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HORSE MOUTH BIT

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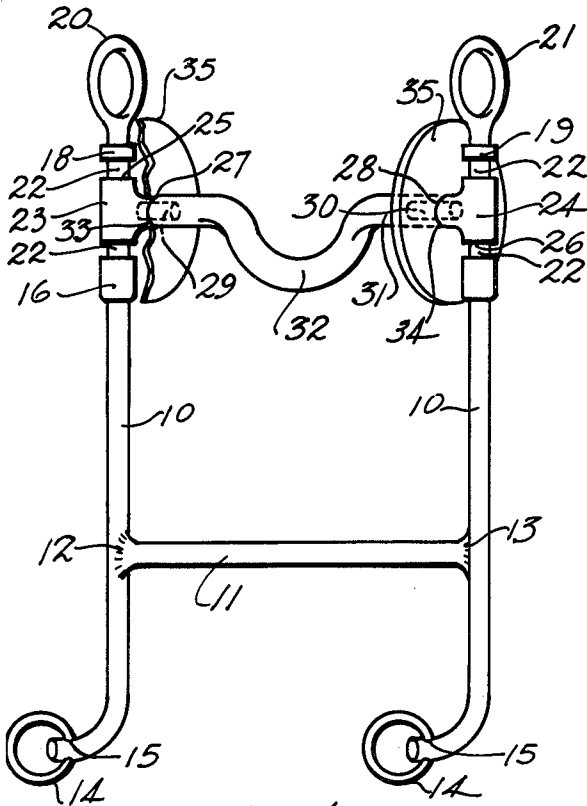


FIG. 1

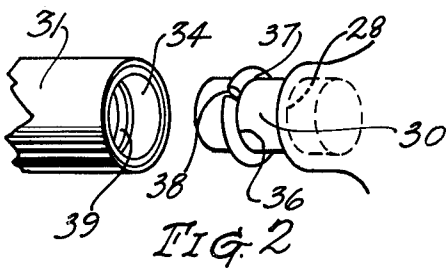


FIG. 2

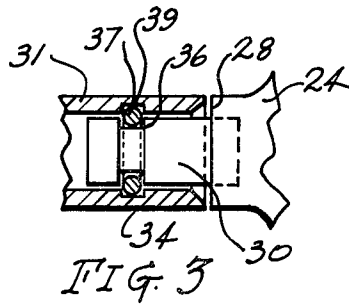


FIG. 3

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AFM HORSE MOUTH BIT

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3 Claims. (Cl. 54—8)

This invention relates to horses, and more particularly, to a new and improved bit of the type generally used with riding horses.

Heretofore various bits have been proposed and used, these generally comprising side elements and a bit bar rigidly connecting such, said bars often having a central offset or curb mouthpiece somewhat conforming to the tongue of the horse. Other minor features such as reinforcing means, rein-connecting elements and the like may be added as well as modifying features which at time may become quite complex; but the essential bit combination is as above, and has been for many years.

An object of the instant invention is to provide a bit bar that is comfortable to the mouth of a horse, yet entirely efficient for its intended purposes.

Another object is to provide a bit of subject type which will not pinch, bruise or otherwise injure the tender mouth of a horse.

Another object is to provide a bit in which the bit bar is rotatable through an arc of 360°.

Another object is to provide in combination in such a bit both vertical or semi-vertical and rotary adjustment and compensation, thereby more readily adapting the device to smooth and satisfactory operation in the mouth of a horse.

A still further object is to provide a bit made of materials highly resistant to the extreme acid conditions found in the mouths of most horses.

Another object is to provide a modification of the means used to mount the bit bar in rotating relationship with the side elements of a bit.

Another object is to provide simplicity of construction, long life, and ease of maintenance in a bit of the instant type.

These and other objects made apparent during the further progress of this specification are accomplished by the present invention, a full and complete understanding of which is facilitated by reference to the drawing herein, in which:

FIG. 1 is a view in perspective of a preferred form of said invention;

FIG. 2 is an enlarged, exploded fragmentary view of a modification of the means by which the bit bar is rotatably anchored to the side members of a bit; and

FIG. 3 is a view similar to that of FIG. 2, partially in vertical longitudinal cross-section showing the bar and its associated side element in assembled or operative position.

