N° 24,953



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Date of Applications, 20th Nov., 1908

Complete Specification Left, 20th May, 1909—Accepted, 7th Oct., 1909

PROVISIONAL SPECIFICATION.

"Improvements in, or relating to, Rifle Sight-mountings."

We, LUKE RICKETTS TIPPINS, of Mistley, Manningtree, Essex, Rifle Expert, and John Tippins, of Mistley, aforesaid, Rifle Expert, do hereby declare the nature of this invention to be as follows:—

This invention has relation to sight-mountings for rifles, and has for its object, to provide a means whereby existing rifles having a side aperture-sight (such as the Lee-Enfield short rifle, the Lee-Enfield long rifle and the Lee-Enfield converted rifle) can be adapted for carrying an additional aperture or other sight in a position nearer to the shooters eye than the ordinary short-range leaf-sight and yet still admit of the easy withdrawal of the bolt or the stripping

10 of the action when required.

This object we propose to attain by an arrangement wherein an aperturesight fitting is combined with or substituted for the existing rear long-range
aperture-sight fitting in such a manner that the new fitting is held in position
and attached to the rifle by the same means as the present fitting, namely, by a
spring and hinge pin, the new sight being used instead of the existing shortrange and long-range rear-sights. We attach to the rifle at the same place and
in the same manner as the existing long-range rear-sight fitting, a new base
capable of carrying a sufficient sight bed and leaf and the necessary slide and
fittings so that the sight can be used in the usual manner but bringing an
aperture on it nearer the eye than on the usual short-range back-sight. In order
to allow of this fitting being sufficiently near the axis of the barrel for convenient use and yet allow of the removal of the bolt and give clearance for the
bolt head the new fitting is hinged on its left side so that it can be turned upward
and over towards the left to get out of the way of the bolt lugs and head as the
bolt is withdrawn from the body of the rifle.

The left limb or side of the fitting fits closely against the left side of the action of the rifle and extends alongside it for a suitable distance. The hinge extends longitudinally along this limb so that the whole of the remainder of the fitting can be swung over towards the left when it is desired to withdraw the bolt. This contrivance, and the attachment of the fitting to, or in the place of the existing back-sight limb in its out of use or lying down position are the

distinctive features of this invention.

The part of the fitting which is attached to the left limb by the longitudinal hinge is extended forwardly and over the bolt race, to form a sight bed. This extension may be continued down to the recess on the right of the body and be steadied there by resting or taking a bearing on the ledge of the recess. It is held down from accidental displacement by a spring or other convenient device. In rifles which need not comply with the rules of the National Rifle Association the right limb may be held from moving by a screw engaging with the body of the rifle and released when the fitting is required to swing over to allow the bolt to be withdrawn. In a similar way the left limb may be held firmly in place by a screw or screws when allowed by the regulations.

Alternatively the right limb may be attached to the left limb by a pin which

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can be withdrawn as needed so that the right limb may be lifted out and so allow the bolt to be withdrawn.

Dated this 19th day of November, 1908.

LUKE RICKETTS TIPPINS.
JOHN TIPPINS.

By Henry Skerrett, Agent for Applicants.

COMPLETE SPECIFICATION.

"Improvements in, or relating to, Rifle Sight-mountings."

We, LUKE RICKETTS TIPPINS, of Mistley, Manningtree, Essex, Rifle Expert, 10 and John Tippins, of Mistley, aforesaid, Rifle Expert, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention has relation to sight-mountings for rifles, and has for its object, to provide a sight-mounting whereby existing rifles and especially such as have a side aperture-sight (such as the Lee-Enfield short rifle, the Lee-Enfield long rifle and the Lee-Enfield converted rifle) can be adapted for carrying an additional aperture or other sight in a position nearer to the shooters eye than the ordinary short-range leaf-sight and yet still admit of the easy withdrawal and replacement of the bolt or the stripping and reassembling of the action, when required, without necessitating the detachment of the said mounting, or of the sight which is carried thereon.

This object we propose to attain preferably by means of a sight-mounting which is attachable to one side of the rear end of the body of a bolt-action rifle and comprises a hinged or swinging sight base or sight bed that is extended laterally over the top of the bolt race-way in the said body so as to provide for carrying an additional or supplementary sight in line with the axis of the rifle barrel and is normally maintained in this position by a spring or other device, whereby the said base is made to bear or bed firmly on the said top of the body and afford a steady support for the sight, whilst the hinging of the base to the attachment side of the mounting admits of the same being tilted or swung from over the bolt or race-way, so as to give sufficient clearance for the head or other projecting parts of the bolt and enable the said bolt to be readily withdrawn from or introduced into the body.

