(No Model.)

C. H. HORNER.

BRIDLE BIT.

No. 442,266. Patented Dec. 9, 1890.

Fig. 1.

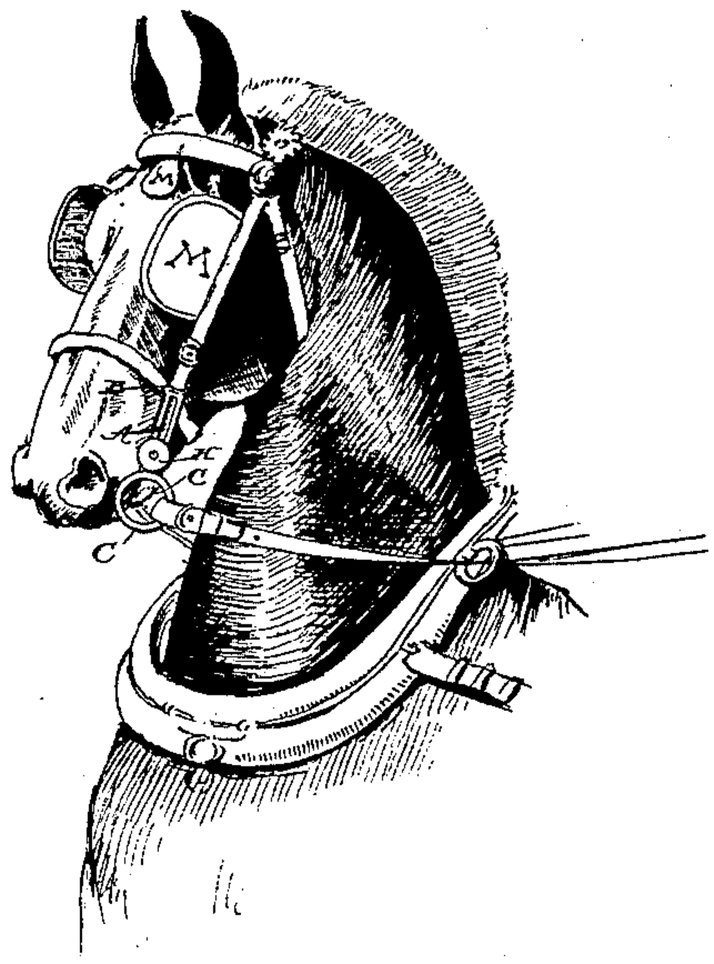


Fig. 2.

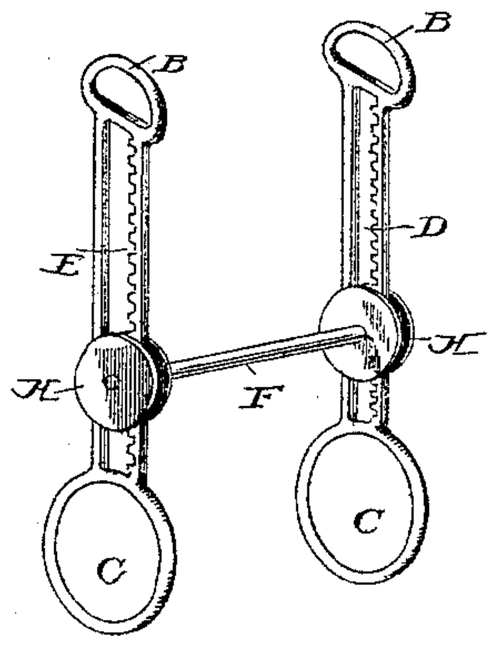


Fig. 3.

