

No. 612,440

C. H. SHEPARD.  
BRIDLE BIT.

Patented Oct. 18, 1898.

(No Model.)

(Application filed Nov. 23, 1896.)

Fig. I.

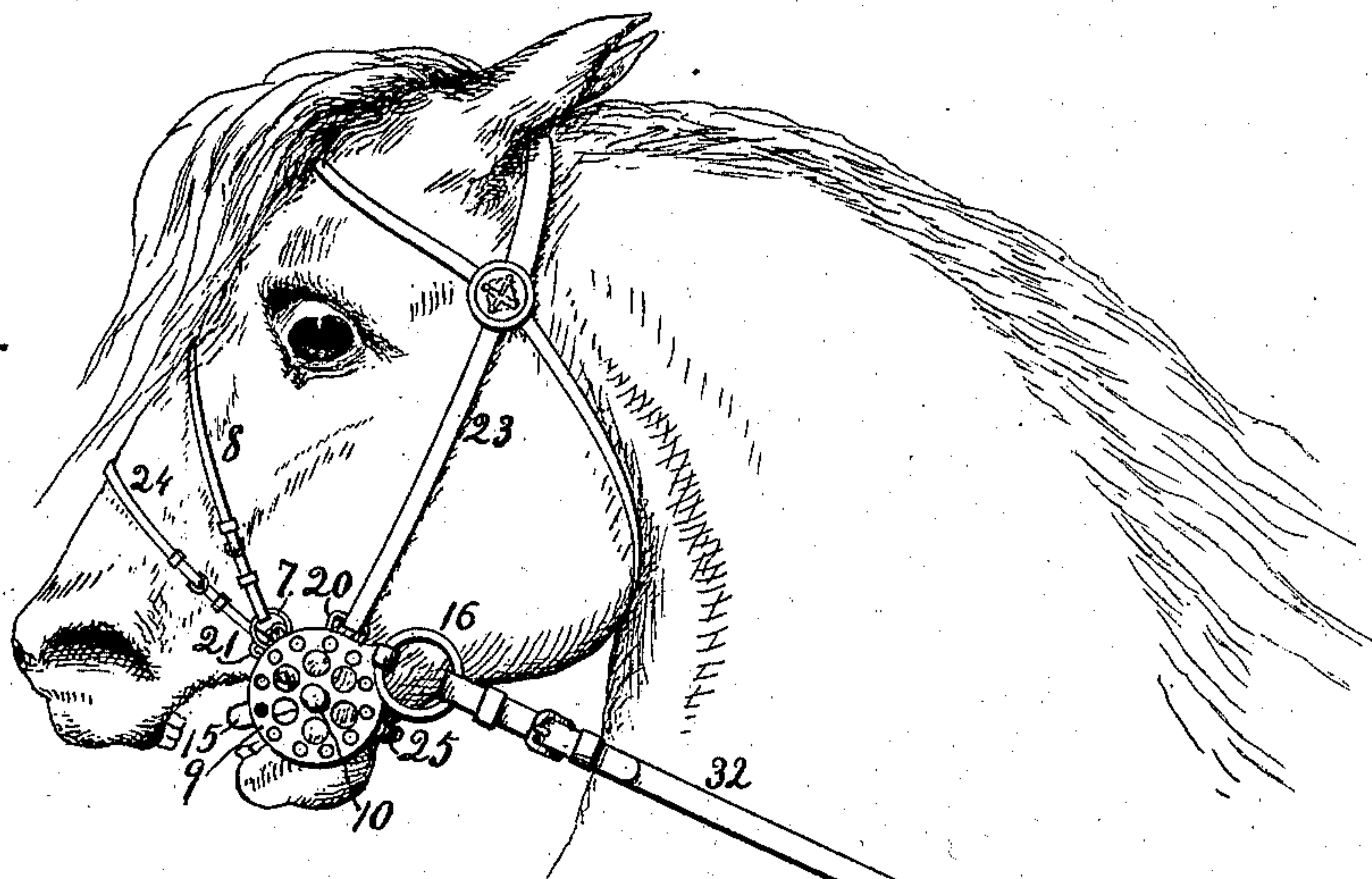


Fig. II.

