(No Model.)

J. W. SOULE.

WIND GAGE SIGHT FOR GUNS.

No. 410,039. Patented Aug. 27, 1889.

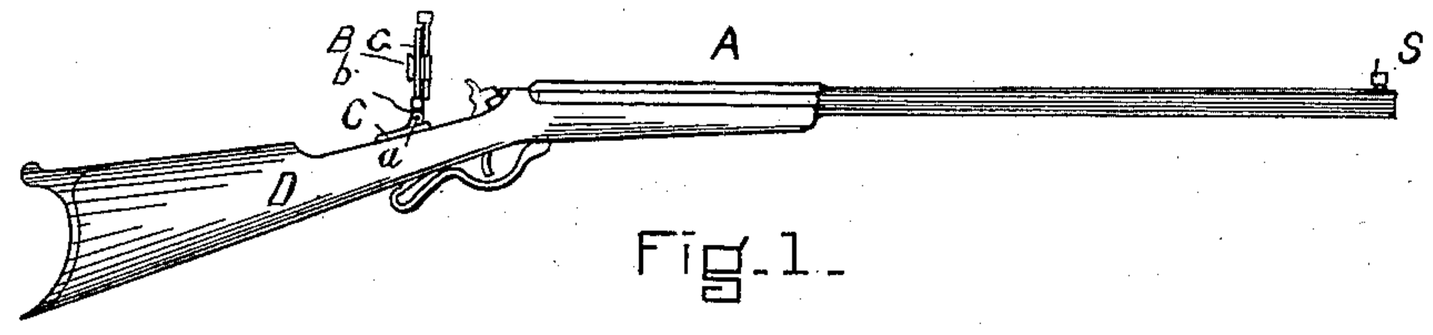

Fig. 1.

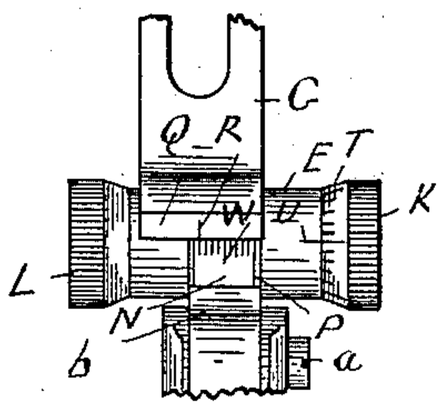

Fig. 3.

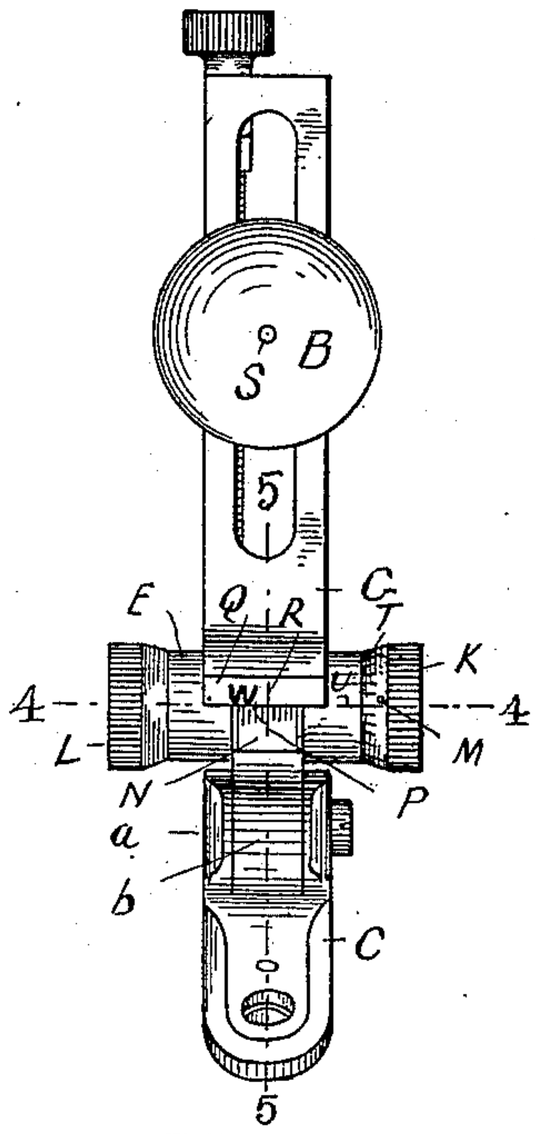

Fig. 2.

