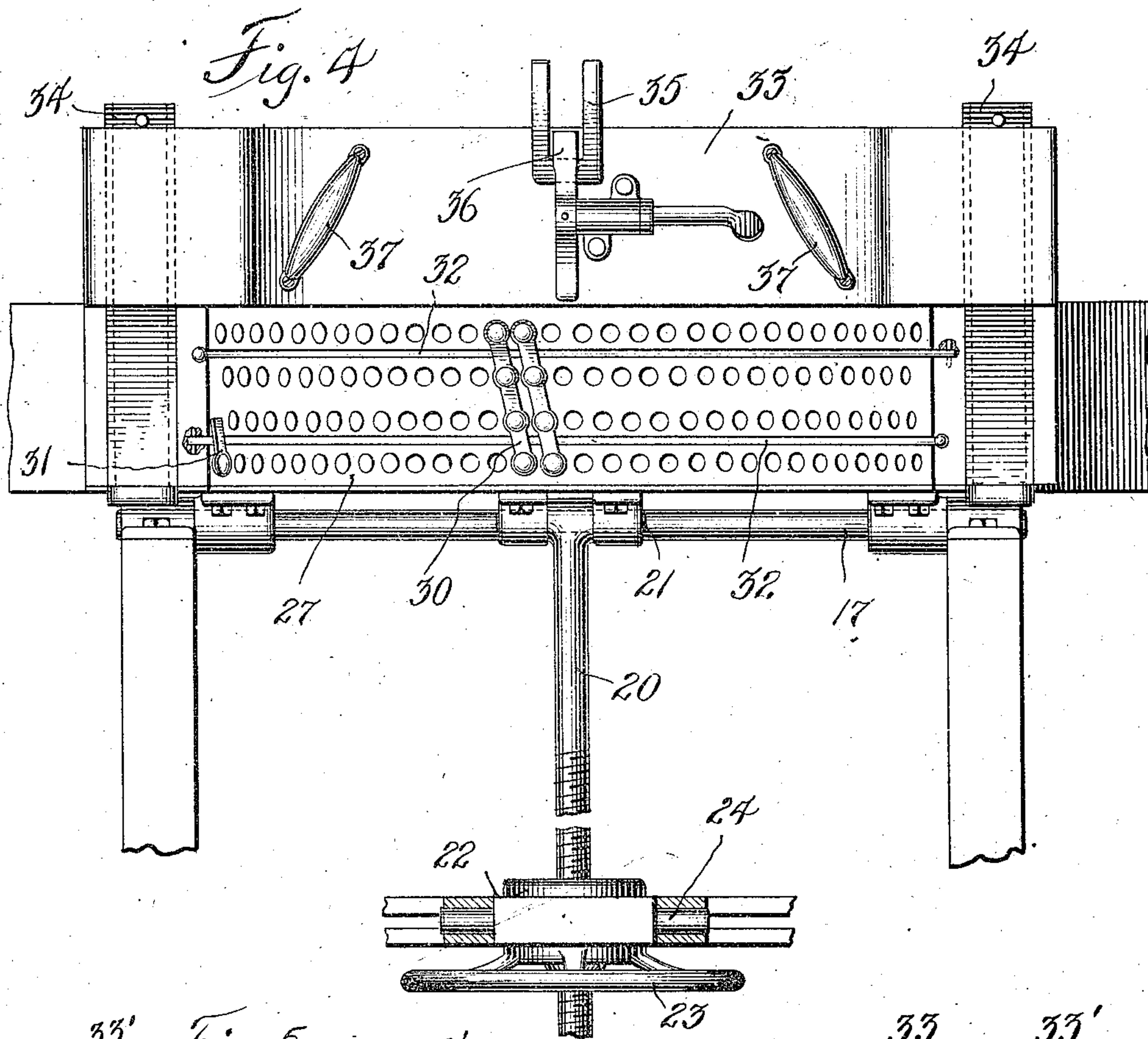
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Witnesses