Referring now to the drawing, in which identical numerals refer to corresponding parts or elements throughout the various figures thereof, 10 represents parallel side members of a riding bit, said members being rigidly united as by milling and welding to a transverse member 11 at points 12 and 13. Rein rings 14 may be affixed to the curved ends of 10 as through apertures 15, and stop elements 16 and 17 are securely affixed to bars 10 as by being slid thereon in a close fit and then in effect being united with members 10 through heat or other appropriate means.

Companion members 18 and 19, to which may be affixed top securing members 20 and 21, are mounted at the tops of side bars 10 in the same manner as are stop elements 16 and 17, the surface 22 between the stops in each case affording a sliding sleeve surface which will be described more in detail as to function hereafter.

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Attention is now directed to the rotating bit bar feature of this invention, and the means of operably mounting such, which includes a pair of T-sleeve members 23 and 24 having vertical internal apertures 25 and 26 connecting with or adjacent openings 27 and 28 which are formed at right angles thereto, said T members sliding upwardly and downwardly as desired on surfaces 22 of bars 10 and providing a sleeve joint at these points. Horizontal bars 29 and 30 fit into and are mounted in openings 27 and 28. The bit bar per se 31, which has an offset centrally disposed mouthpiece 32, is formed with hollow apertures 33 and 34 therein which rotatably receive bars 29 and 30, the entire assembly being fixed and rigid when cross member 11 is securely in place as described heretofore. Circular protective buffer elements 35 may be adjustably mounted on bar 31 to operatively register and cover the joints formed by the ends of 27 and 28 where such meet the ends of 31, in order to give still additional protection to the mouths of animals which otherwise might under extreme conditions become pinched at these points.

FIGS. 2 and 3 of the drawing illustrate a modification of the preferred form of the instant invention, in which the ends of bars 29 and 30 are drilled to provide grooves such as 36 into which are snapped spring rings 37 having cut out portions 38, the rods then being pushed or forced into apertures 33 and 34 which have been internally drilled to provide grooves 39 into which rings 37 snap when reaching that point, and provide an anchorage which cannot be disturbed short of sawing the bit bar apart at these points.

The bit bar and associated elements are preferably fabricated of stainless steel in the present invention, such having been found ideal in combating the high degree of acidity customarily found in the mouths of horses, and thereby avoiding any clogging or malfunction of the moving parts of the bit.

From the foregoing it is believed that the operation of the instant invention is obvious, it being apparent that once the bit is adjusted in place in a horse's mouth, the bit bar is free to rotate to any extent desired, thereby giving freedom and comfort to the animal not heretofore attainable; and that in addition, the sleeve action made possible by T members 23 and 24 acting in cooperation with surfaces 22, guarantees further additional freedom to the horse in manipulating the bit bar, without in any way diminishing the effectiveness of the bit itself.

While there has been described herein in considerable detail, one form of the instant invention, together with a modification thereof, it is apparent that no limitations or restrictions are intended or contemplated thereby, but that on the contrary, certain additional modifications, changes, alterations, reconstructions, additions, deletions, and the like may be resorted to without departing from the appended claims, which are to be accorded a range and scope fairly in keeping with the contribution to the art.

I claim:

1. In a bit for riding horses, a mouthpiece, and spaced parallel side members, stop elements affixed to the side members in spaced relationship, sleeve elements mounted between said stops, apertures formed in said sleeve members to receive horizontal bars which engage similar apertures in the mouthpiece, so as to permit unlimited rotation of the mouthpiece; and protective buffer elements mounted adjacent the ends of the mouthpiece to prevent pinching the mouth of a horse as the mouthpiece rotates in conjunction with the sleeve members.

2. The device of claim 1 which includes grooves formed adjacent the inner end of the horizontal bars around the peripheral edges thereof, spring rings positioned in said grooves, and additional grooves formed in the inner walls

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of the apertures of said mouthpiece to receive said rings at a desired point of penetration.

3. The device of claim 1 which includes a horizontal rigid transverse reinforcing element disposed between the said side members; all elements of the foregoing assembly being fabricated from stainless steel. 5

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