Preferably the mounting is attached to the left hand side of the rear end of the body by means of an attachment piece or bracket plate that fits closely against the said side, whilst the hinge of the swung-over base extends along the top edge of the said bracket. And in the application of the improved mounting to rifles of the Lee-Enfield and similar types, where there is a long-range back aperture-sight fitted to the left hand side of the rear end of the body, we propose to construct and arrange the said mounting so that it can be applied in substitution for or in the same place as, the ordinary or regulation long-range aperture fitting, and be secured by the same hinge pin and spring as are employed for the attachment of the said regulation fitting.

Figure 1 of the accompanying drawings represents an elevation of the left 45 hand side of the body of a Lee-Enfield bolt-action rifle provided with a sight-mounting or sight-fitting constructed and applied in accordance with the inven-

This view shows the parts in their normal positions, in which the sight is supported by the fitting immediately above the bolt-race-way of the body, and in the plane of the axis of the barrel, whilst the leaf of the said sight is shown both in its raised position (by full lines) and in its folded or turned-down position 5 (by dotted lines).

Figure 2 is a rear end elevation of the rifle body and sight-mounting shown in Figure 1, the parts being in the same positions as in that figure, and the sight

leaf raised for use.

Figure 3 is another elevation of the same side of the body and mounting as 10 Figure 2, but it shows how the hinged-sight base of the said mounting and the sight can be turned aside from their normal positions above the bolt race of the body, so as to afford sufficient clearance for the passage of the bolt lug and bolt head through the rear part of the race during the withdrawal or replacement The sight, in this view is shown folded onto the hinged or swung-15 over base of the mounting.

Figure 4 is an end view with the parts in the same positions as in Figure 3. In this view the bolt is in section and the lever is indicated by dotted lines, whilst the bolt head which projects above the top of the race-way in the body

during the withdrawal or replacement of the bolt, is shown in elevation.

20 Figure 5 shows an elevation of the right hand side of the rifle-body, with the improved sight-mounting. The parts are shown in the same positions as in Figure 3, viz, in the positions they assume when the bolt is being withdrawn from the body or being replaced therein.

Figure 6 is a plan of the body, sight-mounting and sight with the parts in

25 the same position as in Figure 1, the sight being folded.

Figure 7 shows an end view and an elevation of the right and left hand sides

of the sight-mounting separately.

Figure 8 is another separate view of the sight-mounting, a part being drawn in section to show the application of the spring whereby the hinged sight bed 30 is normally held down upon the rear part of the rifle body and held rigid or immovable when the sight is in use.

Figure 9 is a cross section of the mounting, upon the dotted line x, Figure 8. The same letters of reference indicate corresponding parts in the several

figures of the drawings.

The rifle body a, to which the improved mounting is shown applied, is that of the ordinary Lee-Enfield service rifle and has the usual bolt race-way a1, the rear end of which is open to provide for the introduction and removal of the bolt b, whose head b^1 projects above the top of the said body, as shown in Figures 4 and 5, when being so withdrawn or replaced.

The sight-mounting c is adapted to be secured to the left hand side of the rifle body, in the position which—in the service arm—is usually occupied by the longrange aperture-sight, and so that the regulation attachment fittings of the said aperture-sight can also be used for attaching the improved mounting. These regulation fittings comprise a hinge-pin d, a positioning spring d¹ and a spring fixing screw d² and the improved sight-mounting is provided with an ear c¹ having a hole wherethrough the hinge-pin d is passed in attaching the mounting to the rear end of the left hand side of the body; also with a notch c^2 which is adapted to be engaged by the tooth or rib d^3 of the spring d^4 (see Figure 4) whereby the said mounting is held immovable against angular displacement in

50 the longer direction of the rifle. The mounting itself consists of two principal parts, viz, a bracket or attachment piece c3 which extends for a suitable distance along the side of the body and is rigid or immovable in relation thereto, and a sight base c4 which is hinged at one side to the bracket part c^3 by means of knuckles c^5 , c^6 and a hinge 55 pin c⁷ and is adapted to extend over, and take a firm bearing upon, the top of the rear part of the rifle body so that it will serve as a support for a suitable sight such as e, which is thereby supported in line with the axis of the rifle

barrel but in a position much nearer to the shooters eye than that afforded by

the ordinary or regulation sight-mounting.

