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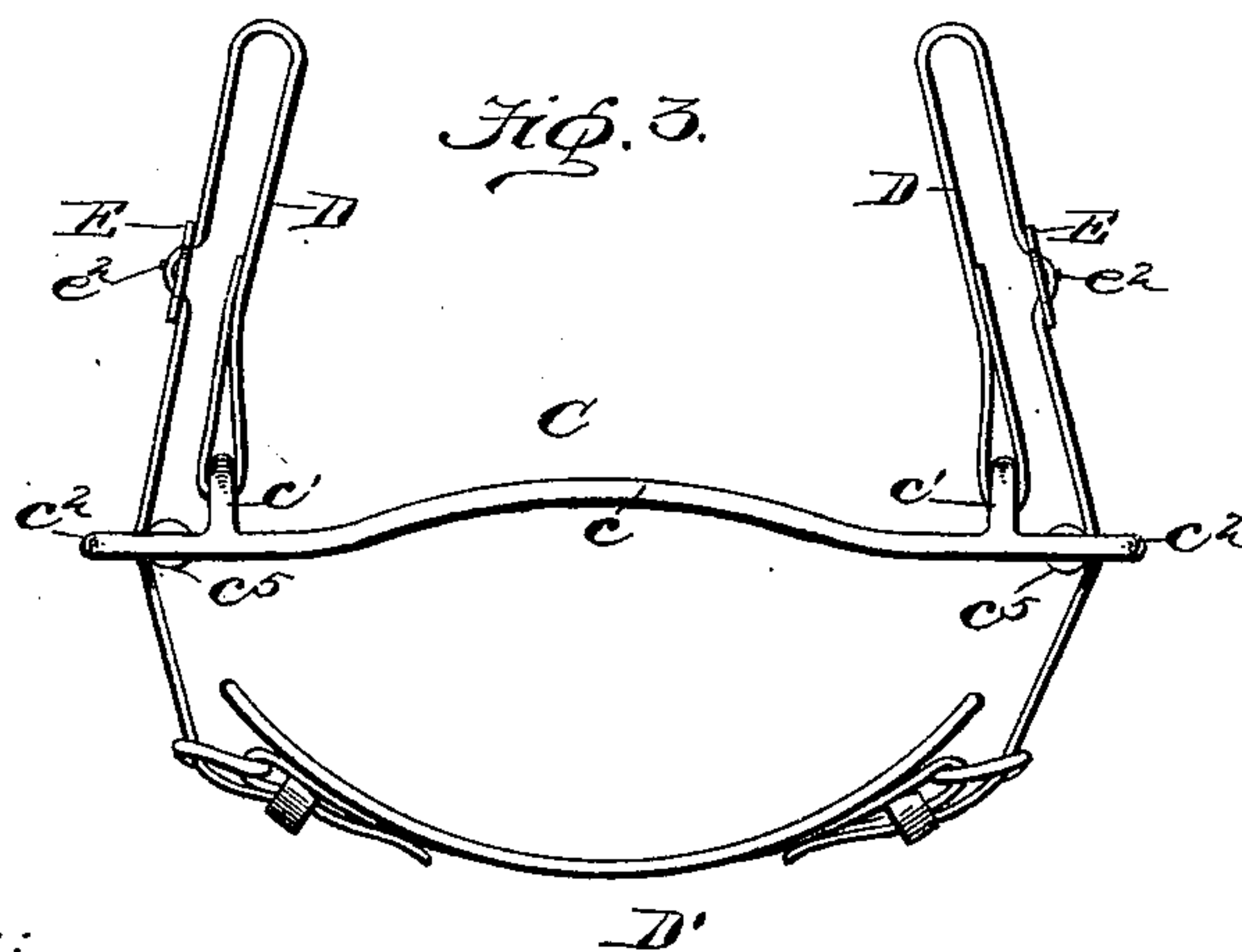