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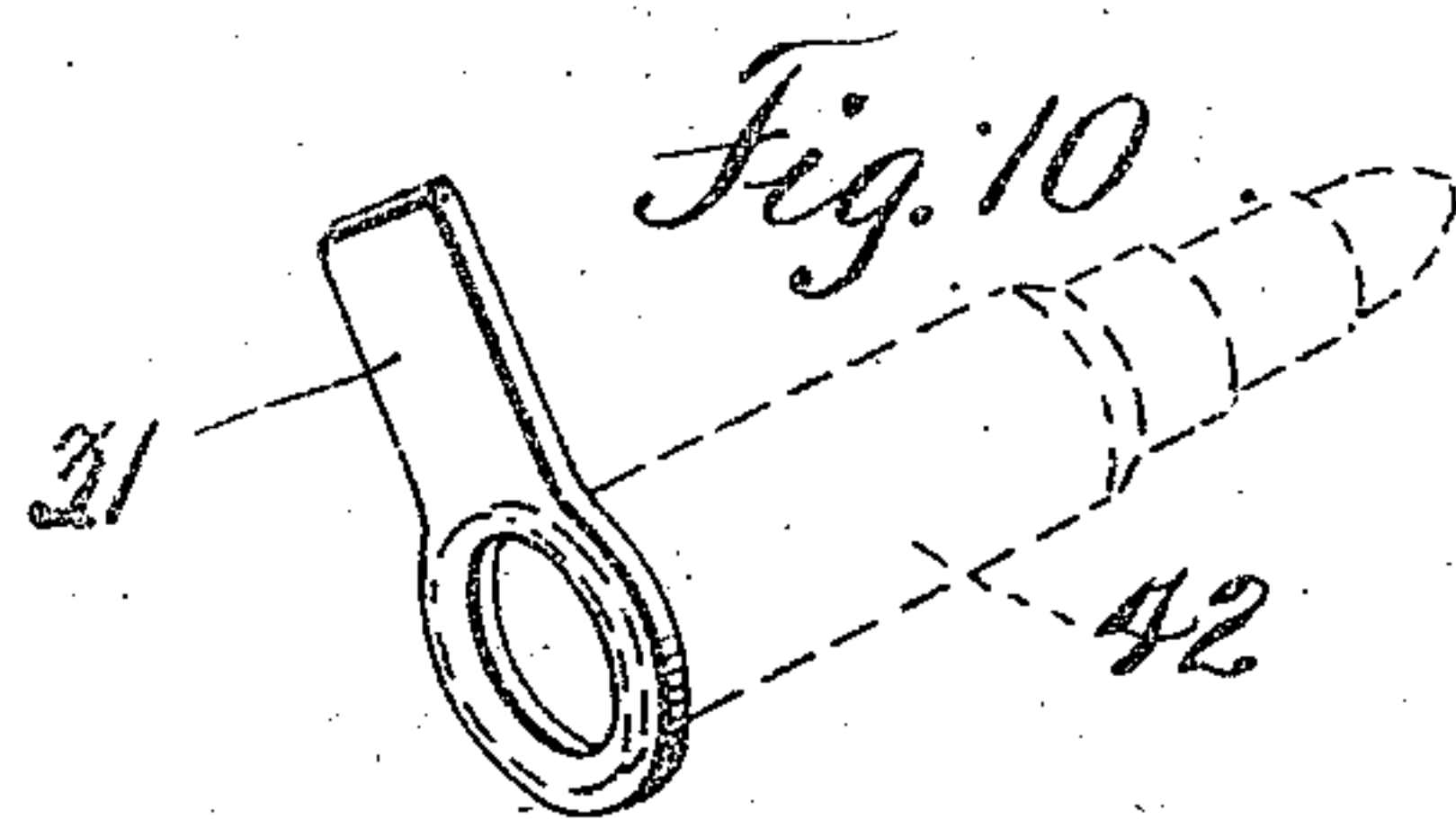
