

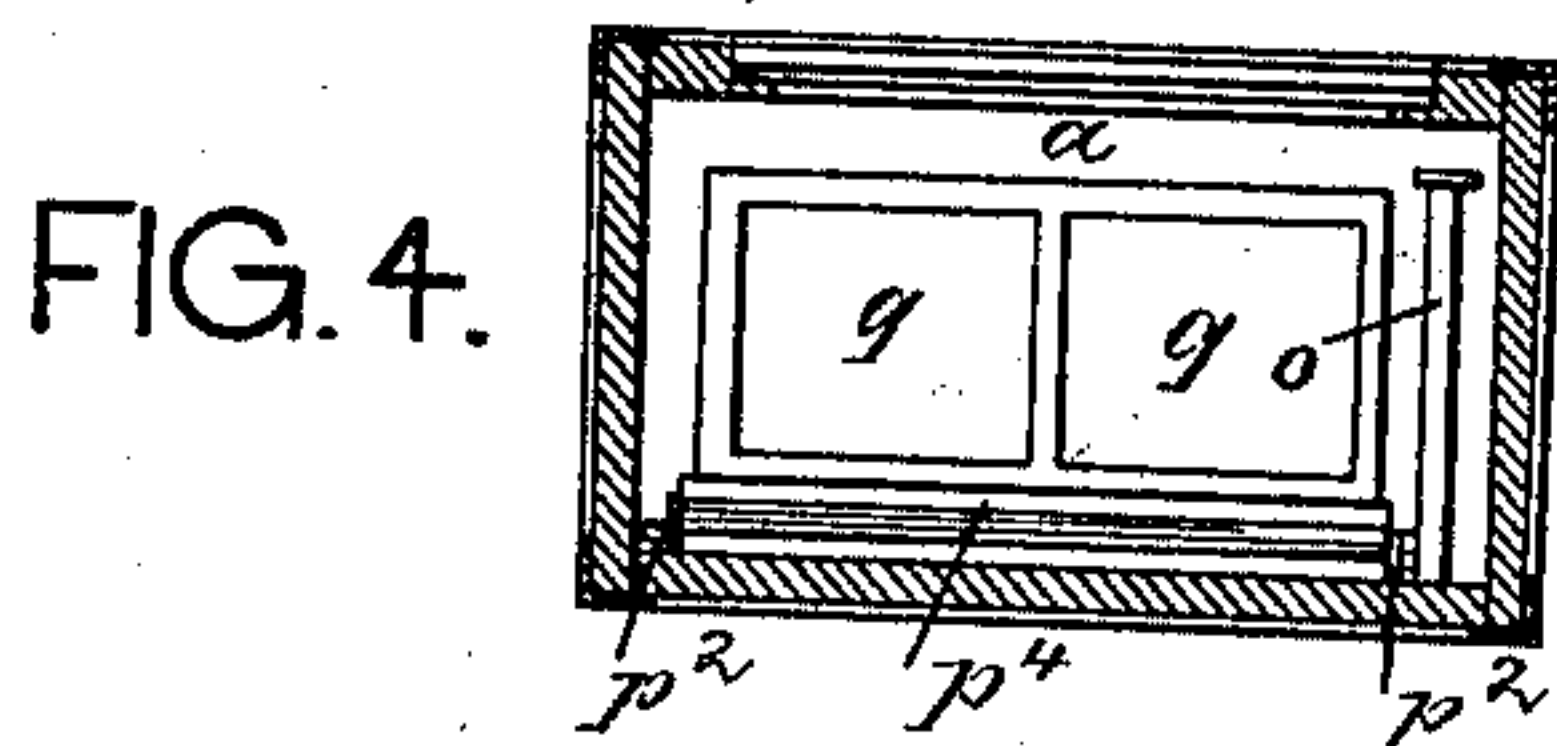
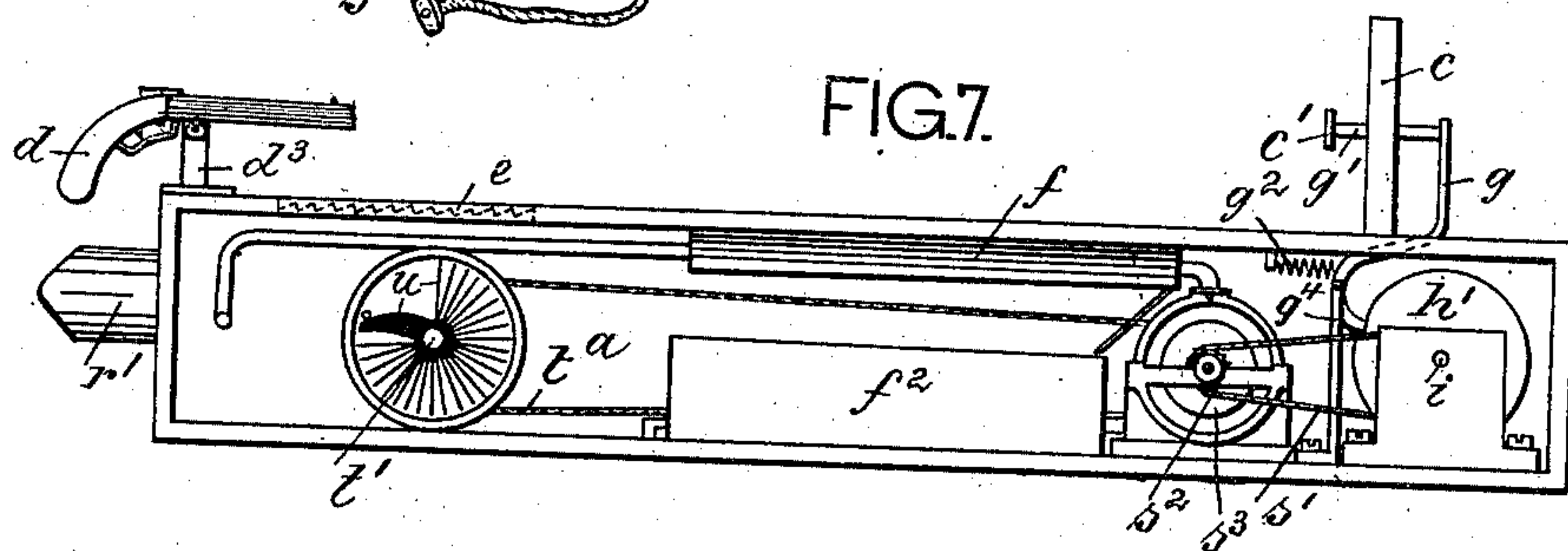