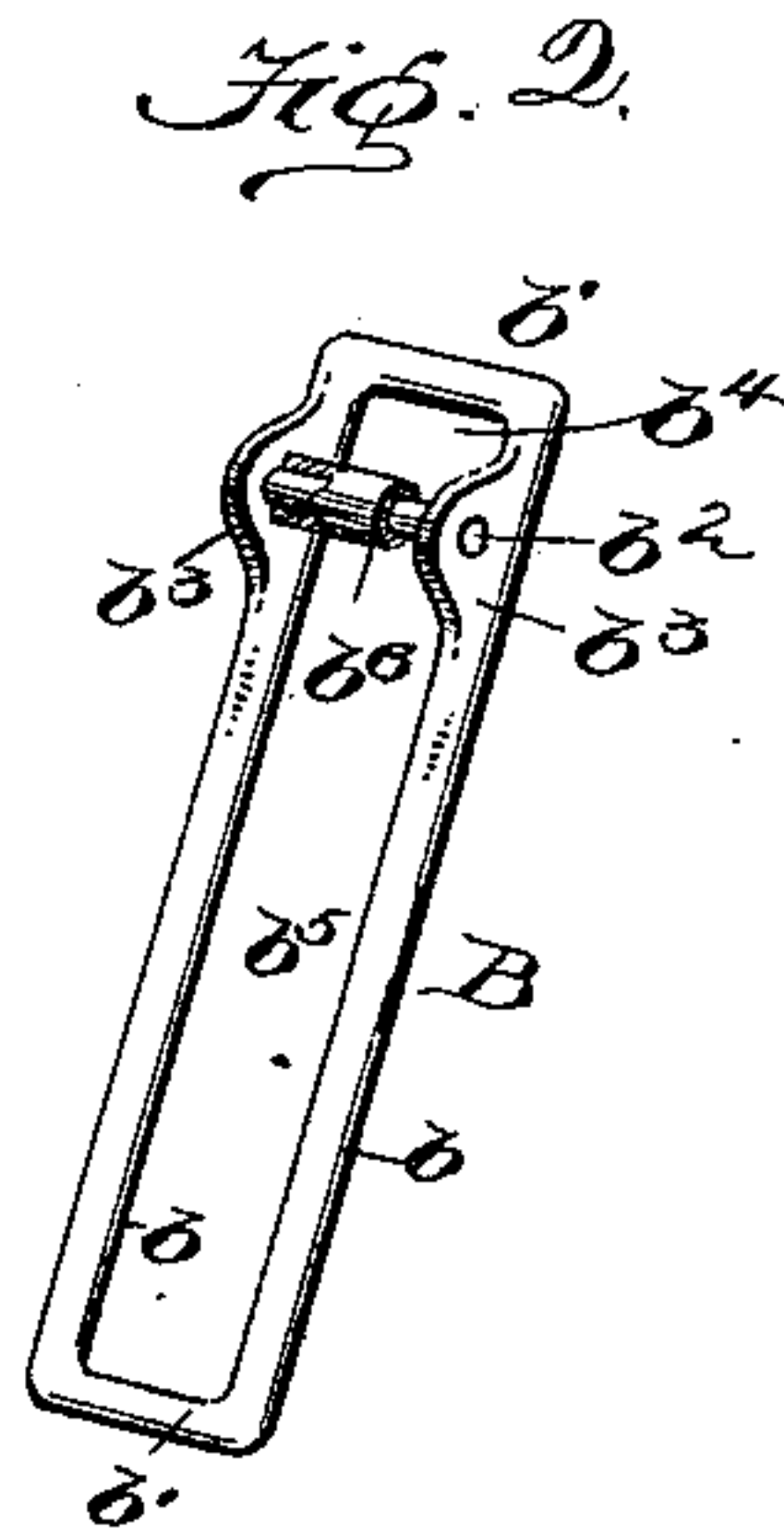
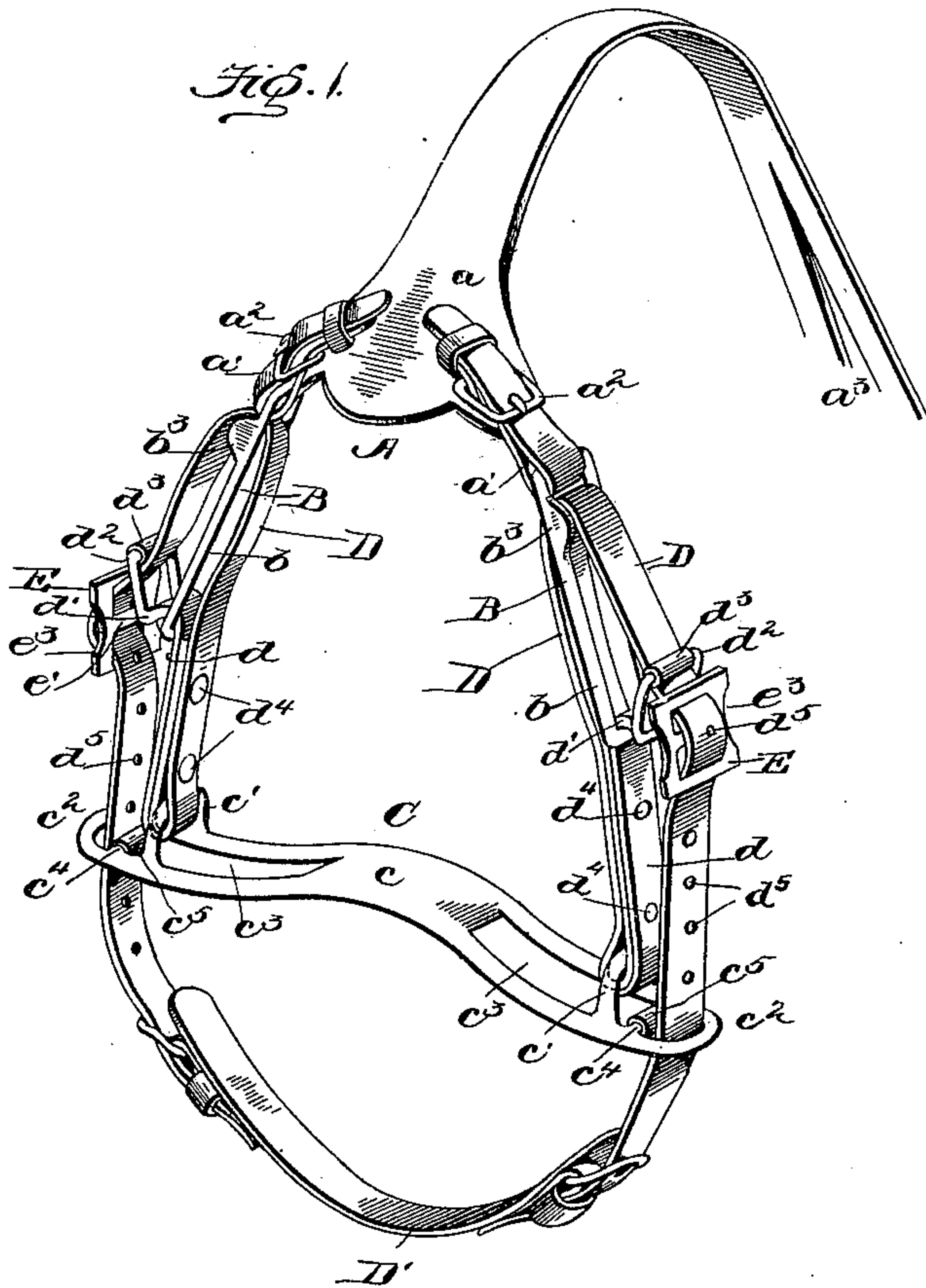
Patented Aug. 8, 1899.