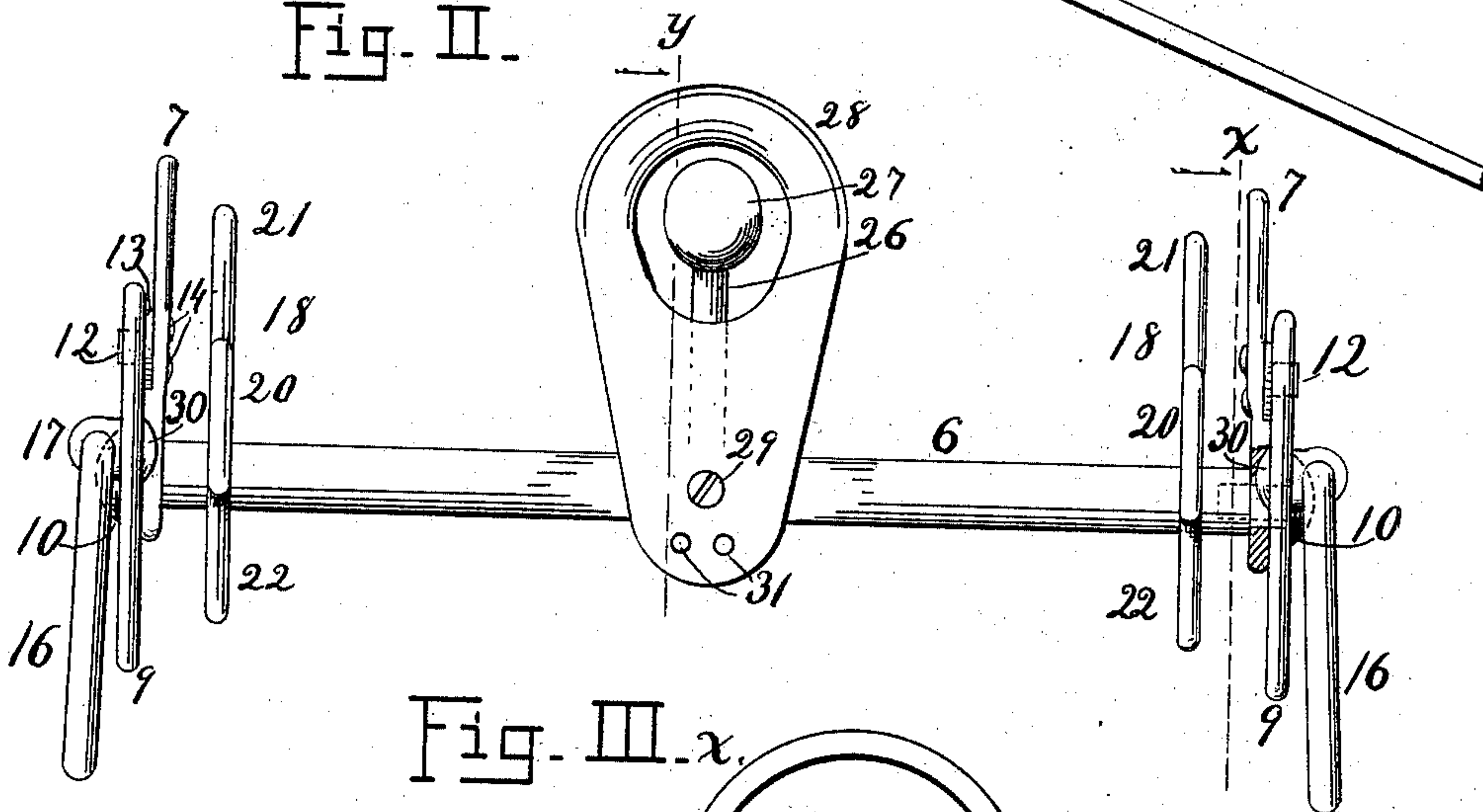


Fig. III. x.