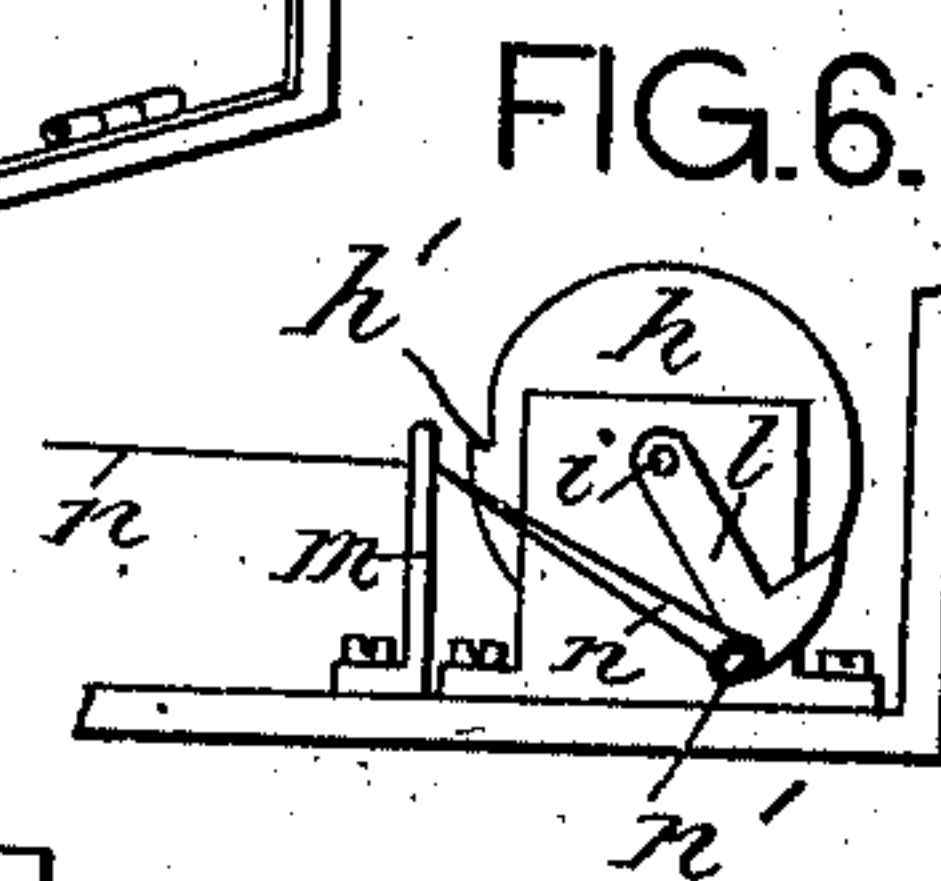
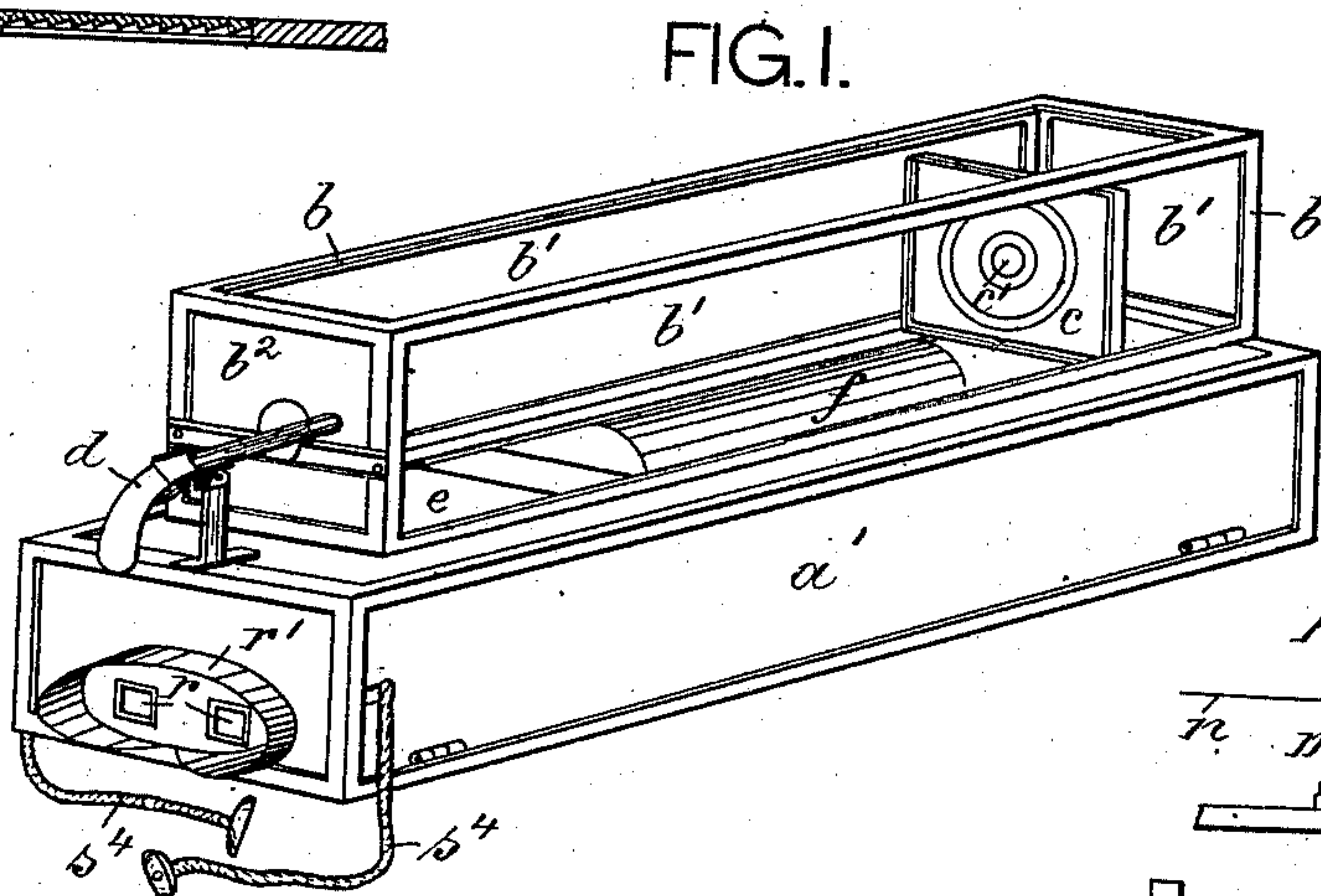