A. M. PENDLETON.  
BRIDLE BIT.

(Application filed May 4, 1898.)

(No Model.)

3 Sheets—Sheet 1.



Witnesses:  
J. M. Fowler Jr.  
Gales P. Moore

Inventor:  
Albert M. Pendleton  
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his Attorney

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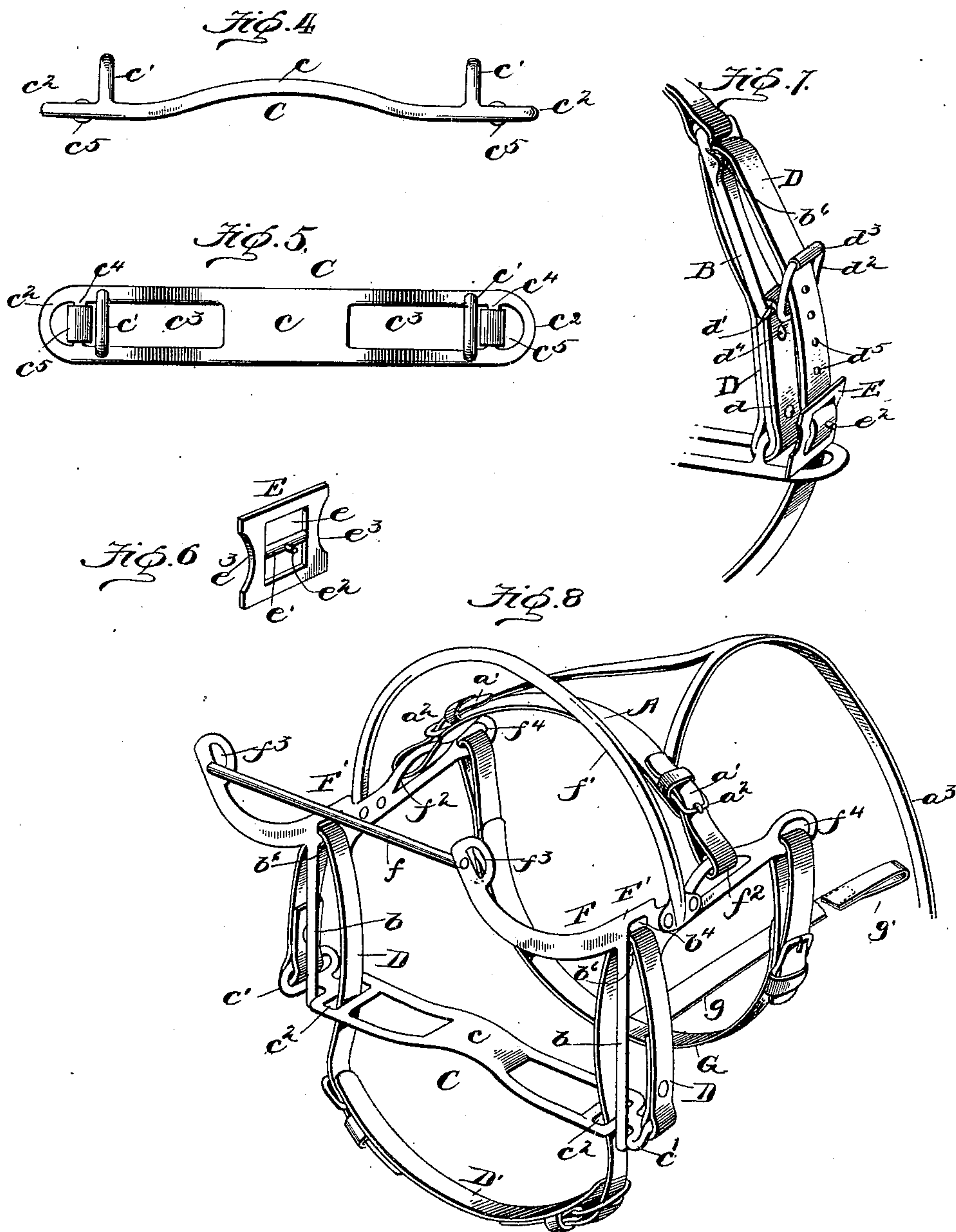