In order to hold the hinged sight base part of the mounting jointly upon the top of the body and prevent any inadvertent or accidental displacement of the same when the sight is in use, the hinge pin c^7 is surrounded by a spring c^{11} , one 5 end of which is secured to the fixed bracket or attachment piece c³ of the fitting, whilst the other end is arranged to act upon the said hinged base part and exert thereon a force which tends to constantly maintain the same in the desired position, as best shown in Figure 2. The rigidity of the base is also ensured by forming the opposite undersides of the same with curved seatings c^9 , c^{10} , which correspond in curvature to, and take a firm bearing upon, the opposite sides of the rear part of the body.

But whilst the spring normally maintains the hinged sight base of the mounting in the prescribed position, it also admits of the said base, with the sight supported thereon, being readily turned upwards or swung over laterally when required and particularly to admit of the withdrawal of the bolt and bolt head and of the replacement of these parts, without necessitating the detachment of the sight-mounting from the body or the disassembling of any part or The range of the hinging or swung over movement is sufficient parts thereof. to provide the necessary clearance for the projecting bolt head (see Figure 4); the said base having to be held by hand in this position till the bolt is clear after which it is released when the spring will return the same automatically to its seating across the body.

The base may either be of the form shown, in which it carries a laterallyadjustable wind-gauge slide to which the hinged sight-leaf is attached, or the said base may be of any other suitable construction, according to the type or pattern of sight to be mounted thereon. Its shape or formation may also be modified, as also may that of the attachment piece or side bracket to suit the construction of rifle to which it is to be applied, and further, although it is preferable to use the regulation means of attachment pertaining to the existing or ordinary side aperture-sight, yet any other suitable means of fixing the side

bracket may be adopted.

Again, instead of relying upon a spring to normally maintain the sight base of the supplementary mounting in position upon the body, a positive fastening, such as a screw or catch, may be used for anchoring the side furthest removed 35 from the hinge to the corresponding side of the body.

Instead of the mounting being constructed for use in the place of the regulation long-range back-sight, we may, as a modification combine the back-sight with the mounting for the additional sight by forming an aperture-sight bar which is attachable to the side of the body by the usual hinge pin and spring, and arranging this bar so that it also serves as the bracket or means of attachment for a hinged or swing-over base, for which purpose the said bar is provided with arms or extensions which fit against the left side of the action and terminate in knuckles to which the base for the supplementary sight is hinged. This base is formed, as in the previously described arrangement, so that it will extend laterally over and take a firm seating upon the top of the body, above the bolt race-way, and is normally held against accidental displacement by a spring or the like which admits of the said bed being swung over or turned aside to enable the bolt to be withdrawn.

Although we prefer to provide for the withdrawal of the bolt by hinging one side of the bed to its attachment bracket and to use a spring to prevent inadvertent displacement, we may, as an alternative means of providing for the withdrawal of the bolt whilst still obtaining the advantages of the additional sight-mounting on the rear of the body, adopt a base or bed which is rigidly secured to a side bracket or the like by a removable pin or equivalent device; the arrangement being such that the pin is withdrawn to allow the base and

sight to be lifted off the rifle when it is required to withdraw the bolt.

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

First:—A sight-mounting which is applicable to the rear end of the body of a bolt-action rifle and comprises a sight-base or bed which extends across the bolt-race and is hinged or removable to admit of the removal and replacement of the bolt.

Secondly:—A sight-mounting which is attachable to the rear end of the body of a bolt-action rifle and comprises a bracket or attachment fitting which is secured to the left side of the said body and a hinged or removable sight base or bed which extends laterally over the bolt race-way of the body so as to provide for the carrying of a supplementary or additional sight in alignment with the axis of the barrel and in a position nearer to the shooters eye than the ordinary back-sight.

Thirdly:—A sight-mounting such as claimed in Claims 1 and 2 in which the sight-base is hinged to the attachment piece or bracket so as to admit of swinging over laterally clear of the bolt race-way in the body and is normally held firmly onto its seating over the top of the said body by a spring or a screw or their equivalents, substantially as described.

Fourthly:—A sight-mounting such as claimed in the preceding claims, in which the bracket or side attachment piece is adapted to be secured to the left hand side of the rifle body by the hinge pin and spring pertaining to the regulation long-range aperture-sight of a Lee-Enfield or similar rifle, substantially as herein described.

Fifthly:—The improved sight-mounting and means of applying or attaching same as represented in the accompanying drawings, in which the several parts are constructed and combined in the manner and for the purposes herein referred to.

Dated this 19th day of May, 1909.

