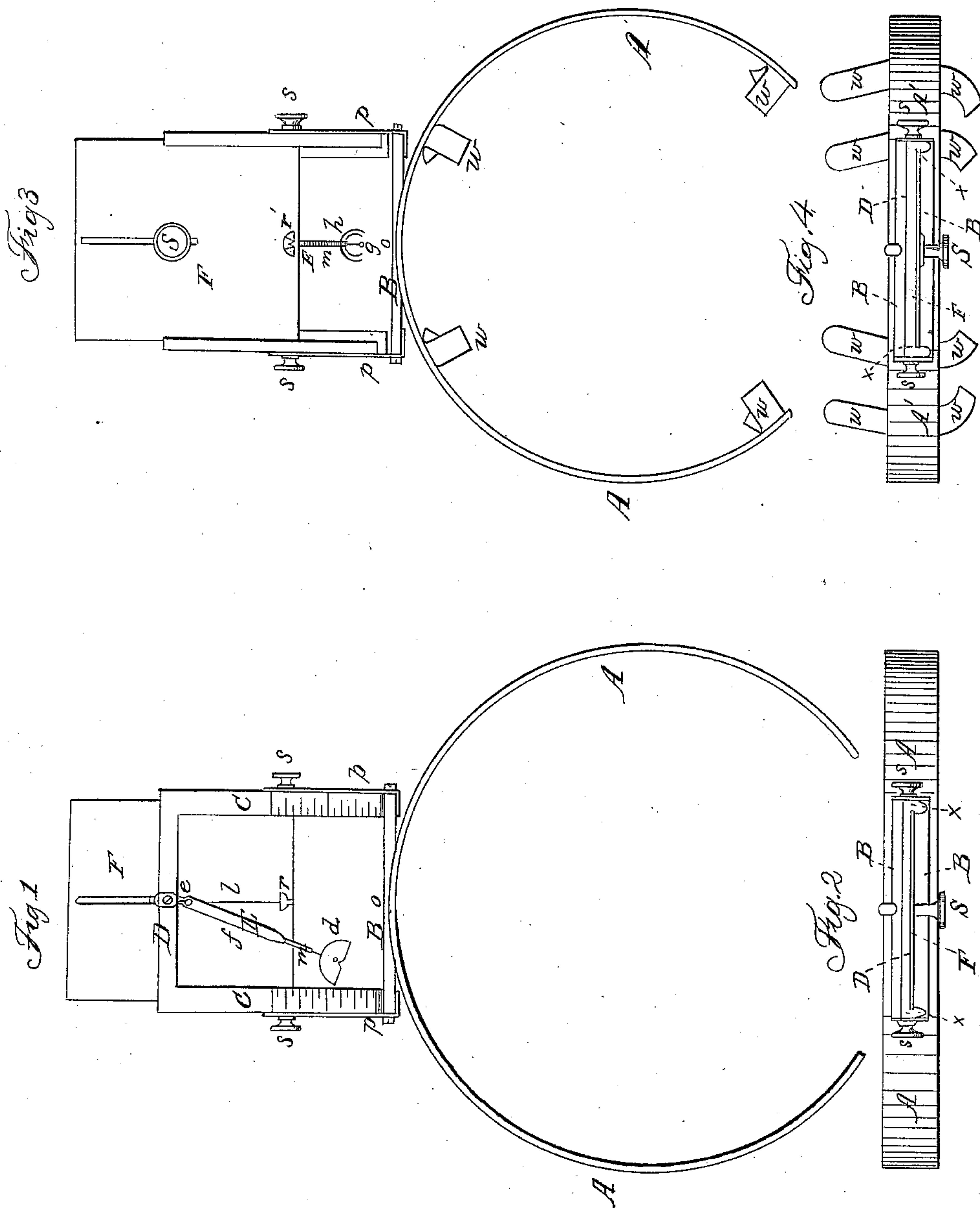


J. A. WAGENER.
Sight for Ordnance.

No 9,615.

Patented Mar. 8, 1853.



UNITED STATES. PATENT OFFICE.

JOHN A. WAGENER, OF CHARLESTON, SOUTH CAROLINA.

IMPROVED CANNON-SIGHT.

