



A.D. 1865, 24th OCTOBER. N^o 2743.

SPECIFICATION

OF

FREDERICK HARGRAVE GREY.

—

GUN LOCKS.

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LONDON:

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1866.



A.D. 1865, 24th OCTOBER. N^o 2743.

Gun Locks.

LETTERS PATENT to Frederick Hargrave Grey, of No. 43, Old Bond Street, in the County of Middlesex, Gun Maker, for the Invention of
“IMPROVEMENTS IN THE CONSTRUCTION OF GUN LOCKS FOR THE DISCHARGING
CENTRAL-FIRE CARTRIDGES AS USED IN BREECH-LOADING FIRE-ARMS.”

Sealed the 20th April 1866, and dated the 24th October 1865.

PROVISIONAL SPECIFICATION left by the said Frederick Hargrave Grey at the Office of the Commissioners of Patents, with his Petition, on the 24th October 1865.

I, FREDERICK HARGRAVE GREY, of No. 43, Old Bond Street, in the County of Middlesex, Gun Maker, do hereby declare the nature of the said Invention for “IMPROVEMENTS IN THE CONSTRUCTION OF GUN LOCKS FOR THE DISCHARGING CENTRAL-FIRE CARTRIDGES AS USED IN BREECH-LOADING FIRE-ARMS,” to be as follows:—

The tumbler of the lock (marked B and B, B, in the Drawing left here-
10 with) is made with an arm on it so formed as to strike the end of a horizontal plunger (marked A and A, A, in the said Drawing) working through the base of the breech piece, the front end of which plunger strikes the percussion cap in the centre of the cartridge. The arm or striking portion of the tumbler may be connected with the plunger by a stud or link, or may be independent

Grey's Improvements in the Construction of Gun Locks.

of it. The above being so arranged as to work upon and inside the lock plate it simplifies the construction and preserves the ordinary shape of the gun, and is at the same time compatible with perfection of action in the locks to which it is applied.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed 5
by the said Frederick Hargrave Grey in the Great Seal Patent Office on
the 24th April 1866.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, FREDERICK HARGRAVE GREY, of No. 43, Old Bond Street, in the County of Middlesex, Gun Maker, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-fourth day of October, in the year of our Lord One thousand eight hundred and sixty-five, in the twenty-ninth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Frederick Hargrave Grey, Her special licence that I, the said 15
Frederick Hargrave Grey, my executors, administrators, and assigns, or such others as I, the said Frederick Hargrave Grey, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of 20
Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "**IMPROVEMENTS IN THE CONSTRUCTION OF GUN LOCKS,**" upon the condition (amongst others) that I, the said Frederick Hargrave Grey, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the 25
said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Frederick Hargrave Grey, do hereby declare the nature of my said Invention, and in what manner the same is to be 30
performed, to be particularly described and ascertained in and by the following statement thereof, reference being had to the Drawings hereunto annexed, that is to say :—

My improvements in the construction of gun locks consist in making the tumbler of the lock with an arm on it so formed as to strike the end of a 35
horizontal piston or sliding plunger fitted into the lock plate and working in a

Grey's Improvements in the Construction of Gun Locks.

cylinder or dovetailed groove, or attached by other means, and having a portion of its front end in contact with the cap striker, which works through the base of the breech piece and communicates the blow to the percussion cap or detonating portion in the centre of the cartridge. The sliding plunger may
5 be connected with the tumbler by a swivel or stud or independant of it. The above being so arranged as to work upon and inside the plate of an ordinary bar gun lock it simplifies the construction and preserves the proper shape and proportion of the gun with front action or bar locks, and is at the same time compatible with perfection of action in the locks to which it is applied; it
10 also removes the hitherto existing objection to the central-fire gun, of the cap striker working outside in connection with the moisture of the atmosphere, which causes rust to accumulate and destroy its action.

The Drawings hereunto annexed represent the manner in which I carry my Invention into effect.

15 Figure 1 represents a sectional portion of the breech piece of a gun, shewing the interior of the lock, the plunger, and cap striker; Figure 2 represents the inside of the lock plate without the limbs, showing the dovetailed groove A, A, in which the plunger works; Figure 3 is the tumbler, the hammer portion of which *b* strikes the end of the plunger marked C in Figure 4; Figure 5
20 represents the front of the false breech, shewing the cap strikers in the centre.

