N. H. AMBLER.

Magazine Gun.

No. 106,246.

Patented Aug. 9, 1870.

FIG. 1

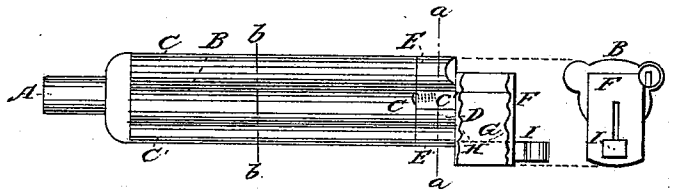


FIG. 2

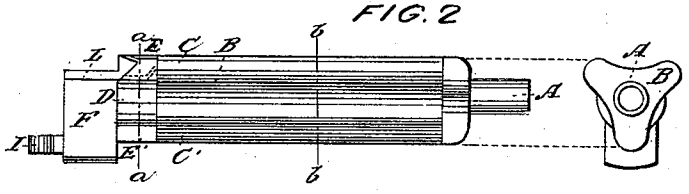


FIG. 3

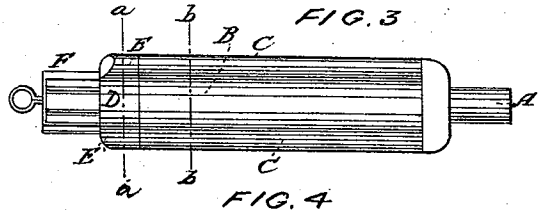


FIG. 4

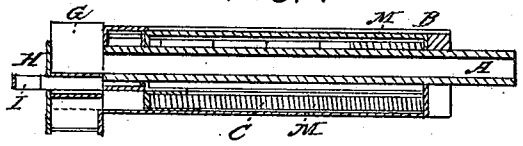


FIG. 5

FIG. 6

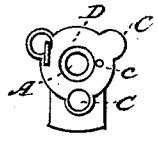


FIG. 7

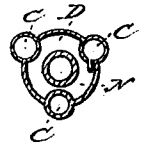


FIG. 8

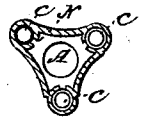


FIG. 9

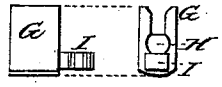
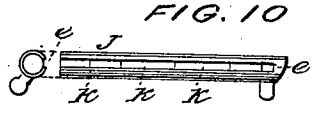


FIG. 10



WITNESSES:

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UNITED STATES PATENT OFFICE.

NATHAN H. AMBLER, OF EAST CLEVELAND, OHIO.

IMPROVEMENT IN MAGAZINE-GUNS.

Specification forming part of Letters Patent No. **106,246**, dated August 9, 1870.

Be it known that I, NATHAN H. AMBLER, of East Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Guns, of which the following is a description.

Figure 1 is a side view of the gun. Fig. 2 is a view of the opposite side of Fig. 1. Fig. 3 is a view of the upper side. Fig. 4 is a longitudinal section. Figs. 5 and 6 are detached sections. Fig. 7 is a transverse section in direction of the line *a a*. Fig. 8 is a transverse section in direction of the line *b b*. Fig. 9 is a detached section. Fig. 10 is a view of a cartridge-case with cartridges.

Like letters of reference refer to like parts in the different views.

My invention relates to one or more revolving magazines connected with the barrel of the gun, and the means employed for filling or charging the magazines, and providing an air-chamber around the barrel of the gun, where such magazines are connected, in the manner as hereinafter more fully described.

In Fig. 1, A represents the gun-barrel, which may be of any desirable length and caliber, and the breech end thereof attached to a stock in any convenient manner. Surrounding the barrel is a magazine, B. Said magazine may have cartridge-chambers C, more or less in number, three such being represented in the drawing, and of any length, the purpose of which will presently be shown.

The barrel A is attached firmly to a breech-piece, D, and against which the breech end of the revolving magazine abuts, as shown in the drawing. Said breech-piece is provided with a receiving-chamber, E, and discharging-chamber E′, corresponding in caliber and position to the chamber C of the magazine B, and in exact open relation to which the chambers C agree, as the magazine may be revolved in either direction, and when in such open relation the two arrangements of chambers are retained by a stud, *c*, Figs. 1 and 6, projecting from the body of the breech-piece D into corresponding depressions or dents *d*, Fig. 5, so arranged as to receive the end of the stud when the magazine is revolved and the chambers thereof brought in exact range with those of the piece D, the stud being forced forward by a spring, *c′*, Fig. 1, arranged for that purpose.

The stud, it will be observed, has a rounded end, and, therefore, is readily forced from the dent and back into its socket by the end of the magazine; but it again springs forward into the dents at the proper time for retaining the chambers in range with the barrel.