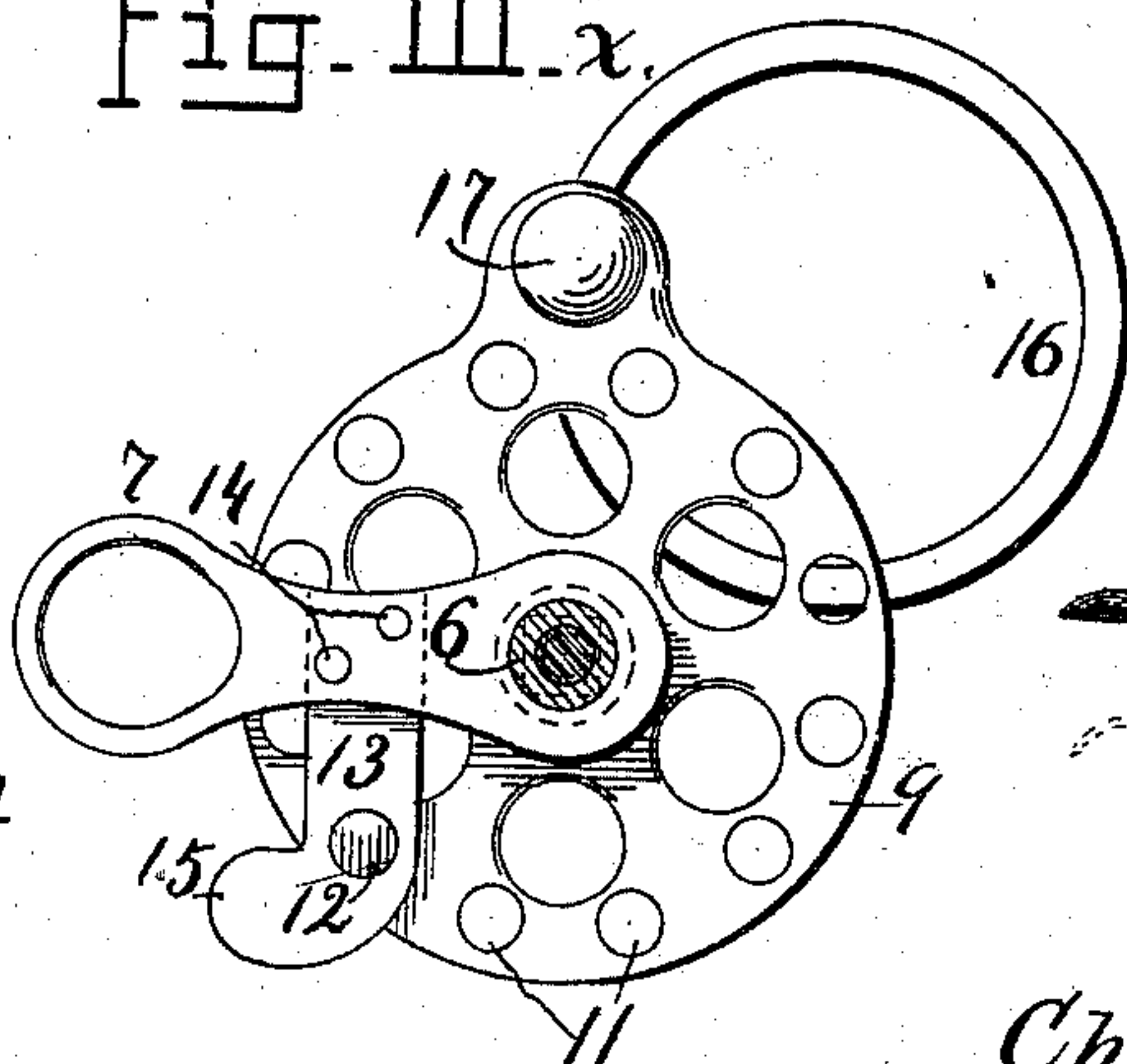


Fig. IV.

