

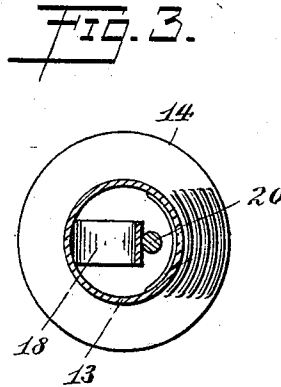
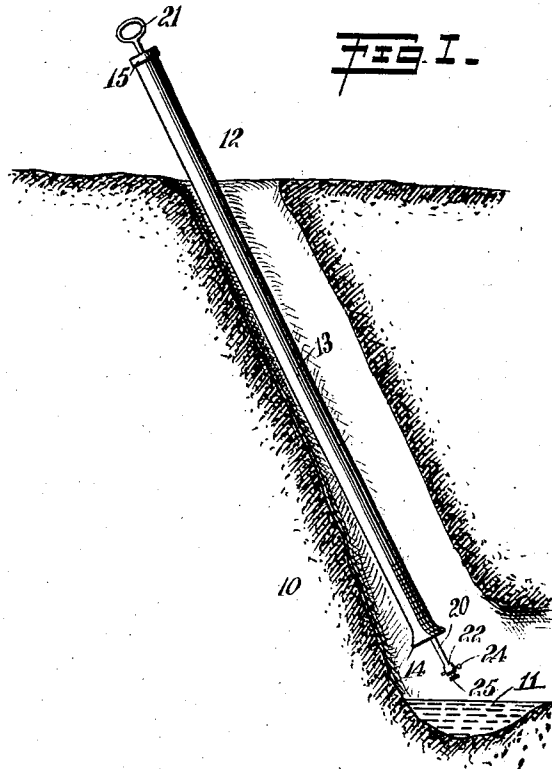
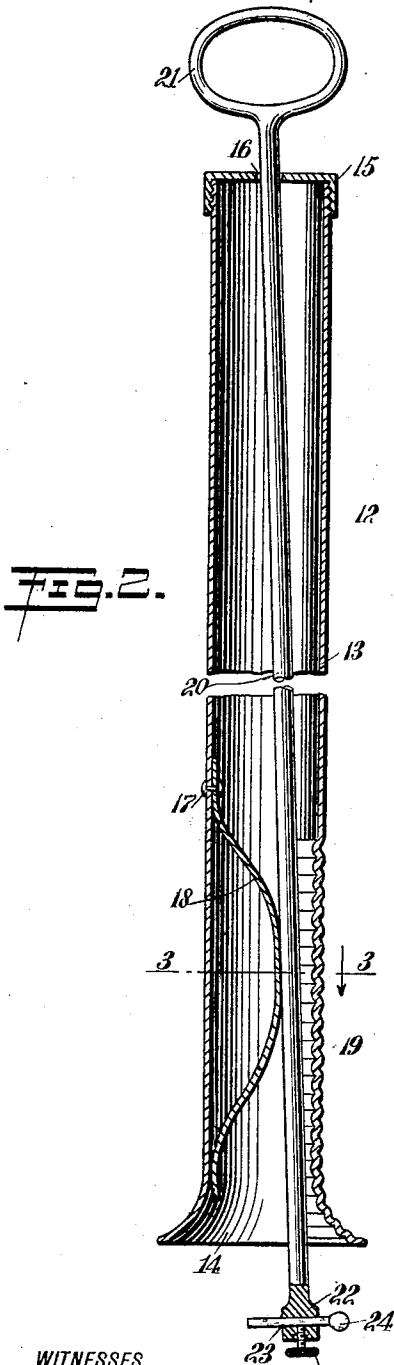
A. DE ROSE.

IGNITER.

APPLICATION FILED JAN. 28, 1910.

968,330.

Patented Aug. 23, 1910.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALBERT DE ROSE, OF GILROY, CALIFORNIA.

IGNITER.

968,330.

Specification of Letters Patent. Patented Aug. 23, 1910.

Application filed January 28, 1910. Serial No. 540,534.

To all whom it may concern:

Be it known that I, ALBERT DE ROSE, a citizen of the United States, and a resident of Gilroy, in the county of Santa Clara and State of California, have invented a new and Improved Igniter, of which the following is a full, clear, and exact description.

My invention relates to igniters, more particularly to that type of igniter adapted to

10 ignite explosive liquids and the like.

My invention is especially adapted for use in igniting explosive liquids secreted in holes and burrows made and inhabited by gophers and the like. The gopher yearly creates
15 great damage to valuable crops and trees, and various means have been tried to rid a territory of this burrowing pest. One of the successful methods of exterminating gophers is to secrete an explosive liquid,
20 such as carbon bisulfid, in the hole inhabited by the gopher, and explode the same by ignition. Serious accidents sometimes result and large pastures are often burned, due to the fact that the liquid to be exploded
25 is ignited on the surface of the ground. For this reason I have invented an igniter adapted to be lowered into the gopher hole or the like, in close proximity to the explosive liquid and ignited by the operator standing
30 outside and away from the hole.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference denote corresponding parts in all the
35 views, and in which—

Figure 1 is a side elevation showing a gopher hole and my igniter inserted therein; Fig. 2 is a sectional side view of my igniter; and Fig. 3 is a sectional view taken on the
40 line 3—3 in Fig. 2, looking in the direction of the arrow.

In a gopher hole 10 is deposited an explosive liquid 11, preferably carbon bisulfid, ready to be ignited by an igniter 12. The
45 igniter 12 comprises a tube 13 having an outwardly diverging opening 14 at the lower end and provided with a cap 15, screw-threadedly secured to the tube 13, and having therein a hole 16. Securely fastened
50 to the tube 13 by a rivet 17 is a suitable spring 18. Directly opposite the spring 18 are numerous corrugations 19 extending horizontally of the tube 13, so as to form a

convenient igniting surface. Slidably held in the tube 13 is a rod 20, comprising a suitable handle 21 and a cap 22 provided with an opening 23 adapted to receive a match 24. A suitable screw 25 for rigidly holding the match 24 is provided on the under side of the cap 22.

The operation of my device is as follows: A combustible liquid, such as carbon bisulfid, is deposited in the gopher hole or the like, as is shown in Fig. 1. An ordinary parlor match is then fastened to the rod 20 by means of the screw 25 and the igniter is then inserted into the hole in close proximity to the combustible liquid. Then by moving the rod 20 upwardly and downwardly by means of the handle 21, the ignitable end of the match 24 engages the corrugations 19 in the tube 13. The friction caused by this movement of the rod ignites the match which in turn ignites the combustible liquid.

I do not limit myself to the shape of the tube used on the igniter, it being understood that square, oval, round or triangular tubing can be used, depending entirely upon the existing conditions.

It will be further understood that by removing the upper cap 15, the igniting rod can be withdrawn from the tube so as to clean the same or replace the same with a new igniting rod, and that the igniting rod can be adapted to fit inside either a round, square, oval or triangular tube.

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

An igniter, comprising a tube having an open end and a closed end; corrugations on the inner periphery of the tube; a spring opposite the corrugations; an igniting rod mounted to slide in the tube and engaged by the spring; a cap on one end of the igniting rod and integral therewith; and a set screw adapted to secure igniting means and screw threadedly engaging the cap.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT DE ROSE.

Witnesses:

HENRY SHOPF,
EUGENE F. ROGERS.