

I. H. RODEHAVER.  
GUN.

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990,669.

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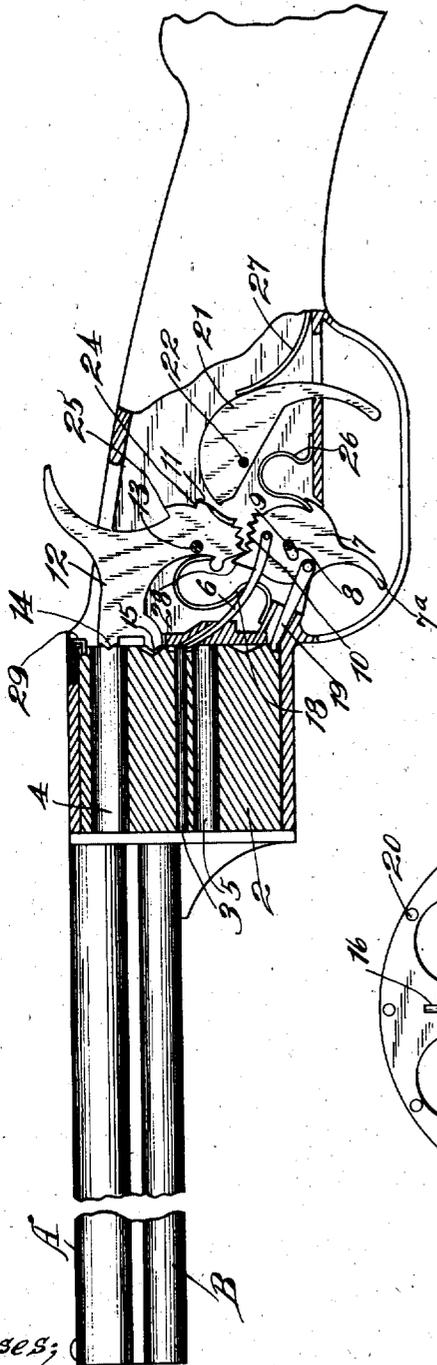


Fig. 1.

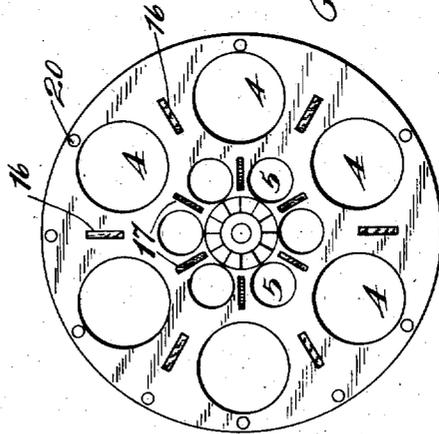


Fig. 2.

Witnesses;

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*Inventor;*  
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*His Att'y.*

# UNITED STATES PATENT OFFICE.

ISAAC HARRISON RODEHAVER, OF AUBURN, CALIFORNIA.

GUN.

990,669.

Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed March 16, 1910. Serial No. 549,704.

*To all whom it may concern:*

Be it known that I, ISAAC H. RODEHAVER, a citizen of the United States, residing at Auburn, in the county of Placer and State of California, have invented new and useful Improvements in Guns, of which the following is a specification.

My invention relates to improvement in guns. It consists in the employment of a revolving cylinder having a plurality of chambers, capable of being brought into line with corresponding barrels, and mechanisms whereby said cylinder may be so revolved as to bring either of the chambers into line with its barrel.

It also comprises a novel arrangement of hammer and trigger mechanism whereby either set of chambers may be discharged independently of the other.

My invention also comprises combinations of parts, and details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a sectional elevation. Fig. 2 is an end view of the cylinder.

My invention is designed to provide a double gun in conjunction with a revoluble cylinder having chambers corresponding with the different barrels of the gun, and capable of being brought into alinement with said barrels independently, and either of the chambers discharged at will. Such a structure may be conveniently disposed as a shot gun and a rifle. In the present construction I have shown two barrels, one above the other; the upper barrel A being a shot-gun barrel, and the lower barrel B a rifle barrel. It will be understood however that any desired variation from this particular combination may be made.