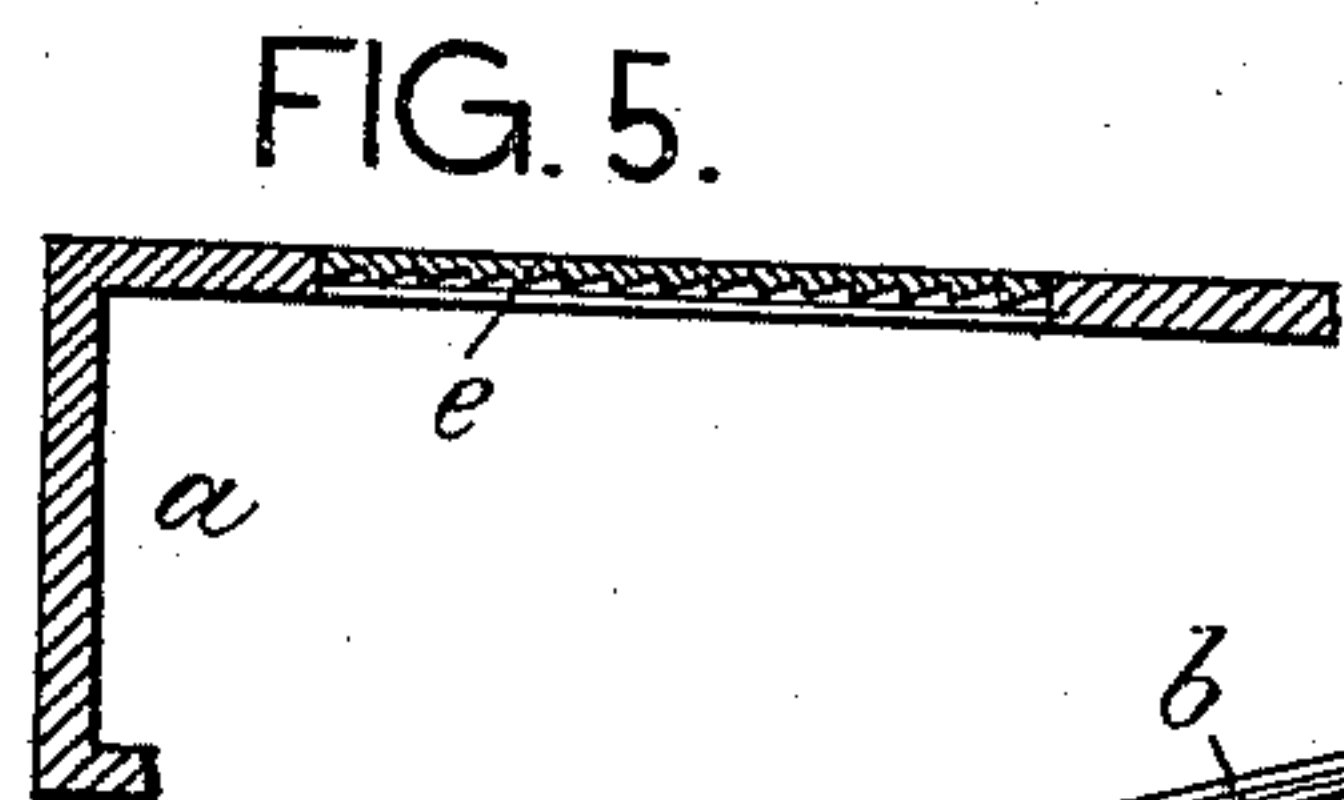
