

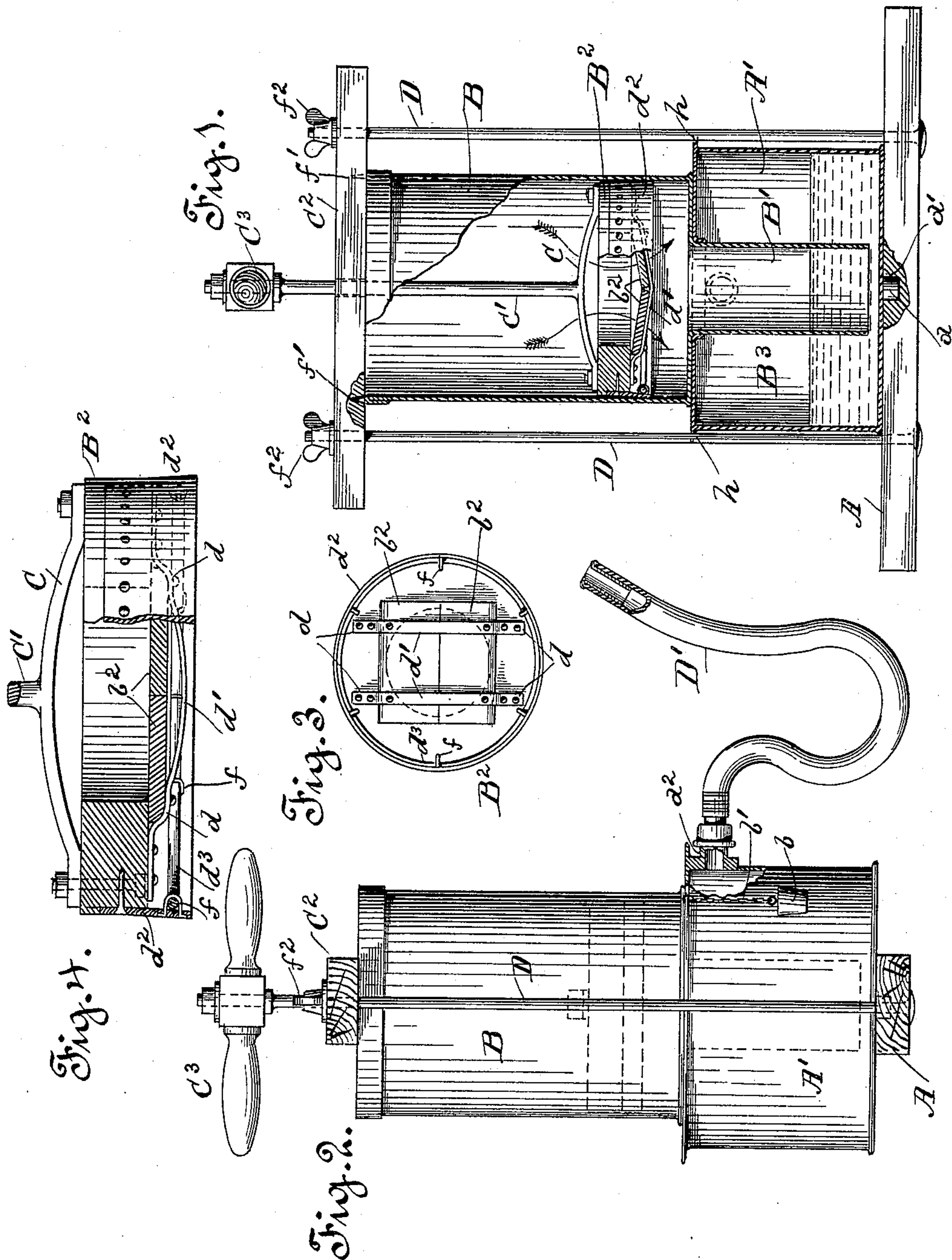
No. 612,006.

Patented Oct. 4, 1898.

C. K. MYERS.
ANIMAL EXTERMINATOR.

(Application filed Dec. 10, 1897.)

(No Model.)



Witnesses
John H. Kutter
 Elmer Wickes.

Inventor
Chas. H. Myers
By his Attorney
Wacker

UNITED STATES PATENT OFFICE.

CHARLES K. MYERS, OF STOCKTON, CALIFORNIA.

ANIMAL-EXTERMINATOR.

SPECIFICATION forming part of Letters Patent No. 612,006, dated October 4, 1898.

Application filed December 10, 1897. Serial No. 661,376. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. MYERS, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in Animal-Exterminators; and I do hereby declare that the following is a full, clear, and exact description thereof.

10 This invention relates to a certain new and useful apparatus for exterminating ground-squirrels, gophers, moles, or similar animals; and it consists in the arrangement of parts and details of construction, as will be hereinafter fully set forth in the drawings, and described and pointed out in the specification.

15 The object of the invention is to provide a simple and inexpensive apparatus which may be easily carried from place to place and operated by hand, within which may be generated a gas poisonous to animal life, which gas may be ejected or discharged therefrom through a flexible connection into the ground-holes of the animal, so as to fill the holes or
25 ground-tunnels with the poisonous gas in order to cause the death of the animals lodged therein.

30 In order to fully comprehend the invention, reference must be had to the accompanying sheet of drawings, forming a part of this application, wherein—

35 Figure 1 is a vertical sectional view of the apparatus. Fig. 2 is a side view thereof, the flexible connection for conveying the gas from the generator to the ground-holes being shown connected to the generator. Fig. 3 is a bottom plan of the piston, and Fig. 4 is an enlarged cross-sectional view of the piston.