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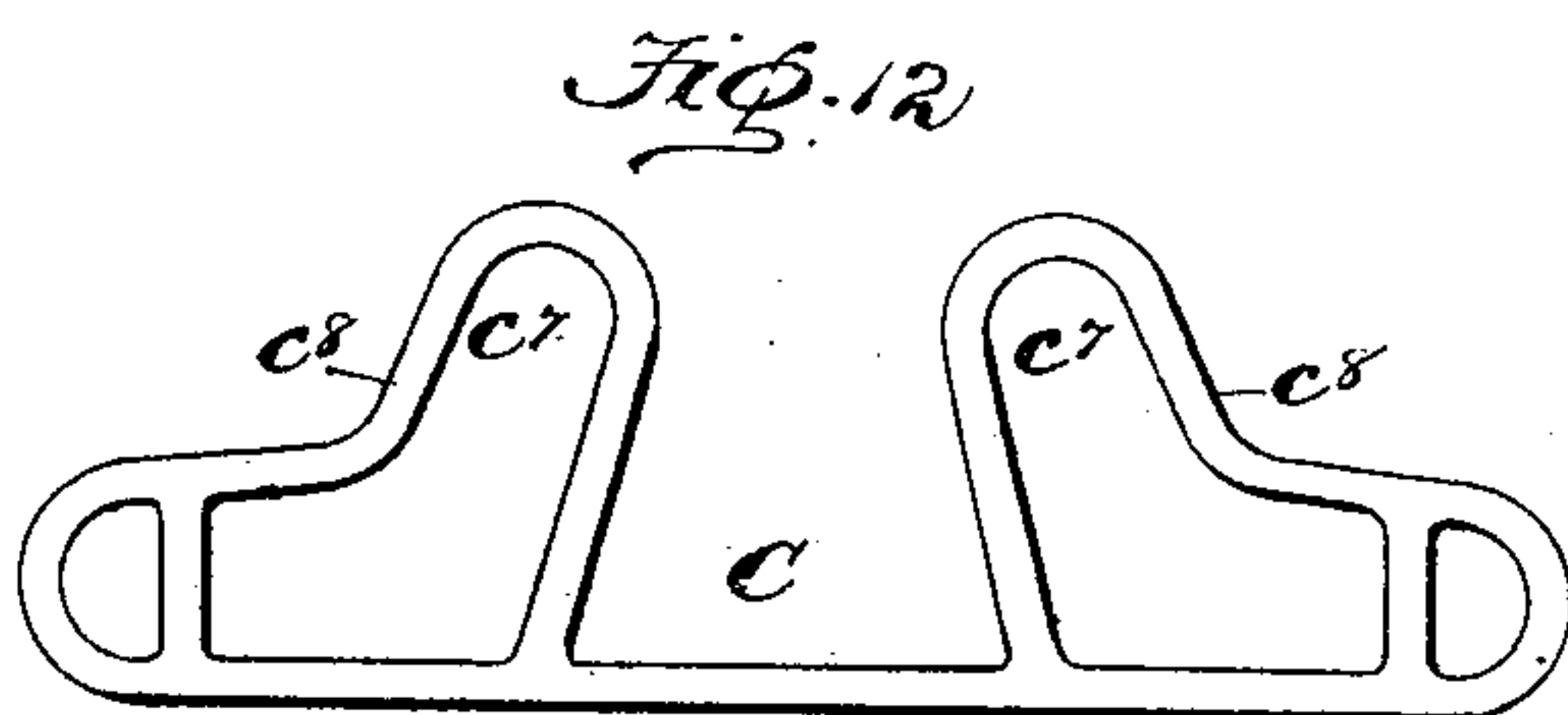
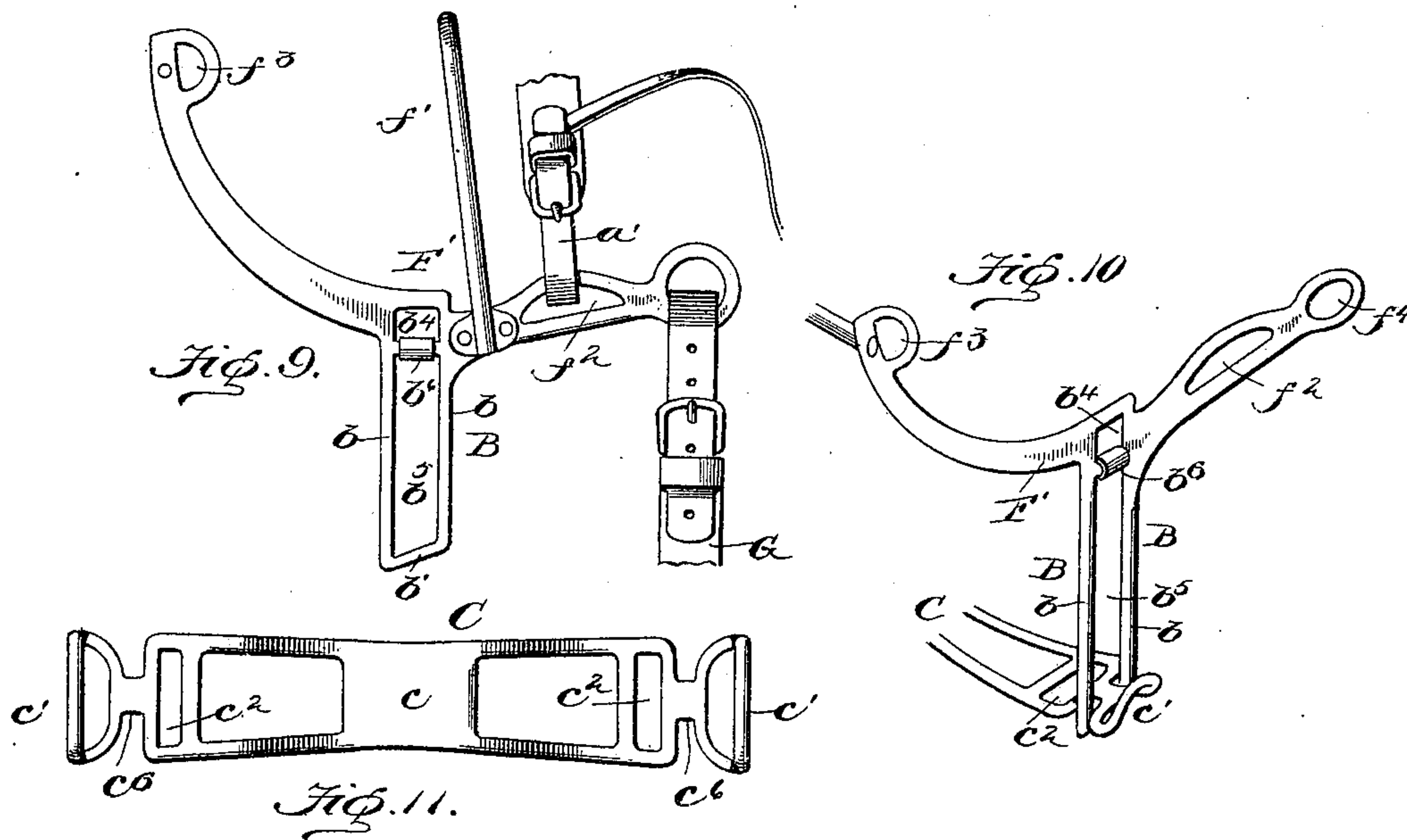
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(No Model.)

