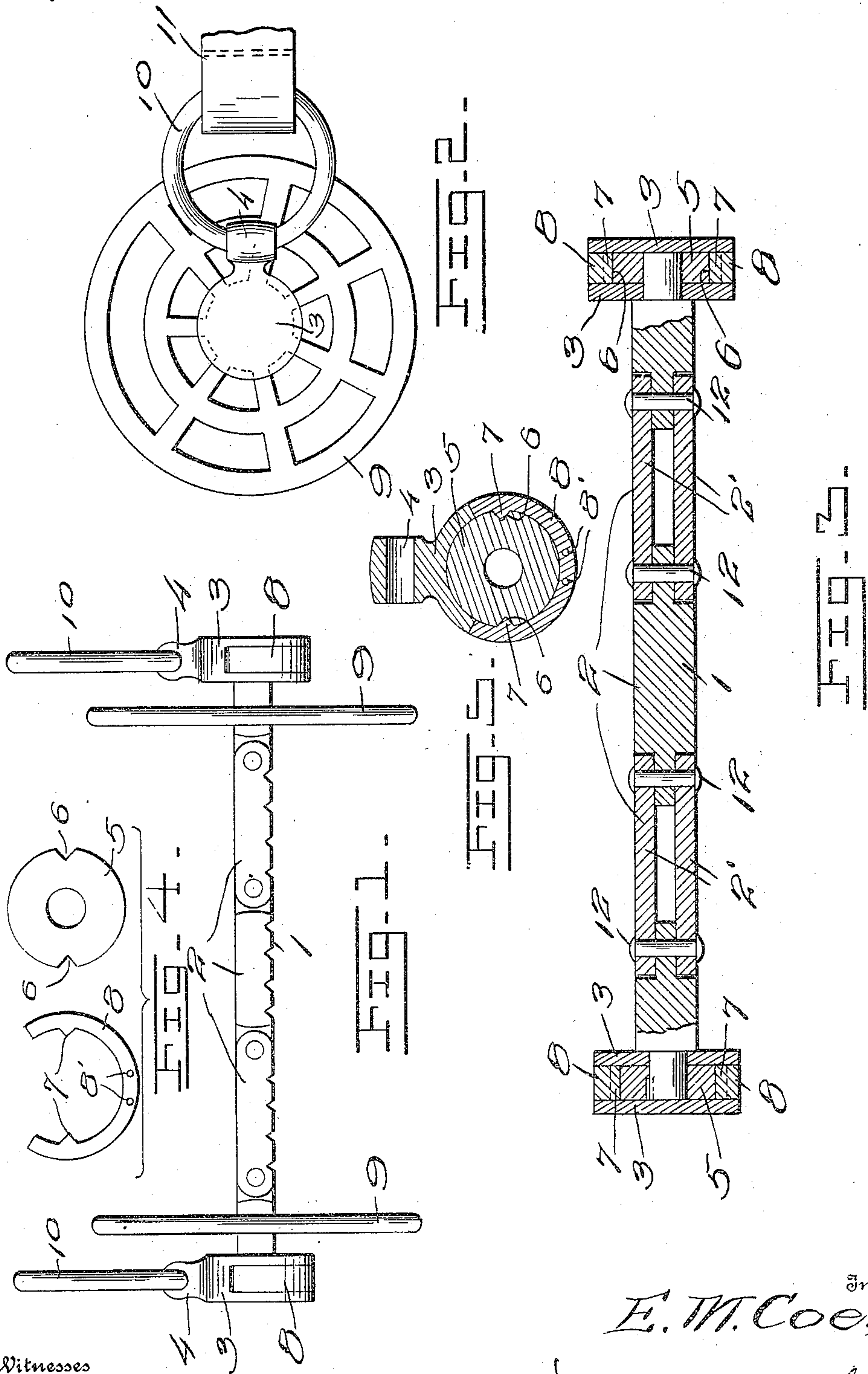


E. M. COE.
 REVERSIBLE BRIDLE BIT.
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962,005.

Patented June 21, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

EMERY MILES COE, OF MILFORD CENTER, OHIO.

REVERSIBLE BRIDLE-BIT.

962,005.

Specification of Letters Patent. Patented June 21, 1910.

Application filed August 5, 1909. Serial No. 511,307.

To all whom it may concern:

Be it known that I, EMERY MILES COE, a citizen of the United States, residing at Milford Center, in the county of Union and State of Ohio, have invented certain new and useful Improvements in Reversible Bridle-Bits, of which the following is a specification.

This invention relates to certain new and useful improvements in driving or bridle bits, and has for its object to provide a bit of this character which is so constructed that the bar thereof may be reversed without the necessity of removing the bit from the horse's mouth or detaching the same from the bridle.

