No. 801,839. PATENTED OCT. 17, 1905.

B. BEHR.

CATTLE SHOOTING APPARATUS.

APPLICATION FILED JAN. 4, 1904.

Fig. 1.

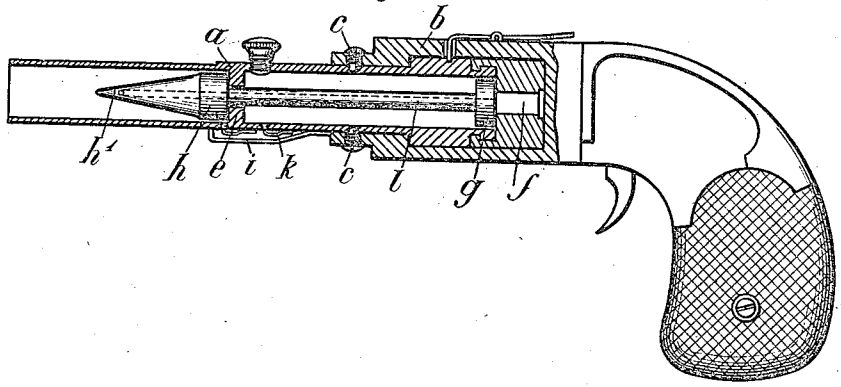


Fig. 2.

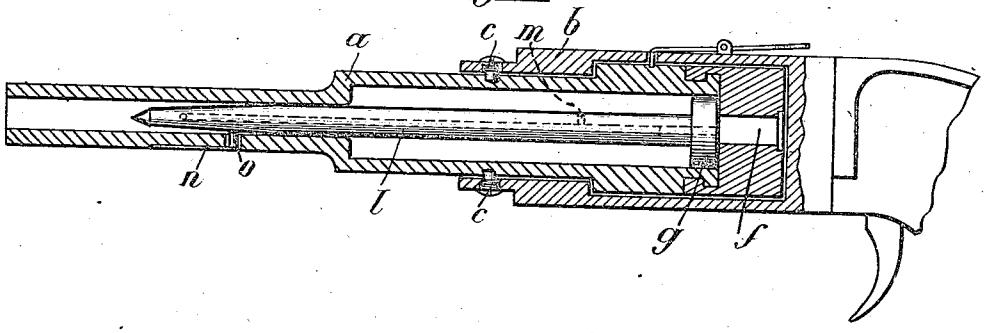
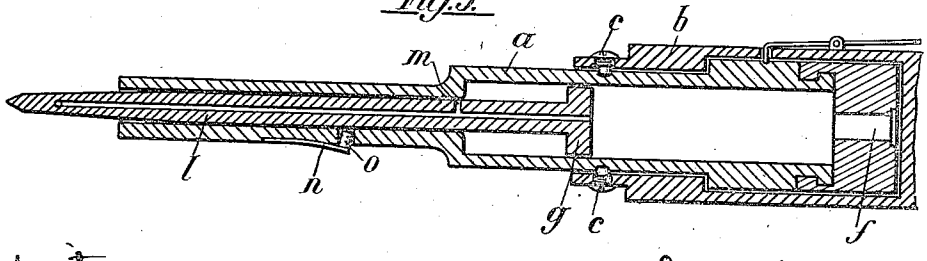


Fig. 3.



Witnesses
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CATTLE-SHOOTING APPARATUS.

No. 801,839. Specification of Letters Patent. Patented Oct. 17, 1905.

Application filed January 4, 1904. Serial No. 187,710.

To all whom it may concern:

Be it known that I, BURKARD BEHR, a citizen of the German Empire, residing at the free city of Hamburg, Germany, have invented certain new and useful Improvements in Cattle-Shooting Apparatus, of which the following is a description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The present invention relates to cattle-slaughtering implements, and has for its principal object to provide a device of simple and inexpensive construction in which a brain-piercing bolt may be fired by an explosive charge contained in a cartridge or similar casing and instantly withdrawn under the pressure of a volume of air condensed or compressed by the forward movement of the bolt.

A further object of the invention is to insure the passage of the exploded gases or products of combustion into the brain of the animal, and, further, to provide means for frictionally locking the bolt in firing position.

With these and other objects in view the invention consists in the matters hereinafter described, and referred to in the appended claims.

In the accompanying drawings, Figure 1 is a sectional elevation of a cattle-slaughtering implement constructed in accordance with the invention. Fig. 2 is a similar view of the forward end of an implement of modified construction. Fig. 3 is a view similar to Fig. 2, showing the bolt in a different position.

Similar reference characters designate like parts throughout the several figures of the drawings.

The barrel *a* is pivoted to the handled breech *b* by pins or screws *c*, and in the standing breech is a cylindrical chamber *f* for the reception of a cartridge.

The barrel is divided by a transverse partition *e* into a forward open-ended barrel and a rear cylinder closed at both ends. In the partition *e* is a guiding-opening for a hollow bolt *l*, which fits snugly in the opening to prevent the free passage of air. To the rear end of the hollow bolt is secured a piston *g*, fitting rather closely in the cylinder and arranged in position to receive the impact of the gases resulting from the detonating of the cartridge. The piston is provided with a central opening in alinement with the passage formed in the bolt *l*. At the opposite end of the bolt is a head-block *h*, having conical point *h'*, said block fitting within the forward barrel and the bolt-passage being continued therethrough, but opening laterally to the exterior of the pointed portion of the head to the rear of the extreme end thereof, so that the gases resulting from the explosion will be directed laterally into the brain without danger of clogging the passages.

In these devices it is desirable to instantly withdraw the bolt with a view of lessening the pain and in order that the device may be instantly ready for refiring. To accomplish this, the forward end of the cylinder forms an air-cushion in which a volume of air is compressed in advance of the piston. The cylinder has an air-entrance port in advance of its front end, and said port is normally closed by a valve *k*, which opens to permit the entrance of air to the cylinder in advance of the piston as the latter moves rearward. When the piston is forced forward, the valve is closed and the air forms a cushion which in expanding restores the bolt to the firing position.

To avoid retarding the rearward movement of the bolt, the barrel is also provided with a valved port *i* to permit the free passage of the air.

In the construction shown in Figs. 2 and 3 the bolt proper extends through a barrel of reduced diameter, and in this case the bolt has a transverse opening *m* leading from the interior of the bolt to permit the passage of air from the cylinder until the bolt has reached the position shown in Fig. 3, the remaining air being compressed to form the cushion. In order to prevent outward movement of the bolt before firing, the barrel carries a spring *n*, to which is secured a friction-block *o*, passing through an opening in the barrel and engaging the tapered forward end of the bolt, as shown in Fig. 2.

Having thus described the invention, what I claim is—

1. In combination, a stock, and barrel, the latter including a cylinder, and a bolt having an enlarged head or piston fitting in the cylinder to form an air-cushion in advance of the piston to automatically retract the bolt.

2. In a firearm of the class described, a pointed bolt having a gas-passage, the passage opening laterally to the exterior of the bolt in rear of its pointed end.

3. In a firearm of the class described, a barrel member, a partition dividing the same into a forward barrel and a rear cylinder, a hollow bolt extending through a guiding-opening in the partition, a piston arranged at the rear end of the bolt and fitting in the cylinder, a conical head arranged at the opposite end of the bolt and fitting in the barrel, and valved ports in the walls of the barrel and cylinder.

In testimony whereof I affix my signature in presence of two witnesses.

BURKARD BEHR.

Witnesses:

ERNEST H. L. MUMMENHOFF,

T. CHRIST. HAFERMAMY.