

UNITED STATES PATENT OFFICE.

GEORGE PECK GUNN, OF ILION, NEW YORK.

BREECH-LOADING GUN.

SPECIFICATION forming part of Letters Patent No. 421,492, dated February 18, 1890.

Application filed September 10, 1889. Serial No. 323,536. (No model.)

To all whom it may concern:

Be it known that I, GEORGE PECK GUNN, a citizen of the United States, residing at Ilion, in the county of Herkimer and State of New York, have invented certain new and useful Improvements in Breech-Loading Guns, of which the following is a specification.

My invention relates to breech-loading guns; and the invention consists in certain novel features of construction, as hereinafter set forth.

Figure 1 is a side elevation with the stock shown in section. Fig. 2 is a similar view showing the hammer in a different position, and Fig. 3 is a transverse vertical section on the line *xx* of Fig. 1.

This invention relates to that class of guns which use small metallic cartridges and which are used for target practice and the like, and the object is to cheapen the construction and to render the gun more safe in handling and prevent accidents.

In the accompanying drawings, B represents the barrel, secured to the stock H by a band C and by a shoulder at the front end of the spring S, as shown in Fig. 1. In the under side of the barrel a short distance from its rear end I cut a notch, as shown in Figs. 1 and 2, in such a manner as to form a hook-shaped shoulder *b* on the rear wall of said notch for the engagement of the front end of the combined breech-block and hammer I. This combined breech-block and hammer I make somewhat in the form of a letter T, the central portion *l* being made of the proper length to reach from the rear end of the barrel to the notch, and having a hook *a* formed on its front end to engage with the shoulder *b*, as shown clearly in Figs. 1 and 2. It is provided with a thumb-piece *r* and below that with an enlargement, the front face of which constitutes the breech-block, it being of the proper size to cover the bore and the head of the cartridge when closed or in the position shown in Fig. 1. At its rear end it is provided with a downwardly-projecting arm *f*, as shown in Figs. 1 and 2, the lower end of which terminates in a hook *h*, which is arranged to engage with a similar hook *g* on the upper end of the trigger T, as shown in Fig. 2, the interlocking of these hooks rendering it impossible to fire the gun while the

parts are in this position, either by pulling the trigger or by accidentally hitting the same. It is also provided with a firing-point *t*, as shown in Figs. 1 and 2.

A short distance above the hook *h* on the front face of the arm *f*, I form a shoulder *e*, the face of which stands at or nearly at a right angle to the arm *f*, on which the point of the hook *g* of the trigger T engages when the hammer is depressed to full-cock, and from which it is readily disengaged by a pull on the trigger when it is desired to fire the gun.

To hold the combined hammer and breech-block in position and operate the same, I secure to the under side of the barrel a nearly straight, flat, and stiff spring, the front end of said spring being fastened to the barrel by a clamp and screw, as shown in Fig. 1, the front ends of the spring and clamp forming a shoulder which abuts against a corresponding shoulder formed by cutting a recess in the stock at that point, as shown in Fig. 1, and which prevents any forward movement of the barrel upon the stock, while the band C clamps the barrel firmly to the stock, as hereinafter more fully described. The rear end of the spring S is made to bear upon the under side of the arm *l* of the combined breech-block and hammer I at a point some distance in rear of the shoulder *b*, and is curved or may have its point thickened and rounded, so as to move freely on the arm *l* when the latter is depressed or raised.

The trigger T is pivoted in the usual manner, and is provided with a spring *o* to throw it back to the proper position to engage with the hook *h* and the shoulder or sear-notch *e*, the rearward movement of the upper end of the trigger T being so limited either by the shoulder or front wall of the slot in the guard-strap, to which it is pivoted, or by a pin in rear of it above its pivot as to hold its upper end in the proper position to automatically engage with the hook *h* or the shoulder *e* when the hammer is depressed.

The band C is constructed in such a manner as to hold and permit of the lateral adjustment of the sight *z*, and also clamp the barrel to the stock. To do this I make the band with a slot *n* at the top where it rests upon the top of the barrel, as shown in

Figs. 1, 2, and 3, there being a slight recess formed on the inside of the band along each side of the slot, as shown in Figs. 1 and 2. The sight *i* is made to project through the slot in the band, and is provided with small lateral flanges at its lower edge, (and which are readily formed by slightly upsetting the metal by means of suitable dies,) these flanges fitting in the recesses at the sides of the slot, as shown in Figs. 1 and 2, but so that the band will bear upon them and when drawn down tight hold the sight securely in position. As indicated in Fig. 3, the slot *n* is made longer than the width of the sight, so as to permit the sight to be adjusted to one or the other side therein when the band is loosened. At its lower side the band *C* is made much thicker, as shown in Figs. 1 and 2, it being provided at this point with a screw-hole to receive a large flat-ended screw *D*, the inner flat end of which bears against the under side of the stock, and thus draws the band down tight upon the barrel, thereby clamping the sight tight upon the barrel and the barrel firmly to the stock. When it is desired to adjust the sight, the screw is turned back a little, when the sight is free to be moved to the right or left in the slot *n*, after which, by tightening up the screw again, the parts are clamped in position.

I am aware that a combined hammer and breech-block has before been used; but in such cases it has been customary to pivot it to a lug projecting downward from the barrel. Such a construction adds to the cost of manufacture, and, besides, is not as safe, because the pivot-point is necessarily thrown much farther below the line or axis of the bore, thereby increasing the tendency of the breech-block to be thrown open by the explosion of the charge. By my construction it will be seen that the point of contact between the point of the hook *a* and the shoulder *b* is

brought very nearly in line with the axis of the bore, and that, therefore, there is much less tendency of the breech to fly open when the gun is fired. The interlocking of the trigger-hook *g* with the hook *h* of the hammer also adds materially to the safety of the arm; and the simplicity of the construction enables the gun to be made very cheaply.

Having thus described my invention, what I claim is—

1. In combination with the barrel *B*, having the shoulder *b*, formed by a notch or recess in its under side, the combined hammer and breech-block *I*, provided with the hook *a* to engage with said shoulder, and the spring *S*, all arranged to operate substantially as shown and described.

2. The combination, in a gun, of the combined hammer and breech-block provided with the hook *h*, and the trigger *T*, provided with the hook *g*, said parts being arranged in relation to each other substantially as shown and described.

3. In combination with a gun-barrel and its stock, the band *C*, provided with the screw *D*, having its end arranged to bear against the stock, substantially as and for the purpose set forth.

4. In combination with the band *C*, provided with a slot, the sight *i*, constructed to fit and be adjustably held in said slot, with a screw *D* for tightening the same, substantially as set forth.

5. The combination, in a gun, of a barrel and an underhung combined hammer and breech-block united to the barrel by means of the hook *a* and shoulder *b*, as set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

GEORGE PECK GUNN.

Witnesses:

A. D. RICHARDSON,
CHAS. HATTER.