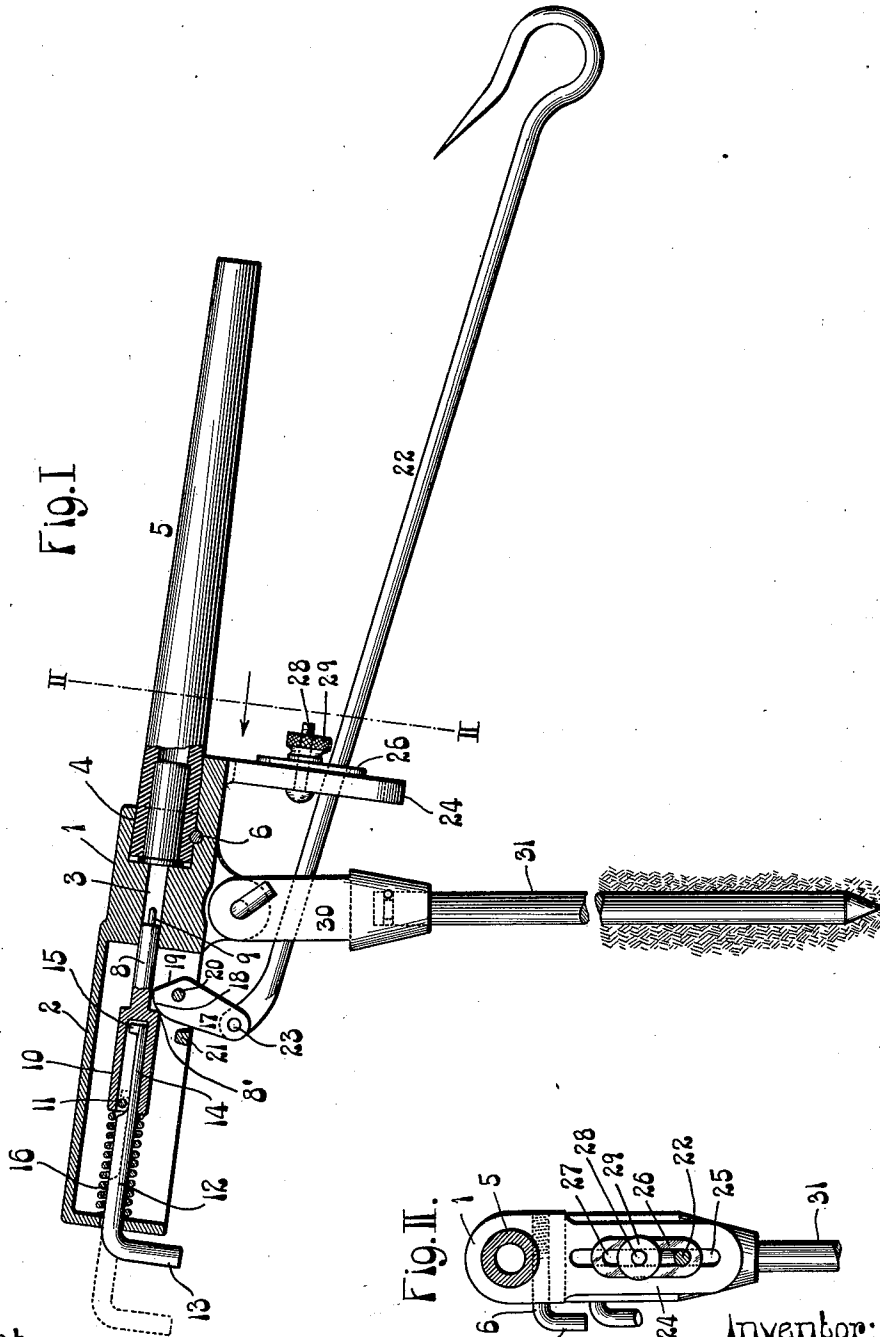


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TRAP GUN.
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Attest
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UNITED STATES PATENT OFFICE.

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TRAP-GUN.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES D. LOVELACE, a citizen of the United States of America, residing at San Angelo, in the county of Tom Green and State of Texas, have invented certain new and useful Improvements in Trap-Guns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to that character of fire arms designed to be set in the haunts of wild animals to be fired by the animals for self destruction.

The present invention has for its object to produce a trap gun of marked simplicity and which may therefore be manufactured and sold at minimum cost.

Figure I is a view of my trap gun shown partly in side elevation and partly in vertical longitudinal section. Fig. II is a vertical cross section taken on line II—II, Fig. I.