Another object is to provide a bit the bar of which is formed with a serrated or roughened edge, and a smooth or plane surface, means being provided to prevent the bar being turned by the horse after the same has been positioned in his mouth.

A further object is to provide a bit of this character which is very simply constructed and will efficiently curb fractious or unmanageable horses and colts.

With these and other objects in view, the present invention consists in the combination and arrangement of parts as will be herein-after more fully described and particularly pointed out in the appended claims, it being understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a part of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a top plan view of my improved bit. Fig. 2 is an end elevation thereof. Fig. 3 is an enlarged section through the mouth-bar securing member. Fig. 4 is a detail view of the locking plate and spring removed. Fig. 5 is a detail section through the mouth-bar.

My improved bit comprises the mouth-bar 1 which may be rigidly formed or may consist of a plurality of pivoted sections 2. The end sections have their extremities cylindrically formed and extended through the circular retaining members 3. The members 3 comprise two section plates disposed in parallel relation and formed with an eye 4, through which the rein ring is adapted to extend. A retaining plate 5 is disposed between the plates 3, and is rigidly secured to

the ends of the mouth-bar. V-shaped recesses 6 are formed at diametrically opposite points in the periphery of the plate 5 and receive similarly shaped projections 7 formed upon the spring plate 8, said spring plate being suitably secured to the collar, as shown at 8', so as to form spring arms upon either side thereof and upon which said projections are provided, it being understood that when sufficient pull is exerted upon the reins, the collars or circular retaining members 3 and the attached spring, will be rotated to disengage the projections 7 from within the notches 6 and thereby present the roughened surface of the mouth-bar to the animal's tongue. Thus it will be seen that when the mouth-bar is placed in the horse's mouth, it will be impossible for the animal to turn the bar as the spring plate 8 engaging with the retaining plate 5 will absolutely prevent any rotation of the bar 1. The serrated or roughened edge of the mouth-bar is positioned inwardly when the animal has become unmanageable, and as his efforts to relieve the pain caused by the bar will be fruitless, he will soon become tractable, when the bar may be readily turned and the contact of the serrated edge of the bar removed from the animal's tongue. To accomplish this result, it is unnecessary to remove the bar from the animal's mouth or the bit from the bridle, as it is only necessary to rotate the section plates 3 to remove the V-shaped projections 7 from the notches 6, when the bar 1, may be easily turned until the serrations are disposed outwardly, and the retaining plate 5 again locked against movement.

As shown in Fig. 1, the mouth-bar may be formed of a plurality of flat link sections which are pivotally connected to allow of a certain amount of movement of the bar within the animal's mouth, but preventing any rotation thereof. The central link section consists of a solid bar having ears formed on either end thereof. These ears are disposed between the ends of the link plates 2' and are pivotally connected thereto by suitable pivot bolts 12. As before stated one edge of each of the link sections is serrated to provide a roughened surface, the other edge thereof remaining smooth and positioned inwardly in the normal operation of the bit.

Cheek plates 9 are positioned upon either end of the bar 1 inside of the retaining mem-

bers 3. To these cheek plates the ends of the
bridle straps are secured. To the rings 10
which are positioned in the eyes 4, the driv-
ing reins 11, are secured.

5 From the foregoing it will be seen that I
have provided an extremely simple con-
struction of driving bit, whereby the mouth-
bar may be instantaneously reversed to check
the animal should he suddenly become un-
10 manageable. As efficient means are provid-
ed for locking the bar in position, it will be
obvious that all liability of the mouth-bar
becoming accidentally reversed or rotated
by the champing of the horse will be avoided.
15 The bit may be very inexpensively con-
structed, is highly durable in use, and effi-
cient in operation.

What is claimed is:

20 1. A bit of the character described com-
prising a mouth-bar formed of a plurality
of pivoted sections, the ends of said mouth-
bar being positioned in suitable casings con-
sisting of spaced parallel plates having an
eye formed integral therewith, a plate se-

cured upon each end of said mouth-bar and 25
disposed between said parallel plates, and
resilient locking members secured to and po-
sitioned between said parallel plates and
frictionally engaged with the peripheries of
the plates secured to the ends of said bar to 30
normally hold said bar against rotation.

2. A bit of the character described com-
prising a mouth-bar having a serrated edge,
the ends of said bar being disposed within
suitable casings and having retaining plates 35
secured thereto, V-shaped recesses being
formed in the peripheries of said plates,
spring members secured in said casings and
formed with projections adapted to engage
in said recesses, and cheek plates disposed 40
inwardly of said casings upon either end of
the mouth-bar.

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

EMERY MILES COE.

Witnesses:

FRED STALL,

JOHN A. KENSINGTON.