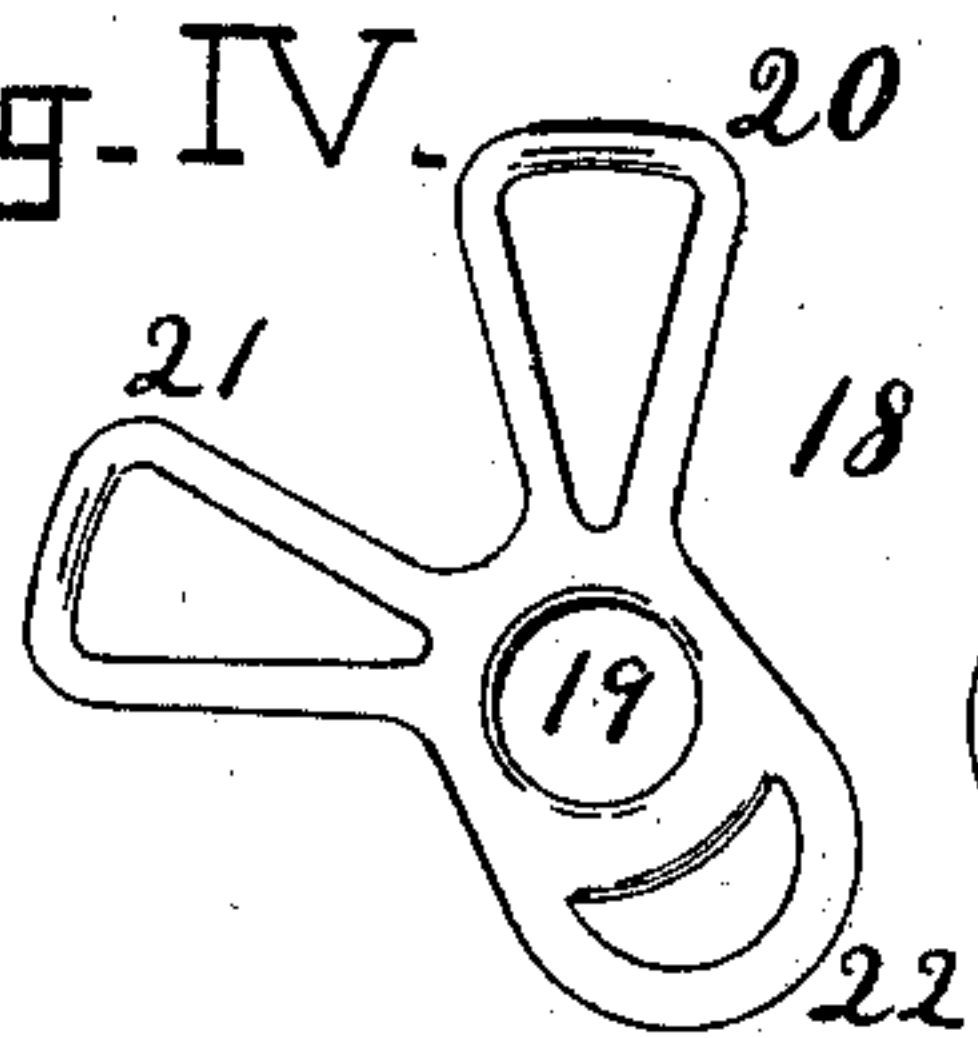
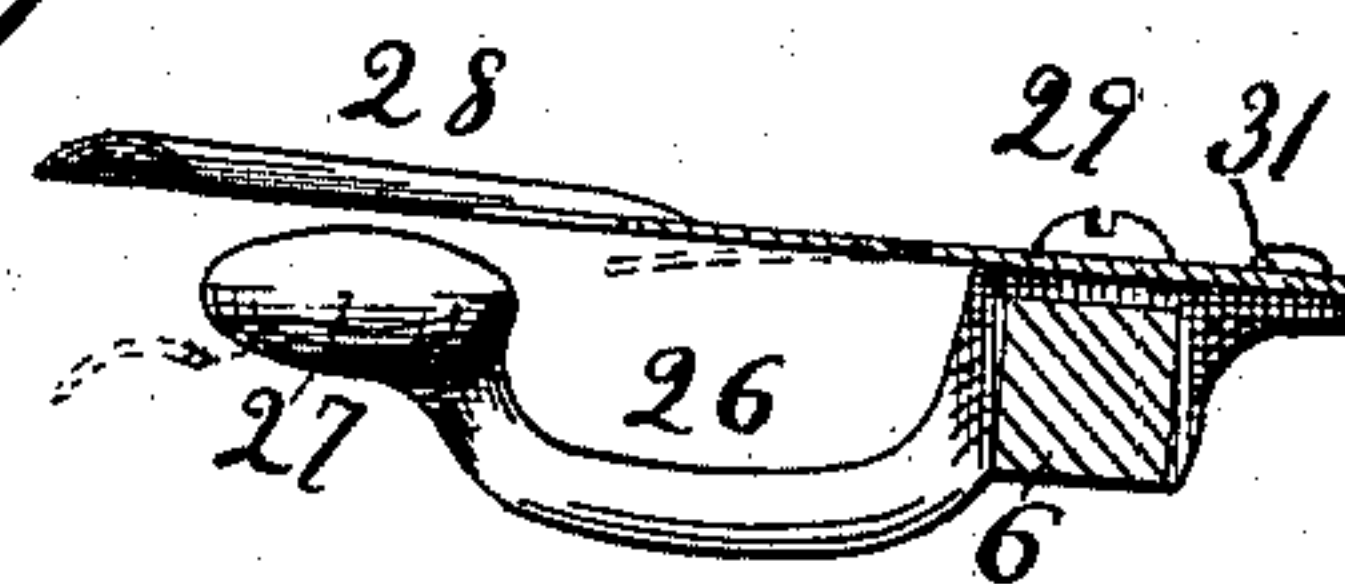


Fig. V. y.