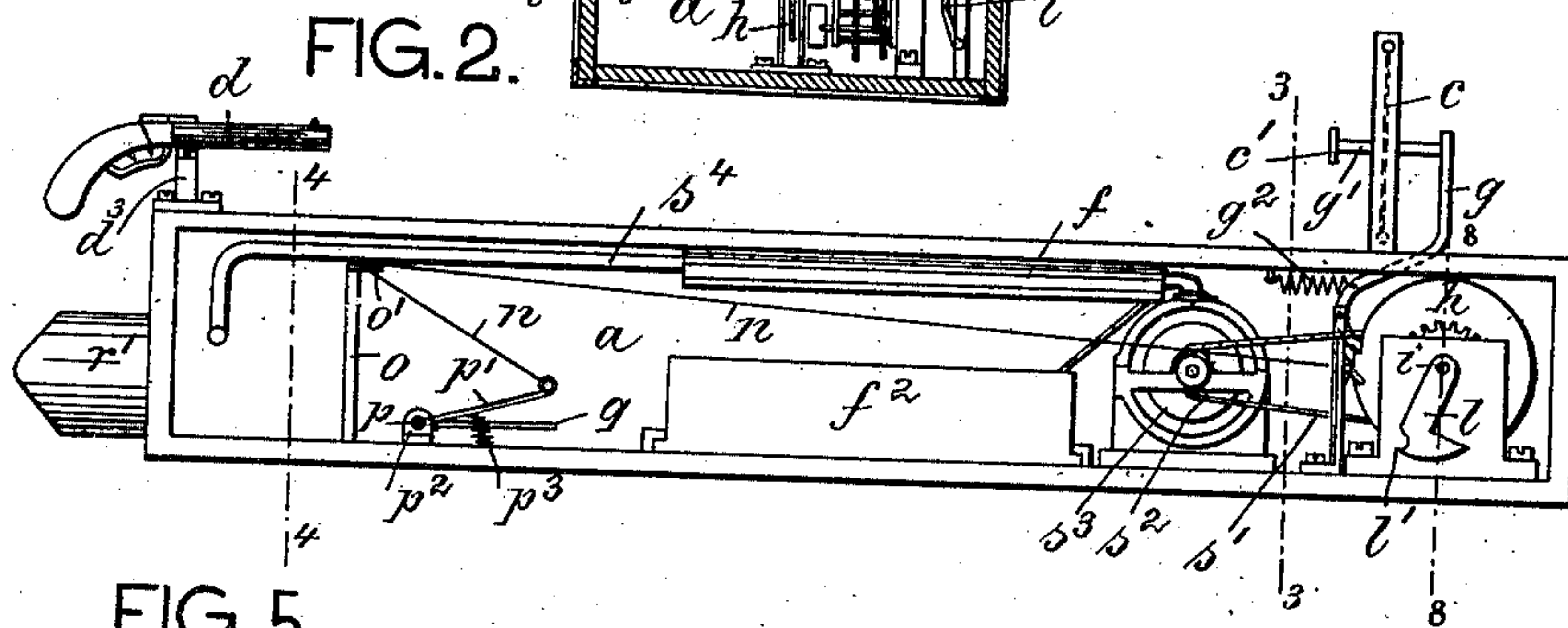
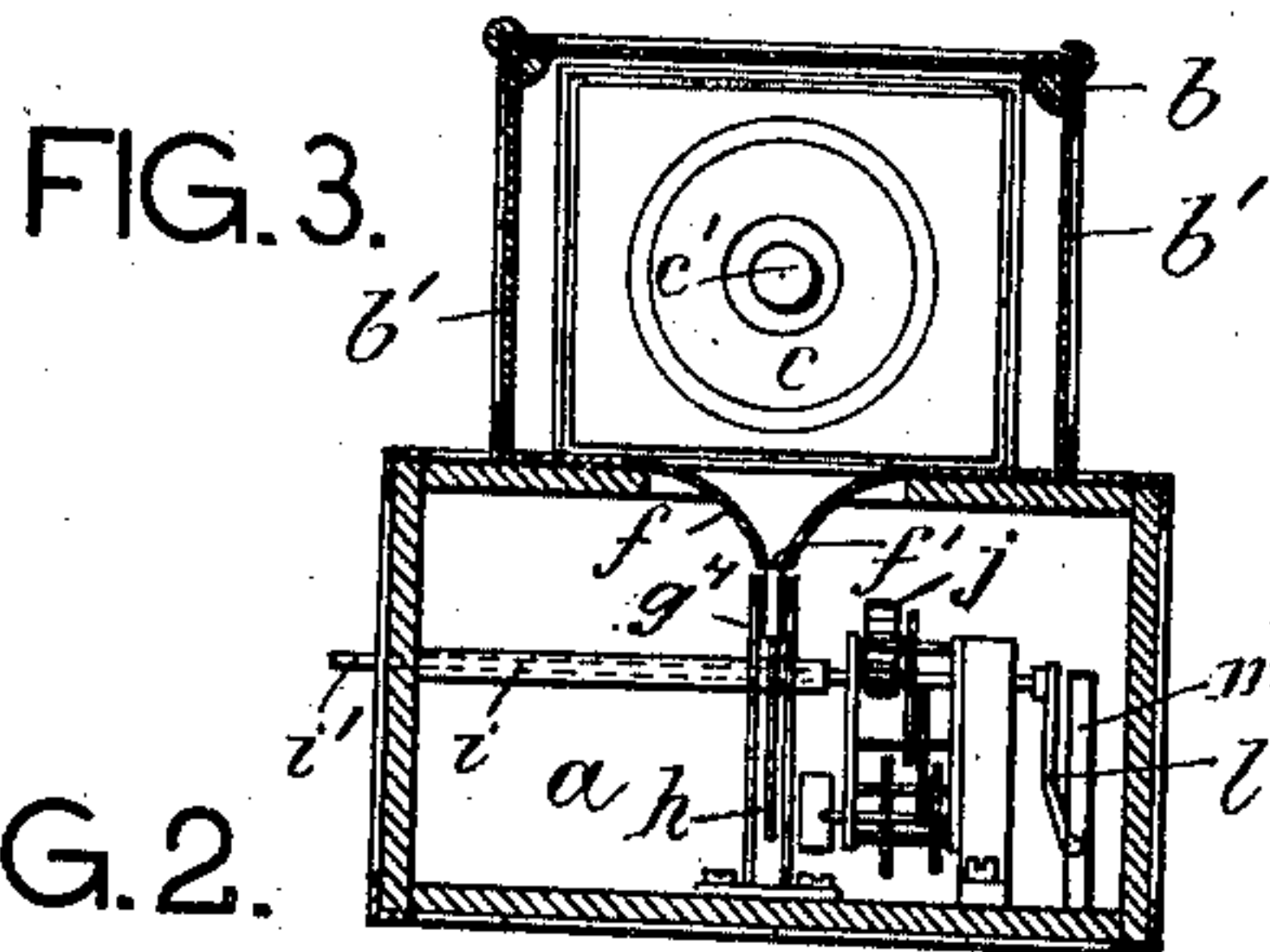
No. 719,141.

