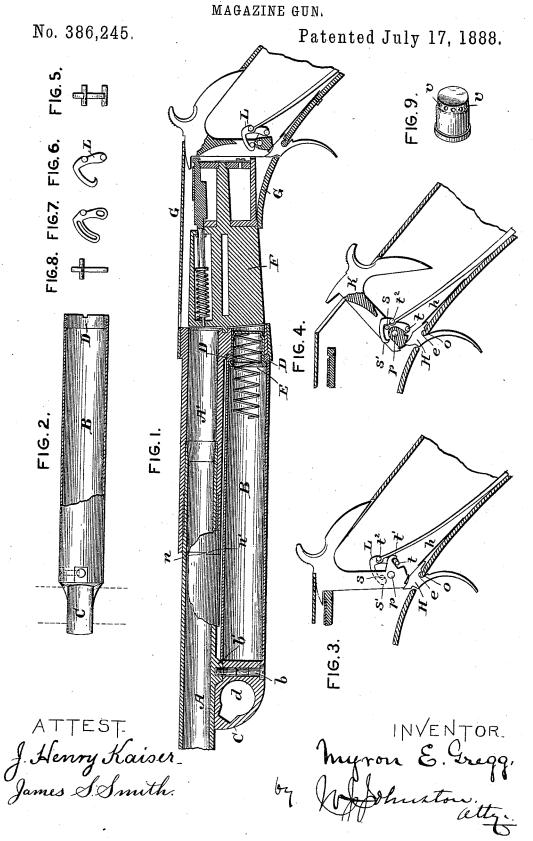
M. E. GREGG.



## UNITED STATES PATENT OFFICE.

MYRON E. GREGG, OF WASHINGTON, DISTRICT OF COLUMBIA.

## MAGAZINE-GUN.

SPECIFICATION forming part of Letters Patent No. 386,245, dated July 17, 1888.

Application filed May 2, 1888. Serial No. 272,580. (No model.)

To all whom it may concern:

Be it known that I, Myron E. Gregg, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Magazine-Guns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to fire arms, and more especially to the class of magazine-guns, and is designed as an improvement on patents here-tofore granted to me and numbered, respectively, 353,376, dated December 7, 1886, and 374 597 dated December 13, 1887

374,597, dated December 13, 1887.

It consists in certain details of construction and arrangement of parts, hereinafter specifically described in the specification, pointed out in the claims, and illustrated in the draw-

ings, in which-

Figure 1 is a longitudinal vertical section through the center. Fig. 2 is a top or plan view of the magazine detached, showing the rear upper portion of the shell removed. Fig. 3 is a side elevation of the hammer, main-30 spring, and trigger, with the exterior shell or casing in section. Fig. 4 is a central longitudinal section through hammer and casing, showing the actuating and controlling mechanism of the hammer and means of pivoting 35 the trigger. Figs. 5, 6, 7, and 8 are details showing the stirrup, by means of which the hammer is suspended and maintained in its normal position out of contact with the firingpin, Fig. 5 being a rear view, Fig. 6 a side 40 elevation, and Figs. 7 and 8 modifications. Fig. 9 is a view of the follower in the magazine.

The objects of my invention are, first, to provide a stop or bushing within the open end of the magazine-barrel, whereby the follower 45 and spring are confined and prevented from dropping out when the magazine is detached from the gun; second, in providing at the outer or closed end of the magazine a sling-opening of such peculiar shape or form as will 50 adapt it for use as a wrench or spanner in unshipping the barrel; third, in so constructing the trigger that its pivot or seat shall consist of the edge of the shell or casing, through which it projects, and thereby obviate the ne-

cessity of transversely boring and consequent 55 weakening of the shell for the accommodation of the pivot; fourth, in providing a stirrup of peculiar form to connect the mainspring and hammer, whereby it is balanced or suspended by the spring out of contact with the firing- 60 pin when in its normal position, thus facilitating the lateral motion of the breech-block after firing the gun, and, fifth, in providing means for arresting the revolution of the barrel when screwed home at the precise instant when it 65 reaches its normal position, thus saving wear.

Referring more particularly to the drawings, A represents the barrel of the gun, which is preferably constructed with a rear guide-section, A', as in my former patent, to which the 70 front section is secured by means of the exterior and interior screw-threaded ends of the respective sections, as shown in Fig. 1.

B is the magazine beneath the barrel, the rear end of which is seated within the block 75 beneath the barrel in front of the cylinder, and the front end secured by means of a screw, b, inserted through the said end into a projecting lug, b', on the under side of the barrel.

C is the plug forming the front closed end 80 of the magazine, and also serving as a loop or

ring for attaching the sling.

d is the sling-opening in the plug, of a shape and size corresponding to a cross-section of the barrel and lug b', or may be made octagonal 85 or otherwise, whereby it is adapted to inclose the barrel for use as a wrench.

D represents the bushing or stop in the open end of the magazine, which is formed integral therewith or may be screwed in place, and 90 serves to arrest and confine the follower E and retain it with the spring within the magazine when it is unshipped or detached from the gun.

F is the cylinder, which, with its operating 95 mechanism, is similar to that shown in my former patents, and forms no part of my present invention; therefore it need not be de-

scribed here.

