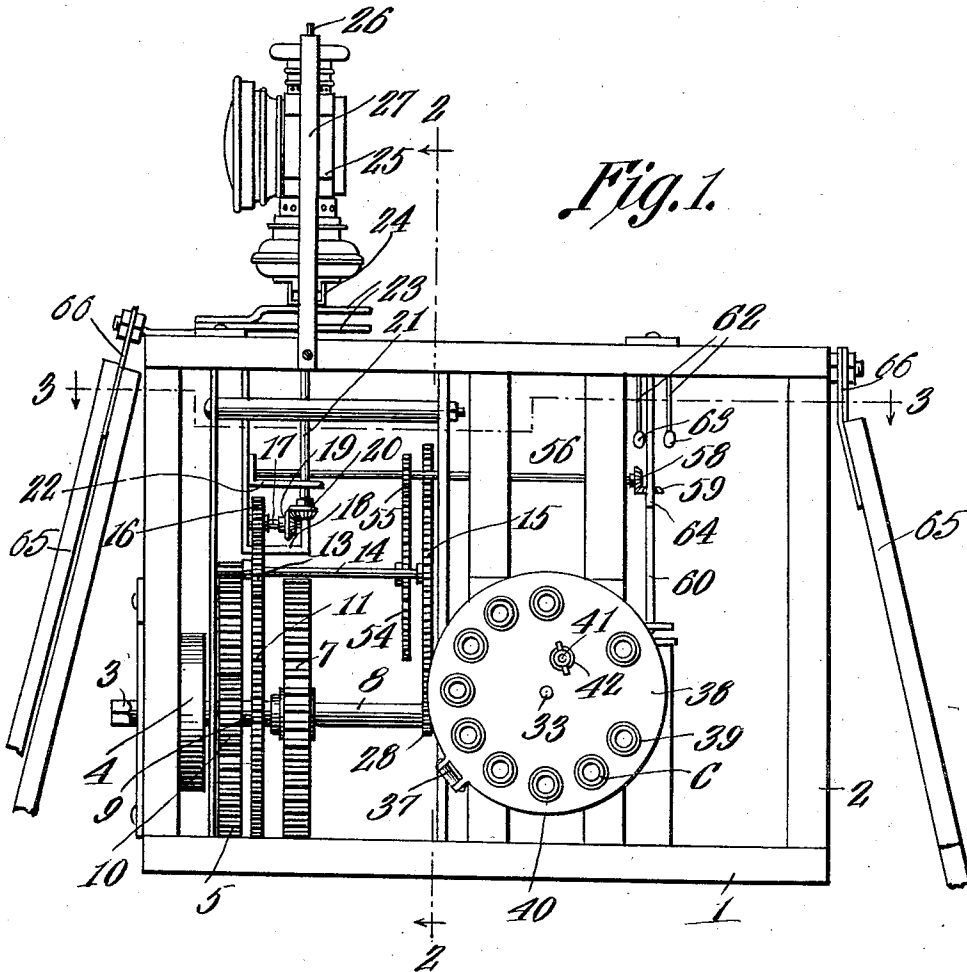


E. C. WINCHESTER.
NIGHT GUARD OR ALARM.
APPLICATION FILED MAR. 25, 1912.

1,055,687.

Patented Mar. 11, 1913.

