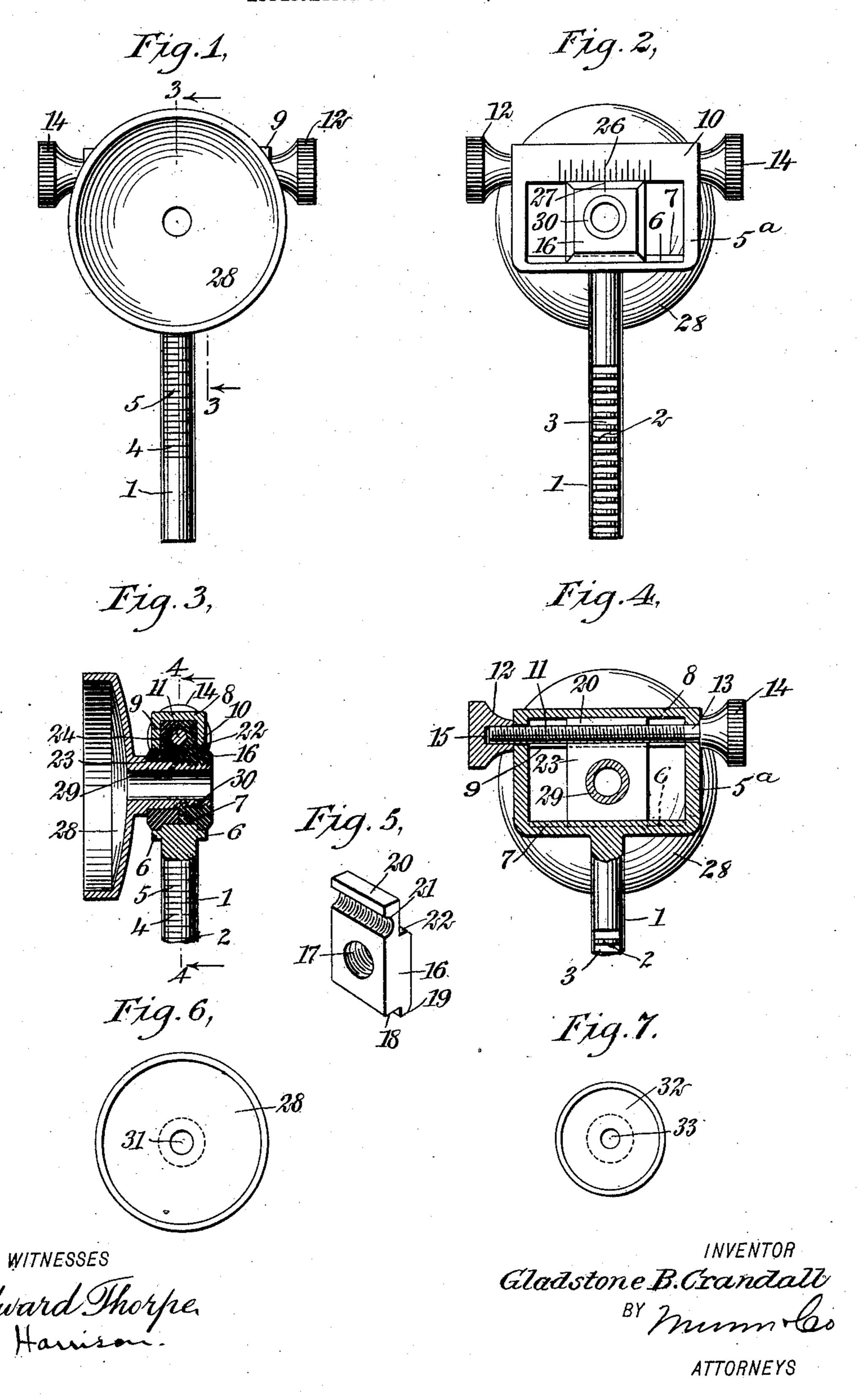
G. B. CRANDALL. SIGHT FOR FIREARMS. APPLICATION FILED NOV. 13, 1906.



UNITED STATES PATENT OFFICE.

GLADSTONE BLAKE CRANDALL, OF CHERRY VALLEY, ONTARIO, CANADA.

SIGHT FOR FIREARMS.

No. 862,717.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed November 13, 1906. Serial No. 343,199.

To all whom it may concern:

Be it known that I, GLADSTONE BLAKE CRANDALL, a citizen of the Dominion of Canada, and a resident of Cherry Valley, in the county of Prince Edward, Province of Ontario, and Dominion of Canada, have invented a new and Improved Sight for Firearms, of which the following is a full, clear and exact description.

My invention relates to sights used upon fire-arms, and more particularly to improved types of rear sight capable of employment generally in the art, and of peculiar value in connection with ordinary rifles.

Among the several objects of my invention are the following: 1. To enable an ordinary sporting or target sight to be converted into a wind gage sight; 2. To facilitate the adjustment of the movable parts of the sight; 3. To provide the sight disks of different sizes, and have sight openings of different diameters; to be interchangeably used; 4. To provide for clamping certain movable parts fixedly in position.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures:

25 ance with my invention; Fig. 2 is a front elevation of the same; Fig. 3 is a fragmentary central section on the line 3—3 of Fig. 1 showing the mounting for the sight disk, and also showing one means employed for clamping the sight disk holder in a predetermined position; Fig. 4 is a fragmentary section upon the line 4—4 of Fig. 3, looking in the direction of the arrow, and showing the screw mechanism used for the joint purpose of moving the sight disk and its accompanying parts, and for clamping the same in predetermined positions; Fig. 5 is a perspective of one of the twin members constituting the disk sight support; Figs. 6 and 7 are front elevations of sight disks of different sizes and provided with peep holes of different diameters.

