(No Model.)

O. M. SLOAT.

BRIDLE BIT.

No. 479,670. Patented July 26, 1892.

Fig 1

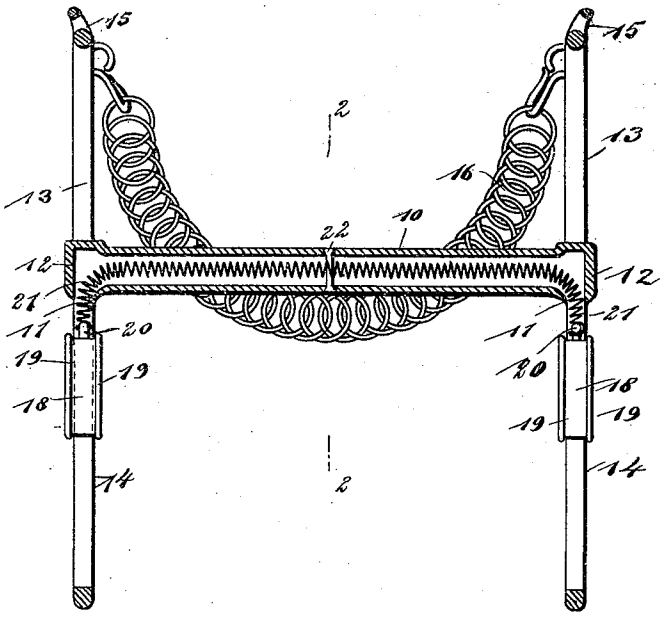
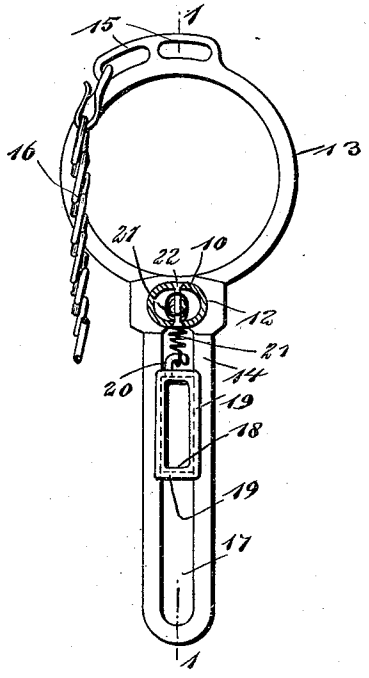


Fig 2



WITNESSES:

H. Walker

C. Sedgwick

INVENTOR

O. M. Sloat

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

OLIVER M. SLOAT, OF BROOKLYN, NEW YORK.

BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 479,670, dated July 26, 1892.

Application filed April 8, 1892. Serial No. 428,334. (No model.)

To all whom it may concern:

Be it known that I, OLIVER M. SLOAT, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bridle-Bit, of which the following is a full, clear, and exact description.

My invention relates to improvements in bridle-bits, and is especially intended as an improvement on the bit for which Letters Patent No. 435,252 of the United States were issued to me August 26, 1890.

The object of this invention, as of the former one, is to produce an adjustable bit which may be used as an ordinary bit, but which when the horse begins to pull will serve as a curb-bit and the force of leverage of which will be increased with the pulling strain applied to the bit. The bit operates in substantially the same way as the one shown in my former patent referred to; and the improvement in this bit consists, essentially, in constructing the cheek-pieces in such a way that they will project only beneath the mouth-bar and in concealing the spring of the rein-eyes, so that it will almost always be out of sight and cannot in any way hurt the horse's mouth.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both views.

Figure 1 is a vertical section of the bit embodying my invention on the line 1 1 in Fig. 2, and Fig. 2 is a cross-section on the line 2 2 in Fig. 1.

The bit is provided with the usual mouth-bar 10, except that in this case the mouth-bar is hollow, and at the ends of the mouth-bar and on the under side are openings 11, through which the springs pass, the mouth-bar being thickened above the openings, as shown at 12, at which point it merges in the rein-rings 13 and cheek-pieces 14, the bit being thickened at these points to give it the necessary strength. The rings 13 are produced above and at each end of the mouth-bar, and into these the reins may be buckled in the usual way. On the top of the rings are keepers 15, to which the usual curb-chain 16 is attached, this chain hanging beneath the horse's chin in the ordinary manner. The cheek-pieces 14 extend downward from the mouth-bar on each end of the bit, and the cheek-pieces are slotted longitudinally, as shown at 17, and are provided with rein-eyes 18, which are held to slide in the slots, and which have flanges 19, adapted to overlap the adjacent parts of the cheek-pieces so that the eyes cannot be displaced. The eyes 10 have hooks 20 at their upper ends, to which is secured a spiral spring 21, and this spring extends longitudinally through the mouth-bar 10 and down through the openings 11. A rivet 22 or its equivalent extends centrally through the mouth-bar and is attached to the central portion of the spring, so as to prevent the spring from shifting. If desired, two springs may be used instead of one and the inner ends of the springs secured to the rivet.

The operation of the bit is as follows: If it is used on a very easy-mouthed horse, the reins may be buckled to the rings 13; but ordinarily they will be buckled into the rein-eyes 18, and if the mouth of the horse is tender and he does not pull the tension of the rings 13 will pull the eyes up snugly against the thickened portion 12 of the bit and the bit will operate in the usual way. If, however, the horse begins to pull, the strain on the reins will tip back the cheek-pieces and draw down the rein-eyes 18, and it will be seen that the harder the horse pulls on the reins the farther down will the rein-eyes be drawn, and consequently the leverage against the horse will be gradually increased and he may always be controlled with the greatest ease.

It will be noticed that under ordinary circumstances the spring is held entirely within the mouth-bar and that it cannot by any possibility come in contact with the horse's mouth.

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

1. The combination, with the bit having slotted cheek-pieces and a hollow mouth-bar,

of rein-eyes held to slide in the cheek-pieces and a spring held within the mouth-bar and secured to the rein-eyes, substantially as described.

2. The combination, with the bit having a hollow mouth-bar and depending slotted cheek-pieces, of rein-eyes held to slide in the cheek-pieces and having hooks at their upper ends and a spring held within the mouth-bar and secured at its outer ends to the hooks of the rein-eyes, substantially as described.

3. The combination, with the bit having depending slotted cheek-pieces and a hollow mouth-bar closed at its ends and with openings on the under side and near the end portions, of rein-eyes held to slide in the cheek-pieces and a spring held in the mouth-bar and having its free ends extending downward through the openings in the mouth-bar and connected with the rein-eyes, substantially as described.

OLIVER M. SLOAT.

Witnesses:
WARREN B. HUTCHINSON,
EDGAR TATE.