

May 13, 1952

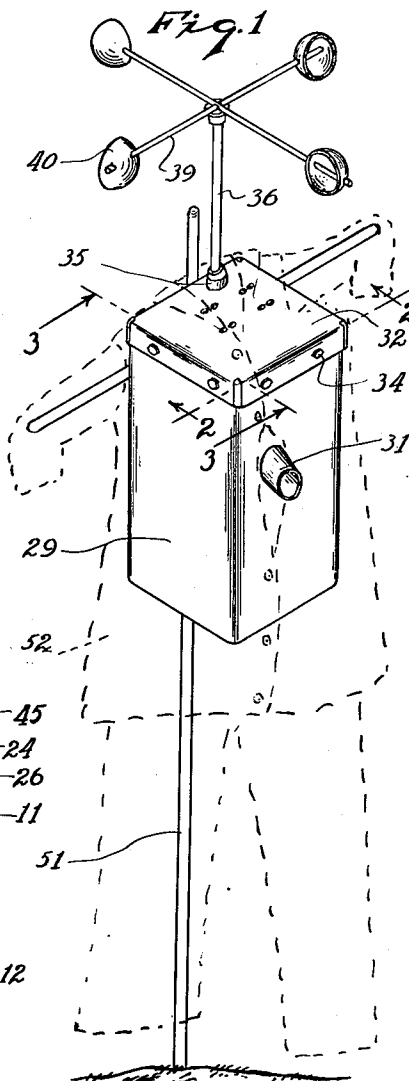
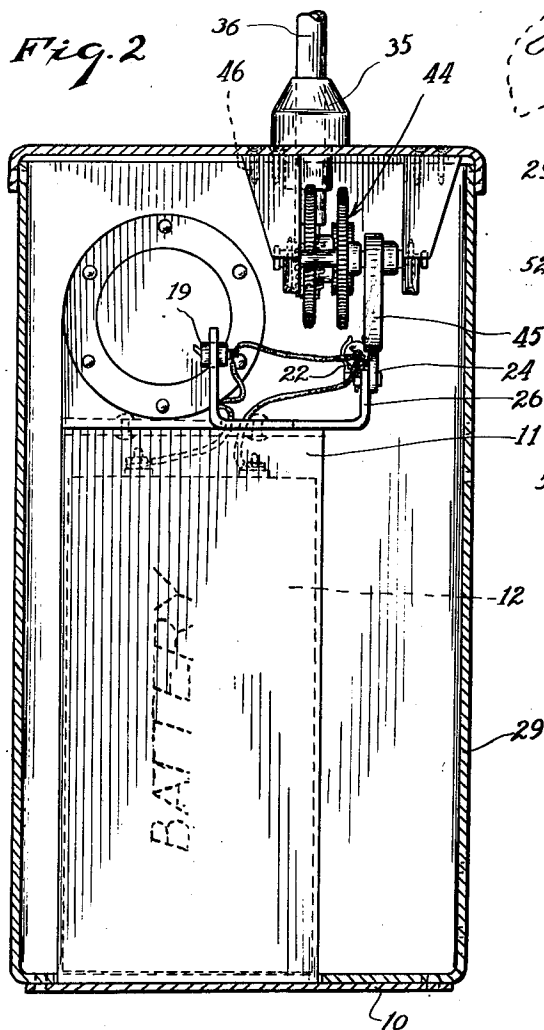
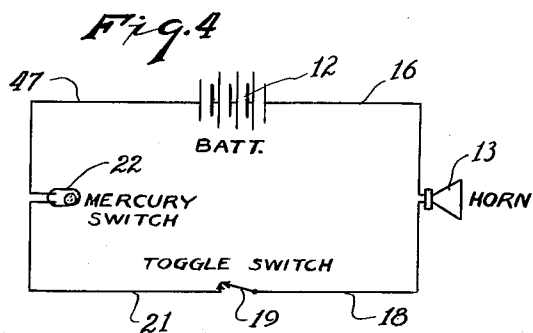
W. W. GROSS, JR