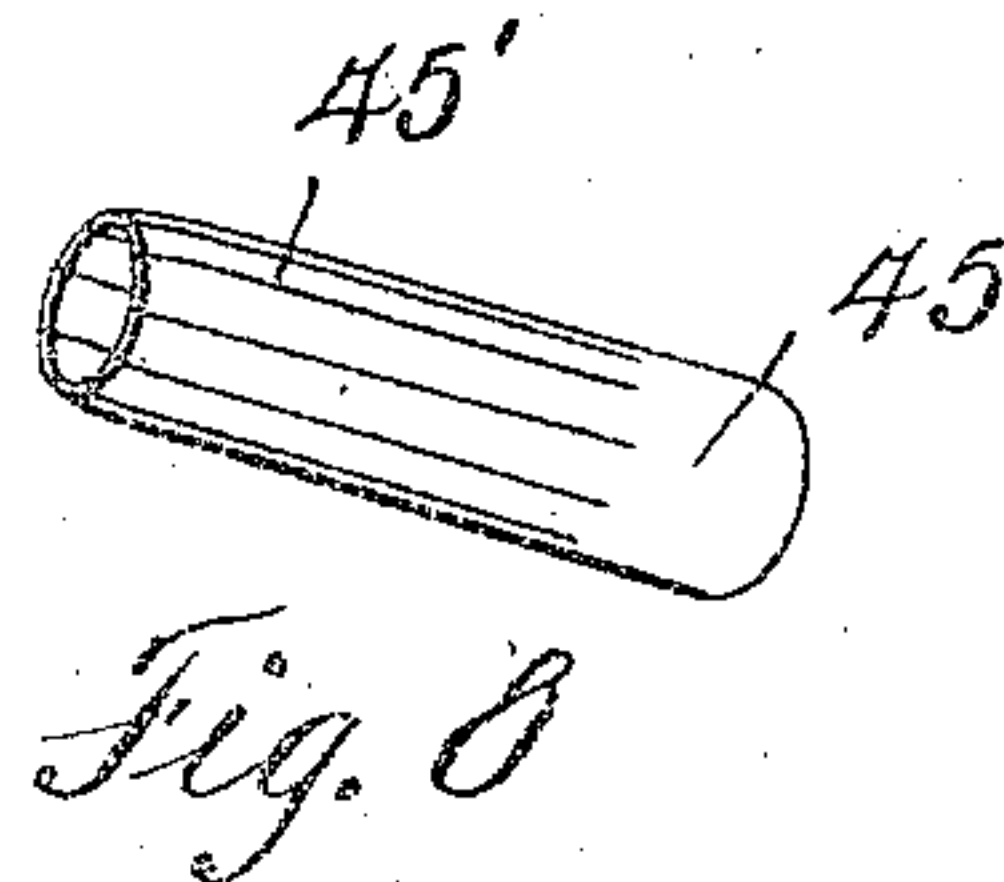
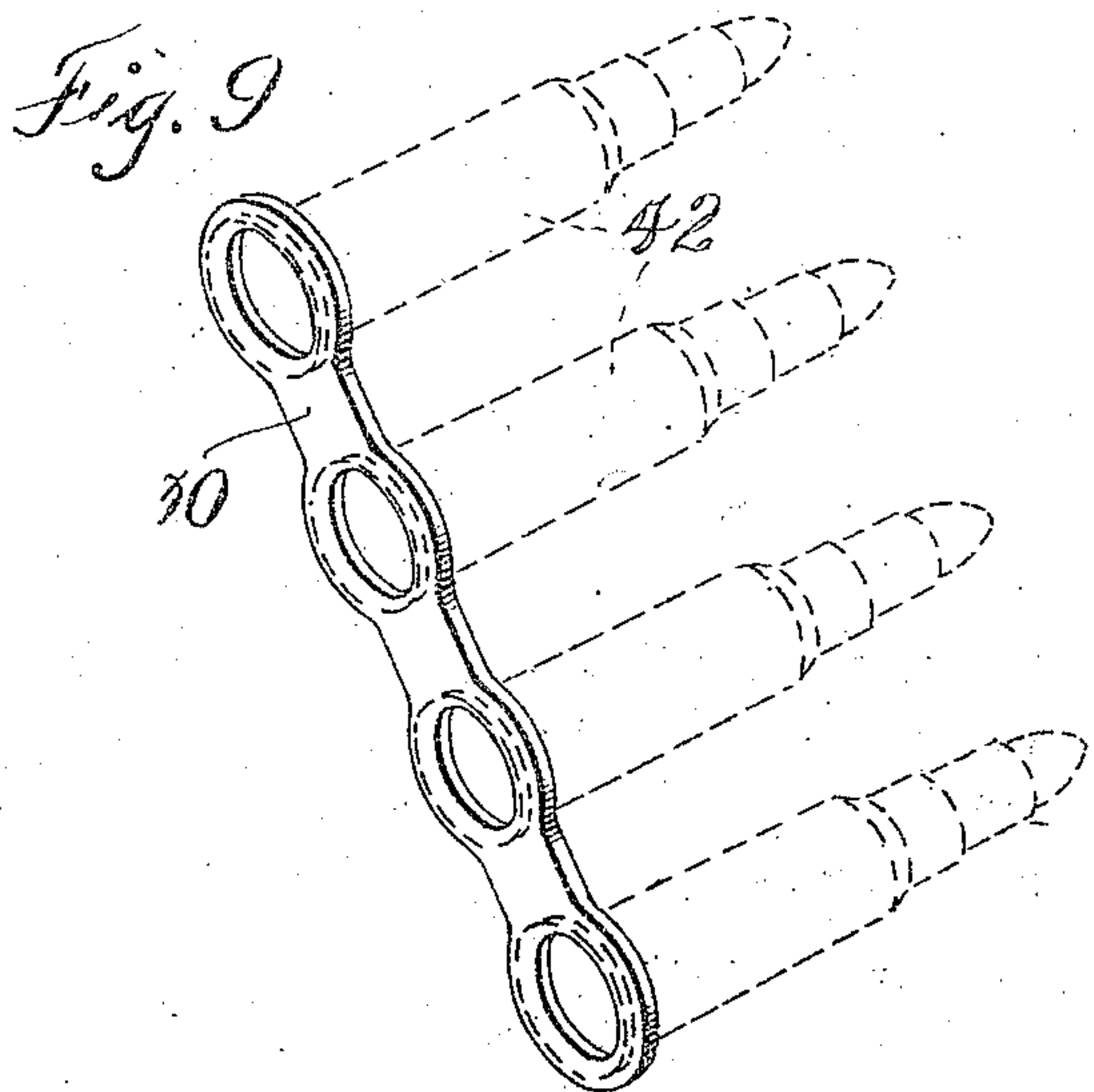