Specification forming part of Letters Patent No. 9,615, dated March 8, 1853.

To all whom it may concern:

Be it known that I, JOHN A. WAGENER, of Charleston, in the State of South Carolina, have invented a new and Improved Cannon-Sight; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists of an easy and correct mode of determining the highest point of the surface of a cannon, regardless of any position which the wheels on account of any uneven surface may occupy, and of affording the gunner at the same time a perfect sight to direct and elevate the piece by, capable of regulation for any distance less than point-blank, as well as to extreme range, according to degrees.

To enable others conversant with artillery practice to make and use my invention, I will proceed to describe its construction and operation.

I. *The rear sight*, (Figures 1 and 2.)—A circular steel spring, A A, embraces the base-ring of the cannon. To this spring is attached, by means of inlet-screws or otherwise, a rectangular (for pieces of heavy caliber and increased range to be oblong) instrument of brass or any other suitable metal or substance, constructed as follows: The base-piece B, with an engraved line in its exact center *o*, to indicate when the pendulum, hereinafter mentioned, hangs plumb. Upon this base is erected and held at right angles by means of the perpendicular side plates, *p p*, fastened at each end of the base-piece, and the screws and pivots *s s*, the upper part of the instrument consisting of the side pieces, C C, and upper piece, D, (which three pieces may be separate and riveted together, or be cast or made in one.) The side pieces, C C, are laid off in degrees. The upper piece, D, has an eye, *e*, affixed in its exact center or middle point, in which swings a pendulum, E, consisting of two parts. The upper part, *f*, is a female screw, (say of brass,) and the lower part, *m*, is a male screw, (say of steel,) having a semi-circular disk, *d*, at the lower end, with a small round perforation to look through in sighting. The male screw is inserted and of easy working in the female screw, and being

turned up or down shortens or lengthens the pendulum, and thereby enables the gunner to increase or decrease the distance of aim, ranging down to point-blank. A vertical sliding plate, F, is attached to the back part of the side pieces, C C, moving between the perpendicular grooves *x x* at said back, and held in position by the same, and a screw, S, in the upper piece, working through an open slit in said plate. This plate is intended to prevent the wind to have too great an effect upon the pendulum; secondly, to assist the gunner in ascertaining when the sight is plumb, it having a line, *l*, in the center; and, lastly, to enable the gunner to be more exact in arranging the pendulum according to degrees, answering in this regard with its lower side the purposes of a common ruler. It also has the usual open rifle sight, *r*, in its lower part or edge to aim at objects that may be rather too dark for the ball-sight, hereinafter described.

II. *The front sight*, (Figs. 3 and 4.)—This is affixed to the swell of the muzzle by means of a steel spring or circular clasp, A' A', with claws *w*, so shaped as to have a hold upon the face-moldings of the piece. It corresponds and is in all its other parts the same with the rear sight, except the male screw of the pendulum, which terminates with a small globe, *g*, of the size of a pin's head, which globe or ball is shaded by an arch, (say of steel,) *h*, and in aiming is brought in line with the object the gunner wants to strike by sighting through the perforation of the rear sight. The plate or slide F of this front sight also differs from the slide of the rear sight, in so much that in the lower edge it has cut out the usual rifle front sight, *r'*, to be used in connection with the rear plate sight.

Of the drawings herewith, and to which reference is made as part of this specification, Fig. 1 represents a front view of the rear sight; Fig. 3, a rear view of the front sight, and Figs. 2 and 4 are vertical views of both sights.

The two sights here described being attached to the gun, and brought in corresponding horizontal position front and rear, the manner of operating is evident from the description given.

What I claim as my invention is—

The sighting apparatus consisting of the corresponding pendula, E, as described, hung between the graduated side pieces or uprights, C C, in connection with the protecting and regulating slide F, with its rifle-sights *r r'*, said pendula having free sway by means of the rotary mounting of the uprights and upper part of the apparatus on the screws and pivots *s s*, and the whole being attached and

shifted into horizontal position on the cannon by means of the movable spring-clasps A A and A' A', all constructed and combined, substantially as set forth.

JOHN A. WAGENER.

Attest:

CHAS. A. KANAPAUX,
A. DOUMILLAT.