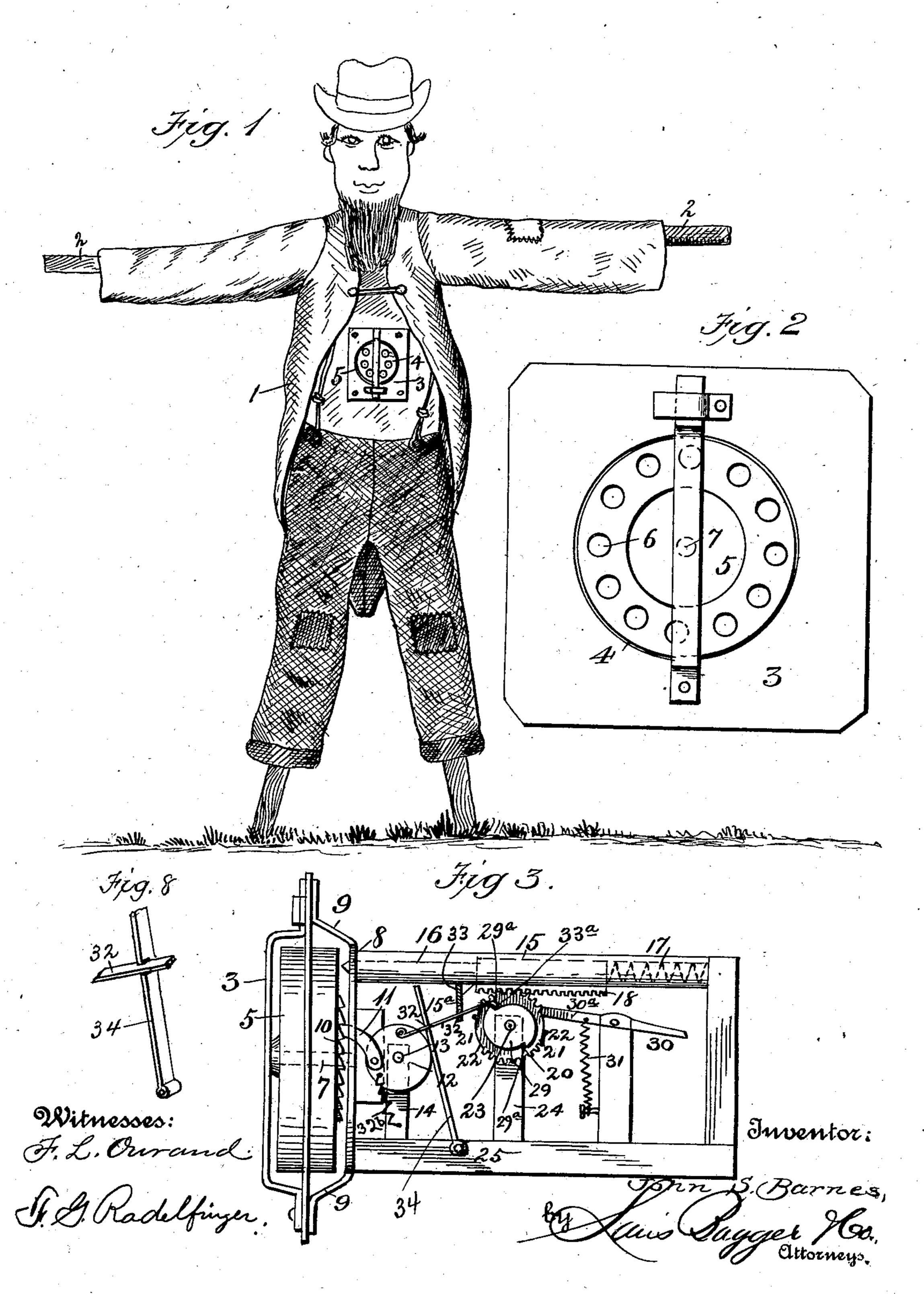
## J. S. BARNES. COYOTE ALARM.

APPLICATION FILED JULY 28, 1902.