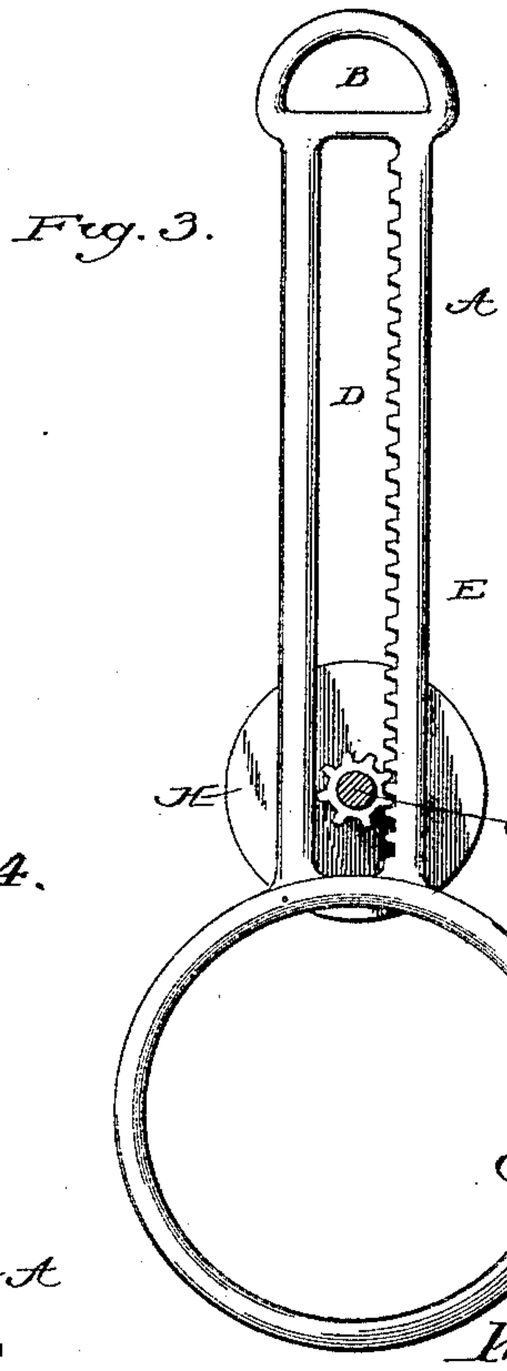
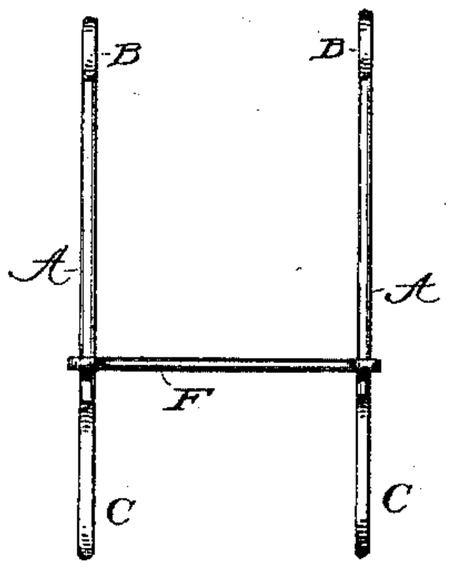


Fig. 4.



Witnesses:
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C. E. Sweetland.

Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES H. HORNER, OF XENIA, OHIO.

BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 442,266, dated December 9, 1890.

Application filed October 16, 1889. Serial No. 327,162. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. HORNER, a citizen of the United States, residing at Xenia, in the county of Greene and State of Ohio, have invented certain new and useful Improvements in Bridle-Bits; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in bridle-bits; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

The object of my invention is to provide a bit which is adapted to be used in the management of unruly horses, and which is strong and simple, may be readily and cheaply manufactured, and is thoroughly efficient in operation.

In the accompanying drawings, Figure 1 is a perspective view of a bridle provided with a bit embodying my improvements. Fig. 2 is a detailed perspective view of my improved bit. Fig. 3 is an enlarged sectional view of the same. Fig. 4 is an elevation of the same.

The sides A of the bit are provided at their upper ends with loops B, adapted for the attachment of the cheek-straps of the bridle. At the lower ends of the side pieces A are formed rings C, to which the reins may be attached, as shown. The intermediate portions of the side pieces between the loops B and rings C are straight, and have the elongated slots D. On the inner side of each slot is a rack E, extending the entire length thereof.

The bit-rod F, which connects the side pieces, is formed separately therefrom, is straight, and has its ends passed through the slots, and provided with spur-pinions G, which engage the racks; also, rigidly attached to the bit-rod, and arranged on opposite sides of the side pieces, are circular disks H, which by contact with the side pieces form guides that serve to retain the bit-rod in a position at right angles to the side pieces, while allowing the bit to move up and down in the slots.

The operation of my invention is as follows: Under ordinary circumstances, and while the lines are loose, the bit-rod is at the lower ends of the slots and in the usual position in the mouth of the horse. When the lines are tightened, the lower ends of the side pieces are drawn rearward and the bit-rod is caused to move upward in the slots and in the mouth of the horse. Owing to the engagement of the pinions on the bit-rod with the racks on the side pieces, the bit-rod is caused to turn axially when moving upward. A very slight pull on the lines is sufficient to retain the bit-ring at any height in the horse's mouth, as the racks and pinions form detents to prevent the animal from using his tongue to force the bit-rod downward. A strong pull on the lines will force the bit-rod entirely to the upper end of the animal's mouth in a position between his jaws, and where he cannot possibly get the bit-rod between his teeth.

Under ordinary circumstances the bit is no source of annoyance to the animal. It is only when the bit-rod is forced upward between his jaws that it becomes painful. A very slight pull on the lines is sufficient to retain the bit-rod in this position, and hence it is a comparatively easy matter to manage even a very spirited animal and speedily reduce him to terms.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The bit comprising the side pieces having the slots and racks and adapted at their upper ends for the attachment of the bridle-cheek straps and at their lower ends for the attachment of the reins, and the bit-rod having the pinions engaging the racks, the ends of the bit-rod being arranged to travel in the slots, and having the guides, for the purpose set forth, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHAS. H. HORNER.

Witnesses:
GEO. W. THOMAS,
HUNTER BULL.