The supporting stem 1 is provided with rack teeth 2, separated by spaces 3, and with long and short graduation marks 4, 5. Mounted upon the upper end of the stem is a **U**-shaped guide-frame 5° provided with a way 7 upon opposite sides of which are guide-ribs 6. A cross-piece 8 is provided with flanges 9, 10, integral therewith, these parts together forming a longitudinal cap secured upon the upper portion of the **U**-shaped guide-frame 5°.

A threaded cylindrical stem 11 is provided at one end with a smooth portion 13 and a milled head 14, and fitted upon the opposite end is another milled head 12 provided with an aperture 15 which is threaded; by turning the milled head 14 the stem 11 is rotated, and by turning the milled head 12, the stem is clamped tightly in position or released, according to the direction of rotation.

A block 16 is provided centrally with a threaded aperture 17 and is also provided with a shoulder 18 adjacent to which is a bead 19. The shoulder 18 is adapted to fit upon the way 7 and the shoulder 19 to fit upon one of the guide ribs 6, as will be under- 60 stood from Figs. 3 and 5. The block 16 is provided with a portion 20 integral therewith, this portion having a threaded aperture 21 of a general semi-cylindrical form and also having a shoulder 22 adjacent to the threaded aperture last mentioned. Another 65 twin block 23 has a form somewhat similar to the one just described. In the twin block 23 however, the central aperture is smooth; this twin block is provided with a portion 24 mating the portion 20 and threaded for this purpose. The threaded stem 11 extends in- 70 termediate of the portions 24, 20, and engages the threads thereof so as to move the two twin blocks 16, 23, whenever the milled head 14 is turned. The flange 10 is provided with graduations 26, and the block 16 is provided with a single mark 27; this single 75 mark taken in connection with the graduations 26 constitute a form of protractor which may be used for measuring the degree of movement of the block 16. (See Figs. 2, 4).

A sight disk is shown at 28, and is provided with a 80 tube 29, the latter having a threaded portion 30 extending about half of its length as will be understood from Fig. 3. The sight disk 28 is provided further with a peep-hole 31.

In Fig. 7 is shown a sight disk 32 of substantially 85 the same construction as that shown in Fig. 6 but somewhat smaller, and provided with a peep-hole 33 of a diameter different from that of the peep-hole 31. My purpose in using sight disks of different sizes and in providing them with peep-holes of different 90 diameters is to enable them to be used interchangeably as a part of my sight.

The parts being assembled as indicated in Figs. 1, 4, inclusive, the milled head 14 is turned by hand, for the purpose of moving the twin blocks 16, 23 in 95 either of two directions. By turning the sight disk 28 slightly in one direction, the blocks 16, 23, are clamped rigidly together and caused to bind upon the way 7, and also upon the threaded stem 11.

The twin blocks constitute together the sight disk 100 support and may be rendered immovable, and the sight may now be employed after the manner of the ordinary fixed sight generally used upon fire arms. If however, it be desired not to turn the sight disk, but to clamp the sight disk support by independent 105 means, this is accomplished by turning the milled head 12; by tightening this milled head upon the threaded stem 11 the milled head 14 is clamped forcibly against the adjoining side of the U-shaped guideframe 3 so that the threaded stem 11 cannot be readily 110

2 862,717

turned, and since the movement of the sight disk support depends upon rotation of this stem, the sight disk support is fixed.

If it be desired to clamp the sight disk support with unusual firmness this may be done by turning both the milled head 12 and the sight disk 28 or 32. The advantage in thus doubly clamping the sight disk holder is to prevent undue strain upon any part of it in consequence of a necessity for binding it too tightly.

Having thus described my invention I claim as new and desire to secure by Letters Patent:

1. In a sight for fire-arms, the combination of a sight disk support made of two members, a screw for adjusting said sight disk support, and a sight disk provided with a portion connecting said two members together.

2. In a sight for fire-arms, the combination of twin blocks, a frame provided with ways upon which said twin blocks may travel, means for adjusting said twin blocks relatively to said frame, and a sight disk provided with a portion for clamping said twin blocks together.

3. In a sight for fire-arms, the combination of a frame

provided with ways, a sight disk support mounted within said frame and adapted to travel upon said ways, means for moving said sight disk support bodily in relation to said ways, and a sight disk provided with a portion for 25 clamping said sight disk support in a predetermined position, relatively to said ways.

4. In a sight for fire arms, the combination of a frame provided with ways, an adjusting screw extending through said frame and disposed parallel to said ways, a sight disk 30 support made in two separate parts engaging said ways, and said screw, and a sight disk connecting said two separate parts together.

5. In a sight for fire-arms, the combination of a frame, an adjusting screw connected therewith, a sight disk support made in halves, said halves being mounted upon opposite sides of said screw and threaded, and a sight disk holder engaging said halves for the purpose of clamping the same relatively to said screw.

In testimony whereof I have signed my name to this 40 specification in the presence of two subscribing witnesses.

GLADSTONE BLAKE CRANDALL.

Witnesses:

•

JNO. R. SAYERS, KENNETH MCKENZIE.