In the drawings: 1 designates the breech block of my gun, which has formed integral with it a receiver 2 that is open at its bottom and comprises a top member, side walls and rear end wall. The breech block contains a longitudinal bore 3 for the hammer of the gun and is provided at its front end with the cavity 4 in which the barrel of the gun is snugly seated.

5 designates the barrel of the gun which is separably fitted to the breech block by entrance into the cavity 4, the wall of said cavity and the exterior of the barrel at its rear end being plain surfaced, thereby permitting of the barrel being readily slipped into position in the cavity. The barrel is connected to the breech block by a simple straight retaining pin 6 which extends through a transverse hole in the breech block and occupies registering transverse grooves, one of which is located in the wall of the cavity 4 and the other of which is in the barrel 5. The retaining pin 6 is preferably screw threaded to engage a screw thread in the hole that receives it and is provided with a handle 7 by which the pin may be grasped to position it in the hole provided therefor and in the registering grooves in the barrel and breech block.

8 designates the hammer of my gun operable in the bore 3 within the breech block and extending into the receiver 2. The hammer is provided at its forward end with

a firing pin 9 and at its rear end with a hollow head 10 containing a transverse pin 11.

12 is a hammer retracting rod extending longitudinally of the receiver 2 and through an opening in the rear wall of said receiver, the rod being provided with a handle 13 that may be grasped to draw the retracting rod rearwardly in the act of setting the hammer. The retracting rod extends into the hollow head of the hammer 8 and is cut away to accommodate the transverse pin 11 in the rear end of said head to permit the longitudinal movement of the hammer independently of the retracting pin when the hammer moves forwardly for cartridge exploding action as will hereinafter more fully appear. At the forward end of the cut away portion of the retracting rod is a lug 15 that engages the pin 11 when the retracting rod is being drawn rearwardly to set the hammer.

16 designates a hammer impelling spring surrounding the retracting rod 12 and located between the head of the hammer and the rear wall of the receiver 2. This spring is contracted and placed under tension when the hammer is retracted by the rod 12, the spring being retained in such condition while the hammer is held retracted through the medium of the sear about to be described.

Before describing the sear of my gun I would mention that the hammer 8 is provided with a shoulder 8' which faces forwardly and preferably extends at a right angle to the axis of the hammer.

17 designates the sear adapted to engage the shoulder 8' of the hammer to hold it retracted. The sear is arranged in the receiver 2 upon a transverse pivot pin 20, and the sear is adapted to be moved so that its inner arm may be disposed in the path of movement of the shoulder 8' on the hammer. The inner arm of the sear is provided with a curved rear face 18 preferably concentric with the pivot pin 20 on which the sear turns, and said arm is cut away in front at 19.

21 is an abutment fixed to the receiver 2 by which the forward movement of the inner arm of the sear is limited when the latter is placed in position to restrain the hammer of my gun in retracted position. When the hammer of my gun is being retracted the sear is adjusted to dispose the front face 19 toward the hammer and the sear will at this

time permit ready retraction of said hammer. The sear is then adjusted on its pivot pin to position the curved rear face 18 of the sear in front of the shoulder 8' of the hammer, as illustrated in Fig. I, such adjustment being limited by the abutment 21 so that the sear will hold the hammer in retracted position. To release the sear from hammer restraining position its outer arm is moved forwardly, thereby causing the inner arm of the sear to move rearwardly until the forward end of the curved face 18 has become separated from the shoulder 8' of the hammer at which time the cutaway face 19 of the sear will be presented to the shoulder portion of the hammer and the hammer is impelled forwardly by the spring 16 to explode the cartridge in the barrel of the gun.

22 is a sear operating rod pivotally connected at 23 to the outer arm of the sear 17 and extending forwardly to a point beyond the muzzle of the gun barrel. This rod is preferably provided at its forward end with a hook to which bait may be applied. An animal attempting to secure the bait applied to the sear operating rod draws said rod forwardly to a sufficient degree to shift the sear until the hammer of the gun is released, and provision being made for the animal being located in front of the muzzle of the gun barrel when it attempts to secure the bait, it receives the missile discharged from the gun and is killed thereby.

24 designates a guide leg depending from the breech block 1 of my gun through which the sear operating rod 22 extends, the guide leg being provided with a vertical slot 25 for the reception of said rod.