NO MODEL,

2 SHEETS-SHEET 1.

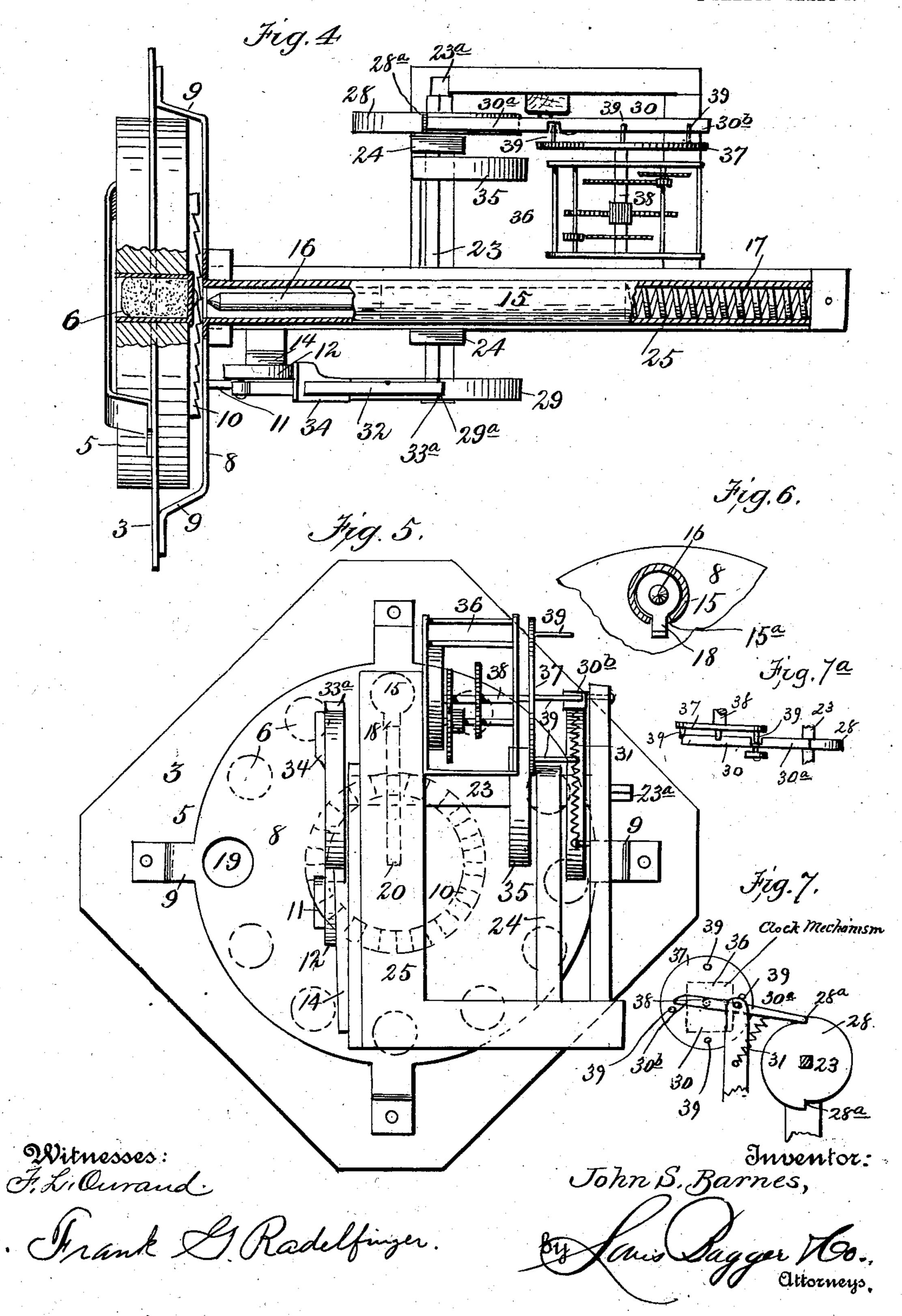


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## United States Patent Office.

JOHN S. BARNES, OF PAYETTE, IDAHO.