PATENTED JAN. 27, 1903.

C. C. REINHARDT.
TOY SHOOTING GALLERY.
APPLICATION FILED JUNE 10, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:
Arthur J. J. J.
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Inventor:
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2 SHEETS—SHEET 2.

FIG. 8.

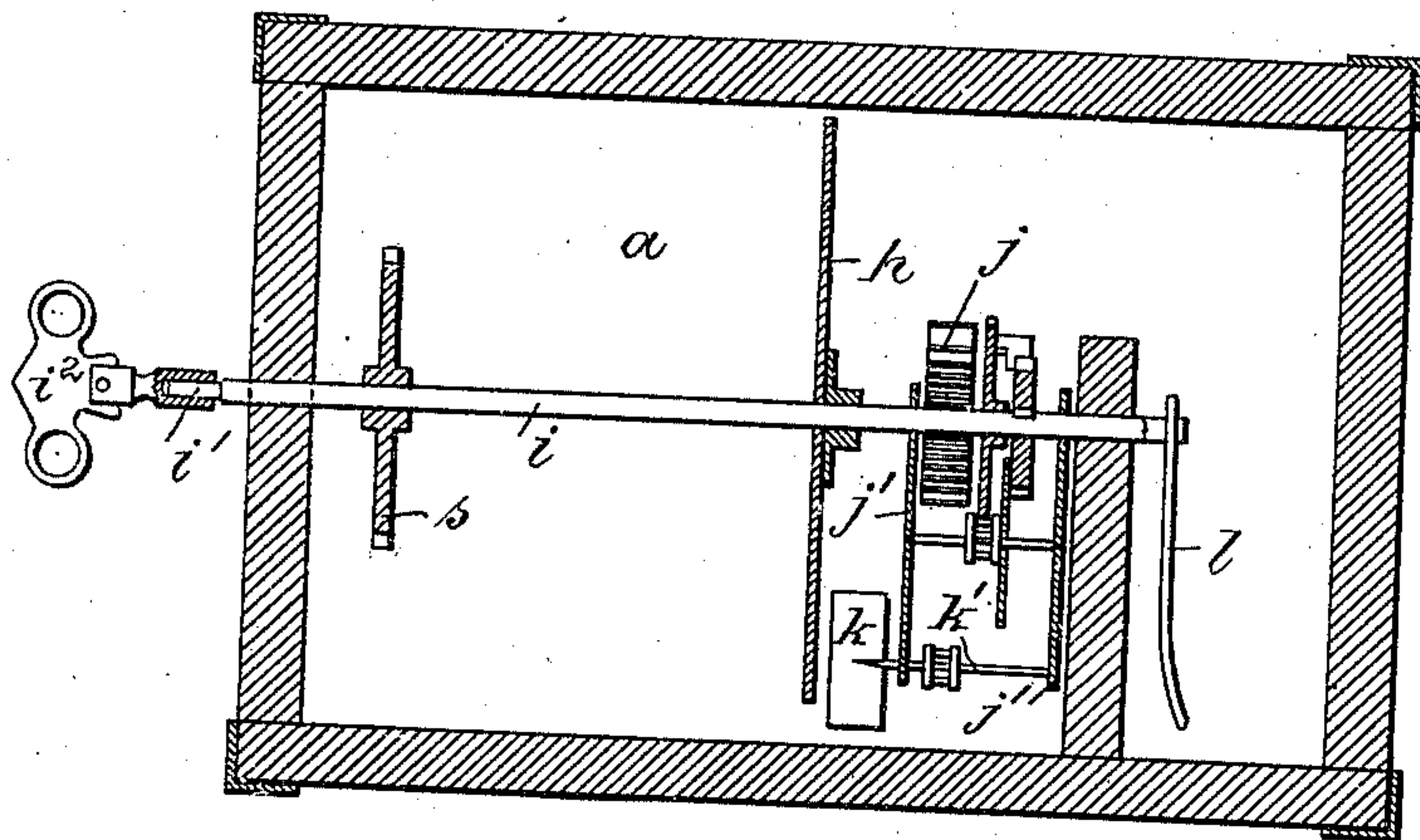


FIG. 10.

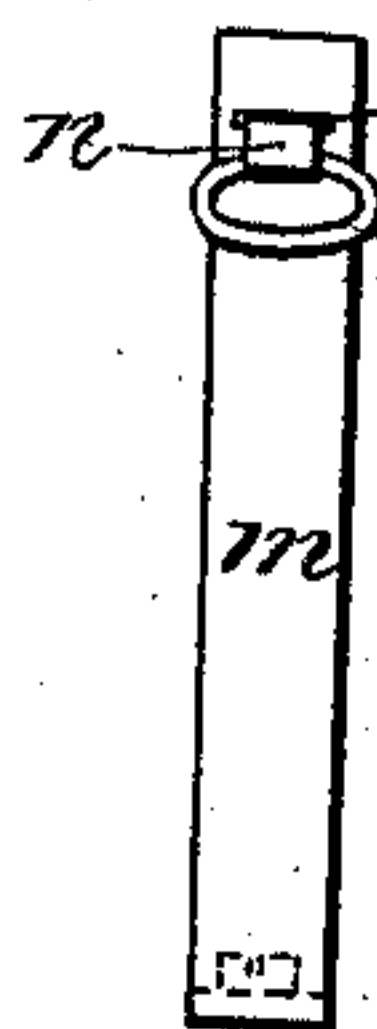


FIG. 11.

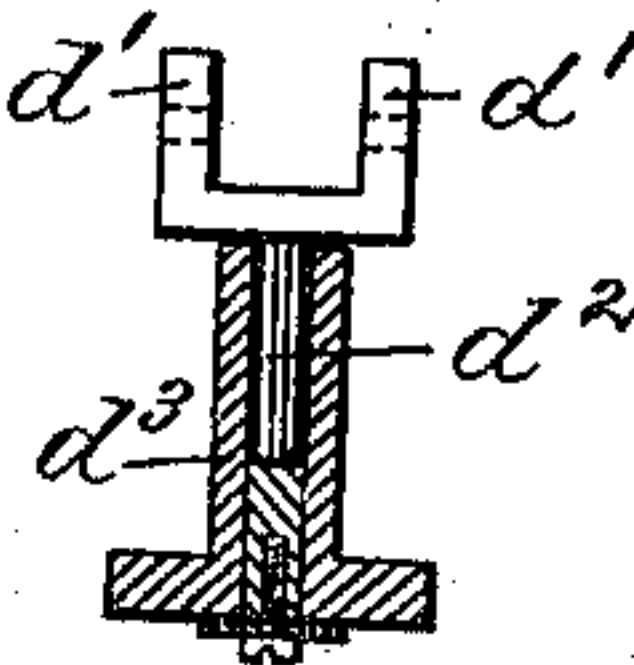


FIG. 12.

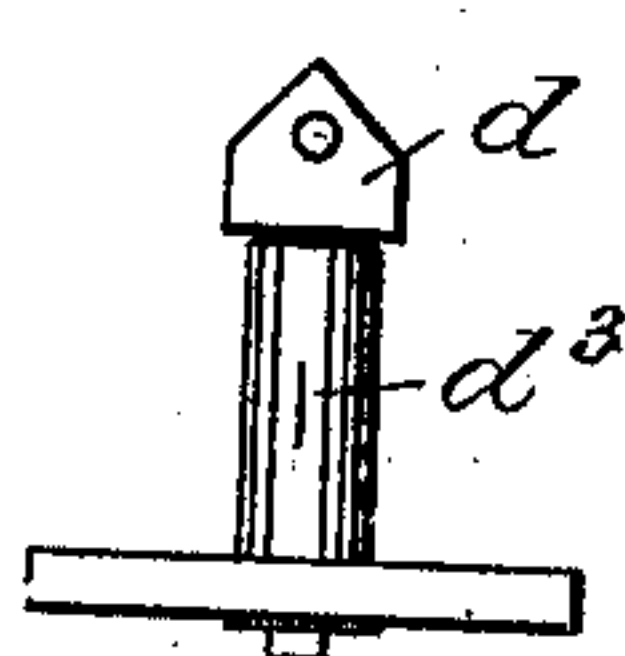


FIG. 9.