3 SHEETS—SHEET 1.



Witnesses

J. P. [Signature]
L. H. [Signature]

E. C. Winchester,
Inventor

by

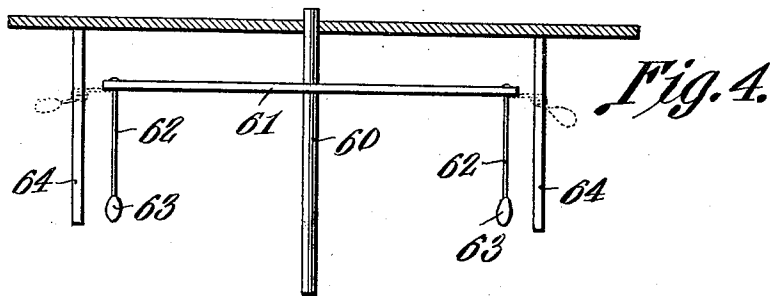
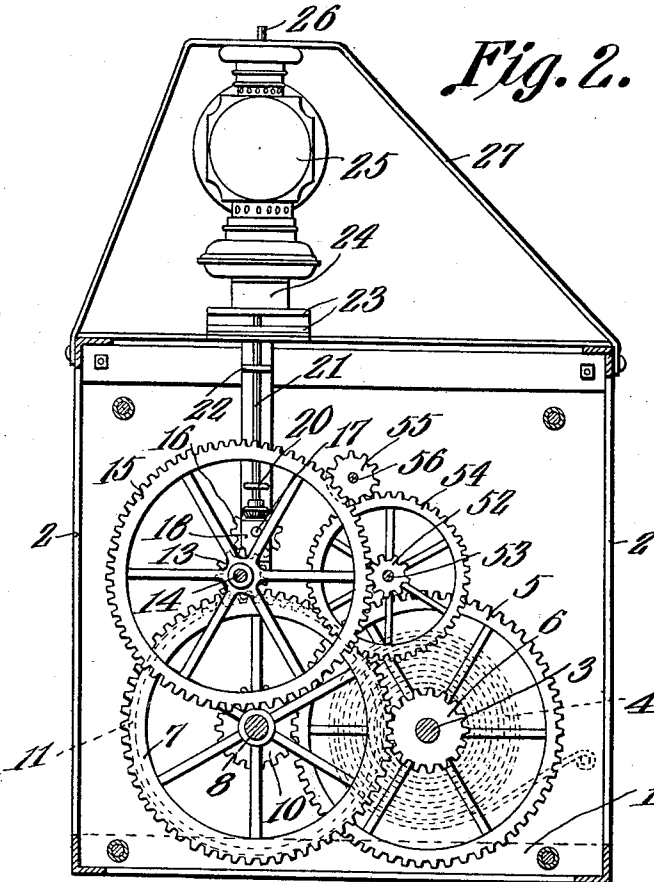
C. A. Snow & Co.
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3 SHEETS—SHEET 2.



Witnesses

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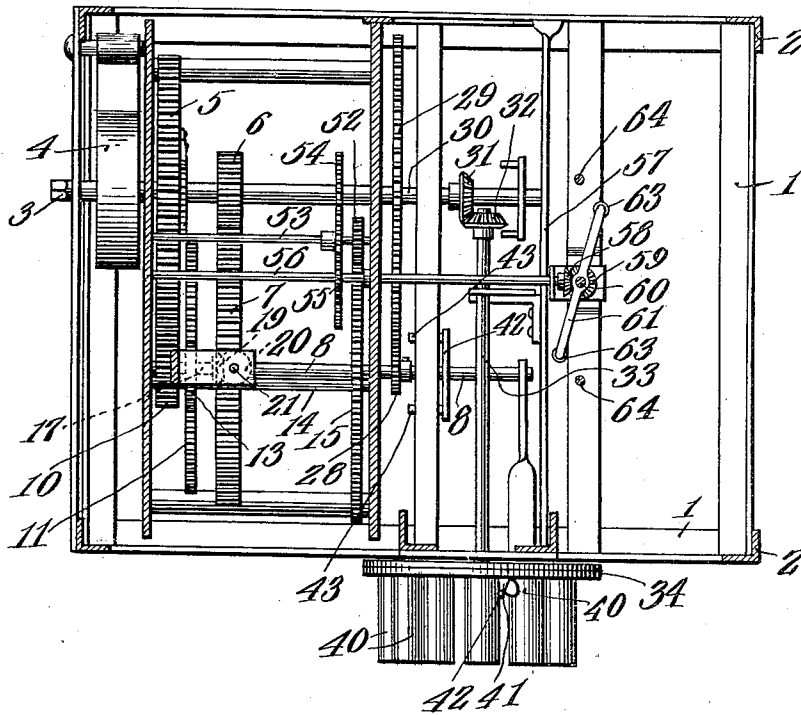
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3 SHEETS—SHEET 3.

Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

ELLIS C. WINCHESTER, OF THERMOPOLIS, WYOMING.

NIGHT GUARD OR ALARM.

1,055,687.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed March 25, 1912. Serial No. 686,141.

To all whom it may concern:

Be it known that I, ELLIS C. WINCHESTER, a citizen of the United States, residing at Thermopolis, in the county of Fremont and State of Wyoming, have invented a new and useful Night Guard or Alarm, of which the following is a specification.

The present invention relates to improvements in night guards or alarms, the primary object of the invention being the provision of a novel form of apparatus whereby sheep are especially retained upon their bedding ground by the intermittent flashing of a light while predatory animals are frightened away therefrom by means of an audible alarm actuated at predetermined intervals throughout the night, the present invention relating more particularly to the means for actuating the light.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention. In the drawings—Figure 1 is a side elevation of the apparatus taken from the cartridge flashing side thereof. Fig. 2 is a section taken on line 2—2 thereof. Fig. 3 is a section taken on line 3—3 thereof. Fig. 4 is a detail view of the escapement mechanism.

Referring to the drawings the numeral 1 designates the base of the frame of the apparatus, which has the upstanding framework 2, the same being especially covered and protected to withstand the elements so that the mechanism carried thereby will in no way be affected.