The sectional portion of breech piece *d, d, d*, Figure 1, is an iron body, into which the front portion of the lock is fixed; but I do not confine myself to any system of body or means of working or holding down the barrels, nor to
25 any other arrangements shewn in the Drawings, except the introduction and working of the plunger, Figure 4, upon the lock plate *a, a*, Figure 2, which is struck by the arm of the tumbler *b*, Figure 1, and is driven against the cap striker *e, e*, which communicates the blow to the percussion cap or detonating portion in the centre of the cartridge, and effects the discharge of the gun.
30 On raising the tumbler of the lock after the discharge by the ordinary lever *f* the cap striker is returned by a spiral spring working upon it in a recess in the false breech *g, g*, or by any other convenient means.

In Figure 1 the lock is represented at half-cock, and the same letters refer to the same parts in all the Figures in the annexed Drawings, by which the
35 nature of my Invention will be seen.

Having now described the said Invention, and in what manner the same is to be performed, I declare that I claim the introduction of a percussion plunger working inside the plate of an ordinary bar or front action gun lock, by means of which arrangement I am enabled to make the central-fire breech-

Grey's Improvements in the Construction of Gun Locks.

loading gun of the same shape and proportions as the ordinary muzzle-loader, and to convert the ordinary muzzle-loader into a central-fire breech-loader in a manner that all the moving parts are protected from the moisture of the atmosphere, and I claim the Invention of doing this in manner and for the purpose herein-before described.

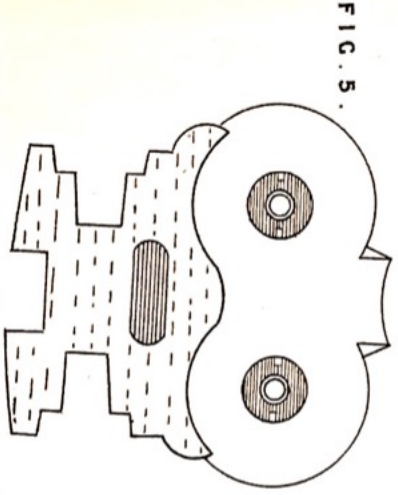
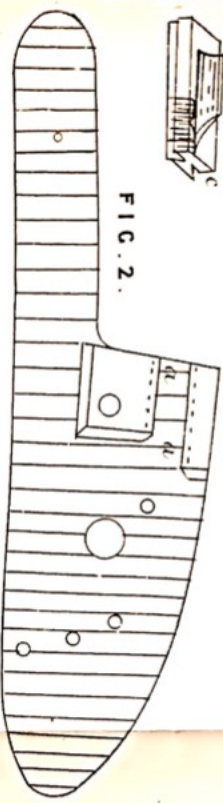
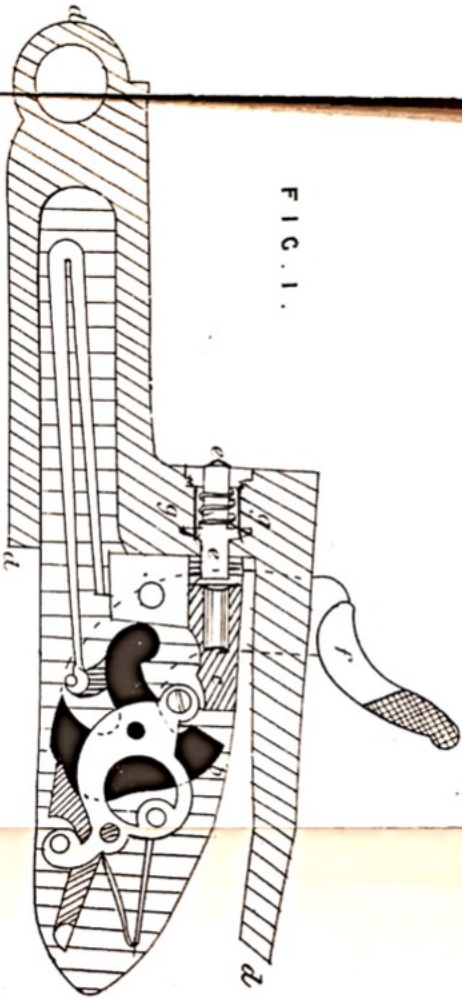
5

In witness whereof, I, the said Frederick Hargrave Grey, have hereunto set my hand and seal, this Twenty-fourth day of April, in the year of our Lord One thousand eight hundred and sixty-six.

