No. 777,929. PATENTED DEC. 20, 1904.

J. B. THORNEYCROFT & M. G. FARQUHAR.

WIND GAGE FOR BACK SIGHTS OF RIFLES.

APPLICATION FILED JULY 8, 1904.

NO MODEL.

Fig. 1

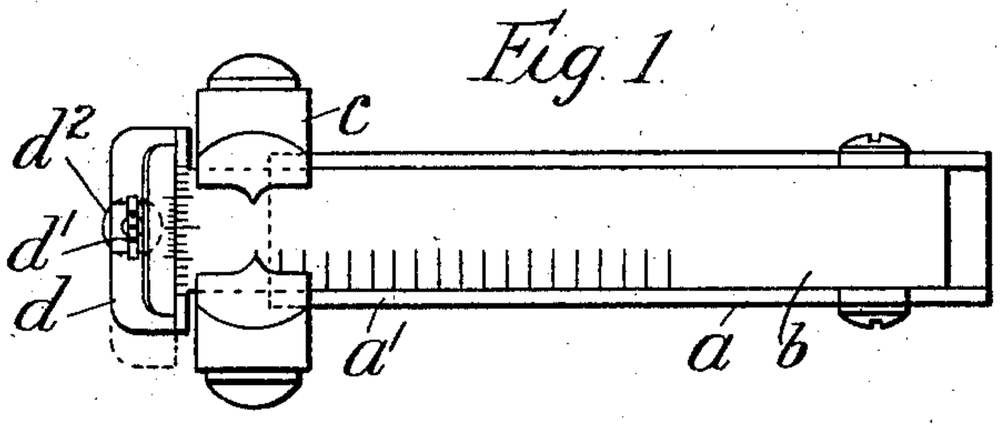



Fig. 3

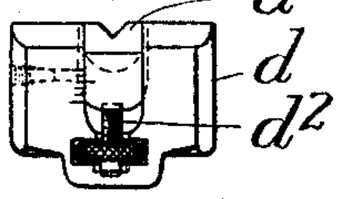



Fig. 2.

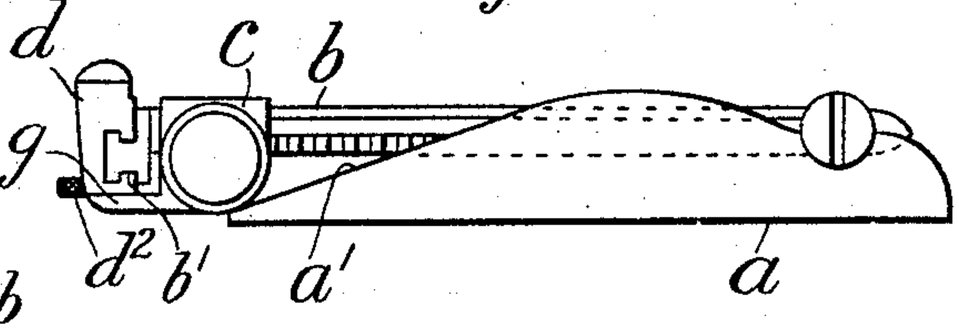



Fig. 6.

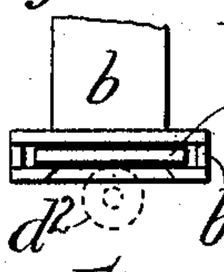



Fig. 7.


Fig. 8.

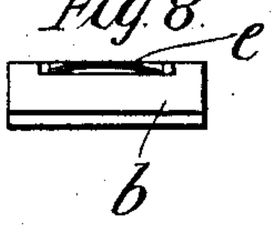



Fig. 4.