Dated this 15th day of may, 1505

LUKE RICKETTS TIPPINS. JOHN TIPPINS.

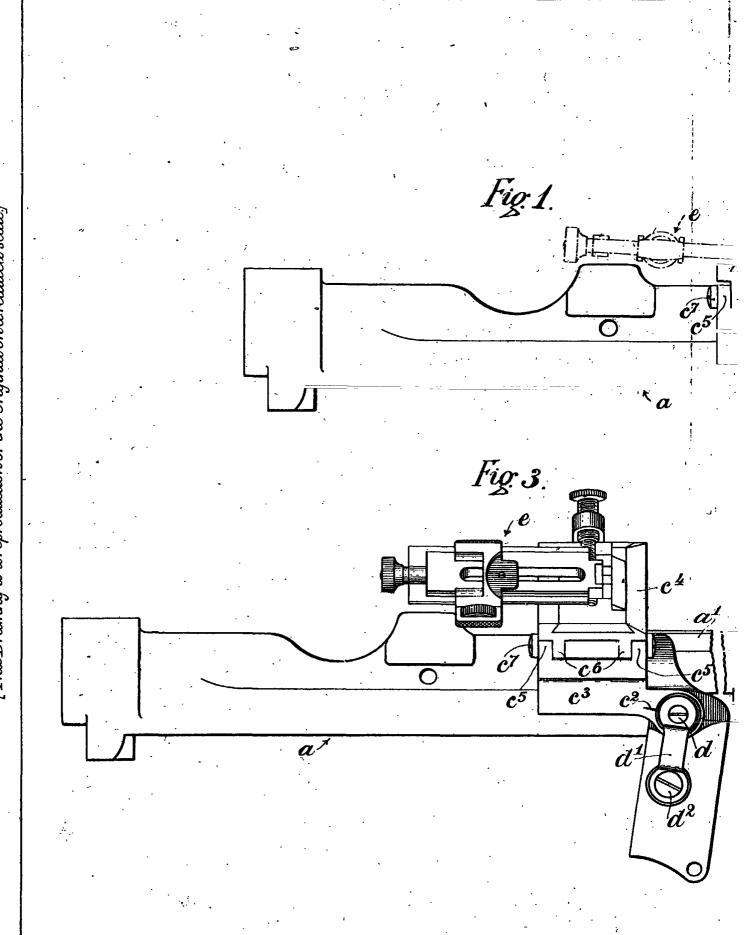
By Henry Skerrett, 24, Temple Row, Birmingham, Agent for Applicants.