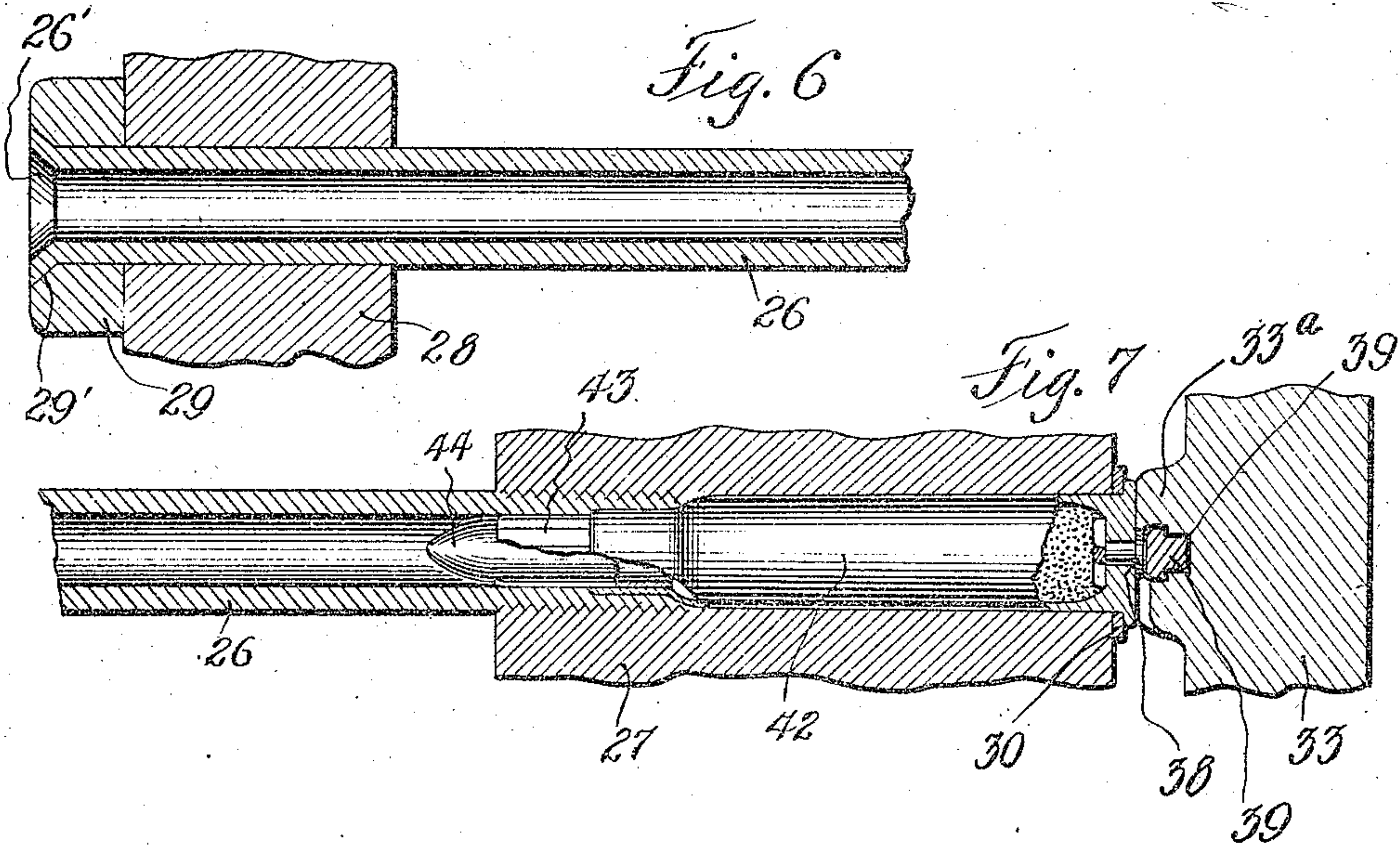
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5 SHEETS—SHEET 5.