3 Sheets—Sheet 3.



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# UNITED STATES PATENT OFFICE.

ALBERT M. PENDLETON, OF SALT LAKE CITY, UTAH.

## BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 630,515, dated August 8, 1899.

Application filed May 4, 1898. Serial No. 679,714. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT M. PENDLETON, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake, State of Utah, have invented certain new and useful Improvements in Bridles, of which the following is a description, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention relates to harness, and more particularly to checking devices, my object being primarily to present a structure which when applied to the animal will cause him to hold his head in proper position. More specifically the device is intended to prevent an animal from lugging at the bit, chewing the bit, pulling to one side or the other, bearing upon the bit, &c., and also to enable the driver or rider to keep his horse under perfect control.

To these ends, and also to present in detail a useful and efficient checking device and the various parts thereof, my invention consists in the various matters hereinafter described and claimed.

Generally speaking, the device comprises a supporting member to be secured to the animal's head, a checking-bit adapted to lie in the mouth, and a strap secured to the bit, passing over a suitable bearing on the head member, and then being secured to a chin-strap or itself forming a chin-strap. Thus it will be apparent that when the chin of the animal is lowered, as when lugging or opening the mouth, the check-bit is raised and caused to bear upon the roof of the mouth or at some other point. Preferably the strap is attached to each end of the bit, so that it is raised evenly, and means are provided for locking either side of the bit or both sides against movement. Suitable guides are provided for the parts and other details are presented.

In the accompanying drawings, Figure 1 is a perspective view of one form of my device, the position being that assumed when the check is at rest in the animal's mouth. Fig. 2 is a detail of one of the side guides. Fig. 3 is a view of the checking-bit, the chin-strap, and the straps connecting these two members, the said parts being detached from the remaining portions of the article. Fig. 4 is

a side elevation of the checking-bit. Fig. 5 is a top plan view thereof. Fig. 6 is a detail of the locking member. Fig. 7 is a perspective view of one side of the present device, the locking member being shown in locking position. Fig. 8 is a perspective view of a second form of my device, the position of the parts being similar to that shown in Fig. 1. Fig. 9 is a side elevation of the form shown in Fig. 8, the checking-bit, the chin-strap, and the strap connecting these two members being removed. Fig. 10 is a side perspective of one of the side guides shown in Fig. 8, the bit being in place. Fig. 11 is a top plan view of the bit shown in Fig. 8. Fig. 12 is a top plan view of a modified form of checking-bit.

Referring now more particularly to the drawings, A represents a nose-strap composed of the central plate *a* and side straps *a'* with their buckles *a<sup>2</sup>*, suitable straps, as *a<sup>3</sup>*, extending from said central plate for attachment to the usual water-hook, as shown in Figs. 1 and 8, or to the crown-piece of the bridle, as shown in Fig. 12. Attention is first directed to the form shown in Figs. 1 to 7, both inclusive. In this structure side guides B are attached to the nose-strap by the side straps *a'*, and, as here shown, each guide comprises a frame having side bars *b*, top and bottom bars *b'*, and an intermediate transverse bar *b<sup>2</sup>*, slightly below the top bar, said intermediate bar being supported by ears *b<sup>3</sup>* upon the side bars. In this way the frame presents two slots or openings *b<sup>4</sup>* and *b<sup>5</sup>*, through the upper of which, *b<sup>4</sup>*, the side strap *a'* passes. For a purpose to be more fully hereinafter described the intermediate bar is preferably provided with a roller *b<sup>6</sup>* of any convenient construction.

The checking-bit is indicated by C and in the form here shown comprises a substantially broad plate having a raised central portion *c*, adapted to bear against the roof of the mouth when the bit is raised. A loop *c'* is provided near each end for the attachment of a strap, and in each end of the bit is an opening *c<sup>2</sup>*, through which the bit-strap passes, as will be below referred to. Preferably slots *c<sup>3</sup>* are provided between the central portion and each end, a transverse strip or bar *c<sup>4</sup>* lying between each slot and its neighboring



opening  $c^2$ , these bars  $c^4$  being provided with rollers  $c^5$ . To each loop  $c'$  is attached a bit-strap D, which passes upwardly along the inner side of its guide-frames B, through the opening  $b^4$  in said frame and over the roller  $b^6$ , then downwardly along the outer side of the frame, through the opening  $c^2$  in each end of the bit, and then each bit-strap is secured to the chin-strap D'. It is manifest that but one bit-strap could be employed and that the lower central portion of this could form the chin-strap, while the ends could be carried over the rollers  $b^6$  and attached to the check-bit.

The above construction being understood and it being borne in mind that the nose-strap is connected to the water-hook or some other portion of the harness which is immovable relatively to the movement of the head members, the operation will now be apparent. Should the horse lug his head the chin will of course bear upon the chin-strap, and the downward movement of said strap through the bit-strap causes the check-bit to rise in the animal's mouth and to bear forcibly upon the roof of the same, the force being augmented by the leverage of the bit-straps. This movement also tends to raise the chin-strap by the downward pressure on the check-bit. Should the horse chew his bit, each movement of the under jaw causes the bit to rise. In fact, any movement of the head against the chin-strap forces the bit upwardly.

Certain other features are to be considered before leaving this first form. A rest is provided for the bit to relieve strain on the bit-straps when the bit is in its lowest position and also to limit its downward movement.