40 The letter A is used to indicate any suitable base, and A' what I shall term the "generator," which is provided with a centrally-depending lug *a*, said lug fitting within a socket or recess *a'* in the upper face of the base A. The generator is also provided near
45 its upper edge with a screw-threaded outlet-boss *a*², which when the apparatus is not in use is closed by the cap *b*, attached to the generator, for convenience, by the chain *b'*.

50 Upon the generator rests the piston-cylinder B, which is provided with a contracted downward extension B'. This extension B' fits through an opening formed in the top of

the generator and extends downwardly within the chamber B³ of the generator to near the bottom thereof, Fig. 1. The extension B' is open at its lower end and its diameter is about one-third of that of the piston-cylinder, the cylinder, extension, and generator being preferably of a cylindrical form.

60 Within the cylinder B is fitted to work the open piston B², which is provided on its under face with two inwardly movable or opening segment-valves *b*². These valves are attached to the under face of the piston, preferably by means of the strap-hinges *d*, the inward or downward movement of the valves being limited by the connecting portion *d'* of the strap-hinges.

70 In order that a snug or air-tight joint may be made between the piston and the inner wall of the piston-cylinder B, I secure to the outer edge of the piston a packing-ring *d*², of leather, rubber, or other suitable material. The said packing-ring extends below the piston, Fig. 4, and is held pressed outward against the inner wall of the piston-cylinder by means of the spring-ring *d*³, which fits through the eyelets or staples *f*, projecting from the inner face of the packing-ring. The pressure of spring-ring *d*³ is sufficient to hold the packing-ring firmly pressed against the inner wall of the piston-cylinder, so as to compensate for frictional wear of the packing-ring by the reciprocating movement of the piston.

85 To the upper face of the piston is secured the bridge-plate C, and to said bridge-plate is attached at its lower end the piston-stem C', which in the present case is formed integral with the said bridge-plate. The upper end of the piston-stem extends through the cross-piece C² and is attached to the handle C³. This cross-piece C², which is of wood, rests upon the piston-cylinder B, and the cylinder is prevented from turning or movement during the working of the apparatus by means of the spurs *f'*, secured to and upwardly projecting therefrom, entering into the under face of the cross-piece, Fig. 1. The cross-piece C² is secured to the base A by means of the vertical tie-rods D, which extend through the said base and cross-piece. These tie-rods hold the parts firmly together and prevent the piston-cylinder moving from the generator, the cross-piece C² being locked by

the thumb-screws f^2 , which screw onto the projecting screw-threaded end of the tie-rods. The tie-rods fit in guide-sockets h , cut in the edge of the cover of the generator, in order
 5 that the said generator may be held against movement.

The piston-cylinder and generator may be of any suitable size; but for ordinary farm use and to permit of ready handling I prefer
 10 to make the air-cylinder about nine inches in diameter and of such length as will permit of a twelve-inch stroke to the piston, the generator being slightly greater in diameter than the piston-cylinder and of sufficient height to
 15 permit of at least one gallon of gasoline or other fluid to be placed therein.

When the apparatus is desired for use, the requisite amount of gasoline or other fluid is placed in the generator through the opening
 20 in the top thereof and the parts secured together, as shown in Fig. 1 of the drawings. The cap b is then removed from the boss a^2 and connection made between the generator and the ground-hole of the animal by means
 25 of the pipe or hose D' , one end of which screws onto the boss a^2 , the free end being inserted a suitable distance into the ground-hole. The ground surrounding the inserted
 30 end of the pipe or hose should be closed to prevent escape of gas. As the piston is moved upward the valves b^2 open inwardly and permit air to flow therethrough into the piston-cylinder. Upon the downstroke of the piston the valves are closed and the air within
 35 the cylinder is forced downward within the generator through the extension B' of the piston-cylinder and forced upward through the gasoline or other fluid within the said generator. As conveyed through the gasoline
 40 the air is intermixed therewith, and the gas thus generated is expelled through the outlet-opening and conveyed into the ground-holes by the connecting pipe or hose. The gas circulating in the ground tunnels or holes
 45 kills the animals therein. As approximately seven hundred and fifty cubic inches of air are thrown with each stroke of the piston, it

will be seen that very little time is required to exterminate animal life in the ground-tunnels.

While the apparatus is mainly devised for use in connection with the extermination of ground-animals destructive to farm products, it is equally as well adapted for the spraying of orchards or vineyards for the killing
 55 of parasites.

Having thus described the invention, what I claim as new, and desire to secure protection in by Letters Patent, is—

1. In an animal-exterminating apparatus, 60 the combination with the generator for the holding of gasoline or other fluids, of the piston-cylinder mounted thereon, a reduced extension projecting downwardly from the cylinder into and within a short distance of the bottom of the generator, an outlet-opening in the
 65 generator, a piston working in the piston-cylinder, inwardly-opening valves connected to the piston, devices for imparting reciprocating movement to the piston, and of a coupling
 70 connection with the outlet-opening of the generator through which the gas is conveyed.

2. In an apparatus of the described character, the combination with the base, of the
 75 generator secured thereon, the piston-cylinder mounted upon the generator, a reduced extension projecting from the said cylinder and extending into the generator to within a short distance of its bottom, the piston work-
 80 ing within the cylinder, inwardly-opening valves secured to the piston, devices for imparting reciprocating movement to the piston, cross-piece extending across the piston-cylinder, and of the tie-rods forming connection
 85 between the base and said cross-piece.

In testimony whereof I affix my signature, in presence of two witnesses, this 24th day of November, 1897.

CHARLES K. MYERS.

Witnesses:

LEE D. CRAIG,
 N. A. ACKER.