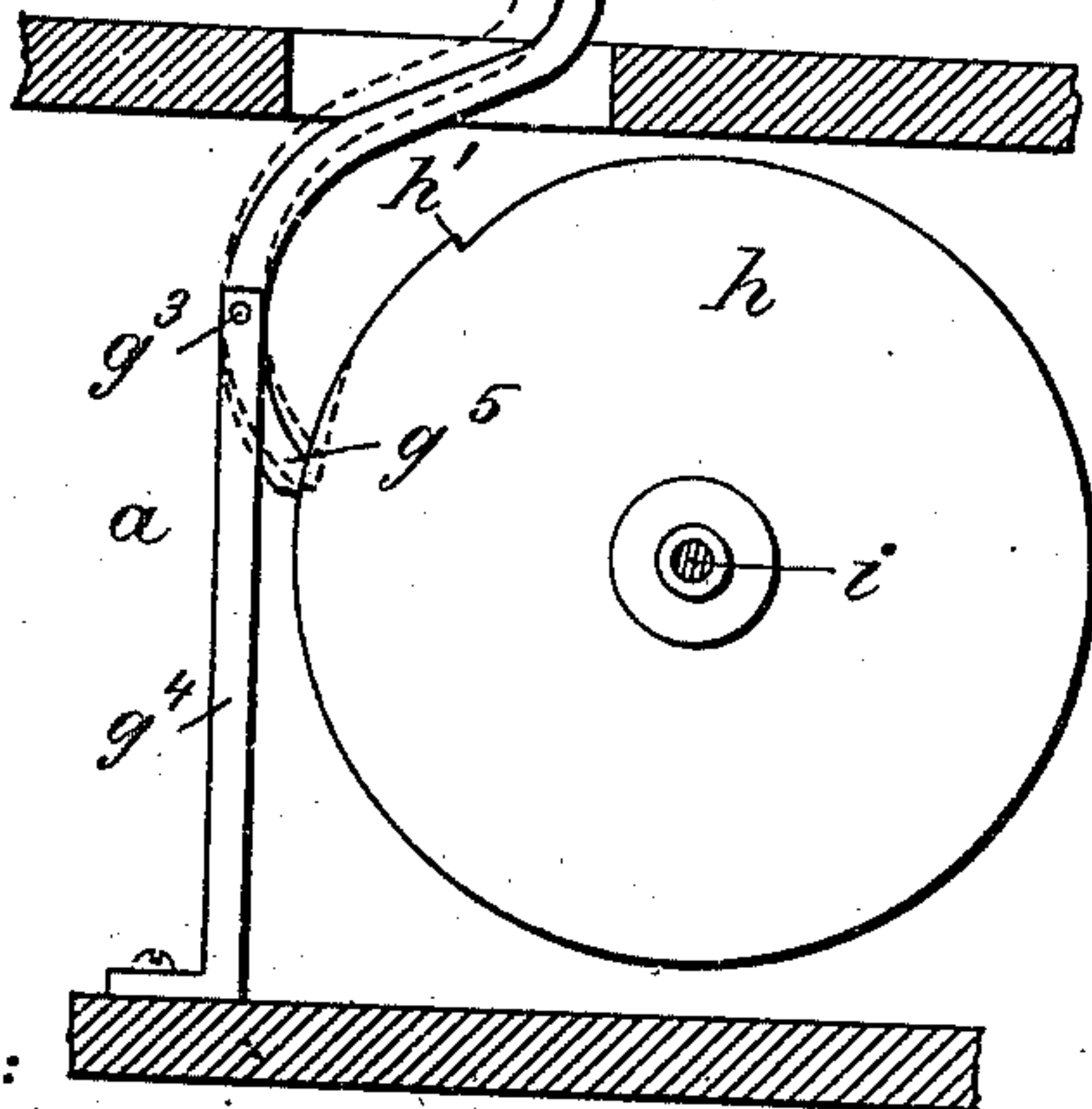
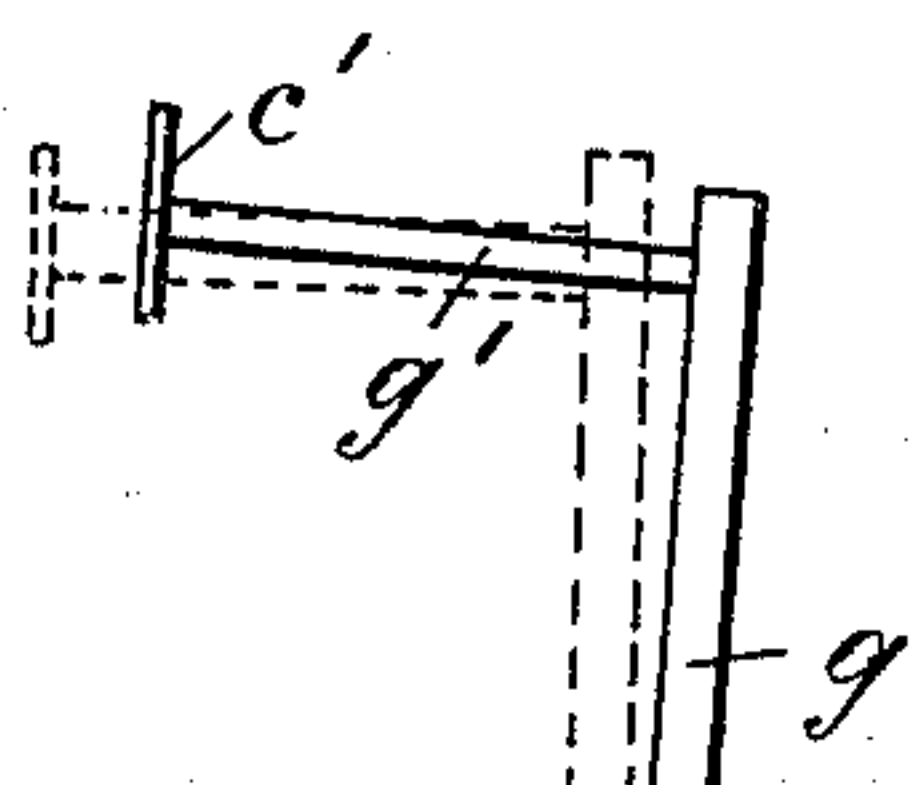
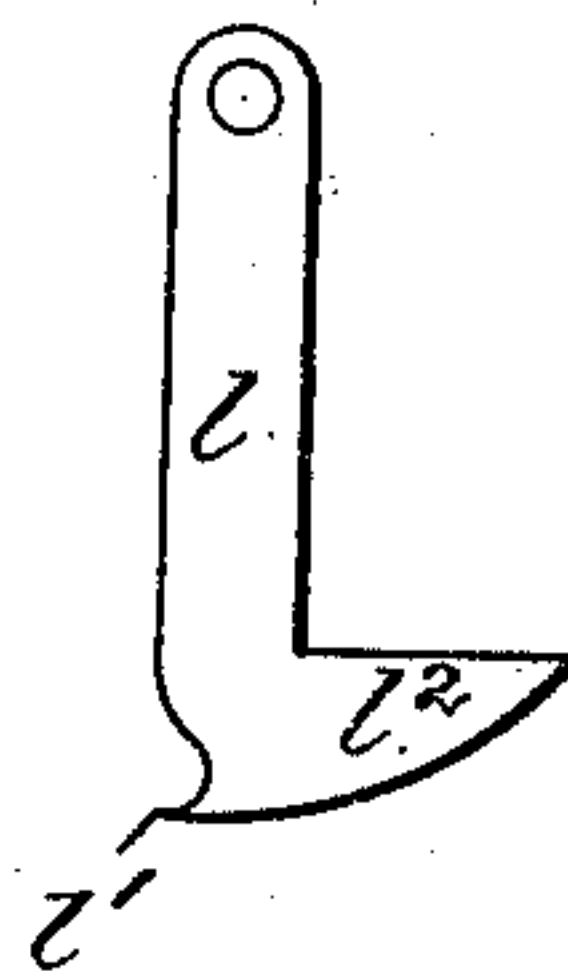
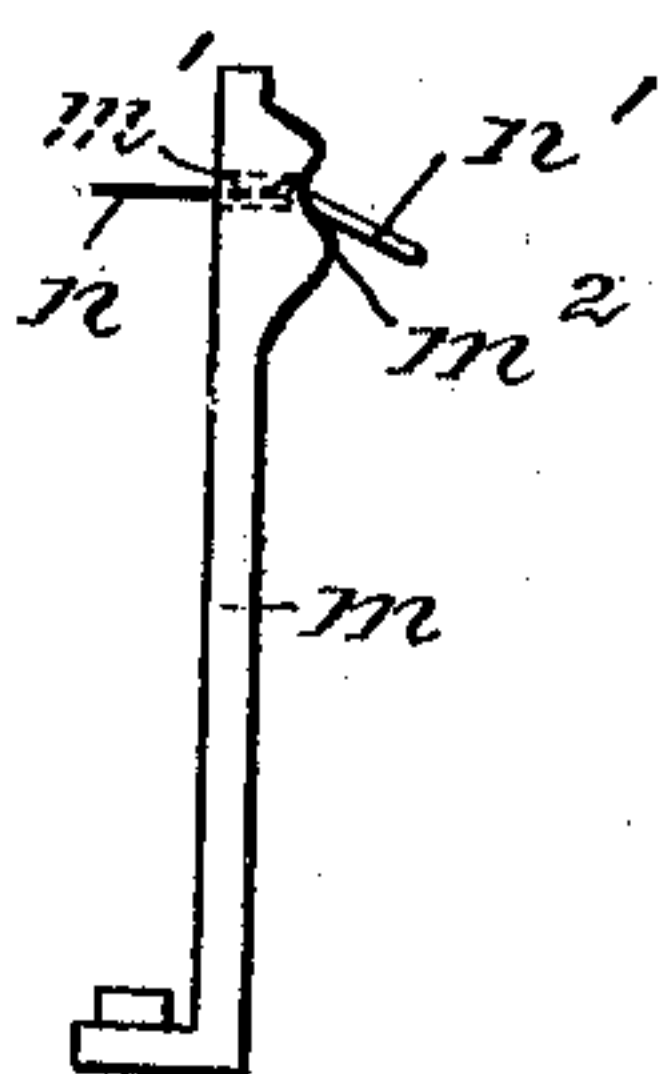