## COYOTE-ALARM.

SPECIFICATION forming part of Letters Patent No. 726,131, dated April 21, 1903.

Application filed July 28, 1902. Serial No. 117,378. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. BARNES, a citizen of the United States, residing at Payette, in the county of Canyon and State of Idaho, 5 have invented new and useful Improvements in Coyote-Alarms, of which the following is a specification.

My invention relates to coyote-alarms or scarecrows; and the object of the same is to to construct a device of this character which will be automatically operated to explode a cartridge at previously-determined intervals to scare coyotes away from sheep-pens.

The simple and novel construction em-15 ployed by me in carrying out my invention is fully described in this specification and claimed, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a perspective of a figure bear-20 ing my automatic device. Fig. 2 is a front elevation of the operating mechanism. Fig. 3 is a side elevation of the same. Fig. 4 is a plan view, partly in section. Fig. 5 is a rear view. Fig. 6 is a detail cross-section of the 25 slotted tube. Fig. 7 is a detail view of the operating mechanism. Fig. 7<sup>a</sup>, Sheet 2, is a detail of the trigger-lever. Fig. 8, Sheet 1, is a detail of the brake mechanism.

Like numerals of reference designate like 30 parts in the different views of the drawings.

The numeral 1 designates the figure of a man, which figure is set in an upright position, with stumps 2 of arms extending horizontally. My automatic detonating device is 35 mounted in the breast of the figure 1. A metal breast-plate 3 is attached to the figure 1 and has a circular aperture 4 therein, within which a cylinder 5 is revolubly mounted. The cylinder 5 is analogous to the cylinder of a re-40 volver of large size and has a number of chambers 6 therein arranged in a circle and constructed to hold blank cartridges. An axle 7 passes through a head-plate 8, supported on feet 9, and secures the cylinder 5. A 45 circular series of beveled teeth 10 are formed on the inner end of the cylinder 5 and coöperate with a pawl 11, carried by a wheel 12,

A slotted tube 15 is mounted perpendicular to the head 8 and contains a plunger 16, actuated by a spring 17 and bearing a rack 18,

arm 14.

keyed on a shaft 13, journaled in a bracket-

which extends through the slot 15° in the tube 15. This plunger 16 is designed to serve to explode the blank cartridges carried by the 55 cylinder 5. An aperture 19 is formed in the head 8, through which cartridges can be in-

serted into the cylinder 5.

end 23<sup>a</sup> of the shaft 23.

Located adjacent to the rack 18 is a mutilated gear 20, which bears two sets of teeth 60 21, separated by smooth arcs 22 about a quadrant in length, which teeth are in position to mesh with the rack 18 as the gear 20 is revolved. The gear 20 is carried by a shaft 23, journaled in bracket-arms 24, supported by 65 a post 25. Two ratchet-wheels 28 and 29 are also keyed on the shaft 23 and each bears two teeth 28<sup>a</sup> and 29<sup>a</sup>, respectively. The teeth 28° are engaged by one arm 30° of the lever 30, normally held in engagement therewith by 70 a spring 31, while the teeth 29° are designed to engage the hooked end 33° of a connectingrod 32, which is pivoted to the pawl-bearing wheel 12. The upper end of the rod is mounted in guides 33, which serve to hold it in po- 75 sition. A brake 31, which engages the wheel 12, is operated by the rod 32.

A spiral spring 35 surrounds the shaft 23 and is arranged to operate said shaft to operate the plunger 16 to explode the cartridges 80 in the cylinder 5. The spring 35 is wound by means of a key applied to the squared

The lever 30 normally holds the spring 35 from running down. To intermittently op- 85 erate the lever 30 to release the spring 35 at predetermined intervals to operate the plunger 16, a mechanism is provided which comprises a clock mechanism 36, located adjacent to the long arm 30<sup>b</sup> of the lever 30 and bear- 90 ing a circular disk 37, which is keyed on the hour-hand shaft 38 and bears four pins 39, located at intervals of a quadrant thereon. By means of this arrangement the lever-arm 30° is engaged by the pins 39 every quarter 95° of an hour to operate the lever 30 to release the shaft 23 to operate the plunger 16 and the cylinder 5.