Journaled in the frame 2 is a shaft 3 which has operably connected thereto the spring motor 4, the outer end of said shaft 3 being squared to receive a winding key for winding the spring motor 4.

Keyed upon the shaft 3 within the frame is a large gear wheel 5, while also keyed upon the said shaft 3 is a small gear 6. This gear 6 is in mesh at all times with a large gear 7 mounted upon the counter shaft 8 which is parallel to the shaft 3.

Journaled for rotation upon the shaft 8 forwardly of the gear 7 is a sleeve 9, which

has keyed thereupon the small gear 10 and large gear 11, thus permitting the sleeve 9 to rotate upon the shaft 8. The gear 10 is in mesh at all times with the large gear 5, so that the sleeve 9 is rotated by the shaft 3 through the gear 5 and in turn rotates the gear 11. The gear 11 is in mesh at all times with the small gear 13 carried upon the counter shaft 14, the purpose of which will presently appear. The gear 13 is in mesh at all times with the gear 16 carried upon the short shaft 17 and journaled in the bracket 18. This shaft 17 has keyed thereon the bevel pinion 19 which meshes at all times with the bevel pinion 20 carried upon the lower end of the vertical shaft 21, said shaft 21 being journaled in the bracket 22 and extending above the framework of the apparatus and through the spaced plates or supports 23. Mounted upon the upper end of the shaft 21 is a lamp support 24, having disposed thereon the lamp 25, which may be taken indicative of any form of lamp, either oil or electric. The pin 26 carried in the upper end of the lamp, forms a supporting means therefor, in connection with the bracket or frame 27, so that the lamp may be retained in the desired upright position during the rotation thereof with the mechanism described. It will thus be seen that the operation of the main shaft will actuate the shaft 21, thus rotating the lamp 25 to throw the flash or rays therefrom with the apparatus as the center. The light may be made to flash intermittently or be steady. By means of the escapement mechanism hereinafter to be described, the rotation of the lamp is intermittent, so as to impart the desired movement thereto for herding the sheep.

The audible alarm 38, which is in the nature of a detonating device, is also operated by the same motor mechanism that controls the lamp, the detail structure of the same being the subject matter of another and divisional application.

In order to produce the desired intermittent movement of the alarm 38, and also the actuation of the lamp 25, a small gear 52 is in mesh at all times with the gear 15 and receives its motion therefrom, the gear 52 being keyed upon the counter shaft 53 and carrying the large gear 54. This gear 54 is in mesh with a small gear 55 upon the counter shaft 56, this counter shaft 56 being extended rearwardly and above the shaft 30

in the center of the machine and is journaled in the bracket 57. Upon the extreme rear end of the shaft 56 is a small bevel pinion 58, which meshes at all times with the bevel pinion 59, carried by the vertical shaft 60. This shaft 60 is properly supported in the frame of the apparatus and carries thereon the double arm 61, which has depending upon the free ends thereof, the flexible cords 62 upon whose lower ends are secured the pendulums or weights 63. Connected to and depending from the top of the frame are the two vertical rods 64, both of which are disposed in parallel and upon opposite sides of the shaft 60. It will thus be seen from the detail structure of this escapement mechanism as shown in Fig. 4, dotted lines illustrating the respective position of the flexible connection 62 and the weight 63 during the rotation of the shaft 60, that the said weights are thrown outwardly by centrifugal force so that the same will pass upon the other side of the respective rods 64 and thus cause the winding of the flexible connections 62 therearound and thus retard the movement of the shaft 60 until the weights due to gravity will unwind from the respective rods and thus permit again the rotation of the shaft 60.

In order to properly support this apparatus and permit the same to be moved from place to place, the tripods 65 are connected by means of the plates 66 in the upper portion of the frame as clearly shown in Fig. 1, and may be of any desired length to prevent

injury to the herd, due to the explosion of the blank cartridges.

From the foregoing description taken in connection with the drawings, it is evident that the apparatus may be set to produce the desired intermittent action of the lamp 25 at the various predetermined periods.

By producing in a single apparatus the cartridge exploding feature and the flash light feature, the predatory animals are frightened by the explosion, while the sheep due to the flashing of the light in their eyes, are retained upon their bedding grounds, as the flash of the light produces after the projection thereof into their eyes and the following darkness, a blinding effect which tends at all times to keep the sheep herded and consequently upon their bedding ground.

What is claimed is:

An alarm apparatus, having a spring motor, a vertically disposed shaft operably connected to the spring motor, a lamp operably connected to said vertical shaft, and an escapement mechanism for controlling the motor to impart an intermittent movement to the lamp.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ELLIS C. WINCHESTER.

Witnesses:

E. E. CRAGLE,

V. C. DINGMAN.