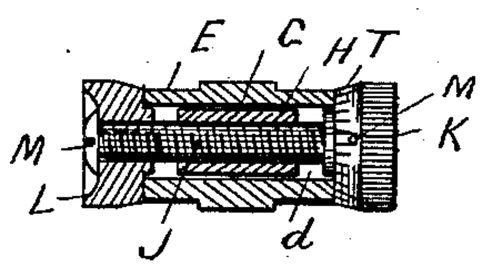

Fig. 4.

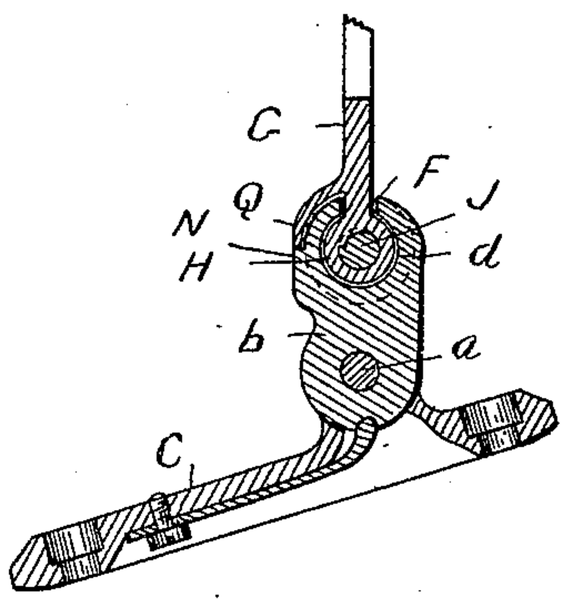

Fig. 5.

WITNESSES

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JOHN W. SOULE, OF EVERETT, MASSACHUSETTS.

WIND-GAGE SIGHT FOR GUNS.

SPECIFICATION forming part of Letters Patent No. 410,039, dated August 27, 1889.

Application filed August 8, 1888. Serial No. 282,220. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. SOULE, of Everett, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Wind-Gage Sights for Guns, of which the following is a full, clear, and exact description.

This invention relates to improvements in wind-gage sights for fire-arms; and the invention consists in the combination, with a sight for a rifle or gun, of a wind-gage scale or measurement constructed and arranged for operation, all substantially as hereinafter fully described, reference being had to the accompanying sheet of drawings, in which—

Figure 1 represents in side view a rifle having this invention applied to its sight. Fig. 2 is a front view of the gage and sight detached from the gun; Fig. 3, a detail front view; Fig. 4, a horizontal cross-section on line 4 4, Fig. 2; and Fig. 5, a detail vertical section on line 5 5, Fig. 2, Figs. 2, 3, 4, and 5 being enlarged.

In the drawings, A represents a gun or rifle which is of any of the usual constructions; B, its sight secured by its base-plate C to the stock D, to which it is pivoted at *a*, the sight being the usual vernier peep-sight, all of which is as usual in the construction of rifles or guns, and needing no particular description herein.

The butt *b* of the sight B, pivoted at *a* to the base-plate, has on its upper part a transverse hollow cylinder E, having in its upper side a longitudinal slot F, through which projects the bar or frame G, which carries the sight B, and which has a transverse cylindrical portion H, adapted to closely fit the chamber *d* of the tube E, but so it can freely move transversely back and forth therein. This cylindrical portion H has a longitudinal central internal screw-thread, into which is adapted to screw the screw rod or pin J, having a milled head K, for operating it, and when screwed in place a screw-nut L is screwed onto its other end, which is secured thereto by a check-screw M, the screw-head K and nut L, abutting against the ends of the tube E, preventing longitudinal movement of the screw J when being turned. Turning the screw J to the left will, through its engagement with the screw-thread of the sight bar or frame, move it, with its sight B, toward the nut L, or to the left, as shown in Fig. 3; and turning the screw to the right will move it in the reverse direction, by which the sight can be moved easily and conveniently to the right or left, to gage the sighting of the gun according to the direction and force of the wind when shooting.

