June 10, 1924. 1,496,652

H. H. HUSSEY

SMALL ARM

Filed June 6, 1923

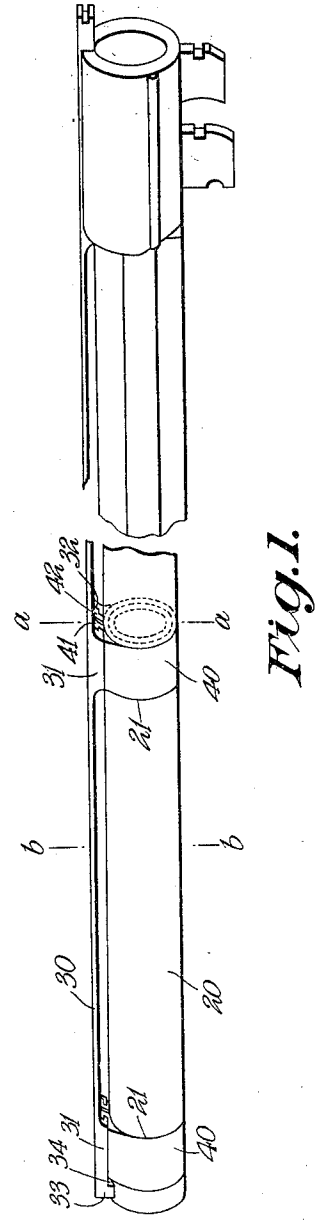


Fig. 1.

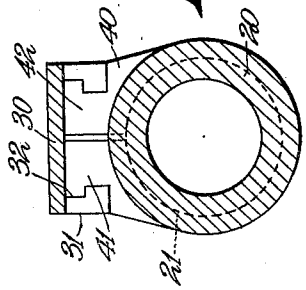


Fig. 3.

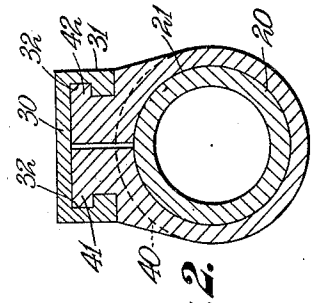


Fig. 2.

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UNITED STATES PATENT OFFICE.

HENRY HUGH HUSSEY, OF LONDON, ENGLAND.

SMALL ARM.

Application filed June 6, 1923. Serial No. 643,705.

To all whom it may concern:

Be it known that I, HENRY HUGH HUSSEY, a subject of the King of Great Britain, and resident of London, England, have invented certain new and useful Improvement in and Relating to Small Arms, of which the following is a specification.

This invention relates to small arms and is particularly applicable to what are generally referred to as trap or pigeon guns.

These guns invariably have a sighting rail running the whole length of the gun barrel and hitherto great difficulty has been experienced in keeping these sighting ribs or rails in position and quite frequently they fly off after the gun has been in use some time.

Usually these sighting ribs or rails are connected rigidly to the gun barrel upon short studs or posts, and it will be realized that continuous firing of the gun results in the barrel getting hot, and it is probable that the continual heating and cooling of the barrel sets up heat stresses which ultimately result in fracture.

The object of the present invention is to provide a gun barrel with the sighting rib or rail so attached that it cannot come off during use, and the invention consists broadly in so attaching the rib or rail to the barrel that it is held firmly to the barrel radially but is capable of movement longitudinally relative to the barrel to accommodate the expansion and contraction of the barrel.

An embodiment of the invention is illustrated by the accompanying drawings wherein

Figure 1 is a general perspective view of the barrel of the gun or small arm with the sighting rail affixed,

Figure 2 a transverse section through *a*—*a* Figure 1, and

Figure 3 a transverse section through *b*—*b* Figure 1.

In these drawings 20 is the barrel of the gun and 30 the sighting rail which is provided at intervals with depending portions 31 provided with dovetail or T-shaped slots or grooves 32 arranged longitudinally of the barrel. The sighting rail holding projections are shown at 40, these projections being in the form of split rings of which the ends 41 and 42 are constructed so as to form laterally extending members adapted to fit in the T-shaped grooves 32.

These projections 40 may in some cases be integral with the barrel 20. In the present case these projections 40 are in the form of split rings adapted to fit in circumferential grooves 21 provided at intervals along the barrel which is made somewhat thicker than usual to allow of such grooves being cut therein. The split ring clips 40 are made as steel springs adapted to be sprung into position in the said grooves 21.

The projections 41 and 42 of the clips 40 are held together by the grooves 32 in the sighting rail in which they slide longitudinally when the barrel expands relatively to the sighting rail.

The stock end of the sighting rail 30 is rigidly affixed to the barrel by welding, brazing or any other suitable process, and the front end of the sighting rail 30 is provided with a depending portion 33 extending laterally across the front of the foremost clip 40 and separated therefrom by a space 34 of sufficient depth to allow of the expansion of the barrel 20 relatively to the sighting bar 30.

It will be understood that, however, these T-headed or other projections are formed or attached to the gun barrel, the sighting rib or rail will be capable of floating longitudinally relative to the barrel but cannot be displaced radially. By this means the rib or rail will always maintain its alignment for sighting purposes and strains due to heat stresses are eliminated with the result that the rib or rail will always maintain its position without fracture.

The rib or rail may be attached at the breech by means of screws, soldering or welding.

What I claim and desire to secure by Letters Patent is:—

1. A small arm comprising a barrel, a sighting rail extending along the barrel and provided at intervals on its underside with depending portions each provided with a longitudinal groove, a plurality of split rings each of which extends round the barrel and its meeting ends provided with lateral extensions which fit in and slide longitudinally in the grooves in the depending portions of the sighting rail.

2. A small arm comprising a barrel, a

sighting rail extending along the barrel and provided with at intervals on its underside, with depending portions constructed to form a T-shaped groove, sight rail holding clips in the form of split rings adapted to extend round the barrel and provided with extensions at their ends which together form a T-shaped member adapted to fit in and slide longitudinally in the T-shaped groove in the depending portions of the sighting rail.

3. A small arm comprising a barrel, a sighting rail extending along the barrel and provided at intervals on its underside with depending portions constructed to form a groove, sight rail holding clips in the form of split rings adapted to spring into and fit in circumferential grooves formed in the outer surface of the barrel and provided with lateral extensions at their ends adapted to fit in and slide longitudinally in the grooves in the depending portions of the sighting rail.

4. A small arm comprising a barrel, a sighting rail extending along the barrel and provided at intervals on its underside with depending portions constructed to form a groove, sight rail holding clips in the form of split rings adapted to extend round the barrel and provided with lateral extensions at their ends adapted to fit in and slide longitudinally in the grooves in the depending portions of the sighting rail, and also with shoulders on which the undersides of the depending portions of the sighting rail are adapted to slide longitudinally.

In witness whereof I affix my signature.

HENRY HUGH HUSSEY.