FIG. 10a FIG. 13.



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UNITED STATES PATENT OFFICE.

CHARLES C. REINHARDT, OF NEW YORK, N. Y.

TOY SHOOTING-GALLERY.

SPECIFICATION forming part of Letters Patent No. 719,141, dated January 27, 1903.

Application filed June 10, 1902. Serial No. 111,004. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. REINHARDT, a citizen of the United States, and a resident of New York city, county and State of New York, have invented certain new and useful Improvements in Toy Shooting-Galleries, of which the following is a specification.

This invention relates to a toy shooting-gallery, in which a stereoscope, mutoscope, phonograph, or similar device contained within the casing of the gallery is set in motion by the impact of the projectile against the target. The casing is provided with sight-openings or ear-tubes, and thus a pleasing exhibition may be witnessed by the skilful marksman.

In the accompanying drawings, Figure 1 is a perspective view of my improved toy shooting-gallery; Fig. 2, a side elevation thereof, showing the casing open; Fig. 3, a cross-section on line 3 3, Fig. 2; Fig. 4, a cross-section on line 4 4, Fig. 2; Fig. 5, a cross-section of the window for admitting light into the casing; Fig. 6, a side view of the string-releasing mechanism; Fig. 7, a side elevation of a modification of the apparatus; Fig. 8, an enlarged cross-section on line 8 8, Fig. 2; Fig. 9, a detail of the stop mechanism for arresting the shaft, and Figs. 10, 10^a, 11, 12, and 13 are details of various minor parts of the apparatus.

The letter *a* represents a casing which is closed at one side by a hinged lid *a'*. Upon the casing is supported a frame *b*, having windows *b'*, and inclosing near its rear end a target *c*, provided with a movable target-button or "bull's-eye" *c'*. Opposite the target the front window *b²* of frame *b* is perforated to admit the projectile ejected from a gun *d*. This gun is hung in a fork *d'*, Figs. 11 and 12, of a pin *d²*, embraced by a hollow post *d³*, which is mounted upon the forward end of a casing *a*, so that in this way the gun is connected to the casing by a universal joint.

