

No. 720,689.

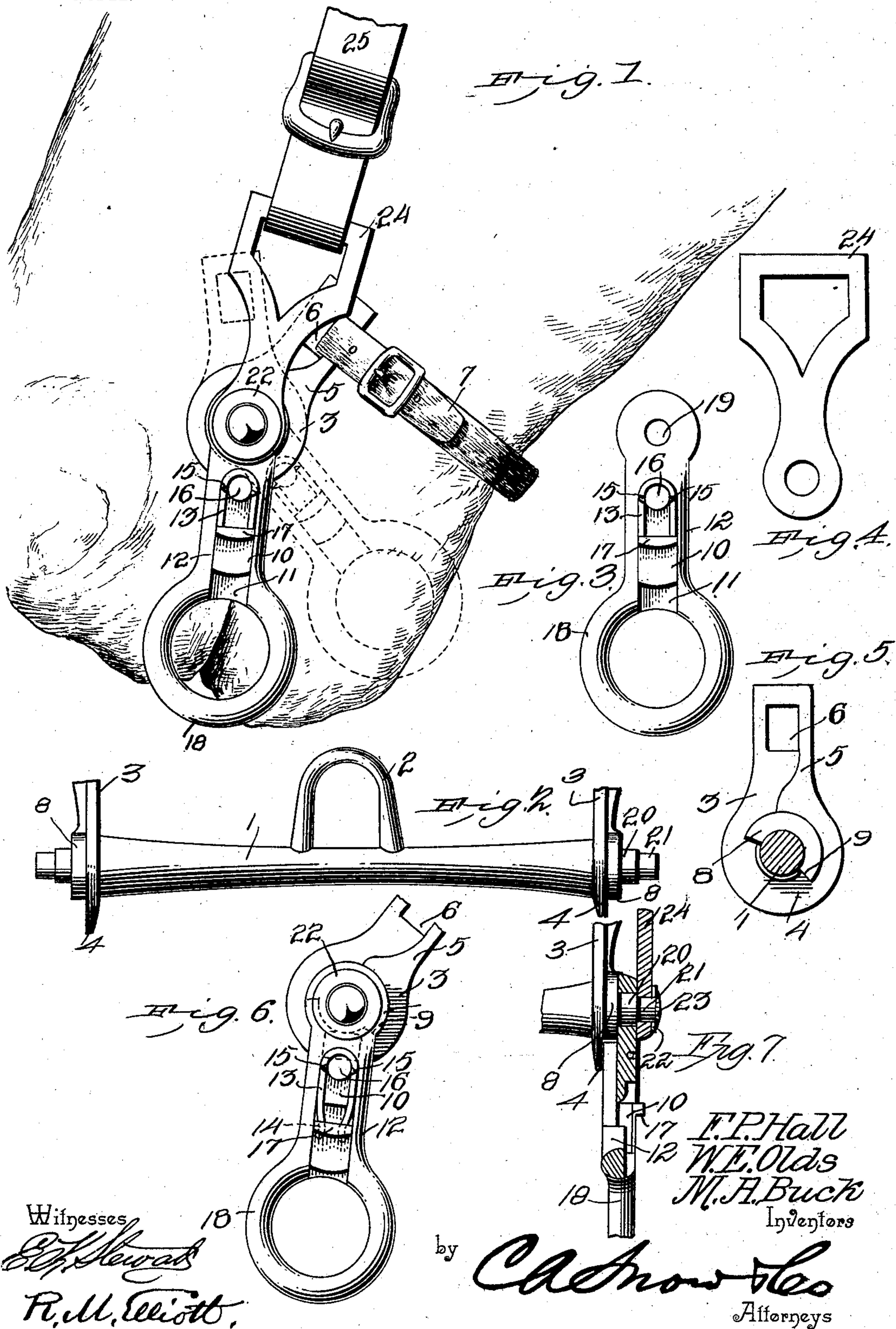
PATENTED FEB. 17, 1903.

F. P. HALL, W. E. OLDS & M. A. BUCK.

BIT.

APPLICATION FILED MAR. 16, 1901.

MODEL.



Witnesses

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BIT.

SPECIFICATION forming part of Letters Patent No. 720,689, dated February 17, 1903.

Application filed March 16, 1901. Serial No. 51,561. (Model.)

To all whom it may concern:

Be it known that we, FRANK P. HALL, WARREN E. OLDS, and MADISON A. BUCK, citizens of the United States, residing at Pleasanton, in the county of Linn and State of Kansas, have invented a new and useful Bit for Horses and Mules, of which the following is a specification.

This invention relates to bridle-bits.

The object of the invention is to provide a bit which by a slight adjustment of certain of its parts may be converted from a straight bit to a curb-bit.

