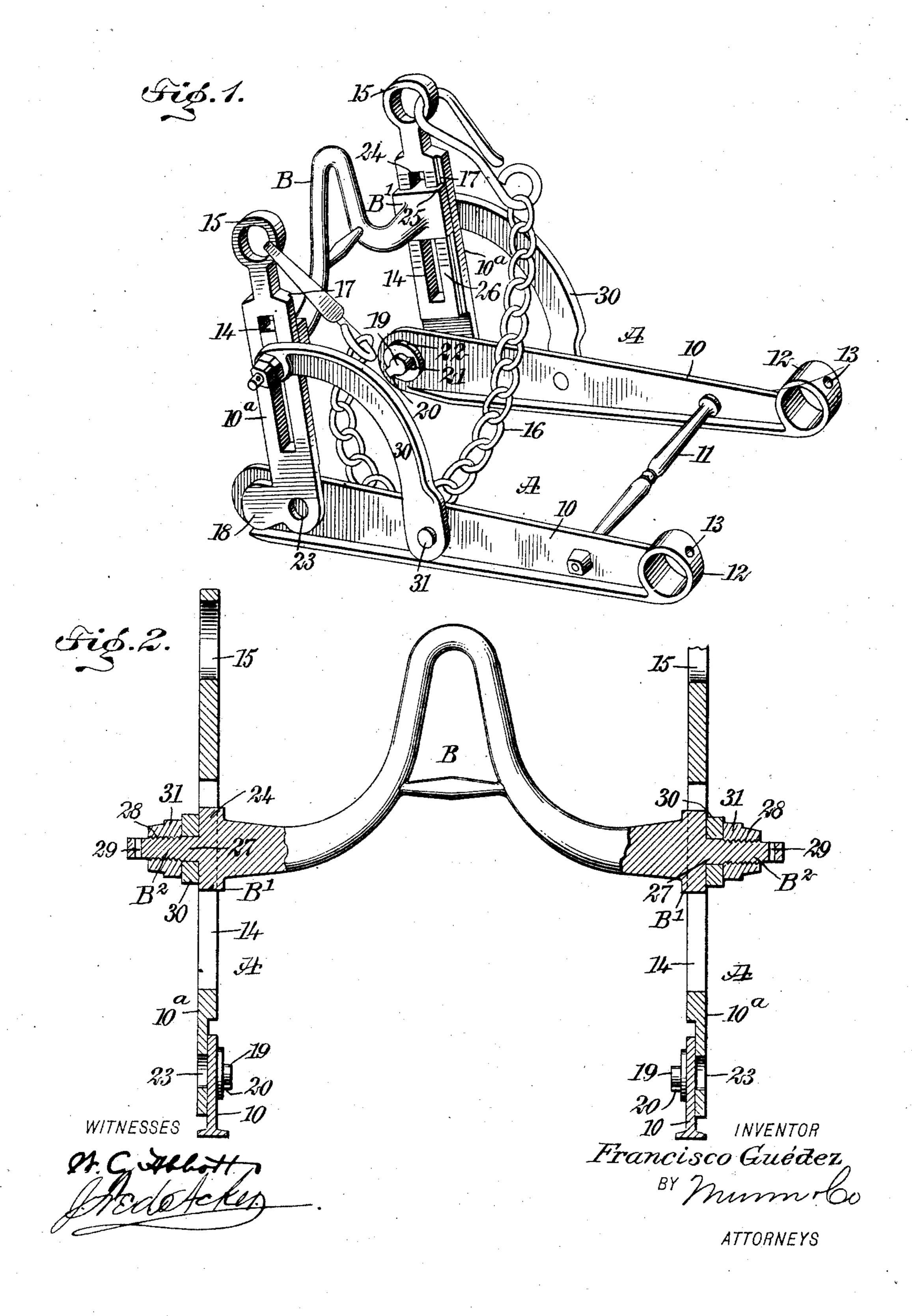
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BRIDLE BIT.
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UNITED STATES PATENT OFFICE.

FRANCISCO GUÉDEZ, OF CARACAS, VENEZUELA.

BRIDLE-BIT.

No. 864,641.

Specification of Letters Patent.

Patented Aug. 27, 1907.

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To all whom it may concern:

Be it known that I, Francisco Guédez, a citizen of the Republic of Venezuela, and a resident of Caracas, Venezuela, South America, have invented a new and 5 useful Improvement in Bridle-Bits, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a construction of bridle bit particularly adapted for use upon mules, which will be simple, durable and economic; 10 and further to provide simple and conveniently-operated adjusting mechanism whereby to adapt the bit for as effective service in a hard mouth as in a soft or normal mouth by increasing or decreasing the leverage at the driving end of the cheek pieces.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which simi-20 lar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved bit, the parts being adjusted to obtain the least possible leverage; and Fig. 2 is a vertical section taken through 25 the cheek pieces and a portion of the bar.