When in use the figure 1 is set up near a sheep pen or corral, and the clock mechanism ico 36 and the spring 35 are wound up about dusk in the evening by means of a key. The clock will run, thereby driving the disk 37 and bringing one of the pins 39 into contact

with the lever-arm 30<sup>b</sup> to disengage the lever 30 to release the shaft 23, when the spring 35 will rotate the shaft and bring one set of the teeth 21 into engagement with the rack 18, 5 thereby raising the plunger 16. As soon as the gear 20 has performed a quarter of a revolution the rack 18 will be released to permit the plunger to descend and explode one of the cartridges in the cylinder 5.

Simultaneously with the rotation of the gear 20 the ratchet 29 will also be rotated to engage the connecting-rod 32 to operate the wheel 12 to turn the cylinder 5 a distance equal to the interval between the barrels in 15 the cylinder, and thereby bring a cartridge beneath the plunger 16 for it to be operated on. The spring 32<sup>b</sup> will restore the wheel 12 to its initial position, so that it is ready to bring forward the next cartridge. This op-20 eration will be repeated every quarter of an hour throughout the night. In the morning the device is stopped.

I do not wish to be limited as to details of construction, as these may be modified in 25 many particulars without departing from the

spirit of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the class described, the combination, of a cylinder mounted to revolve and containing chambers for cartridges, a slotted tube, a spring-actuated plunger mounted in said tube and bearing a rack, a 35 gear bearing alternate toothed and smooth sections, and means for operating said gear to actuate said plunger to explode said cartridges, substantially as described.

2. In a device of the class described, the .40 combination of a cylinder constructed to contain cartridges, a tube containing a springactuated plunger bearing a rack, a gear bearing alternate toothed and smooth sections, a shaft supporting said gear, a spring mount-45 ed on said shaft, a ratchet mounted on said shaft, a lever engaging said ratchet, and means for intermittently operating said lever to release said ratchet to operate said plunger, substantially as described.

3. In a device of the class described, the combination of a cartridge-cylinder bearing a

circular rack, a wheel bearing a pawl, a springdriven shaft bearing a ratchet, a connectingrod pivoted to said wheel and located to be engaged by said ratchet, and means for driving 55 said ratchet, substantially as described.

4. In an alarm mechanism, the combination of a chambered cylinder for holding cartridges, a clock mechanism, a wheel bearing a series of pins and driven by said clock mechanism, 60 a spring-actuated plunger bearing a rack, a mutilated gear meshing with said rack, a ratchet mounted to travel in unison with said gear, a lever engaging said ratchet and located to be engaged by the said pins on said 65 wheel to be disengaged from said ratchet,

substantially as described.

5. In an alarm mechanism, the combination of a chambered cylinder carrying a ratchet, a wheel bearing a spring-actuated pawl mesh-70 ing with said ratchet, a brake-lever, a connecting-rod connected to said wheel and engaging said brake-lever to operate it, and means for intermittently actuating said connecting-rod to rotate said cylinder, substan- 75 tially as described.

6. In an alarm mechanism, the combination of a cylinder carrying a ratchet, a wheel bearing a pawl, a connecting-rod pivoted to said wheel and having a hooked head, guides for 80 said connecting-rod, a ratchet engaged by the hooked end of said connecting-rod, and means for intermittently actuating said ratchet to rotate said cylinder a fraction of a revolution at a time, substantially as described.

7. In an alarm mechanism, the combination of a chambered cylinder for containing cartridges, a plunger located to strike the cartridge in said cylinder as it is revolved, a rack carried by said plunger, a spring bear- 90 ing on said plunger, a mutilated gear meshing with said rack to raise said plunger, means for intermittently actuating said gear, substantially as described.

In testimony whereof I have hereunto set 95 my hand in presence of two subscribing wit-

nesses.

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JOHN S. BARNES.

Witnesses:

ELIJAH M. HOFF, O. W. THURSTON.