To ascertain the angle the gun-sight B varies from the true central longitudinal line of the barrel of the gun in relation to the sight S at the front or muzzle of the gun, certain scales are arranged upon the parts, by which the angle of such line can be measured, in the present instance, to a thousandth of an inch, and this is arranged as follows: On the front face N of the butt *b* is a scale P, having vertical lines divided into ten (10) equal parts, and on a face-plate Q of the gun-sight bar or frame next above the face N is a vertical mark R, which mark is in the same vertical plane with the peep-hole S of the sight. The scale P corresponds to the screw-threads of the screw pin or rod J, which in the present instance is forty (40) to the inch, the scale representing ten-fortieths of an inch, so that turning the screw J once round in either direction the bar or frame, with the sight, will be moved correspondingly one-fortieth of an inch.

To measure the distance moved as above in a smaller degree, the periphery T of the screw-head K is divided circumferentially into twenty-five equal parts and marked from naught upward, and on the face of the tube E, at the end next to the screw-head K, in a horizontal line between the two face-plates N Q, is a mark or line U, and when the mark R on the face Q is in line with the central mark W on the scale P the naught-mark M on the screw-head scale will be in line with the mark U on the tube. By these two scales the distance the sight B is moved to the right or left, as the case may be, is measured to the thousandth of an inch, and thus is measured, to a small degree, the angle of the line of the two sights in relation to the central longitudinal line of the barrel of the gun, which system of measuring is substantially what is called the "micrometer-scale."

Although two special scales are herein described, it is obvious each can be varied so as

to make any measurement desired, either larger or smaller, without departing from this invention; but the scales herein described are practical and satisfactory in their results. Also, the scales and marks can be reversed on their respective parts, and also the screw-thread on the screw J can be varied as desired.

In the present instance the sight B, having this invention applied thereto, is placed at the breech of the gun, and a great advantage, and which all sportsmen will fully appreciate, for the reason that, when shooting, in changing the sight to make allowance for the direction and strength of the wind he can easily and conveniently reach the screw to turn it, to change the sight, without materially altering the position of the gun or removing it from his shoulder, and without any liability to injury from the accidental discharge of the gun, as is now the case where the wind-gage sight is located at the front or muzzle of the gun. By the check-screw M the screw J and its nut L can be adjusted so as to take up the wear of the parts.

The passage in which the lower end of the bar or frame moves can be of any suitable shape in cross-section—for instance, square, triangular, &c.—the parts being arranged so that the bar cannot be moved out upwardly therefrom.

Having thus described my invention, what I claim is—

1. The combination, with the frame or bar carrying a gun-sight, a screw adapted to engage with said bar or frame and provided with a circumferential scale or mark on its outer end, of a support in which said frame is arranged to move back and forth across the gun and provided with a mark or scale adjacent to and to be read with said circumferential scale or mark, for the purpose specified.

2. The combination, with the frame or bar carrying a gun-sight provided with a mark or scale, a screw adapted to engage with said bar or frame and having a head and nut, the head having a mark or scale on its periphery, of a support in which said frame is arranged to move back and forth across the gun and provided with a scale or mark to be read with said mark or scale on said frame, and a scale or mark to be read with said peripheral mark or scale, for the purpose specified.

3 The combination, with a bar or frame carrying a gun-sight provided with a mark or scale, and a transverse cylindrical portion having a longitudinal central internal screw-thread adapted to engage with a screw J, of a support for said bar or frame secured to the stock of the gun and having a tubular portion E, provided with a longitudinal slot in which said cylindrical portion is arranged to move back and forth, and a scale or mark to be read with said mark or scale of the sight-bar or frame, for the purpose specified.

4. The combination, with the bar or frame carrying a gun-sight provided with a mark or scale, and a transverse cylindrical portion H, having a longitudinal central internal screw-thread adapted to engage with a screw J, of a support for said bar or frame secured to the stock of the gun and having a tubular portion E, provided with a longitudinal slot in which said cylindrical portion is arranged to move back and forth, and a scale or mark to be read with said mark or scale on the sight-bar or frame, and said screw having a circumferential scale or mark on it to be read with a mark or scale on the adjacent end of the tube E, for the purpose specified.

5. The combination, with a bar or frame carrying a gun-sight adapted to move back and forth in a tubular support, of a screw adapted to engage with said bar or frame and support, and having a head K, nut L, and check-screw M, for the purpose specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN W. SOULE.

Witnesses:
EDWIN W. BROWN,
A. B. WENTWORTH.