Witnesses
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UNITED STATES PATENT OFFICE.

ALFRED F. SWAHN, OF BROOKLYN, NEW YORK

MACHINE-GUN

No. 928,344.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed March 11, 1909. Serial No. 482,759.

To all whom it may concern:

Be it known that I, ALFRED F. SWAHN, a subject of the King of Sweden, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Machine-Guns, of which the following is a specification.

This invention relates to rapid firing guns adapted especially for field work or for use in the defense of cities at the time of riots, or the like.

The invention consists in certain novel peculiar combinations of parts to be hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a preferred embodiment of the invention, certain parts being broken away; Fig. 2 is an enlarged longitudinal vertical section of the rear portion of the truck and the principal parts of the gun; Fig. 3 is a plan view of the gun casing and breech mechanism, a portion of the cover being broken away; Fig. 4 is a face view of the breech, the breech block being elevated; Fig. 5 is a rear face view of the breech block in diagram; Fig. 6 is a detail of the muzzle of one of the gun barrels; Fig. 7 is a detail of the breech mechanism and firing devices; Fig. 8 is a detail perspective of the projectile sheath; Fig. 9 is a perspective view indicating a cartridge clip; Fig. 10 is a view of the form of cartridge clip used at the end of the breech member, and Fig. 11 is a fragment of the wiring for the firing device.

Throughout the following detail description and on the several figures of the drawings similar parts are referred to by like reference characters.

Referring to the drawings by reference characters the invention is shown as applied to a truck or carriage 10 of any suitable construction adapting it for convenient transportation and manipulation. The frame 11 is shown as being supported upon front wheels 12 and a pair of rear wheels 13, the intermediate portion of the frame being dropped to form a platform 14 upon which an operator stands during firing operation. The device may be drawn by hand or by horses, and is provided preferably with a seat 15. The front portion of the frame and front axle are so related that the front wheels may turn fully around under the frame for ease of turning and guiding.

The gun casing 16 is supported upon a horizontal axis 17 above the rear axle 18 of the carriage, and is adjustable with respect to said axis by means of a rod 20 pivotally connected to the casing 16 at 21 and having threaded engagement with a nut 22 to which is connected an operating hand wheel 23, the said nut 22 being pivoted at 24 in the frame 25, whereby the rod 20 may oscillate to accommodate the pivotal movements of the casing on the axis 17. By the means just described the gun casing may be adjusted so as to train the guns in the manner described. The casing may be constructed of any suitable size, form, or materials.

Within the casing 16 and extending through the same from front to rear are a series of gun barrels 26. As shown said casing is segmental in plan view and the gun barrels contained therein are arranged in the form of a fan or radiating in a flaring shape in order that the scope of the gun may be very broad. As indicated in Figs. 2 and 4 the gun barrels are arranged in a plurality of rows or series, the breech or rear ends of the same are comparatively close together and it is my intention to employ in connection with the gun a peculiar arrangement of ammunition. Each gun barrel 26 is secured in any suitable manner as by screw threads into the breech 27 and its muzzle projects through the casing member 28 and is protected on the outside of the same by means of a washer 29 having a countersunk hole 29', the extreme end 26' being upset into said countersink. As indicated in Fig. 4 the breech openings are arranged in rows or groups of four each, each group being slightly inclined from the vertical. In each of these groups it is intended to insert a series of cartridges carried by a single clip indicated at 30. At each end of the face of the breech there may be left one or more single openings which may be filled by the use of a clip 31 bearing a single cartridge. It is the intention that the ammunition will be carried in cases from which the operator or operators may remove the same with rapidity and slip them into the gun. For the purpose of extracting the empty shells there are connected to the breech a pair of rods 32 curved to conform to the shape of the gun breech and pivoted at their respective ends to the same. The end of each rod opposite its pivot is provided with a handle,