To adapt my gun for use in killing different sized animals I provide an adjustable auxiliary guide device upon the guide leg 24 and through which the sear operating rod 22 is operable. This device comprises a guide plate 26 fitting against the guide leg and containing a vertical slot 27. The plate 26 is held in positions to which it is adjusted by a bolt 28 and nut 29, the bolt extending through the slots in the leg 24 and plate 26. The head of the bolt bears against one of the said members and the nut bears against the other member. By vertical adjustment of the guide plate 26 I am enabled to readily raise or lower the sear operating rod so that its forward end, on which the bait is placed, will be properly positioned relative to the muzzle of the gun barrel according to the size of the animal for which the gun is set. The auxiliary guide device just described is advantageous for the further reason that the vertical slot therein permits of the bolt and nut 28 and 29 by which the slotted plate 26 is held being adjusted to any desired position throughout the length of the slot in the plate to provide an upper adjustable abut-

ment that will limit the vertical movement of the sear operating rod 22 to the proper degree only, with just sufficient play of the sear operating rod to permit its actuation.

My trap gun is preferably mounted on a swivel fork 30 to which the breech block is tiltably attached and the swivel fork is supported by a post or leg 31 that may be conveniently forced into the ground at the point where the trap gun is set.

I claim:

1. A device of the character described comprising a breech block, a hammer operable in said breech block, means for impelling said hammer in a forward direction, a sear pivotally connected to said breech block, the said sear having an inner arm provided with a curved rear face adapted to be engaged by said hammer when the latter is retracted, and means for limiting the forward movement of the inner arm of said sear to prevent forward movement of said hammer without rearward movement of the inner arm of the sear to disengage its curved surface from said hammer.

2. A device of the character described comprising a breech block, a hammer operable in said breech block, means for impelling said hammer in a forward direction, a sear pivotally connected to said breech block, the said sear having an inner arm provided with a curved rear face adapted to be engaged by said hammer when the latter is retracted, the inner arm of the sear being cut away in front of its curved face to permit the forward movement of the hammer when said inner arm is thrown rearwardly, and means for limiting the forward movement of the inner arm of said sear to prevent forward movement of said hammer without rearward movement of the inner arm of the sear to present the front cut away portion thereof toward said hammer.

3. A device of the character described comprising a breech block, a hammer operable in said breech block having a shoulder extending at an angle to the axis of the hammer, means for impelling said hammer in a forward direction, a sear pivotally connected to said breech block, the said sear having an inner arm provided with a curved rear face adapted to be engaged by the shoulder of said hammer when the hammer is retracted, and means for limiting the forward movement of the inner arm of said sear to prevent forward movement of said hammer without a rearward movement of the inner arm of the sear to disengage its curved surface from the shoulder of said hammer.

4. A device of the character described comprising a breech block having a receiver extending rearwardly therefrom, a hammer operable in said breech block and extending

into said receiver, means for impelling said hammer in a forward direction, a sear pivotally mounted in said receiver, the said sear having an inner arm provided with a curved rear face adapted to be engaged by said hammer when the latter is retracted, and an abutment fixed to said receiver adapted to be engaged by said sear to prevent forward movement of its inner arm to a degree sufficient to permit forward movement of the hammer while the inner arm of the sear is in a forward position, thereby requiring rearward movement of the inner arm of the sear to release the hammer from engagement with the curved rear face of said sear.

5. A device of the character described comprising a breech block, a barrel secured to said breech block, a hammer operable in said breech block, a sear by which said hammer is held in retracted position, a sear operating rod, a main guide member for said sear operating rod, and an auxiliary rod guiding member adjustably secured to said main guide member.

6. A device of the character described comprising a breech block, a barrel secured to said breech block, a hammer operable in said breech block, a sear by which said hammer is held in retracted position, a sear operating rod, a main guide member for

said operating rod, and a slotted auxiliary rod-guiding member adjustably secured to said main guide member.

7. A device of the character described comprising a breech block, a barrel secured to said breech block, a hammer operable in said breech block, a sear by which said hammer is held in retracted position, a sear operating rod, a main guide member for said sear operating rod, an auxiliary rod guiding member fitted to said main guide member, and a set bolt whereby said auxiliary rod guiding member is adjustably secured to said main guide member.

8. A device of the character described comprising a breech block, a barrel secured to said breech block, a hammer operable in said breech block, a sear by which said hammer is held in a retracted position, a sear operating rod, a main slotted guide member through which said sear operating rod extends, a slotted auxiliary rod guiding plate fitted to said main guide member, and means for holding said rod guiding plate in positions of varying adjustment longitudinally of the slot in said main guide member.

CHARLES D. LOVELACE.

In the presence of—

C. R. HALLMARK,
N. S. RINES.