FREDERICK HARGRAVE GREY. (L.S.)

LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1866.



The filed drawing is not colored

Drawn on Stone by Halsey & Sons.

A.D. 1865, OCT. 24, N° 2743,
GREY'S PROVISIONAL SPECIFICATION.

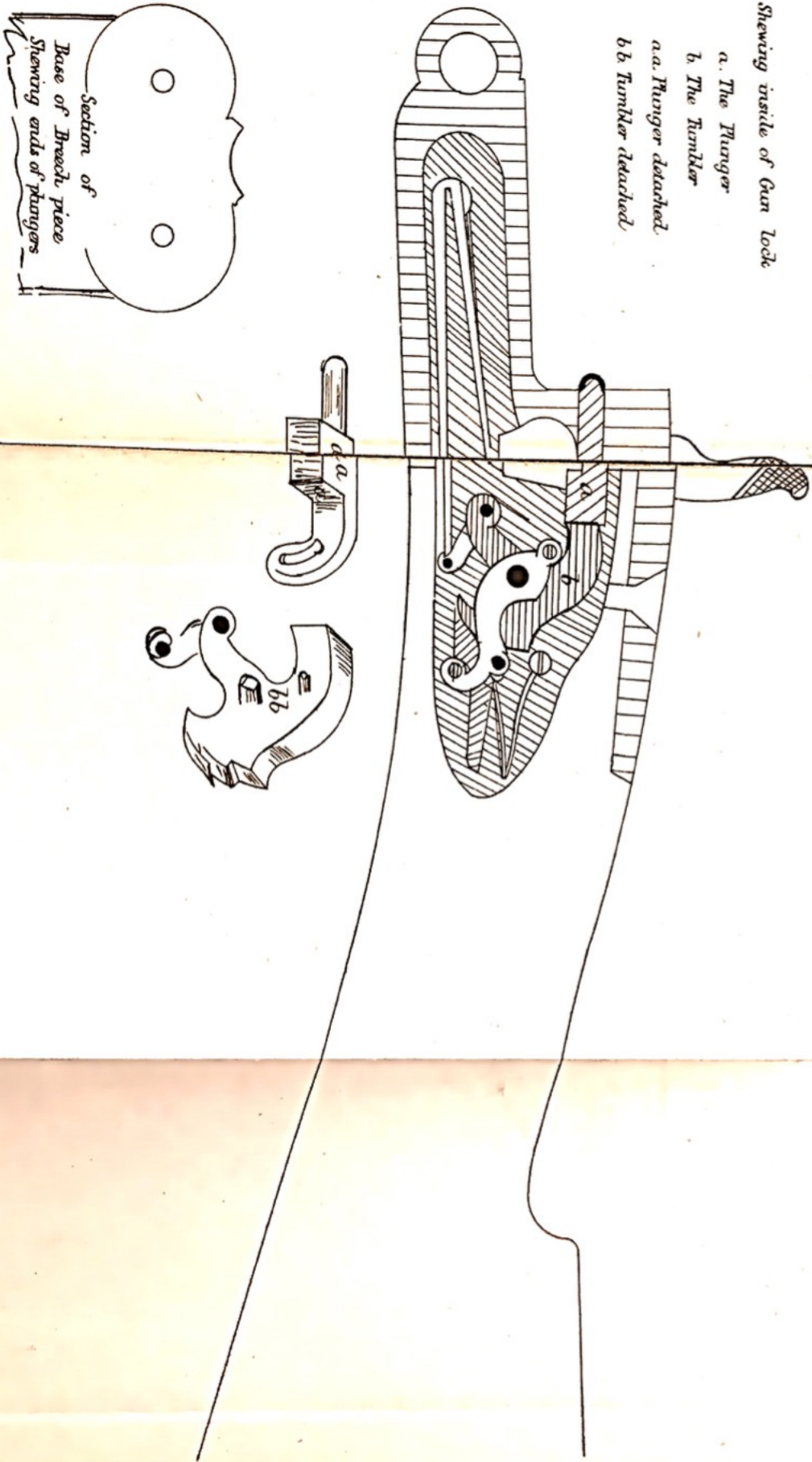
Shewing inside of Gun Lock

a. The Plunger

b. The Tumbler

a.a. Plunger detached.

b.b. Tumbler detached.



The drawing left with Provisional Specification is not colored.