and upon grasping said handles and pulling down the same the clips 30 with the shells therein will be quickly extracted from the gun. Both rods 32 engage the clips 30 while only one of them will engage the clips 31. It is to be understood, however, that from the peculiar form of the gun and its manner of loading and firing as many or as few of the cartridge groups may be employed as desired, and that they may be used at any particular portion of the series of gun barrels.

The breech block 33 is arc-shaped in form and is slidable at right angles to the plane of the gun casing 16. It is connected to the gun casing by means of dove-tailed extensions 33' coöperating with guides 34 carried by the casing. Mounted upon the outer face of the casing is a catch 35 and coöperating therewith is a hook 36 pivoted to the breech block. When the breech block is elevated the hook will engage with the catch and hold it in that position until released. The breech block has connected thereto a pair of handles 37, whereby the same may be elevated. As indicated in Fig. 5 the face of the breech block adjacent to the cartridges is provided with a series of contact points 38 connected to a wire 39 having a terminal 39'. Mounted at any suitable place is a battery 40 and a switch 41 connected to the poles thereof is adapted to complete the circuit from the battery through the wiring 39 and body of the structure in a conventional manner, whereby the points 38 are adapted to fire any or all cartridges adjacent thereto. The breech block as indicated in Fig. 7 is provided with as many lugs or projections 33^a as there are gun barrels 36, said lugs coöperating with the respective cartridges. The wire 39 may be insulated at 39^a.

Any suitable character of cartridges and projectile may be used in connection with this gun. I propose, however, to employ a cartridge comprising a shell 42 in which is fitted a projectile 43 comprising the bullet 44 and sheath 45. The bullet 44 may be of lead or soft metal, and the sheath 45 is of tubular form having a slitted end 45' embracing the bullet and adapted when the bullet strikes an obstacle to spread out to increase the effectiveness of the gun.

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

1. In a gun of the character set forth, the combination of a casing, a plurality of gun barrels extending therethrough and arranged in a flaring form, a breech block mounted to slide to and from the breech of the casing at right angles thereto, a catch supported upon and above the casing, a hook carried by the breech block adapted to engage the catch when the breech block is elevated, and firing means carried by the

breech block and the casing and adapted to be set into operation when the breech is closed.

2. In a gun of the character set forth, the combination of a casing, a series of sets of gun barrels inclosed therein, the gun barrels of said series being arranged in groups for the reception of sets of cartridge clips, a breech block movable at right angles to the casing to and from the breech mechanism, electric wiring carried by the breech block and comprising contact points for each gun barrel, and means to complete the circuit through said wiring when the breech block is in closed position.

3. In a gun of the character set forth, the combination of a casing comprising a breech member, a series of gun barrels screwed therinto, an outer member through which the gun barrels project, a series of washers embracing the ends of the barrels and lying snugly against the outer face of the outer member, the said washers being countersunk and the outer ends of the barrels being upset therinto, a breech block movable at right angles to the casing into and out of position, and means connected to the breech block for firing purposes.

4. In a gun of the character set forth, the combination of a casing comprising a breech member, a series of gun barrels screwed therinto, an outer member through which the gun barrels project, a series of washers embracing the ends of the barrels and lying snugly against the outer face of the outer member, the said washers being countersunk and the outer ends of the barrels being upset therinto, a breech block coöperating with the casing and comprising a projection for each gun barrel, an electric wiring connecting all of said projections whereby any or all of the gun elements may be fired simultaneously when the breech block is in position.

5. In combination with a gun comprising a plurality of rows of gun barrels, a casing inclosing said gun barrels, the casing comprising a breech member to which the barrels are connected, the gun barrels being arranged in groups, sets of cartridge clips, each clip adapted to carry cartridges in accordance with the groups of gun barrels mentioned and ejector mechanism connected to the said breech member and adapted to extract all of the cartridge clips simultaneously.

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

ALFRED F. SWAIN.

Witnesses:

CHAS. W. N. AKBERG,
BERTHA MELLGREN.