Witnesses  
N. Stevens.  
C. W. Stevens.

Inventor  
Charles H. Shepard.  
by W. L. Stevens.  
Attorney



# UNITED STATES PATENT OFFICE.

CHARLES HENRY SHEPARD, OF PLAINFIELD, NEW JERSEY.

## BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 612,440, dated October 18, 1898.

Application filed November 23, 1896. Serial No. 613,232. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES HENRY SHEPARD, a citizen of the United States, residing at Plainfield, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Bridle-Bits; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings.

This invention relates to that class of bridle-bits usually called "gag-bits," some of its features being improvements on the bit for which a patent, No. 506,834, was issued to me October 17, 1893; and its objects are, first, to provide effective means for driving and controlling with safety headstrong and vicious horses without undue punishment; second, to correct the habit in horses of tongue-lolling and of traveling with open mouth, and yet not to hold the mouth rigidly closed; third, adjustability of the bit to meet the requirements of variously-tempered animals, and, fourth, adaptability for both riding and driving horses.

To this end my invention consists in the construction and combination of parts forming a "bridle-bit," hereinafter more fully described, and particularly pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 represents in side elevation a bridle-bit according to my invention in service. Fig. 2 is a plan or top view of the same bit on a larger scale, a portion of one piece being broken away. Fig. 3 is a transverse vertical section at the line X of Fig. 2. Fig. 4 represents one of the hangers in side elevation, and Fig. 5 is a transverse vertical section at line Y of Fig. 2.

6 represents a bar which crosses through the horse's mouth and is the main body-piece of this bit.

7 represents two arms, each having a square hole fitted upon a square shoulder of the bar 6, near one end thereof. Each of these arms is provided with a loop at its outer end, in which the checkrein 8 is hitched.

9 9 are cheek-plates, journaled so that they can be rotated upon the bar 6 and kept in place thereon by means of large heads 10, which may be washers riveted on the bar or

large-headed screws threaded into it. Each cheek-plate has a circle of holes 11 in it, any one of which may be engaged by a stud 12, which projects from the free end of a spring 13, whose other end is rigidly fixed to the arm 7 by means of rivets 14, and this spring is shaped with a handle 15, that projects beyond the circumference of the cheek-plate 9, whereby this spring serves as a latch to the arm 7.

16 is a ring hung upon the cheek-plate by means of a stud 17, that passes through the cheek-plate and is riveted thereto closely, yet permitting rotation, or instead of the head 30 being riveted it may be a screw connected with the stud 17 by a screw-thread. To these rings 16 the driving-reins 32 are to be attached.

18 represents two hangers, each having a central hole 19, in which the bar 6 is journaled to rotate freely, and further having three loop-holes 20, 21, and 22 in the respective arms of the hanger. Each hanger is attached by means of its loop 20 to one of the head-stalls 23, and by means of its loop 21 to one end of the nose-band 24, and by means of its loop 22 to the under-jaw strap 25.

26 is a gag, shaped at one end to engage the square central portion of the bar 6 and removably secured thereto by means of a screw 29. The outer or free end 27 of the gag is smoothly rounded to avoid injury to the horse's mouth and has an upward bend, so that it may rise freely through an aperture in the guard 28. This guard is of thin spring material, which may, if desirable, be covered in its bearing region with a cushion, such as soft rubber, and it is secured at one end to the gag 27 by means of rivets 31, thus becoming practically a part of the gag and removable therewith from the bar 6.

