

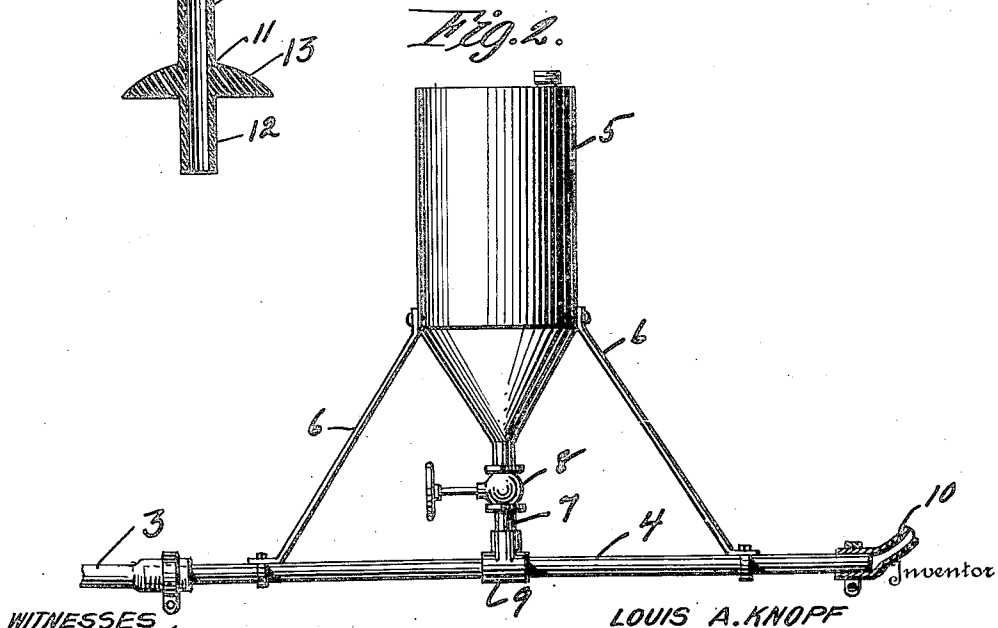
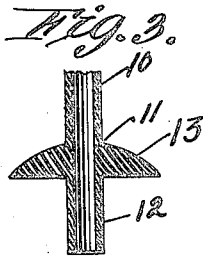
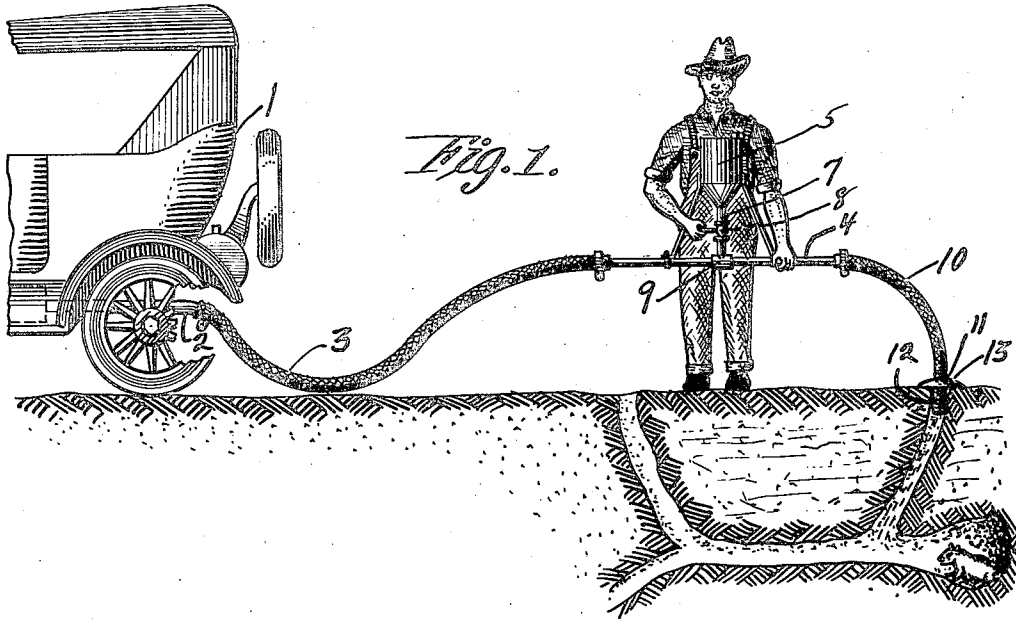
May 6, 1924.

1,492,732

L. A. KNOPF

GOPHER KILLER

Filed July 18, 1923



WITNESSES

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# UNITED STATES PATENT OFFICE.

LOUIS A. KNOFF, OF GARRISON, MONTANA.

GOPHER KILLER.

Application filed July 18, 1923. Serial No. 652,415.

*To all whom it may concern:*

Be it known that I, LOUIS A. KNOFF, a citizen of the United States, residing at Garrison, in the county of Powell and State of Montana, have invented certain new and useful Improvements in a Gopher Killer, of which the following is a specification.

The present invention relates to a device for destroying gophers and like animals which inhabit the ground and destroy crops.

The principal object of the invention is to provide an apparatus for utilizing poison gas so that the same may be forced into the homes of gophers by means of the exhaust from an engine or the like.

Another important object of the invention is to provide an apparatus of this nature having a simple and efficient construction, one which is reliable, inexpensive to manufacture, durable, and well adapted to the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description progresses, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawing:

Figure 1 is an elevation of the apparatus showing the same connected with the exhaust pipe of an automobile,

Figure 2 is an enlarged elevation of the mixing apparatus, and

Figure 3 is an enlarged detail section through the nozzle.

Referring to the drawing in detail it will be seen that 1 designates an automobile of any preferred construction which is provided with the usual internal combustion engine (not shown) from which extends an exhaust pipe 2. A flexible hose 3 or some other suitable conduit is attached to the terminal of the exhaust pipe 2 and is led to the mixing apparatus for feeding the exhaust gases thereto. This mixing apparatus consists of a pipe or conduit 4, a tank 5 mounted on the pipe 4 by means of the brace arms 6 and a communicating pipe 7 in which is disposed a valve 8. The lower end of the tank 5 is communicated with the pipe 7 which is also communicated with the intermediate portion of the pipe 4 by means of a

T-coupling 9. The tank 5 is adapted to contain poison gases and when the valve 8 is opened the pulsations of exhaust gases passing through the pipe 4 will abstract the poison gases from the tank 5 and force them with the exhaust through the pipe 4.

At the end of this pipe 4 there is disclosed a flexible hose or other conduit 10 which is provided at its end with a nozzle indicated generally at 11 which includes the nipple 12 and an annular flange 13 spaced from the terminal of the nipple 12. This nipple 12 is inserted into an opening in the ground as is shown in Figure 1 and when the engine of the automobile is started and the valve 8 opened, there will be delivered to this opening and the home of the gopher a supply of exhaust mixed with the poison gas from the tank 5. If this treatment is given to the various gopher openings in the ground the field will soon be rid of these undesirable animals.

I have, in the present instance, shown and described the preferred embodiment of the invention which will give in practice satisfactory and reliable results, and it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

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

In combination, a rigid conduit, a tank mounted on the rigid conduit, a pipe communicating the tank with the rigid conduit, a valve disposed in said pipe, a flexible tubing extending from one end of the rigid conduit and adapted to be attached to the exhaust pipe of an internal combustion engine, and a second flexible tubing extending from the other end of the rigid conduit and adapted to be inserted in a passage in the ground in the manner and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS A. KNOFF.

Witnesses:

PAUL HERTZ,  
E. J. CUMMINS.