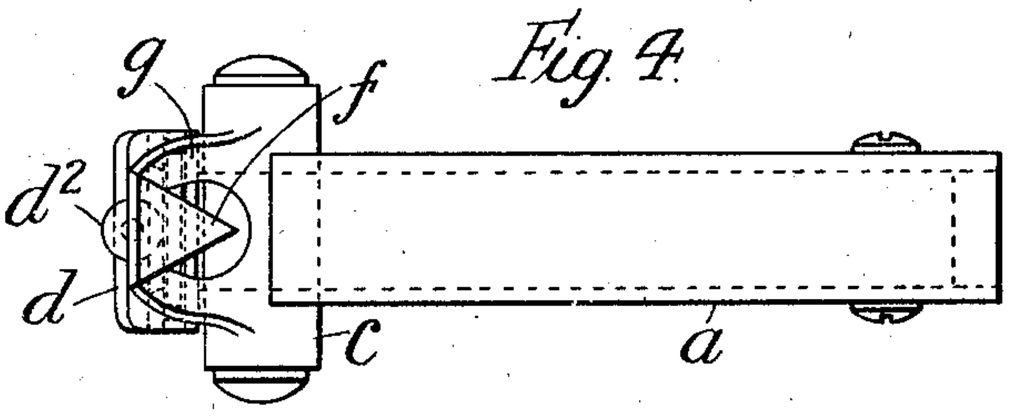
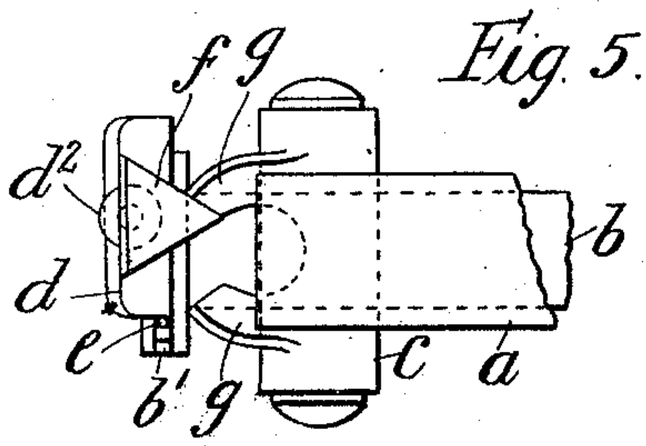



Fig. 5.




Witnesses.

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PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 777,929. Patented December 20, 1904.

# UNITED STATES PATENT OFFICE.

JAMES BAIRD THORNEYCROFT, OF MAUCHLINE, AND MOWBRAY GORE FARQUHAR, OF ABOYNE, SCOTLAND.

## WIND-GAGE FOR BACK-SIGHTS OF RIFLES.

SPECIFICATION forming part of Letters Patent No. 777,929, dated December 20, 1904.

Application filed July 8, 1904. Serial No. 215,827.

*To all whom it may concern:*

Be it known that we, JAMES BAIRD THORNEYCROFT, residing at Netherplace, Mauchline, county of Ayr, and MOWBRAY GORE FARQUHAR, residing at Drumnagesk, Aboyne, county of Aberdeen, Scotland, have jointly invented new and useful Improvements in Wind-Gages for Back-Sights of Rifles; and we do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to improvements in rifle-sights; and it has for its object to provide a leaf-sight fitted with a wind-gage, which latter after being set and used with any desired elevation of the sight is automatically brought back to the zero or mid position by the act of lowering the sight.

The invention is illustrated by way of example in the accompanying drawings, in which—

Figure 1 is a plan of the improved back-sight for a rifle. Fig. 2 is a side elevation, Fig. 3 an end elevation, and Fig. 4 an inverted plan, of the same. Fig. 5 is a view corresponding to Fig. 4 of part of the sight, but showing the wind-gage as set to one side and about to be returned to the central position. Figs. 6, 7, and 8 are respectively an inverted plan, a sectional side elevation, and a front elevation, of part of the notched bar on the folding leaf and showing the spring which serves to hold the wind-gage in adjusted position.

