

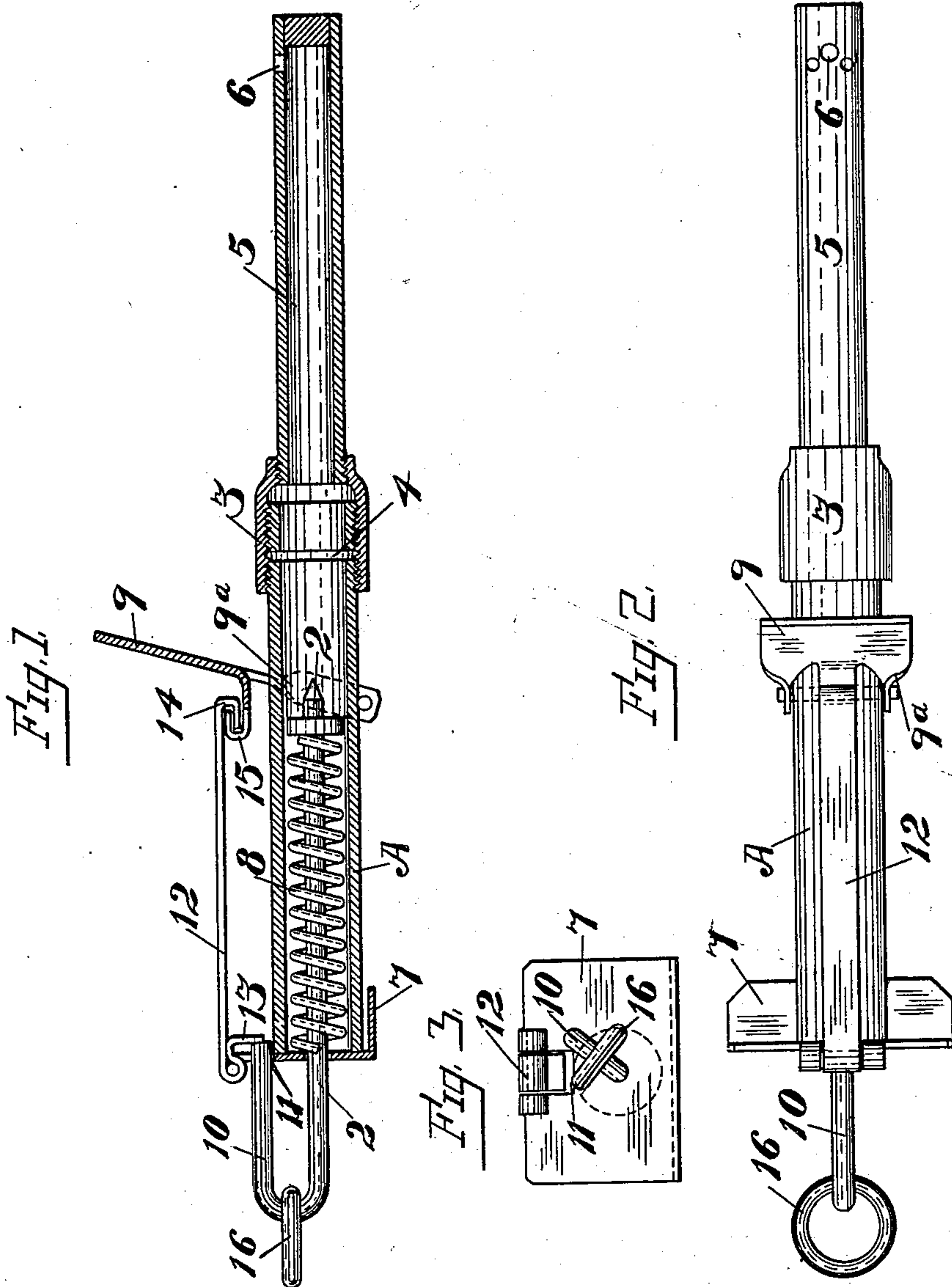
No. 725,883.

PATENTED APR. 21, 1903.

C. SIMS.  
GOPHER GUN.

APPLICATION FILED NOV. 13, 1902.

NO MODEL.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

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## GOPHER-GUN.

SPECIFICATION forming part of Letters Patent No. 725,883, dated April 21, 1903.

Application filed November 13, 1902. Serial No. 131,138. (No model.)

*To all whom it may concern:*

Be it known that I, COURTLAND SIMS, a citizen of the United States, residing at San Jose, county of Santa Clara, State of California, have invented an Improvement in Gopher-Guns; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to improvements in that class of firearms known as "gopher-guns" and designed to be set in the path of gophers and like burrowers and to be exploded by the movement of said animals. Its object is to provide a breech-loading gun of simple and economical construction in which blank cartridges may be used and in which the discharge of the gases will take place upwardly beneath the belly of the animal and insure his destruction.

It comprises the parts and the combination of parts hereinafter set forth, having reference to the accompanying drawings, in which—

Figure 1 is a longitudinal vertical central section of my invention. Fig. 2 is a top plan view of same. Fig. 3 is a rear view of same, showing firing-pin at safety.