2,596,678

WILD LIFE CHASER

Filed Nov. 21, 1950

2 SHEETS—SHEET 1



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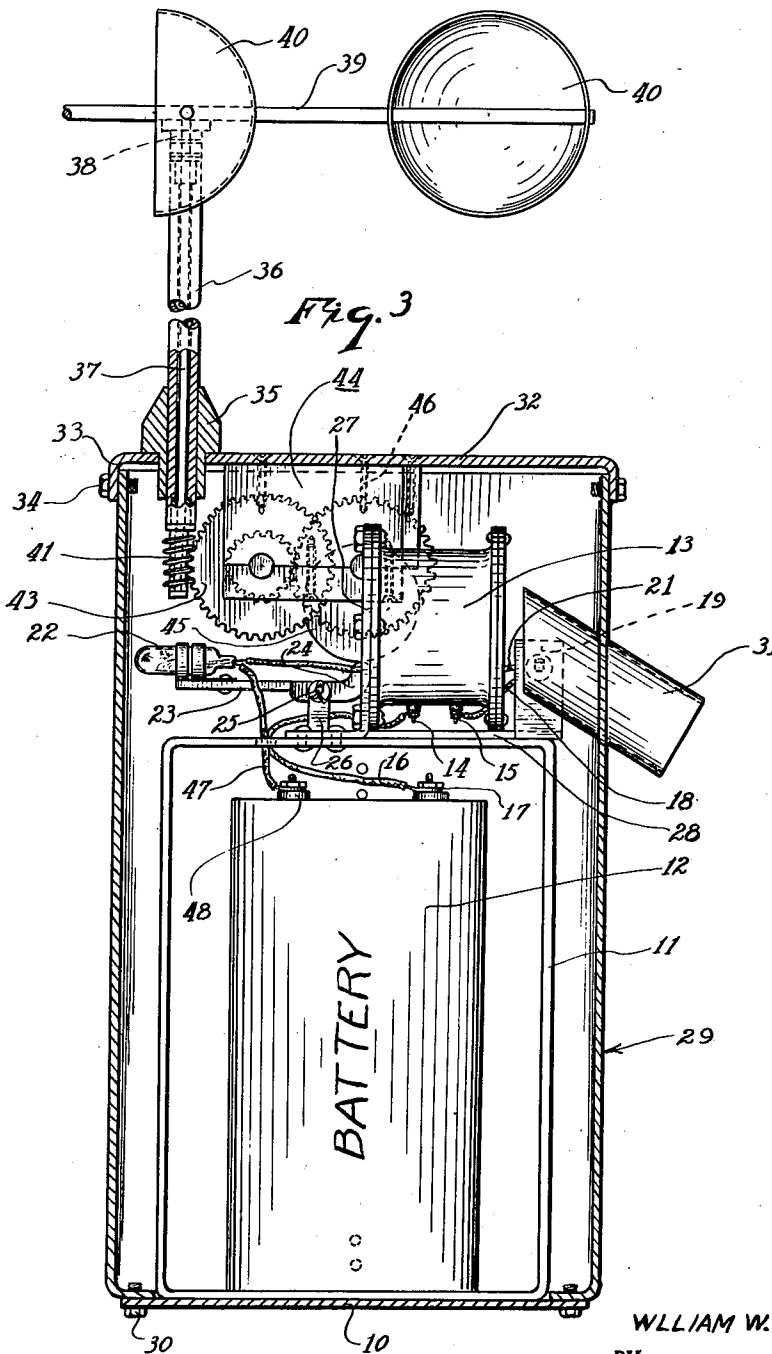
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2 SHEETS—SHEET 2



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UNITED STATES PATENT OFFICE

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WILD LIFE CHASER

William W. Gross, Jr., Tulare, S. Dak.

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1 Claim. (Cl. 177-311)

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This invention relates to a wild life chaser.

It is an object of the present invention to provide a wild life chaser adapted to be erected in a field bearing planted crops which will be operated by the wind in such manner as to periodically sound off an alarm which will frighten and scare away small animals and harmful birds and whereby to save and prevent the loss of the crop.

Other objects of the present invention are to provide a wild life chaser which is of simple construction, inexpensive to manufacture, adapted to be easily mounted upon a post, has a minimum number of parts, covered and thoroughly protected from the rain and snow, compact, durable and efficient in operation.

For other objects and for a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which

Fig. 1 is a perspective view of the wild life chaser embodying the features of the present invention and mounted upon a post that may be trimmed as a scarecrow.

Fig. 2 is a vertical sectional view of the device taken from one direction.

Fig. 3 is a vertical sectional view taken from another direction.

Fig. 4 is a wiring diagram of the electrical elements.

