H. J. JOHNSON.

GUN.

APPLICATION FILED JULY 1, 1921.

1,419,968. Patented June 20, 1922.

2 SHEETS—SHEET 1.

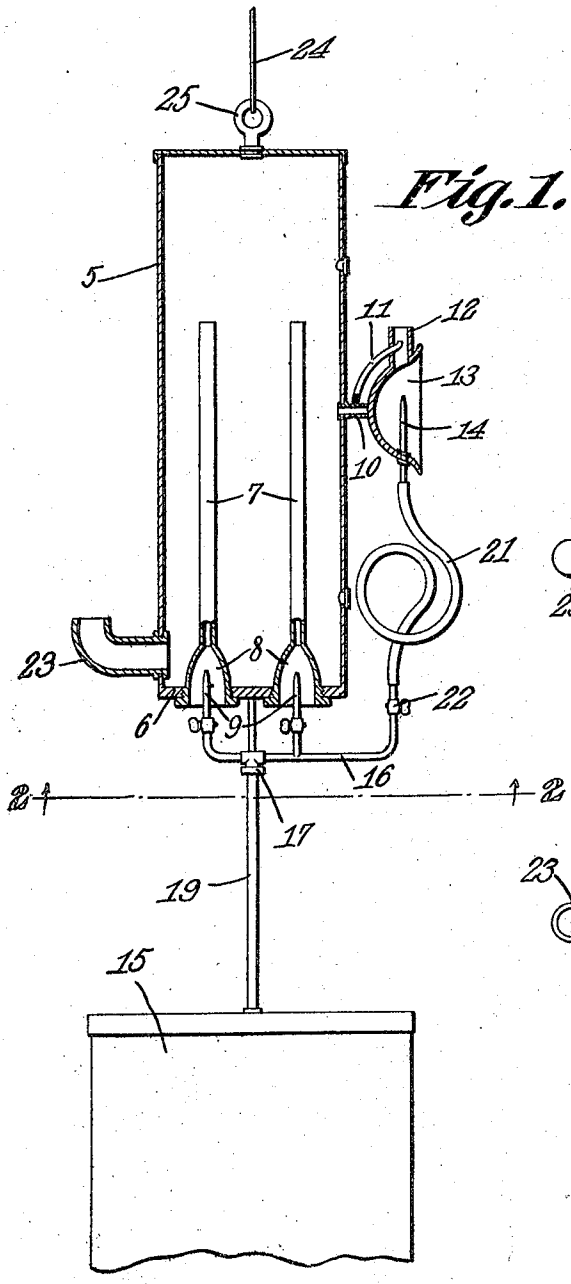
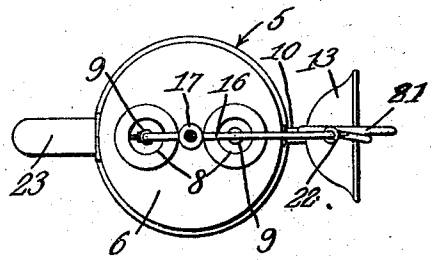


Fig. 1.

Fig. 2.



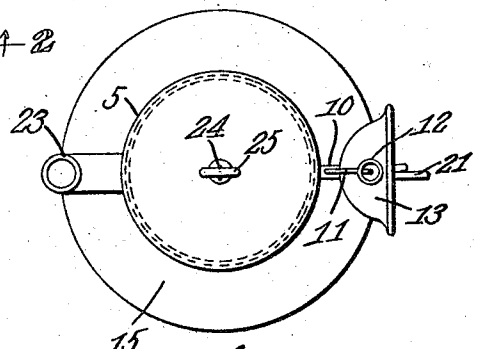


Fig. 3.

Inventor,

H. J. Johnson.

By C. A. Snow & Co.

Attorneys

H. J. JOHNSON.

GUN.

APPLICATION FILED JULY 1, 1921.

1,419,968. Patented June 20, 1922.