The cylinder 2 is pivoted and turnable upon the central shaft or bolt 3 in the usual manner of such structures. Around the outer portion of said cylinder are disposed chambers 4 which correspond with the upper barrel A, and interior to these are chambers 5 which correspond with the barrel B of the gun. These interior chambers are so disposed as to lie intermediate of the chambers 4; that is, each of the chambers 5 will be in a radial line which will pass between the chambers 4, thus only one of the chambers can be brought into line with its corre-

sponding barrel at one time. The cylinder is revolved by a lever 6, which is connected with a trigger 7, which trigger also serves to raise the hammer and cock the gun. This trigger blade has a slot made in it, as shown at 8, and a fixed pin 9 passes through this slot. The periphery of the trigger has teeth 10 formed in it, which are adapted to engage with corresponding teeth 11 upon the rear portion of the hammer 12. This hammer 12 is pivoted or fulcrumed at 13, and has two firing points 14 and 15, the first named being in line with the exterior chambers 4 of the cylinder, and the second with the interior chambers 5.

The rear end of the cylinder has indentations 16 between the chambers 4, and similar indentations 17 between the chambers 5. These indentations are of such a character that when the hammer is caused to fall so as to discharge the cartridge within an exterior chamber of the cylinder, the firing point 15 of the hammer will enter one of the depressions 17 which lie between the chambers 5, and radially in line with the axis of the exterior chamber 4. In the same manner if the inner chambers are being fired, the inner point 15 will strike and explode the cartridge in the chamber which is in line with it, while the other point 14 will enter one of the slots or depressions 16 which are between the chambers 4, and radially in line with the chambers 5. Thus either of the chambers may be fired independently of the other.

The hammer is actuated by the spring 18 which may be of any suitable character or arrangement. In order to raise the hammer and cock the gun, the trigger extension 7<sup>a</sup> will be pulled, and the blade 7 will be moved backwardly by reason of the slot 8 movable upon the pin 9. The first action caused by this movement is to release the catch or holding bolt 19 which is connected with the trigger blade, and slidable through the cylinder frame so as to enter one of the holes or depressions 20 which are made around the periphery of the cylinder. The next action which is practically simultaneous with the withdrawal of the latch bolt will be the engagement of the teeth 10 and 11 of the trigger blade and the hammer respectively. A further pull upon the trigger 7<sup>a</sup> then causes

the trigger blade to revolve about the pin 9, and the teeth 10 acting upon the teeth 11 will cause the hammer to be withdrawn, turning about its pin 13 until the teeth have passed out of engagement when the hammer will be free to be forced down by its spring 18.

21 is what I term a "set trigger" pivoted at 22, and as here shown at the rear of the trigger 7. This set trigger has a notch 23 which is adapted to engage either of the notches 24 or 25 upon the rear of the hammer, when raised by the finger. The trigger blade 7 is normally forced forward by the action of the spring 26. The trigger 21 is similarly acted upon by a spring 27. The operation would then be as follows: The hammer being down, the trigger 7<sup>a</sup> will be pulled, and the first action will be to cause the slot 8 to traverse upon the pin 9, compressing the spring 26, and withdrawing the latch bolt 19, thus releasing the cylinder. This rearward movement of the trigger blade engages the teeth 10 and 11, as previously described, and the further movement of the trigger acts to raise the hammer, and to act through the lever 6 to revolve the cylinder until the desired chamber is brought into line with that particular part of the hammer which is to coact with it. The cylinder is locked at the moment of firing by a beveled spring-actuated snap bolt 29, the bevel allowing it to be forced back to release the cylinder when it is to be again advanced.

When the hammer is cocked by pulling the shiftable trigger, 7, and intermeshing the teeth, 10 and 11, as before described, the spring, 18, will instantly and forcibly throw the hammer, 12, against the cartridge as the said teeth, 10 and 11, clear each other, the arrangement of the teeth being such as to permit this action. The force of the spring and velocity of the hammer will carry the half-cock lug, 24, past the trigger, 21. If the hammer be slowly cocked by hand, then the trigger, 21, will engage and hold the lugs, 24 or 25, and the spur, 28, will be pushed over by the hammer, the teeth, 10 and 11, not engaging.