Intermediate the gun and the target the top of the casing *a* is divided into a front and a rear section. The front section is covered by a prismatic window *e*, Fig. 5, to concentrate the rays of light upon the exhibitor, hereinafter described, which is mounted within the cas-

ing underneath the window. The rear section of the top is made in the form of a flat funnel *f*, which conveys the projectile through a slot *f'* into the interior of the casing, where it is received by a suitable box *f²*.

The button *c'* of the target is by a rod *g'*, passing through the target center, connected to the upper arm *g* of a lever influenced by a spring *g²*. The lever is pivoted at *g³* to a post *g⁴* within casing *a*, Fig. 9. The lower arm *g⁵* of the lever constitutes a detent, which is adapted to engage a tooth *h'* of a stop wheel or disk *h*. This disk is fast upon a transverse shaft *i*, mounted within casing *a*, and rotated when released by a coiled spring *j*, one end of which is connected to the shaft *i*, while the other end is connected to a clockwork-frame *j'*. This frame carries the spindle *k'* of a fly *k*, which is intergeared by suitable clockwork with the shaft *i*, so that the rotation of the latter is regulated in the usual manner.

One end of the shaft *i* projects outwardly through the side of casing *a* and is here squared, as at *i'*, to be engaged by a key *i²* and to thus constitute the winding-arbor of the clockwork. The other end of the shaft *i* is contained within the casing *a* and carries an arm *l* Fig. 13, which is provided with a hook *l'* and with a laterally-bent projection *l²* in alinement with said hook. In front of the arm *l* there is mounted within the casing a post *m*, Figs. 10, 10^a, which is slotted, as at *m'*, and provided with an inclined rest *m²* underneath said slot. Through the slot *m'* passes a string or tape *n*, which carries at its free end a ring *n'*, adapted to be supported upon the rest *m²* and arranged in the path of the rotating hook *l'*. The other end of the tape *n* passes through the eye *o'* of a post *o* and is thence attached to a lever *p'* of a rock-shaft or drum *p*, hung in bearings *p²* within casing *a*.

The lever *p'* is influenced by a spring *p³*, and the shaft *p* is provided with a clamp *p⁴*, Fig. 4, adapted to hold one or more pictures *q*, the whole constituting a stereoscope. The picture *q* is visible through a pair of lenses *r* within a hood *r'* on the front of casing *a*.

Upon the shaft *i* is also mounted a chain-

wheel s , which is engaged by an endless chain s' for transmitting motion by a chain-wheel s^2 to the cylinder s^3 of a phonograph contained within casing a . The ear-tubes s^4 of the phonograph pass through the casing a and thence outwardly, as shown in Fig. 1.

The operation is as follows: The clockwork being wound up is normally arrested by the engagement of the detent d^5 with the notched disk h . When the button c' is struck by a projectile from the gun d , the detent g^5 will be thrown out of engagement with the nose h' against the action of spring g^2 , so that the shaft i is liberated and will be rotated by the spring j . As the shaft i commences its rotation the hook l' will enter ring n' , supported upon inclined rest m^2 , so as to draw the tape n backward against the action of spring p^3 . The spring will in turn partially rotate shaft p with clamp p^4 , and thereby gradually raise the picture q into an upright position, so that it becomes visible through the lenses r . When the arm l has made about a three-quarter turn and has thus arrived at the position shown in Fig. 6, with its hook l' projecting downwardly, the ring n' will slip off the hook, and the string n , being thus liberated, will release arm p' . The picture-exhibitor being thus released is folded back by spring p^3 and the picture q is withdrawn from view.

The laterally-bent projection l^2 serves to cause a slight lateral deflection of the ring n' as the latter is taken along by the hook l' , and thereby prevents the string from being wound upon the end of arm l . In this way the ring will readily slip off the hook when the latter points downward.

Simultaneously with the oscillation of the stereoscope by spring n the cylinder s^3 will be rotated by chain s' , and in this way the phonograph will also be sounded.

When the disk h has made one complete turn, the pawl g^5 will reengage nose h' by spring g^2 , so as to arrest shaft i and reset the button c' for the next discharge of the gun.

In Fig. 7 the shaft i drives by chain t the drum t' of a mutoscope containing a number of pictures u , which are thus successively exposed to view through the lenses r .

It will be seen that by my invention the projectile in striking the target-button actuates either an ocular or auricular exhibitor contained within the casing a . For the purpose of this invention the stereoscope, mutoscope, and phonograph are equivalents, which

may be either jointly or separately operated from shaft i .

What I claim is—

1. A toy shooting-gallery composed of a casing, an inclosed movable exhibitor, a movable target-button, a spring-actuated shaft, a detent mechanism intermediate the shaft and button, and means for connecting said shaft to the exhibitor, substantially as specified.
2. A toy shooting-gallery composed of a casing, a movable target-button, a lever connected thereto, a spring-influenced shaft, a notched disk on said shaft engaged by the lever, and a movable exhibitor within the casing operatively connected to the shaft, substantially as specified.
3. A toy shooting-gallery composed of a casing having a sight-opening, a movable exhibitor within the casing, a movable target-button, a lever connected thereto, a spring-influenced shaft, a notched disk on said shaft engaged by the lever, and means for operatively connecting said shaft with the exhibitor, substantially as specified.
4. A toy shooting-gallery composed of a casing having a sight-opening, a gun, a movable target-button, a lever connected to the target-button, a spring-influenced shaft adapted to be locked by said lever, a movable picture-exhibitor within the casing, and means for operatively connecting the shaft to said exhibitor, substantially as specified.
5. A toy shooting-gallery composed of a casing having a front sight-opening, a top window, and a funnel for receiving a projectile, combined with a gun, a movable target-button, a lever connected thereto, a spring-influenced shaft adapted to be locked by the lever, a movable picture-exhibitor within the casing, and means for operatively connecting the shaft to said exhibitor, substantially as specified.
6. A toy shooting-gallery composed of a casing, an inclosed exhibitor, a spring-influenced shaft having an outwardly-projecting end to constitute a winding-arbor, means for operatively connecting said shaft to the exhibitor, a gun, a movable target-button, and a detent mechanism intermediate said button and shaft, substantially as specified.

Signed by me at New York city, New York, this 9th day of June, 1902.

CHARLES C. REINHARDT.

Witnesses:

F. V. BRIESEN,
WILLIAM SCHULZ.