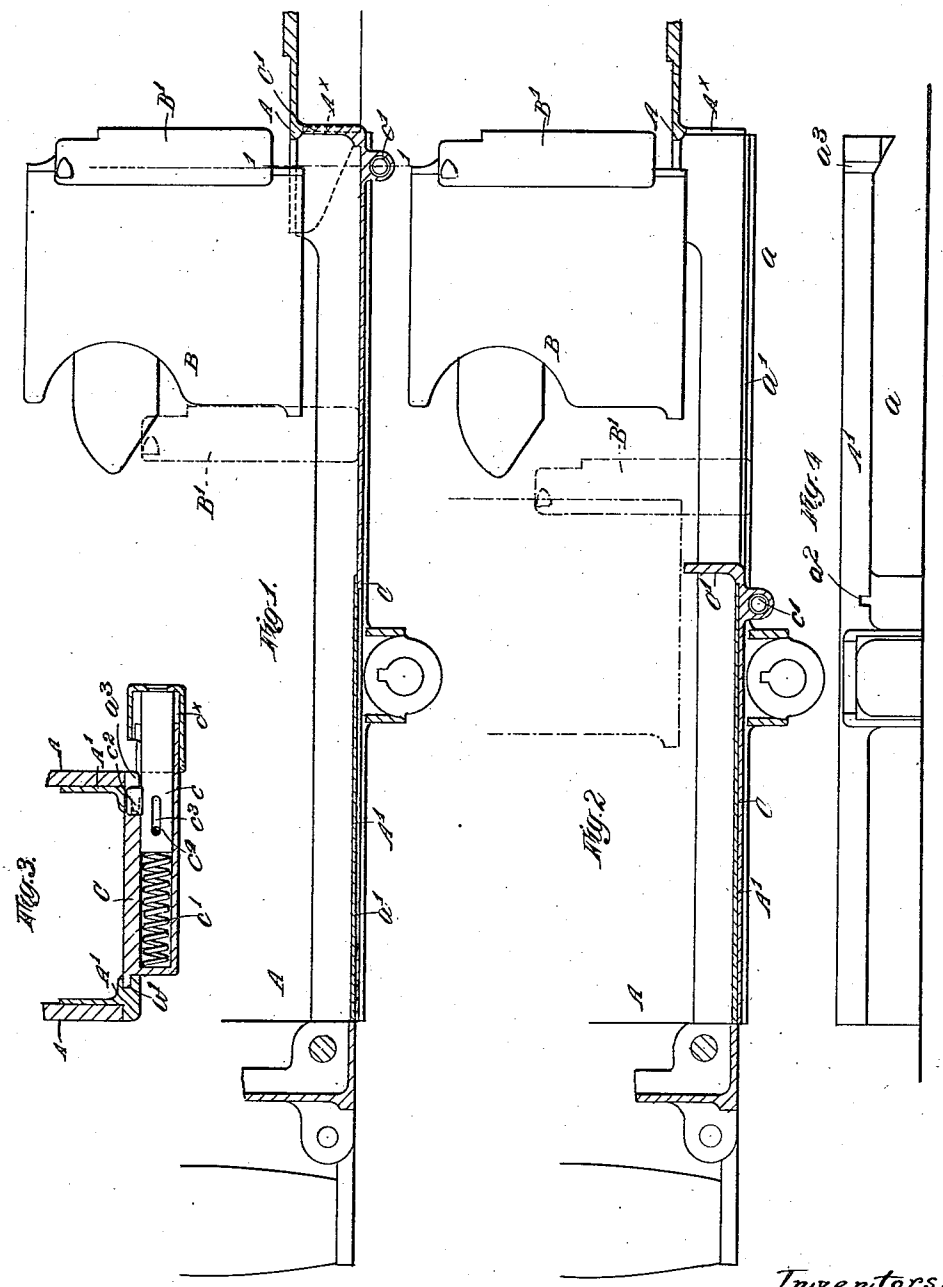
A. T. DAWSON & G. T. BUCKHAM.

AUTOMATIC GUN.

APPLICATION FILED OCT. 19, 1911.

1,077,680. Patented Nov. 4, 1913.



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UNITED STATES PATENT OFFICE.

ARTHUR TREVOR DAWSON AND GEORGE THOMAS BUCKHAM, OF WESTMINSTER, LONDON, ENGLAND, ASSIGNORS TO VICKERS LIMITED, OF WESTMINSTER, ENGLAND.

AUTOMATIC GUN.

1,077,680. Specification of Letters Patent. Patented Nov. 4, 1913.

Application filed October 19, 1911. Serial No. 655,618.

To all whom it may concern:

Be it known that we, ARTHUR TREVOR DAWSON, knight, and GEORGE THOMAS BUCKHAM, both subjects of the King of Great Britain, residing at Vickers House, Broadway, Westminster, in the county of London, England, have invented certain new and useful Improvements in or Relating to Automatic Guns, of which the following is a specification.

This invention relates to automatic guns and has particular reference to the sliding member or shutter for closing the aperture in the bottom of the mechanism casing through which the empty cartridge cases pass.

According to our invention we so construct and arrange the aforesaid member or shutter that when it is in its closed position the gun cannot be loaded, thereby preventing the gun from being fired with the aperture closed. For this purpose the said member or shutter is manually operated, and when in its closed position will arrest the downward movement of the cartridge carrier and thereby prevent the gun from being loaded.

