C. HUIE & A. S. JENKS.

Driving-Bits.

No. 164,375. Patented June 15, 1875.

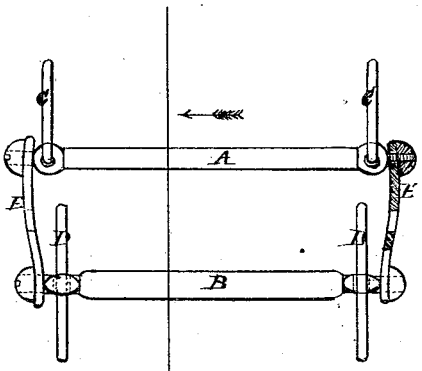

Fig. 1.

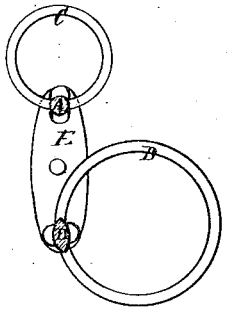

Fig. 2.

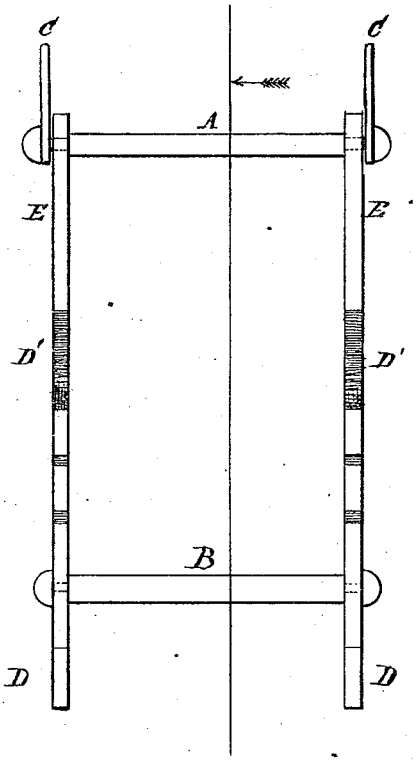

Fig. 3.

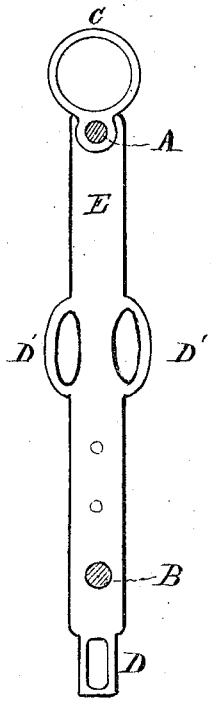

Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES HUIE AND ABRAHAM S. JENKS, OF PHILADELPHIA, PA.

IMPROVEMENT IN DRIVING-BITS.

Specification forming part of Letters Patent No. **164,375**, dated June 15, 1875; application filed July 16, 1874.

To all whom it may concern:

Be it known that we, CHARLES HUIE and ABRAHAM S. JENKS, both of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Driving-Bits; and we declare the following to be a full and exact description thereof.

Our invention has reference to that class of driving-bits which may be termed "double-barred driving-bits," and which consist of two bars for insertion in the horse's mouth, connected by link-plates, and provided with rings for attaching the headstall-straps and driving-reins. A driving-bit having this construction was patented to one of the applicants, CHARLES HUIE, under date of May 14, 1872, Letters Patent No. 126,704, entitled improvement in driving-bits. It is represented in Figures 1 and 2 of the annexed drawing.

A and B are parallel bars, designed to enter the horse's mouth, and connected together by link-plates E E, to which their ends are secured. When in use the bar A is to be held in the back part of the mouth, while to the bar B, which will then be retained near the front teeth, are fastened the driving-reins. Holes are formed near the ends of both bars, through which are passed the rings C C and D D, for attaching the headstall straps and reins respectively.