Referring now to the figures, 10 represents a bottom plate on which the electrical parts of the device are assembled. Connected to this plate is an inverted U-shaped supporting member 11 within which is disposed a battery 12 which provides the electric current source for operating the electrical parts of the device. On the support 11 is mounted a horn 13 that has electrical terminals 14 and 15. A wire 16 leads from a terminal 17 of battery 12 to terminal 14. A wire 18 leads from terminal 15 to a snap toggle switch 19. A wire 21 leads from the snap toggle switch 19 to mercury switch 22. This mercury switch is mounted upon a pivot arm 23 that has a follower 24. This pivot arm is pivotally connected by a pin 25 to an upstanding bracket 26 mounted on the top of the support 11. This same bracket 26 has portions 27 for the mounting of the horn 13 and a portion 28 for the mounting of the snap toggle switch 19. This entire assembly can be removed from the bottom of casing 29 with the bottom plate 10 by the removal of bottom screws 30 connected to inwardly turned flanges of the casing 29.

In the side of the casing is a megaphone tube

31 through which the noise of the horn passes. This megaphone is inclined downwardly to throw the sound toward the ground. The toggle switch 19 is so located that it can be accessible by reaching with the arm through the megaphone 31 at times when it is desired to turn off the device.

A top plate 32 has a depending flange 33 by which it may be connected to the upper end of the casing 29 by machine screws 34.

Mounted on this plate 32 is a bushing 35 upwardly through which extends a tubular support 36. This tubular support is tightly fitted in the bushing and has a central opening through which extends a shaft 37. On the upper end of the tubular support is mounted bearing elements 38 and to the upper end of the shaft 37 are connected a series of radially extending arms 39 having wind driven cups 40 connected to their respective outer ends.

A worm gear is connected to the lower end of shaft 37, as indicated at 41, and this worm gear meshes with a worm wheel 43 of a gear assembly 44 having a series of gears and an output cam 45. This gear assembly is secured by screws 46 to the under face of the cover 32. Cam 45 engages with the cam follower 24 of the arm 23 and will permit the mercury switch to be lowered or raised whereby to make and break the electric circuit. A wire 47 extends from the mercury switch to the other battery terminal 48. Any gear arrangement can be had, but preferably an arrangement which will permit two hundred turns of the wind driven shaft 37 to move the cam so that the mercury switch will close the battery circuit, is preferred. It will be seen that the device is assembled to provide generally three assemblies. One assembly comprising the electrical elements which is removable as a unit from the bottom of the casing 29, the other assembly being the top assembly including the wind driven shaft arrangement and the gear mechanism for operating the cam. Automatically, as the assembly of these sub-assemblies are made, the cam will be brought into contact with the cam follower of the electric unit.

At one position of the cam 45, the mercury switch is tilted to close the electric circuit from the six volt battery to operate the six volt horn 13. The ratio of rotation of the shaft to the closing of the electric circuit can be varied by substituting different gears in the mechanical gear assembly.

As shown in Fig. 1, the device can be mounted

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as a unit on a pole 50 and over which clothing 52 may be placed.

It should now be apparent that there has been provided a wild life chaser which can be erected in a field where there are growing crops and which will operate automatically under the power of the wind to send off periodically an alarm or horn blast to scare off the wild animals and birds.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the appended claim.

What is claimed is:

A wild life chaser comprising an electric assembly having a bottom plate, a support, a battery disposed within the support, a horn mounted on the support, a bracket, a pivot arm mounted on the bracket and having a cam follower, a mercury switch mounted on the pivot arm, a manually operable switch mounted on the support, wiring means extending between the electrical elements and operable upon the closing of the switches to sound the horn alarm, a mechanical assembly comprising a top cover plate, a shaft support extending upwardly from the top cover plate, a shaft rotatable in the shaft support, wind driving means connected to the upper end of the shaft

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whereby to effect the rotation of the shaft, mechanical timing gearing means connected to the wind driven shaft and supported upon the cover, a cam operated by said gearing and engageable with the cam follower of the pivot arm intermittently to open and close said mercury switch to sound said horn at irregular intervals in accordance with wind velocity, a covering disposable between the bottom plate of the electric assembly and the cover plate of the mechanical assembly and a megaphone tube extending through the covering adjacent to the horn, and said manually operable switch being on a common bracket with the pivot arm and accessible through the megaphone tube in the side of the casing.

WILLIAM W. GROSS, JR.

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