In order that the said invention may be clearly understood and readily carried into effect, we will describe the same more fully with reference to the accompanying drawings, in which:—

Figure 1 is a longitudinal vertical section of the mechanism casing showing the closing member in the closed position. Fig. 2 is a similar view with the member in the open position. Fig. 3 is a transverse section taken approximately on the line 1—1, of Fig. 1, and Fig. 4 is a plan, viewed from beneath, of a portion of the lower part of the mechanism casing.

A is the mechanism casing and B the lock casing and B′ the cartridge carrier.

C is the aforesaid closing member or shutter.

The base of the mechanism casing is, in the example shown, provided with a bottom plate A′ which is formed with an aperture *a* of substantial length and width beneath the lock casing when the latter is in its advanced position. The forward part of the mechanism casing is formed with the usual ejection opening A^x. The closing member or shutter C is in the form of a sliding plate mounted in longitudinal grooves *a′* in the bottom plate A′ and the forward end of the said sliding plate is furnished with a vertical projection C′ which when the plate is in the forward position covering the aperture *a* in the bottom plate A′ will close the opening A^x as shown in Fig. 1.

The sliding plate C is provided with a catch which may be of the kind shown at *c* (Fig. 3) for retaining the said plate in its closed and open position. The said catch is under the control of a spiral spring *c′* and is formed on its top surface with a lug c^2 (Fig. 3) adapted to engage in one or other of two notches a^2, a^3 (Fig. 4) formed in the aforesaid bottom plate, the said notches representing respectively the open and the closed position of the sliding plate. The catch is formed with a slot c^3 (Fig. 3) in which a pin c^4 carried by the sliding plate C engages to limit the movements of the catch. The outer end of the said catch is provided with a knurled head c^x by the inward pressure of which the catch can be displaced to release it from engagement with either of its notches a^2, a^3.

It will be evident that by reason of the aperture *a* in the base of the casing, the empty cartridge cases can be readily ejected from the gun even if they drop out of their correct position in the extractor. The said aperture also serves for the passage of the caps of cartridge cases which may become detached.

When the sliding plate C is moved from its rearward or unclosed position shown in Fig. 2 to its forward or closed position shown in Fig. 1, the aperture *a* and the ejection opening A^x are closed and the entry of dust and the like to the mechanism is prevented. If when the sliding plate C is in this closed position, an attempt is made to load the gun, the lower part of the cartridge carrier B′ will come into contact with the said sliding plate (as shown in Fig. 1) and its downward movement will be arrested. When however the sliding plate is moved rearwardly to its fully open position shown in Fig. 2, the cartridge carrier B′ can complete its descent and the gun can be loaded by reason of the lock casing B being free to move in the ordinary manner.

What we claim and desire to secure by Letters Patent of the United States is:—

1. In an automatic gun the combination with the mechanism casing having an aperture in the bottom and forward part thereof for the escape of the spent cartridges, of manually actuated means for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing loading of the gun so long as the aperture remains closed.

2. In an automatic gun, the combination with the mechanism casing having an aperture in the bottom and forward part thereof for the escape of the spent cartridges, of a manually actuated shutter for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun as long as said aperture remains closed.

3. In an automatic gun, the combination with the mechanism casing having an aperture in the bottom and forward part thereof for the escape of the spent cartridges, of a manually actuated shutter for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun as long as said aperture remains closed, and means for retaining said shutter in its open or closed position relatively to the said aperture.

4. In an automatic gun, the combination with the mechanism casing having an aperture in the bottom and forward part thereof for the escape of the spent cartridges, of a manually actuated sliding plate for covering and uncovering the portion of the aperture in the bottom of the mechanism casing and an upward projection on the forward end of the said plate for covering and uncovering the portion of the aperture in the forward part of the mechanism casing, the said plate retarding the movement of the mechanism and preventing the loading of the gun so long as the aperture remains closed.

5. In an automatic gun, the combination with the mechanism casing of a bottom plate attached to said casing and having an aperture of substantial length and width and a sliding plate carried by said bottom plate for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun so long as the aperture remains closed.

6. In an automatic gun, the combination with the mechanism casing, of a bottom plate attached to said casing and having longitudinal grooves and an aperture of substantial length and width, and a sliding plate disposed within said longitudinal grooves for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun as long as said aperture remains closed.

7. In an automatic gun, the combination with the mechanism casing, of a bottom plate attached to said casing and having longitudinal grooves and an aperture of substantial length and width, a sliding plate disposed within said longitudinal grooves for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun as long as said aperture remains closed, and an upward projection on the forward end of said sliding plate.

8. In an automatic gun, the combination with the mechanism casing, of a bottom plate attached to said casing and having an aperture of substantial length and width, a sliding plate carried by said bottom plate for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun as long as said aperture remains closed, and a catch device carried by said sliding plate for engaging with one or other of two notches formed in said bottom plate.

9. In an automatic gun, the combination with the mechanism casing, of a bottom plate attached to said casing and having an aperture of substantial length and width, a sliding plate carried by said bottom plate for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun as long as said aperture remains closed, and a catch device carried transversely by said sliding plate for engaging with one or other of two notches formed in said bottom plate.

10. In an automatic gun, the combination with the mechanism casing, of a bottom plate attached to said casing and having an aperture of substantial length and width, a sliding plate carried by said bottom plate for covering and uncovering said aperture and for retarding the movement of the mechanism and preventing the loading of the gun as long as said aperture remains closed, a spring controlled catch carried transversely by said sliding plate for engaging with one or other of two notches formed in said bottom plate, and an actuating head on said catch projecting laterally from the mechanism casing.

In testimony whereof we affix our signatures in presence of two witnesses.

ARTHUR TREVOR DAWSON.
GEORGE THOMAS BUCKHAM.

Witnesses:
HENRY KING,
JNO. R. CASWELL.