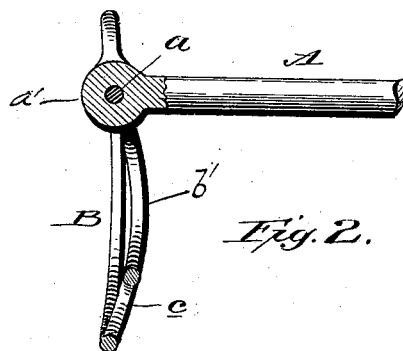
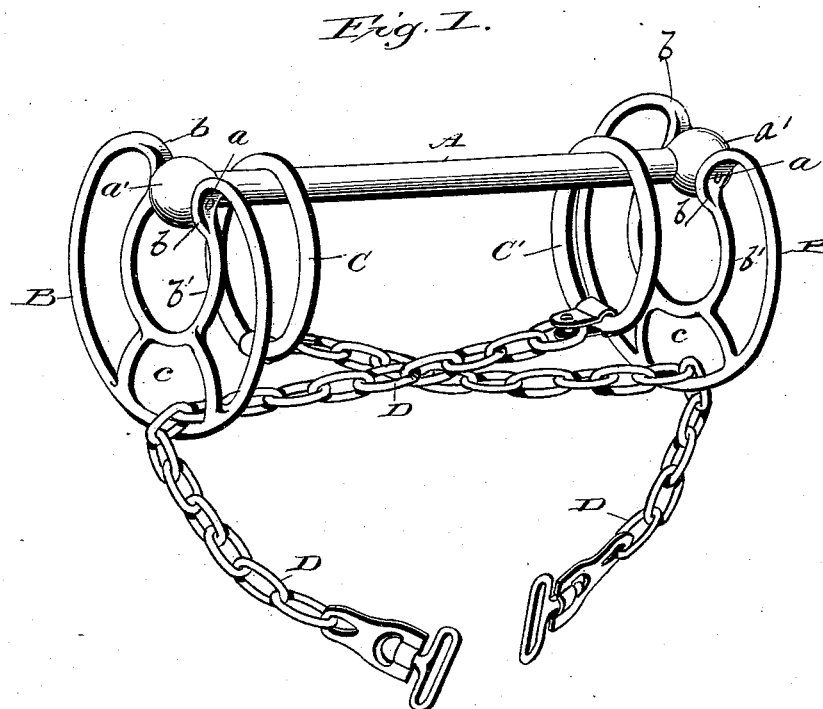


(No Model.)

W. C. WITTMANN.
BRIDLE BIT.

No. 522,572.

Patented July 3, 1894.



Witnesses:
L. C. Hills.
E. H. Bond.

Inventor:
Will C. Wittmann,
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Attorney.

UNITED STATES PATENT OFFICE.

WILL CHRIS WITTMANN, OF LINCOLN, NEBRASKA.

BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 522,572, dated July 3, 1894.

Application filed December 21, 1893. Serial No. 494,261. (No model.)

To all whom it may concern:

Be it known that I, WILL CHRIS WITTMANN, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Bridle-Bits, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in bridle-bits of that class in which is embodied a mouth-bar with a ring at each end and cheek rings fitted to slide on the mouth-bar between the end rings and attached to connections for attachment to the reins. It is designed primarily as an improvement upon the construction disclosed in the Patent No. 500,831, issued to me July 4, 1893.

The main object of the invention is to simplify the construction of the bit, dispensing with the auxiliary loops or rings on the outer rings and forming the said ring with a loop for the reception of the rein-connection which shall be wholly within the outer boundary of the ring itself. The outer rings, which are attached to the mouth-bar, are convex upon their adjacent faces, and the construction is such that the bit works closer and forms a smaller clinch upon the under jaw of the horse than that of the prior form, and a greater radius is presented on the outside of the horse's mouth.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improved bit. Fig. 2 is a detail partly in elevation and partly in vertical section, the section being through the end ring.

Like letters of reference indicate like parts in both of the views.

Referring now to the details of the drawings by letter, A designates the mouth-bar, which is by preference substantially round in

cross-section, and of a form best adapted for ease and comfort for the horse.

B B are bit-rings pivoted by pins *a* to the enlarged spherical ends *a'* of the mouth-bar, said rings having widened portions *b* to bear on the opposite faces of the spherical ends of said bar. Each of these rings is also formed with an integral inner ring *b'* and a loop or opening *c*, the latter being designed to receive the rein-connection, said loop and inner ring being formed wholly within the ring B. The rings are convex on their adjacent faces, which is an important feature, in that by this construction when the bit-rings are turned at an acute angle to the bar by drawing on the reins the convex surfaces afford a broad bearing on the horse's jaw, this bearing including the inner rings and loops. Were the bit-rings made flat their outer portions only would clinch the jaw, resulting in undue torture to the animal.

Mounted to slide freely upon the mouth-bar A, between the bit-rings, are the cheek-rings C and C', to each of which is connected in any suitable manner the chain or other connection D, which connections are designed for attachment to the reins (not shown) in any suitable manner. The connections are crossed, as shown in Fig. 1, for the same purpose as in the prior construction. In the present arrangement the pull upon the cheek-rings is nearly in line with the leverage of the connections and greater force is obtained with the exertion of less power.

With the parts constructed and arranged substantially as above set forth, the operation is as follows:—When a pull is exerted on the reins, the crossed connections, extending as they do from one of the animal's cheeks to the other, are drawn tightly under the animal's mouth, with the cheek-rings sliding inward toward each other on the mouth-bar to firmly engage the cheeks of the animal, whereby the latter can be perfectly held in check. The bit works closer than the old form, and forms a closer clinch with the under jaw of the animal and at a greater distance from the bit itself; it also presents a greater radius on the outside of the horse's

mouth. When the pull is released on the reins the connections and the cheek-rings to which they are attached relax, and therefore exert no further pressure on the lower jaw of the animal.

5 What I claim as new is—
A bridle-bit comprising a mouth-bar, cheek-rings carried loosely on said bar, bit-rings pivotally connected to the ends of the mouth-bar,
10 said rings being convex on their adjacent faces

and each formed with an interior ring and a loop, and rein-connections passed through the loops and connected with the cheek-rings, substantially as described.

In testimony whereof I affix my signature in 15
presence of two witnesses.

WILL CHRIS WITTMANN.

Witnesses:

JAMES L. CALDWELL,
JOEL S. EDWARDS.