G is the shell or easing inclosing the breech 100 and operative parts of my gun in rear of the magazine, and, as in my former construction, is preferably composed of metal tubing of a uniform thickness

shipping the barrel; third, in so construct ing the trigger that its pivot or seat shall consist of the edge of the shell or casing, through which it projects, and thereby obviate the ne- left formula ing the trigger, the free end of which is pro- 105 jected downward from the interior of the cassist of the edge of the shell or casing, through the usual opening until the notch which it projects, and thereby obviate the ne- left formula in its rear side, rests upon the rear

edge, o, of the opening in the casing, which is rounded to form the seat or pivot, thereby affording a permanent and substantial pivot for the trigger (which pivot is integral with 5 the casing) without the necessity of boring the thin metal of which the shell or casing is composed to accommodate such pivot, and at the same time enabling the trigger to be lifted out of place when the hammer is removed to without withdrawing its pivot-pin, as in the usual construction.

K is the hammer, which rotates in the usual manner upon its pivot p, but is connected with the mainspring by means of the elbow-shaped 15 stirrup L, the front arm of which projects through a vertical slot in the hammer stem over a transverse stud, s, in said slot, and terminates in a hook, s'. Its opposite or rear arm is constructed in the form of the ordinary 20 stirrup and provided with the usual trupnions, one set of which,  $t_i$  engages the notch t' in the rear and bottom of the hammer, and another set,  $t^2$ , with the mainspring.

When the hammer is down or in its normal 25 position, the hook s' on the front arm engages the transverse stud s and holds the hammer suspended slightly out of contact with the firing pin, as shown in Fig. 1, the tension upon the spring being so adjusted by the distance 30 between the trunnions  $t^2$  and hook s' as to bal-

ance the hammer in that position.

The barrel A has formed on its rear face a right-angled shoulder, n, and a corresponding shoulder, n', is formed on the face of the breech-35 piece A', the opposite faces being inclined to correspond with the screw-threads by which the parts are united, so that when the barrel is screwed into the breech-piece and forced home the faces and shoulders will come in 40 close contact and form a stop at the instant when the barrel reaches its normal position.

The follower shown in Fig. 9 has an annular recess formed around its outer end, through the bottom of which are perforations v for the 45 purpose of admitting air within the magazine, as the follower fitting closely with the interior of the magazine operates somewhat in the nature of a piston, and its free movement is impeded unless a means is afforded for the free 50 ingress or exit of the air when the follower is actuated.

Having thus described the several parts of my invention in detail, I will proceed to describe its operation. When it is desired to 55 unship the barrel, the sling is removed and the magazine is detached by removing the screw b. The bushing D, being in the open end of the magazine and integral with it, acts as a stop or retainer for the follower and prevents it, 60 with its spring, from slipping out.

The opening d in the plug C, being made in a form to surround the barrel and its  $\log b'$ adapts the said plug to serve as a wrench in shipping or unshipping the barrel, the maga-65 zine proper being the handle or lever, and by means of it I am enabled to easily and quickly remove and replace a cylinder barrel with a

choke bore, or vice versa, while in the field, thus readily and conveniently adapting my

gun to the uses required.

When in the act of firing, the hammer is drawn back to the position shown in Fig. 4 and retained by the trigger, the forward end of which is thrown up by its spring h. the trigger is pressed and the hammer re- 75 leased, the impetus imparted by the mainspring carries it past the point of balance or suspension shown in Fig. 1 to the position shown in Fig. 3, and the transverse post s, engaging the hook S', carries the stirrup L down- So ward, forcing the trunnions t below the notch t' in the foot of the hammer until the impetus is overcome, when the tension of the mainspring exerted upon the hook s' and post s instantly lifts it clear of the firing-pin and to the 85 position of balance shown in Fig. 1.

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

1. The combination, with the barrel of a mag- 9c azine gun provided with a rib, angle, or lug, of the detachable magazine constructed as described, and having a sling-opening in its outer end of a form to span or inclose the barrel and its rib, thereby adapting the magazine 95 when detached for use as a wrench for shipping and unshipping the barrel, substantially as described.

2. The combination, with the mainspring and hammer provided with the vertical slot or 100 opening in its stem and the transverse post, of the elbow-shaped stirrup having its forward arm projecting through the slot in the hammer and provided with a hook adapting it to engage with said transverse post, substantially 165

as and for the purpose described.

3. In combination with the shell or casing provided with a trigger-opening beneath, having its rear edge swaged and rounded to form a trigger seat, the trigger provided on its rear 1110 side with the recess c, adapting it to fit and rest upon said seat at the rear edge of the opening, whereby it is wholly supported and operated independently of the casing at the front edge of said opening, substantially as and for 115 the purpose described.

4. The combination, with the barrel and its breech-piece, provided, respectively, with the exterior and the interior screw-threads, of the inclined faces corresponding in direction with 120 the screw-threads and the opposite right-angled shoulders, substantially as and for the

purpose described.

5. In combination with the magazine constructed as described, the hollow cylindrical 125 follower inclosing the outer end of the cartridge-spring and having the perforated annular recess at its end, substantially as and for the purpose described.

In testimony whereof I affix my signature in 130

presence of two witnesses.

MYRON E. GREGG. Witnesses: D. CARROLL DIGGES, CHARLES W. HANDY.