The ratchets or gears in the hammer and trigger are so constructed and arranged that the hammer is released, and the outside barrel of the gun is fired before the set trigger becomes engaged in the top notch 25, and when the set trigger is in the half cock notch 24, the trigger blade 7 will be released and forced back to its place by the action of the spring 26, and the hammer allowed free action.

28 is a point or extension at the front of the trigger 7, and this point is engaged by the hammer when the latter is raised by finger pressure, so that the trigger and hammer teeth are forced into gear, and the cylinder is released and revolved in the same manner as when operated by pulling the

trigger backward. When the hammer is raised by the action of the trigger 7, it is released and allowed to fall as soon as the teeth have passed and become disengaged, but when raised by finger pressure to either half or whole cock, it can only be released or fired by the use of the set trigger.

The operation of the gun is as follows: The gunner determines which series of chambers 4 or 5 he wishes to shoot, and if he selects the large chamber 4 he half cocks the hammer to turn the cylinder 2 sufficiently to bring a chamber 4 under the hammer point 14. Then by pulling the trigger 21 the hammer will be released and discharge the cartridge. Thereafter, if he pulls the trigger 7<sup>a</sup> this will cause the cylinder to turn a sixth revolution at each pull, thus discharging large cartridges. Half cocking the hammer 12 only turns the cylinder a twelfth turn, and if the small chamber 5 is selected, then each pull on trigger 7<sup>a</sup> will thereafter turn the cylinder a sixth and fire the small chambers. The relative proportions of the release trigger 21 and the shoulder 24 of hammer 12 is such that the momentum of the latter under impulse of spring 18 always carries the shoulder clear of the trigger nose when firing. When the hammer is half cocked slowly it will lock lightly on the trigger 21.

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

1. In a gun, superposed barrels, a cylinder having concentric cartridge chambers adapted to be brought into line with the respective barrels, said chambers being on radial lines intermediate of each other, a latching device adapted to engage the cylinder to retain either of the chambers in register with its barrel, a hammer having points corresponding with the two sets of chambers, said cylinder having depressions intermediate of the chambers to receive the firing point of the hammer which is not in use.

2. A gun having a cylinder with concentric radially alternating cartridge chambers, a unitary hammer having integral firing points in line with said chambers, means for retracting the hammer, said means consisting of teeth formed upon the rear of the hammer, and a trigger having corresponding teeth adapted to engage therewith, and to raise the hammer when the trigger is pulled, said cylinder having depressions and the inactive points of the hammer adapted to enter the depressions between corresponding chambers when the other ones are being discharged.

3. In a gun, a cylinder having concentric alternating chambers and intermediate depressions; a hammer having points adapted to register with the two sets of chambers, the inactive points of the hammer falling in

the depressions between the corresponding chambers, when the other ones are being discharged.

4. In a gun, a cylinder having concentric and radially alternating cartridge chambers, a hammer having points adapted to register with either set of chambers, and having gear teeth upon the rear portion, a slotted trigger, a pin upon which said trigger is movable so that when pulled it moves backward to engage the teeth of the hammer, a spring by which the hammer is forced down when the teeth have passed out of engagement, and a spring acting to return the trigger to its normal position when released.

5. A gun having concentric radially alternating cartridge chambers, a hammer having firing points in line with said chambers, means for retracting the hammer, said means consisting of teeth formed upon the rear of the hammer, a trigger having corresponding teeth adapted to engage therewith, and to raise the hammer when the trigger is pulled,

and a set trigger adapted to engage and retain the hammer when raised by finger pressure. 25

6. A gun having concentric radially alternating means for retracting the hammer, said means consisting of teeth formed upon the rear of the hammer, a trigger having corresponding teeth adapted to engage therewith, and to raise the hammer when the trigger is pulled, a second trigger fulcrumed at the rear of the first named trigger, and having an engaging notch, and coacting engaging notches upon the hammer. 30 35

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses. 40

ISAAC HARRISON RODEHAVER.

Witnesses:

L. ARMBRUSTER,  
C. H. SLADE.