As shown, the back-sight comprises the usual bed-block *a*, having the inclined surface *a'*, to which block is hinged the leaf *b*, carrying the elevating-bar *c*, the said bar serving by its longitudinal movement over the inclined surface *a'* to elevate or lower the sight *d*. The slide *d* or sight proper, formed with the usual orifice or having a notched bar *d'* for sighting purposes, which slide *d* also constitutes the wind-gage, is fitted to slide transversely in a dovetailed groove *b'* in the free end of the leaf *b*, but instead of being adjusted by a screw or the like has a free sliding movement therein, so as to be set by pushing along in the groove by hand, a spring *e* or like frictional device being provided to prevent it from moving after being set, the said spring *e* being fitted in a recess in the leaf end, as shown at Figs. 6, 7, and 8, so as to frictionally hold the slide *d*. The under side of the slide *d* is formed with a wedge-piece or V-shaped projection *f*, which extends between projecting fingers or prongs *g*, formed on the elevating-bar *c*, as shown.

In the position of the elevating-bar *c* illustrated in Figs. 1 to 4 the prongs *g* engage the wedge-piece *f* at its wider end and hold it and the slide *d* in mid-position. The elevation of the sight is now suited for point-blank firing and no windage is allowed for, while any slight elevation of the back-sight is provided for by raising or lowering the notched bar *d'* by means of a screw $d^2$ in well-known manner. When, however, the elevating-bar *c* is pushed along the inclined surface *a'* to elevate the back-sight, these prongs *g* are moved clear of the wedge-piece *f* and the slide or wind-gage *d* may be moved in a lateral direction, as indicated at Fig. 5, and as may be required to allow for any degree of wind-pressure, a suitably-graduated vernier-scale being engraved on the slide and leaf, as indicated at Fig. 1. Upon returning the elevating-bar *c* to its original or normal position to lower the sight to zero one of the prongs *g* strikes against one inclined edge of the wedge-piece *f* and presses the slide toward mid-position, where both sides of the wedge-piece are equally borne on by said prongs. Thus the return of the elevating-bar *c* to its normal position insures the bringing back of the wind-gage to its mid-position on the leaf.

It is to be understood that the invention is not limited to the details of construction shown and described, as these may be varied considerably without departing from the spirit of the invention.

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

1. The improved leaf-sight for rifles, comprising, in combination, a leaf, an elevating-

bar slidable longitudinally along said leaf, a slide movable transversely at one end of said leaf, and devices for automatically moving said slide to zero position when said leaf is lowered, substantially as described.

2. The improved leaf-sight for rifles, comprising, in combination, a leaf, an elevating-bar slidable longitudinally along said leaf, a slide movable transversely at one end of said leaf and having a sighting-bar thereon, and coacting wedge and prong devices formed on said slide and said elevating-bar adapted to automatically move said slide to mid-position when said leaf is lowered, substantially as described.

3. In a rifle-sight, in combination, a bed-block having an inclined surface, a leaf hinged to said block, an elevating-bar slidable longitudinally along said leaf, a slide movable transversely in a groove at the free end of said leaf, and having a sighting-bar thereon, and devices for automatically moving said slide and notched bar to mid-position when said leaf is lowered, substantially as described.

4. In a rifle-sight, in combination, a leaf, an elevating-bar slidable longitudinally along said leaf, a slide movable transversely in a groove at one end of said leaf and having a sighting-bar thereon, a spring for holding said slide stationary, and devices for automatically moving said slide to mid-position when said leaf is lowered, substantially as described.

5. In a rifle-sight, in combination, a leaf, an elevating-bar slidable longitudinally along said leaf, a slide movable transversely in a groove at one end of said leaf and having a sighting-bar thereon, a spring for holding said slide stationary, and coacting wedge and prong devices formed on said slide and elevating-bar adapted to automatically move said slide to mid-position when said leaf is lowered, substantially as described.

6. In a rifle-sight, in combination, the bed-block $a$ having the inclined surface $a'$, the leaf $b$ hinged to said block $a$, the elevating-bar $c$ slidable longitudinally along said leaf $b$, the sighting-bar $d'$, the slide $d$ movable transversely in the groove $b'$ of said leaf, the spring $e$ to retain said slide stationary, the screw $d^2$ the wedge $f$ on the under side of said slide $d$, and the prongs $g$ on the elevating-bar, as shown and described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JAMES BAIRD THORNEYCROFT.
MOWBRAY GORE FARQUHAR.

Witnesses:
WALLACE FAIRWEATHER,
JNO. ARMSTRONG, Junr.