2 SHEETS—SHEET 2.

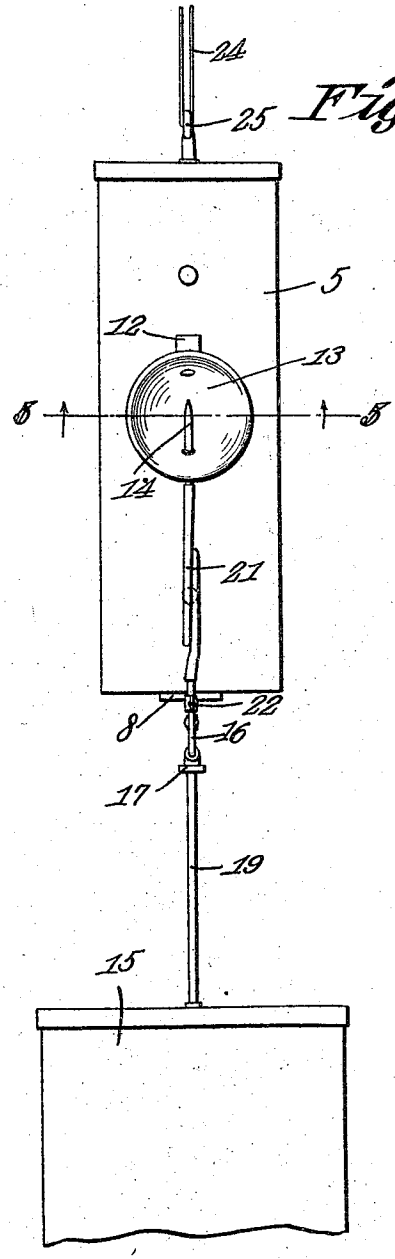


Fig. 4.

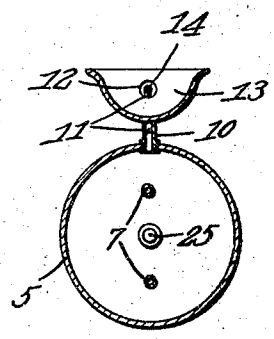


Fig. 5.

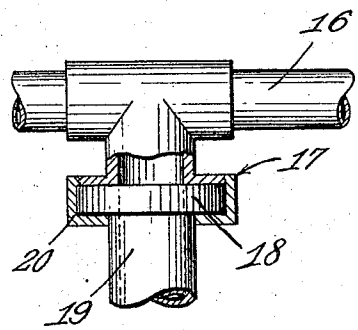


Fig. 6.

Inventor,

H. J. Johnson.

By C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

HILDING J. JOHNSON, OF SALT LAKE CITY, UTAH.

GUN.

1,419,968. Specification of Letters Patent. Patented June 20, 1922.

Application filed July 1, 1921. Serial No. 481,912.

To all whom it may concern:

Be it known that I, HILDING J. JOHNSON, a subject of the King of Sweden, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented a new and useful Gun, of which the following is a specification.

This invention relates to alarms, and more particularly to an automatically controlled alarm designed for producing loud reports to frighten away destructive animals from crops or the like.

An object of the invention is to provide a device of this character which may be revolved by the action of discharging gases, thereby causing the lamp portion thereof to illuminate the field or vicinity in which the device is supported.

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, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:—

Figure 1 illustrates a side elevational view constructed in accordance with the present invention, the body portion of the lamp and lamp chamber being shown in vertical section.

Figure 2 illustrates a sectional view taken on line 2—2 of Figure 1.

Figure 3 illustrates a plan view of the device.

Figure 4 illustrates a front elevational view.

Figure 5 illustrates a sectional view taken on line 5—5 of Figure 4.

Figure 6 illustrates a fragmental detail view of the connection between the lamp chamber and gas tank.

Referring to the drawings in detail, the reference character 5 designates the main or lamp chamber of the device, which is relatively long and provided with spaced openings in the bottom wall 6 thereof, which openings accommodate the lower portions of the feed pipes 7, which feed gas to the chamber 5.