As here shown, this rest and stop comprise a plate  $d$ , attached to the bit-strap, the upper end of said plate being curved outwardly and downwardly to form a hook  $d'$ , adapted to rest upon the lower cross-bar of the guide-frame

B. Preferably the loop  $d^2$  extends upwardly and outwardly from the end of the hook, and through this loop passes the bit-strap, an additional guide for said strap being thus presented. A roller  $d^3$  is placed upon the top bar of the loop. In the construction here shown the bit-strap is brought through the bit-loop  $c'$  and its end carried up on the outside of the main portion of the strap. The plate  $d$  is then applied outside of the end of the strap and the parts secured by rivets  $d^4$  through the three elements, thus producing a strong union and securely holding the end of the bit-strap. There is also provided means for locking the bit against upward movement.

This consists of what may be termed a "buckle-plate" E upon each bit-strap, the said buckle-plate being applied between the bit and the loop upon the rest. This buckle-plate is merely a plate having slots  $e$ , with an intermediate transverse bar  $e'$ , provided with a pin or teat  $e^2$ , adapted to engage a suitable hole  $d^5$  in the bit-strap, said strap passing

over the transverse bar and through the slots, as shown. Manifestly when the buckle-plate is in the position shown in Fig. 1 it can move downwardly until it meets the bit, and the bit can consequently be raised. This buckle-plate is of course of such size that it cannot pass through the opening  $c^2$  in the bit, and when adjusted against the bit, with the bit in its lowermost position, as shown in Fig. 7, it prevents the bit from rising even when pressure is exerted upon the chin-strap. For ease in adjusting the sides of the buckle-plate are hollowed out, as at  $e^3$ . By the use of these locking members the bit can be prevented from rising or its upward movement can be limited. Furthermore, this device is useful in preventing side pulling of the horse. If the animal pulls to the right, the left side of the bit is locked and the right side left free to move, when a side lug will cause the right side of the bit to exert pressure upon the animal's mouth, and thus cause him to throw his head straight. For a horse which pulls to the left the opposite arrangement of parts is made.

The second form of the present device—i. e., the form illustrated in Figs. 8 to 11—is now to be considered. This form is particularly adapted for use upon an extremely hard-pulling or hard-mouthed animal, and by it greater force is exerted. The nose-strap, with its straps for attachment to the water-hook, remain as in the first-described construction. There is provided, however, a lever-frame F, which has the side members F' secured together and properly braced by the bar  $f$  between the said side members at their forward ends and the arched tie  $f'$  intermediate of the ends of each lever. The side guides B are similar to the said guides of the first form, but are made integral with the side members F'. This lever-frame is supported by the straps  $a'$  of the nose-strap passing through openings  $f^2$  in the side members, while the forward ends of the side members have eyes  $f^3$  for the attachment of overdraw-straps in a well-known manner. These straps  $a'$ , together with strap  $a^3$ , provide means for supporting the lever-frame independent of the overdraw which is to connect with the eyes  $f^3$ , as before described, and the straps G  $g$ , to be presently described, also assist in holding the lever-frame in position independent of the overdraw. It will now be apparent that to the force of the parts employed and as assembled in the first-mentioned structure is added the force of the overdraw-straps acting through the side pieces, which form levers pivoted to the nose-strap.

In order to prevent the forward ends of the lever from falling when the head of the horse is in proper position, a second or rear chin-strap G is employed, this rear chin-strap being secured to eyes  $f^4$  in the rear ends of the side members F' and preferably having a short strap  $g$ , provided with a loop  $g'$  to be engaged by the throat-latch, whereby the rear chin-strap is itself prevented from falling or work-



ing forward out of its proper position. Thus the animal is relieved from unnecessary pressure when holding his head properly, but is severely punished when lugging, &c.

5 A form of bit differing slightly from that shown in connection with the first structure and having slightly-different connection with the side guide and chin-strap is here shown. In the form here illustrated the bit is provided with T ends, the shank  $c^6$  of which lies in the slot  $b^5$  of the side guide, while the loops  $c^7$  are provided at the ends of the bit and outside of the guides B, the openings  $c^2$  being intermediate the ends of the bit and inside the side guides. The bit-straps are secured to the loops, pass upwardly along the outer side of the guides over the rollers, and then extend downwardly on the inner side of the guides through the openings  $c^2$  and then to the chin-strap. Either form of bit, with its connections, is of course applicable to either structure.

Obviously the character of check-bit employed in my device can be changed as occasion may demand. With some horses—*e. g.*, those whose upper lips have a tendency to turn inwardly along the teeth—a substantially straight bar-bit, as heretofore described, might cause the lip to be pinched and cut against the teeth in the upward movement of said bit, and to obviate this the form of bit shown in Fig. 12 is provided. This bit has forwardly-extending portions  $c^7$ , whose outer edges incline outwardly from the forward part of the extensions toward the body portion of the bit, such inclined portions being here lettered  $c^8$ . By this bit when it is raised the inclined portions  $c^8$  engage the inner side of the lip and move said lip outwardly, thus preventing it being caught and pinched between the teeth and the bit.