A represents a cylinder in which the firing-pin 2 is reciprocable. To the forward end of this cylinder is detachably secured the breech 3, which is provided with a suitable annular seat 4 to support the rim of a blank pistol-cartridge. The barrel 5 of suitable length is detachably secured to the end of the breech. In the present instance I have shown the cylinder A, the breech, and the barrel as consisting of ordinary pipe-sections and pipe-fittings, the parts easily screwing together; but it is obvious that the breech and barrel could be cast in one piece and other means of attachment with the cylinder be devised.

Instead of discharge taking place out through the end of the barrel, as is usual in all guns of which I have knowledge, I have closed up the bore at the muzzle end and have drilled holes 6 in the sides and top of the barrel adjacent to the closed end, so that discharge takes place upwardly in fan shape at right angles to the axis of the barrel.

The means for setting the gun and for occasioning discharge are as follows:

7 is a plate secured across the rear end of

the cylinder A and perforated to permit the firing-pin 2 to project through. The lower edge of the plate where it rests on the ground affords a support to keep the gun in position. A helical spring 8 surrounds the pin in cylinder A. One end of the spring is secured to the pin, and the other bears against the plate to cause the pin to impinge upon and explode a cartridge in the breech when the spring is released by the trigger 9. The projecting end of the firing-pin is bent upon itself, and the bent portion 10 is movable in a slot 11 in the plate above the barrel. A sear-plate 12, pivoted to the upper edge of plate 7, has a projection 13, adapted to extend into the path of said portion 10 and to be engaged by the end of the latter when the firing-pin is retracted. The outer end of the sear-plate is provided with a hook portion 14, which may engage a similar hook projection 15 on the trigger-plate 9. The latter is pivoted to and straddles the cylinder adjacent to the breech. The forks of the trigger are twisted, as at 9<sup>a</sup>, to lie parallel with the cylinder and close to the sides thereof, so as to take up as little room as possible and allow the gun to be inserted into the hole.

In operation the breech is unscrewed from cylinder A and a blank cartridge inserted. The breech is then screwed onto cylinder A, and by means of a ring 16 the operator may retract the firing-pin till the end of 10 is drawn through the slot 11, when by a slight turn of the pin the end of the part 10 is allowed to rest against the back of plate 7, while the trigger is being set by engaging the hooks 14 and 15. On turning the pin back again to bring 10 into line with slot 11 the end of 10 is met by stop 13 on the sear and is only released by the actuation of the trigger to disengage the hooks 14 and 15.

The device is set in the burrow of a gopher. The length of the barrel and the disposition of the discharge-orifices 6 are such that discharge will take place just as the gopher gets over the barrel, so that the contents of the gun will strike him from below and insure his destruction.

The confinement and discharge of the gases in the manner described renders the use of blank cartridges as deadly to these pests as loaded shells have heretofore been found to



be, while the advantages in favor of blank cartridges lie in the cheapness of this form of ammunition and the fact that a gun can be handled with comparatively little danger to the operator.

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

1. In a breech-loading gun, the combination of a barrel, a firing-pin and operative means therefor, said barrel having a closed muzzle end and having a discharge at right angles to its axis.

2. In a breech-loading gun, a barrel closed at the muzzle end and having discharge-openings in the side of the barrel adjacent to the muzzle.

3. In a gopher-gun, the combination of a cylinder, a barrel adapted to contain a blank cartridge secured to the forward end of said cylinder, a firing-pin reciprocable in said cylinder, and trigger mechanism for operating the firing-pin, said barrel closed at the muzzle and having discharge-openings adjacent to the muzzle by which the contents of the barrel are directed upward at right angles to the axis of the barrel.

4. The combination in a gopher-gun, of a cylinder, a firing-pin incased therein, a barrel adapted to contain a cartridge removably connected with the forward end of said cylinder, said barrel having a closed muzzle end and having a discharge in its side back of said closed end, and said firing-pin extending rearwardly exterior to the cylinder, a pivoted trigger-plate, a sear having one end adapted to engage the trigger, and means upon the sear interposable in the path of the exterior extension of the firing-pin by which the latter may be held in retracted position.

5. The combination in a breech-loading gopher-gun, of a cylinder, a barrel removably

connected with the cylinder, a firing-pin operatable in the latter, an extension of said firing-pin beyond the rear end of the cylinder, a return-bend on said extension, a pivoted sear, a trigger-plate, and means upon said sear engaging said trigger and return-bend portion by which the firing-pin may be held in retracted position.

6. The combination in a breech-loading gopher-gun, of a cylinder, a barrel removably connected with the forward end of said cylinder, a firing-pin operatable therein, a plate secured to the rear end of said cylinder, an extension of said firing-pin through said plate, a return-bend on said extension, a pivoted sear having a projection extending into the path of said return-bend portion to retain the firing-pin in retracted position, said firing-pin having a rotatable movement by which the return-bend portion may be moved out of line with said sear projection and engaged for the purpose set forth.

7. A gopher-gun comprising in combination two pipe-sections separably connected by a pipe-union, one of said sections affording a housing for a firing-pin, the second section adapted as a barrel and said union adapted as a breech to contain a cartridge, a firing-pin operatable in said housing-section, said firing-pin projecting rearward of said housing-section and terminating in a return-bend, a pivoted sear engaging said return-bend portion, and a pivoted trigger-plate straddling the housing-section and having its legs twisted as at 9<sup>a</sup> for the purpose described.

In witness whereof I have hereunto set my hand.

COURTLAND SIMS.

Witnesses:

WESLEY PIEPER,  
E. W. CLAYTON.