The cheek pieces A are constructed in two sections, a rearwardly-extending section 10 and an upwardly-extending section 10^a. These sections are made of metal, and the sections 10 are made of any desired length and 30 are made plain or ornamental and connected near their rear ends by a suitable cross bar 11. At the rear extremities of the sections 10 of the cheek pieces rings or eyes 12 are formed to receive snaps, for example on the driving reins, and these ring terminals 12 are likewise 35 shown provided with openings 13 whereby the reins may be connected with the bit by means of rings or the like. The vertical or forward sections 10° are adapted to extend up at the sides of the cheeks and have more or less of a forward inclination; and each section 10° is pro-40 vided with a longitudinal slot 14 extending nearly the length of the sections. Each vertical section 10^a terminates at its upper end in an eye or a ring 15 for attachment to the headstall, and the same rings likewise serve as supports for the throat-latch 16. In each side 45 edge of each cheek section 10° at its outer edge, a longitudinal angular groove 17 is produced; and at the lower end of the forward upwardly-extending sections 10a of the cheek pieces a forwardly and downwardly extending lip 18 is formed, and the pivot pins 19 whereby the 50 two sections of each cheek piece are connected are carried by the said lips 18, extending from the inner face of the same. These pivot pins 19 are provided with lugs 20, so that the pivot pins may be passed through

key-hole slots 21 made in the forward end portions of

55 the sections 10a of the cheek pieces, and by turning the

said pivot pins they are locked in position but are capable of being readily disconnected from said sections 10^a when required. By reason of the pivot connection between the sections 10 and 10^a of the cheek piece being at a lip or extension 18 a far greater range of adjustment 60 is obtainable than if the said forward sections 10° were pivoted at their lower central portions to the said sections 10.

The forward sections 10^a of the cheek pieces are shown as provided with holes 23 at their lower por- 65 tions, and these may be utilized for the attachment of such auxiliaries or trappings as it is customary to provide for a bit of this character in South American countries.

In connection with the forward sections 10^a of the 70 cheek pieces A, a mouth bar B is employed, which may be of any type, that shown in the drawings being in one piece and provided with an A center. A rectangular plate B' is formed at each end of the bar B, and each plate B' at its outer face is provided with a 75 rectangular lug or projection 24, extending outwardly therefrom. These lugs or projections 24 are adapted to enter and freely slide in the slots 14 in the said forward sections 10^a of the cheek pieces. At each side of the lugs 24 on the plates B', vertical grooves 25 are 80 made, adapted to receive the inner side face portions of the said sections 10^a between the longitudinal grooves 17 and the slots 14, so that the plates B' are guided in their longitudinal movement relatively to the said front sections 10² of the said cheek pieces A. Prefer- 85 ably a scale 26 in inches is produced on the inner faces of the forward sections 10^a of the cheek pieces at each side of the slots 14 therein to facilitate accuracy of adjustment.

Each lug or projection 24 from a bar plate B' is pro- 90 vided with an outwardly-extending centrally located horizontal post B². The said posts B² are circular and at their inner end portions they are exteriorly plain as shown at 27 in Fig. 2, and adjacent to the plain sections 27 of the posts exteriorly threaded sections 28 are 95 provided. In the outer end portion of each post an aperture 29 is usually made.

Arms 30 are employed to adjustably and pivotally connect the sections 10 and 10° of the cheek pieces A. These arms 30 as is shown in Fig. 1, are upwardly and 100 forwardly curved, their forward ends being loosely received on the plain sections 27 of the posts B2 and their opposite or rear ends are pivotally attached to the rearwardly extending members 10 of the said cheek pieces about midway between their ends, as shown at 31 in 105 Fig. 1. After the arms 30 have been passed over the posts B² one or more nuts 32 are screwed upon the threaded portions 28 of the posts, and said nuts may be prevented from working off by placing cotter pins or their equivalents through the openings 29.

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In the operation of the bit, more or less leverage is obtained at the rein end of the cheek sections 10 by adjusting the bar B downward or upward, so as to give the said rein sections 10 of the cheek pieces more or less of a downward and rearward inclination, or carry them more or less to an approximate horizontal position, in which latter position shown in Fig. 1, the leverage is least at said cheek sections 10; and when the slides connected with the bar are at the bottom of the slots 14 in the forward sections 10^a of the cheek pieces, the leverage is greatest at the said rein sections 10.

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

1. As an improved article of manufacture, a driving bit, comprising cheek pieces constructed in pivotally connected sections, a bar located between the forward sections and mounted to slide therein, locking devices for the bar, and arms pivotally carried by the said bar and pivotally connected with the rear sections of the cheek pieces.

20 2. As an improved article of manufacture, a bridle bit consisting of two cheek pieces, each constructed in two sections, a rearwardly-extending section and an upwardly extending section, the sections of the said cheek pieces being connected at the forward end portion of the rearwardly-extending sections, the pivots for the upwardly-extending sections being forward of a line drawn through their centers, a bar connecting the vertically-extending sections of the cheek pieces, which bar has sliding and guided movement longitudinally of the said upwardly extending sections of the cheek pieces, and arched arms pivotally connected with the end portions of the said bar

and with the rearwardly extending sections of the cheek

pieces to the rear of their pivotal connections with the upwardly-extending sections.

3. In a bridle bit, the combination with the cheek 35 pieces, each being a duplicate of the other and each cheek piece consisting of a rearwardly-extending section and an upwardly-extending forward section, the upwardly-extending forward sections having forward projections at their lower portions and pivot pins carried by said projections, 40 mounted to turn in the forward end portions of the rearwardly-extending sections, each forward section of a cheek piece being also provided with a longitudinal slot, of a bar connecting the forward sections of the cheek pieces, which bar has a guide plate at each end having guided 45 engagement with the inner faces of the said forward sections of the cheek pieces, each plate being also provided with a lug on its outer face, mounted to slide in the slot in the forward section of the cheek piece, and an outwardly-extending post integral with each lug, upwardly 50 and forwardly-curved arms pivoted to the rearwardly-extending sections of the cheek pieces between their ends, also being pivotally connected with said posts, and means for holding said arms and said bar in adjusted position.

4. As an improved article of manufacture, a bridle bit 55 comprising opposing cheek pieces, members pivotally attached to the cheek pieces and extending upward therefrom, a mouth bar adjustably carried on the cheek pieces, and means connected with the said mouth bar and with the cheek pieces for regulating the position of the mouth 60 bar.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCISCO GUÉDEZ.

Witnesses:

Julio A. Pocatena,

Lionel J. T. Mann.