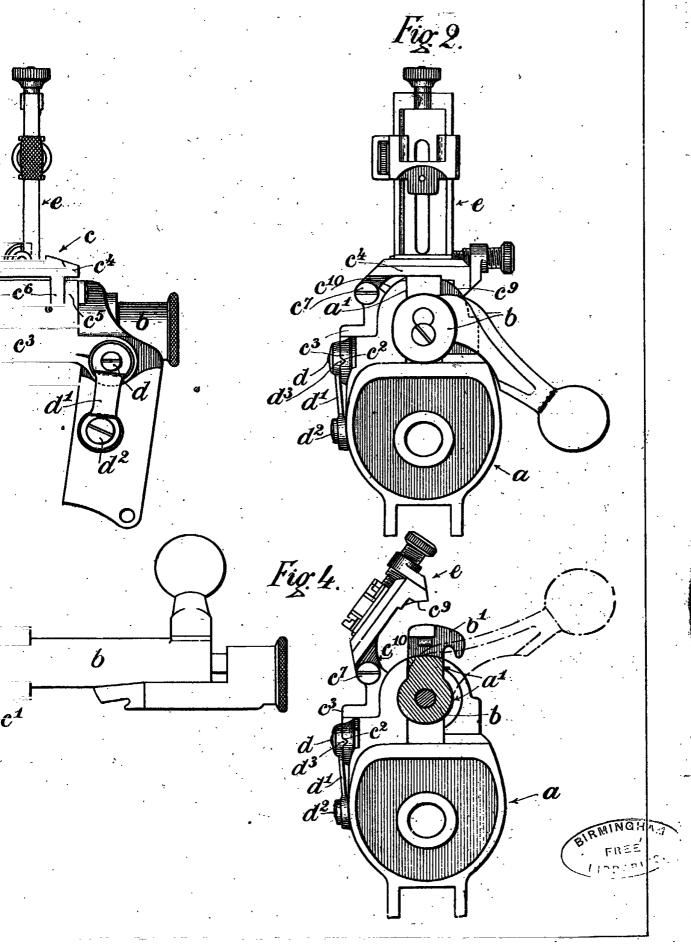
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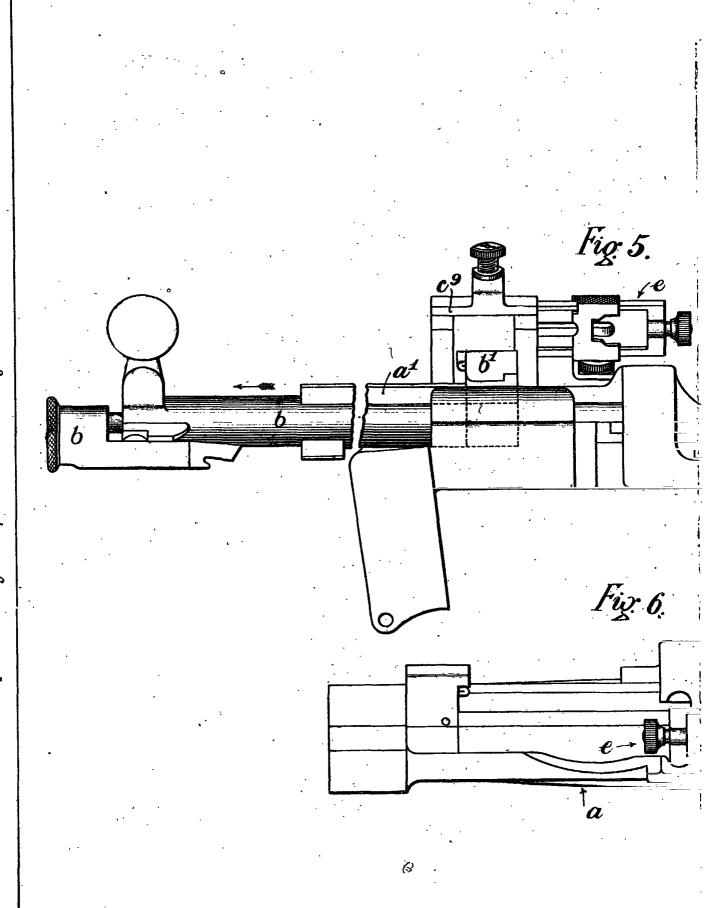
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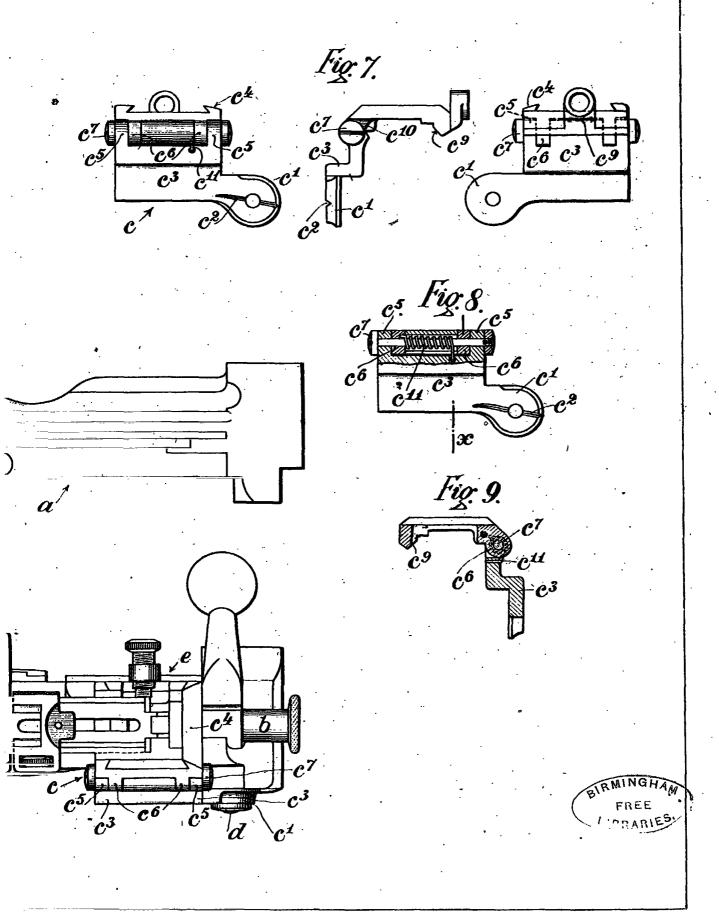
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