I am aware that heretofore it has been proposed to secure a driving-line to a bit, carry said line backwardly over a pulley attached to a bridle, bring the line forward again, pass it about the bit, and then carry it backwardly as usual, the bit being thereby operated by the lines through the medium of the pulleys. I am also aware that it has been proposed to guide bits in frames, and that it has further been proposed to provide check-straps of halters with rings at their lower ends, secure a strap at one end to a check-piece, pass said strap downwardly and through a ring upon a bit, carry the strap upwardly and through the ring in the check-piece, pass the strap across below the animal's chin, where it is brought through the ring in the second check-strap, then downwardly and through the ring in the end of the bit not first engaged, and finally carry the free end of the straps upwardly and secure the same to the second check-strap, the purpose being to attach a hitching-strap to the underhanging portion of the strap engaging the bit ends; whereby when the animal pulls backwardly against the hitching-strap the bit is thrown into the

mouth-corners. I am not aware, however, that it has been proposed to so attach a bit that in the movement of the animal's chin it will be caused to bear forcibly upon the horse nor that any of the structures set up in the accompanying claims have been heretofore contemplated by others.

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

1. A device of the nature indicated comprising a supporting member, a bit below the same, and a flexible member secured to said bit, passing over a support upon the supporting member, and being then attached to a chin-strap; substantially as described.

2. A device of the nature indicated, comprising a nose-strap, a bit, a chin-strap, and a flexible member secured to the bit, passing over a support upon the nose-strap thence down through openings at the bit ends and being then secured to the chin-strap and adjustable stop devices on the flexible member above said bit-openings; substantially as described.

3. A device of the nature indicated, comprising a nose-strap, a bit having an opening therein, a chin-strap, and a flexible member secured to the bit, said flexible member passing over a support upon the nose-strap, then passing through the opening in the bit and being then secured to the chin-strap; substantially as described.

4. A device of the nature indicated, comprising a support, side guides depending from opposite sides thereof, a bit in sliding connection at its ends with said guides, a chin-strap below the bit, and a flexible member secured to the bit, passing upwardly over a support at the upper ends of said guides and thence downwardly to the chin-strap; substantially as described.

5. A device of the nature indicated, comprising a support, side guides depending from opposite sides thereof, a bit, a chin-strap below the bit, straps extending from the ends of the chin-strap upwardly over supports at the upper ends of the side guides and thence downwardly through bit-loops and plates secured to the bit-straps adjacent to where they connect with the bit and provided with hooked upper ends engaging the side guides; substantially as described.

6. A device of the nature indicated comprising a support having depending side guides, a bit in sliding connection at its ends with said guides and provided with end openings, a chin-strap below the bit, bit-straps extending from the bit upwardly over supports at the upper ends of the side guides and thence downwardly through the bit-openings to the ends of the chin-strap, and adjustable stops on the bit-straps above the bit-openings; substantially as described.

7. A device of the nature indicated, comprising a supporting member, a bit having an opening therein, a guide-frame upon the sup-



porting member, a projection upon the bit entering the guide, a loop upon said projection, a chin-strap, and a strap secured to the bit, passing over a support upon the supporting member, thence through the loop upon the projection and through the opening in the bit, and then being attached to the chin-strap; substantially as described.

8. In a device of the nature indicated, a lever-frame having side members, means for pivotally supporting said frame upon the animal, means upon the lever-frame for the attachment of an overdraw, a bit, a chin-strap, and a strap connected to said bit, said strap passing over a support upon a side-frame member and then being attached to the chin-strap; substantially as described.

9. In a device of the nature indicated, a lever-frame having side members provided with depending side guides, a bit in sliding connection at its ends with said guides, a chin-strap below the bit, bit-straps extending from the bit over supports at the upper ends of the side guides and thence downwardly to the ends of the chin-straps; substantially as described.

10. In a device of the nature indicated, a lever-frame having side members provided

with depending side guides, a bit in sliding connection at its ends with said side guides, a chin-strap below the bit, bit-straps connecting the ends of the bit with the ends of the chin-strap for operation thereby, an overdraw connected to the lever-frame and means for supporting the lever-frame in position irrespective of the overdraw; substantially as described.

11. In a device of the character described, a lever-frame having side members connected at their front ends and there provided with overdraw connections, side guides depending from the lever-frame, a downwardly-curved strap connecting the rear ends of the levers and provided with a throat latch-strap, a nose-strap, a bit in sliding connection at its ends with the side guides, a chin-strap below the bit and bit-straps extending over guides and operatively connecting the ends of the bit with the said chin-strap; substantially as described.

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

ALBERT M. PENDLETON.

Witnesses:

WILLIAM ROBERTS,  
MARY RANDS.