These pipes 7 are relatively long, the upper ends thereof terminating at a point beyond a central horizonal line through the tank, the lower ends of these pipes being flared as at 8 to provide housings for the nozzles 9, that supply gas to the pipes 7. From the foregoing it is obvious that due to the space between the nozzles 9 and the flared portions of the pipes 7, sufficient quantities of air may mix with the incoming gas so that when the gas enters the chamber 5, the same is of a high volatility.

A pipe 10 has one end thereof extending through the wall of the chamber 5, and has communication with the pipe 11 which extends upwardly and has its upper end disposed within the exhaust pipe 12 forming a part of the lamp casing 13, so that the heat from the burner 14, which is disposed within the lamp casing 13 will ignite gas from the pipe 11 to cause a back-fire in the chamber 5.

The burner 14 is supplied with gas under pressure from the tank 15, the connection between the tank and supply pipe 16 being made through the coupling 17 which is in the form of a head and socket as clearly illustrated by Figure 6 of the drawings, the head being indicated by the reference character 18 and carried by the feed pipe 19, the socket member being indicated at 20. It is therefore obvious that the upper portion or gas chamber 5 may revolve with respect to the tank 15 and pipe 19.

A pipe 21 connects the burner 14 and pipe 16, there being a valve 22 provided within the pipe 16 to control the passage of gas to the burner 14.

A discharge pipe 23 has one end thereof extending through the wall of the gas chamber 5, the connection between the pipe 23 and wall of the chamber 5 being such as to permit the discharge pipe 5 to be turned to a point where the discharge of gas will be lateral.

The device may be supported in any suitable manner, the preferred form however being to support the same by means of the flexible connection 24 which may have its upper extremity connected to a bracket or the like, while the lower extremity thereof passes through the eye bolt 25 which has connection with the upper end wall of the gas chamber 5.

When the discharge pipe 23 is turned to cause the discharge gases to be forced later-

ally through the pipe 23, the gas chamber 5 together with the burner, will be caused to revolve.

In the operation of the device, gas is admitted to the burner 14, where the same is ignited. Gas flows through the pipe 7 into the chamber 5, and as the gas collects in the chamber 5 and reaches a point where the same will pass outwardly, through the pipe 10, the pipe 11 is supplied with gas which is ignited and caused to back-fire, resulting in a loud report being made.

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

1. In a device of the character described, a lamp chamber, a gas tank supported on the lamp chamber, pipes extending into the lamp chamber, nozzles for feeding gas to the pipes, a burner forming a part of the device, means for causing back-fire in the lamp chamber, means for discharging gas from the lamp chamber to cause the device to be revolved.

2. In a device of the character described, a lamp chamber, pipes extending into the lamp chamber, the pipes having their upper ends spaced from the upper end of the lamp chamber, means for supplying gas to the lamp chamber, an adjustable discharge pipe disposed at one end of the lamp chamber and having communication with the interior thereof, a burner supported by the lamp chamber, means for igniting gas in the lamp chamber, and flexible means for supporting the device.

3. In a device of the character described, a lamp chamber, a flexible member for supporting the lamp chamber, a lamp supported by the lamp chamber, means for supplying gas to the lamp, means for discharging gas into the lamp chamber, and means for causing the rotation of the lamp and lamp chamber.

4. In a device of the character described, a lamp chamber, pipes extending into the lamp chamber, the lower end of each pipe being flared to provide a nozzle housing, nozzles supported in the nozzle housing, means for supplying gas to the nozzles, a lamp supported by the lamp chamber, flexible supporting means for supporting the device, said flexible supporting means adapted to permit the device to revolve, and means for causing gas to back-fire in the lamp chamber, and means for directing the back-fired gas laterally to cause the rotation of the device.

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

HILDING J. JOHNSON.

Witnesses:

HELGE CHARLES JOHNSON,

HERBERT E. SMYTH.