In practice we have found that this method of providing the strap and rein attachments has some objectionable features, to avoid which is the object of the present invention. These objections are as follows: The rings C C and D D, being inside of the link-plates E E, are, when in use, pressed closely against the corners and sides of the horse's mouth, and (being loosely attached to the bars A and B) by their constant motion and rubbing are liable to chafe and irritate the parts with which they are in contact. A further objection is that, by reason of the attachment of the driving-reins directly to the bar B, it is impossible to increase or diminish the severity of the bit without altering the position of the bar by inserting it in other holes in the link-plates. This may not be desirable should the conformation of the horse's mouth be such that the bar B is most effective when in a given position. By our improved bit both of these objections are obviated, as will be seen by reference to the following description and Figs. 3 and 4 of the annexed drawing.

A and B are the two parallel bars designed to enter the horse's mouth at such a distance apart that when the former is pushed back as far as possible in the mouth the latter will rest upon the lower jaw just behind the front teeth, and be retained in that position by the rigid link-plates E E. The bar A is inserted loosely into these plates, so that the rest of the structure can revolve freely around it. This is essential to the operation of our double-barred bit, as it prevents the horse from getting control of it by griping the bar A between his large and powerful back teeth. The bar B, which is an ordinary snaffle-bar, acting by pressure upon the tender part of the mouth, is the bit proper, and the remainder of the structure is auxiliary to its action, serving to retain it properly in its position, and to afford the attachments for the straps and reins. By reason of the free revolution of the link-plates E E around the ends of the bar A it is impossible for the horse to exert any control over the movement of the bar B, and the slightest pressure upon it is at once felt upon the sensitive part of the mouth. The bar B is preferably flattened or made oval in form, so that it may bear smoothly and easily upon the jaws. The link-plates E E are prolonged beyond the point of insertion of the bar B, and in the prolongation are slots D D, for attaching the driving-reins. Between the bars A and B other slots, D′ D′, are provided for the same purpose. If preferred, rings or other equivalent devices may be substituted for these slots. To the ends of the bar A, outside of the link-plates E E, are attached the rings C C, in the manner shown in Figs. 3 and 4 of the drawing, and to these rings the headstall-straps and check-reins are fastened; or, if preferred, the attachments may be made directly to the link-plates E E by devices similar to D D. By this mode of construction the points of attachment for the headstall-straps and reins are removed from contact with the horse's mouth, and chafing is effectually prevented, while at the same time the power or severity of the bit may be greatly increased by fastening the driving-reins to the extension of the

link-plates at D D, and correspondingly lessened if the intermediate points of attachment D′ D′ are made use of.

We are aware that curb-bits, having two bars for insertion in the mouth, have been known before our invention, but believe that in all of them the bars have been so close together as to be practically the same as a single broad or flattened bar, and by reason of this closeness could not operate in the same manner as our improved bit. Such bits depend for their efficiency upon the chain, which is an essential part of all curbs, and which, by its attachment to the cheek-pieces, forms a lever to twist or compress the under jaw, while our improved bit is a snaffle merely, acting, not by torsion, but by pressure, upon a tender part of the mouth, where it is held in position by its attachment to the bar A. We are also aware that other double-barred bits have been previously known resembling ours in general appearance, but differing from it in that the bars have been riveted firmly to the side pieces, or so attached thereto that the latter could not revolve around the ends of the bar corresponding to A. For this reason they have failed to be effective, since the bar A, being between the powerful back teeth, could be so griped by them as to prevent the movement of the bar B and its pressure upon the other part of the mouth, and since the bar B was not adjustable its position could not be altered to fit the mouth or give relief to the chafed parts. Thus the essential features of our bit, as previously described, were wanting.

We do not claim either of these forms of bit, but

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, with a double-barred bit, substantially as shown and described, and in which the adjustable bar B and plates E E are adapted to revolve freely around the bar A, of the rein attachments D D and D′ D′, by which the severity of the bit may be lessened or increased without altering the position of the bar B.

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Witnesses:
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