To the rear end of the breech-piece D is attached a receiving-case, F, Fig. 1, a side view of which is shown in Fig. 2. In said case is fitted closely, but loosely, a carrier, G, Fig. 1. A portion of the side of the case is represented as being broken away, in order that it may be seen. A detached view of said carrier is shown in Fig. 9, in which figure it will be observed that the bottom of the carrier is circular, as seen at H. Said circle is of the same diameter as that of the cartridge-chambers referred to, also that of the bore of the barrel, and to which it is brought into exact range by sliding it upward until the bottom of the carrier ranges with the bore of the barrel, as shown in Fig. 4, in which it will be seen that the rounded bottom H of the carrier is in range with the bore A of the barrel, whereas in Fig. 1 the carrier is represented as being near the bottom of the case. The purpose of said carrier and its operation will hereinafter be shown.

The manner of charging the gun and the operation of the same are as follows:

The cartridges, which are made up in the usual way, are filled into the chambers C by means of a cartridge-case, J, Fig. 10, which is made to fit the inside of the chambers. In said case the cartridges K are dropped. The case, when thus filled, is pushed into the chamber, and in such relation thereto that the slot *e* in the side of the case, through which the cartridges are seen, embraces the spring L, lying along the lower side of the chamber E of the piece D, the inner end of which is bent upward, as indicated by the dotted lines *f*. Now, on pushing in the case the end of the spring is depressed by its contact with the cartridges, which will again spring upward, as shown in Fig. 2, when all the cartridges in the case have passed over it. The case can now be withdrawn, leaving the cartridges in the chamber, they being prevented from coming out by the end of the spring passing up between the end of the last cartridge and the back end of the holder. In this way all the chambers of the magazine are filled, be they more or less in

number, and of any length. The chambers of the magazine on being thus charged, each cartridge is brought in succession to the barrel, and forced therein as follows: By turning the magazine around in either direction, a chamber is brought to the lower side of the barrel, as seen at C, Fig. 1, which will be in range with the lower chamber, E′, of the piece D, and which will also be in range with the lower part or bottom, H, of the carrier, as indicated by the dotted lines *m*, Fig. 1, which shows the carrier down. A cartridge will now be forced from the chamber of the magazine into the carrier by a coiled spring, M, Fig. 4. Now, on pushing up the carrier by the finger-piece I, the cartridge will be brought in range with the barrel, into which it is forced by some device arranged for that purpose, and from which it is fired by a lock of the ordinary construction or a modification of the same. The carrier is again dropped to the chamber C′, from which it receives another cartridge. It is then again raised by the carrier to the barrel, as before, and so on until all the cartridges from the chamber are used. The magazine is again revolved, thereby removing the empty chamber C′ from its relation to the chamber of the piece D, and substituting therefor a charged one, which is filled into the barrel in the same way as before, and so on until all the chambers are exhausted, which are then recharged, as above described.

It will be obvious that each chamber may be charged with cartridges without waiting until all the chambers are empty, and in this way keep more or less number of the chambers charged all the time.

The devices for raising the carrier, forcing the cartridge into the barrel, and firing the same may be such as are now employed in this class of implement or a modification thereof.

It will be seen on examination of the cross-sections, Figs. 7 and 8, that the barrel is surrounded by an air chamber or space, N, whereby said barrel is kept cool during frequent firing, and which may be very rapid and continuous, as the facility of charging the chambers is such that it can be done while the implement is in active use.

The number of cartridges with which the gun may be charged will be according to the number of chambers in the magazine and the length that they may be, which, as aforesaid, may be equal, or nearly so, to that of the barrel. The heat generated by the continued discharge of the cartridges in the barrel is prevented from affecting the cartridges in the revolving chamber by the air-chamber N, which is interposed between the barrel and the revolving magazine, so that no danger may arise by the heat thus generated to the loads in the chambers, and which will admit of a long and continuous firing of the piece.

The charge may be withdrawn from each chamber by inserting the empty cartridge-holder therein, into which will be received the cartridges that may be in the chamber. Now, by depressing the check-spring L, the holder and the cartridge can be withdrawn together, or as many of them as may be desired.

Claims.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The revolving magazine B, provided with one or more chambers, C, as arranged in relation to and in combination with the barrel A, substantially in the manner as described, and for the purpose set forth.

2. The air-chamber N, surrounding the barrel A, formed by the magazine in the manner as described, and for the purpose set forth.

3. The cartridge-holder J, when constructed in the manner as described and used, for the purpose specified.

4. The cartridge-holder J, spring L, and chamber C, when arranged to operate conjointly in the manner as described, and for the purpose set forth.

NATHAN H. AMBLER.

Witnesses:

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W. H. BURRIDGE.