A further object is to provide a bit having the above characteristics which shall be simple of construction, thoroughly efficient and durable in use, and ready of manufacture.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a bridle-bit, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof, and in the drawings—

Figure 1 is a view in side elevation, exhibiting the lower portion of a horse's head with the bit applied in operative position thereto, the parts of the bit being adjusted for curb purposes. Fig. 2 is a view in front elevation of the bit with certain of the parts removed. Fig. 3 is a detached detail view of one of the curb-plates. Fig. 4 is a similar view of one of the cheek-strap plates. Fig. 5 is a similar view of one of the gag-plates. Fig. 6 is a view in side elevation, showing the parts of the bit adjusted for straight-bit purposes. Fig. 7 is a vertical sectional view taken through the cheek-plate, curb-plate, gag-plate, and bit.

Referring to the drawings, 1 designates the bit-bar, the same being provided at its center with a curb 2.

In describing the bit the mechanism at one end only thereof will be discussed, as the arrangement at both ends is identically the same.

Rigidly secured to or formed integral with the bit near its end is a gag-plate 3, which, assuming the curb to be in a vertical position, is disposed at an angle of about thirty degrees thereto, this arrangement, as will presently appear, operating to cause the curb to lie easily in the horse's mouth when the bit is used as a straight bit. The plate comprises a head 4 and an arm 5 integral therewith and provided near its terminal with an orifice 6 to be engaged by one end of a chin or gag strap 7, as clearly shown in Fig. 1, this strap operating normally to hold the curb in the position above referred to. The outer face of the head is formed with a semicircular boss 8, concentric with the bit-bar, and presents shoulders 9 to be engaged by a locking-latch 10, mounted in a longitudinal recess 11 in the shank of a curb-plate 12. This latch is adapted for free sliding movement in the recess 11 and is held in its adjusted position with relation to the shoulders 9 of the gag-plate by a yoke-spring 13, the terminals of which fit in slots or recesses 14 in the latch, as shown by dotted lines in Fig. 6, the crest of the spring being housed in the upper end of the recess 11 and held there by projections or teats 15, carried by a stud 16, disposed within the recess. The latch is provided with a lug or projection 17, constituting a finger-hold by which it may be operated.

The curb-plate 12, to which reference has been made, is provided at one end of its shank with a rein-ring 18 and at its opposite end with an orifice 19 to fit over a reduced pintle 20 near the terminal of the bit-bar and is free to move thereon, the terminal of the bit-bar being further reduced to present a pintle 21, upon which is mounted the cheek-strap plate 4, the same being held from disengagement therefrom by a washer 22, held on the pintle 21 by having the latter upset or mushroomed, as shown at 23 in Fig. 7. The cheek-strap plate is free to move on the pintle 21 and is provided at its free end with a loop 24, to be engaged by the cheek-strap 25. When the latch is in the position shown in Fig. 1, it

engages with one of the shoulders 9 of the boss 8, and upon draft being applied to the curb-plate the bit will be rocked, thus to force the curb 2 against the roof of the animal's mouth in the usual manner. When the latch is in the position shown in Fig. 6, the curb-plate is free to rotate on the pintle 20 without imparting any rocking movement whatever to the bit, and under these conditions the device operates as a straight bit.

It will be seen from the foregoing description that although the device of this invention is exceedingly simple of construction it will be thoroughly efficient in use for the purpose designed and that the adjustment to convert the bit from a straight to a curb, or vice versa, may be accomplished in a ready and easy manner.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a bit provided with a curb, and cheek-strap plates pivotally associated with the terminals of the bit, of plates rigid with the bit and provided with stops or abutments, and rein-ring-carrying arms swiveled to the bit-bar and carrying adjustable means to coact with the stops or abutments.

2. The combination with a bit provided with a curb, of gag-plates rigid therewith and provided adjacent to the bit with stops or abut-

ments disposed obliquely to the length of the plates and at their free terminals with chin-strap-receiving orifices, rein-ring-carrying arms normally loose upon the bit, and carrying means to interlock with the stops or abutments to convert the bit from a straight bit to a curbed bit, and cheek-strap plates swiveled to the terminals of the bit.

3. The combination with a bit provided with a curb, of gag-plates rigid therewith and disposed at an oblique angle to the curb and provided adjacent to the bit with stops or abutments and at their free terminals with chin-strap-receiving orifices, rein-ring-carrying arms normally loose upon the bit and provided with longitudinal recesses, spring-controlled latches mounted in the recesses and adapted to interlock with the stops or abutments to convert the bit from a straight bit to a curbed bit, and cheek-strap plates swiveled to the terminals of the bit.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

FRANK P. HALL.
WARREN E. OLDS.
MADISON A. BUCK.

Witnesses:

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