As the bit is here shown the gag projects forward of the bar 6 and will press the roof of the horse's mouth forward of the bar if the rein-ring 16 be pulled upon; but in many cases it is desirable for the gag to press the roof of the horse's mouth farther back, and in such cases the screw 29 may be withdrawn and the gag, with its guard, be removed from the bar 6, and after being inverted to point rearward from the bar it may be again secured by re-turning the screw 29. Then the cheek-plate 9 should be turned upon the bar to bring



its rein-ring 16 at the lower side, and for this purpose the spring 13 may be bent outward to disengage its stud 12 from a hole in the cheek-plate. Then after the cheek-plate is  
 5 turned as desired the stud 12 may be sprung into the hole 11 that registers with it. It is usually desirable in driving for the check-rein also to have the aid of the gag in controlling the horse in case he tries to straighten  
 10 his nose out level and run, and for this reason the arm 7, when used with an overcheck, should extend at the same side of the bar 6 that the gag does; but if used with a side check whose pull is to the rear this arm 7  
 15 should project above the bar when the gag projects forward and below the bar when the gag projects rearward, or with a horse of a different disposition it may be desirable to arrange the bit so that he may toss his head  
 20 up, but not permit him to draw his chin down toward his breast, and to all of these adjustments it is adapted by having a square hole fitted to a squared end on the cross-bar 6, and in such cases the bit is always provided with  
 25 screws 10 to hold the cheek-plates 9 and the arms 7 in place, and yet permit their removal. The strap 25 is made midway of a spiral spring or some other longitudinally-resilient device, whereby the bit is closely pressed upon the  
 30 lower jaw of the horse with a yielding pressure that will accommodate any necessary movement of the jaw, and yet does not permit the lazy habit of tongue-lolling or traveling with the mouth open. The hangers 18 are  
 35 kept in a fixed relation to the upper jaw by means of their supports, the head-stalls 23 and the nose-strap 24 thus serving as bearings in which the cross-bar 6 revolves when operating the gag, whereby the pressure of the  
 40 gag upon the roof of the horse's mouth is made positive and pressure on the tongue is avoided, though the direction of pull on the reins tends to cause direct pressure on the tongue.

45 In operation the amount of pull usually required in driving will not tip the gag from its normal position and it is not then felt by the horse; but if he becomes unruly a little extra pull on the reins tips the bit enough to  
 50 bring the spring-guard 28 in contact with the roof of his mouth, whereby he is notified that punishment by the firmer and more local pressure of the gag is ready for him unless he yields, and once having felt the gag he is  
 55 likely to yield at this reminder. The nose-strap 24 may be buckled so close as not to permit the horse to open his mouth as much as it is shown in Fig. 1 of the drawings.

Having thus fully described my invention,

what I believe to be new, and desire to secure 60 by Letters Patent, is the following:

1. In bridle-bits, two side hangers; a cross-bar journaled to rotate freely in the hangers, and means at its ends for attaching reins with leverage to rotate the bar; and a gag reversi- 65 bly secured to the bar midway thereof substantially as described, whereby the same gag may be fixed to the bar to extend either forward or backward therefrom.

2. In bridle-bits, a cross-bar journaled for 70 rotation in hangers; a gag consisting of an arm secured at one end to the cross-bar midway thereof and having an upward bend at its other or free end, and a guard made of spring sheet material located above the gag 75 and secured at one end upon the fixed end of the gag, the body of the guard spreading beyond the gag and having an aperture in its free end registering with the free end of the gag substantially as described, whereby the 80 guard in being bent down may press freely around the end of the gag.

3. In bridle-bits, side hangers; a cross-bar freely journaled therein; a gag secured to the cross-bar midway; cheek-plates having 85 rein-rings attached and fitted to rotate closely upon the ends of the cross-bar, and perforated with holes in a concentric circle; checkrein-levers fixed at one end of each to the cross-bar and having a loop in the other end, and a 90 spring-arm secured at one end to each lever and provided at its other or free end with a projecting stud registering with the said holes in the cheek-plate; substantially as described.

4. In a bridle-bit, side hangers; a cross-bar 95 freely journaled therein; a gag upon the cross-bar midway thereof; cheek-plates fitted to rotate upon the ends of the cross-bar and having a ring of holes concentric with the cross-bar; checkrein-levers fixed at one end of each 100 upon the cross-bar, and a spring-latch for each checkrein-lever fitted to register with any hole of the said ring of holes; substantially as described.

5. In bridle-bits, a cross-bar; a gag adapted 105 to be secured near one end to the cross-bar, and its other end having an upward bend, and a guard for the gag consisting of a piece of thin spring material adapted to be secured at one end on top of the fixed end of the gag, 110 and its other end spreading broader than the gag and perforated for the free passage of the end of the gag up through it; substantially as described.

CHAS. HENRY SHEPARD.

Witnesses:

J. C. POPE,

HOWARD A. POPE.