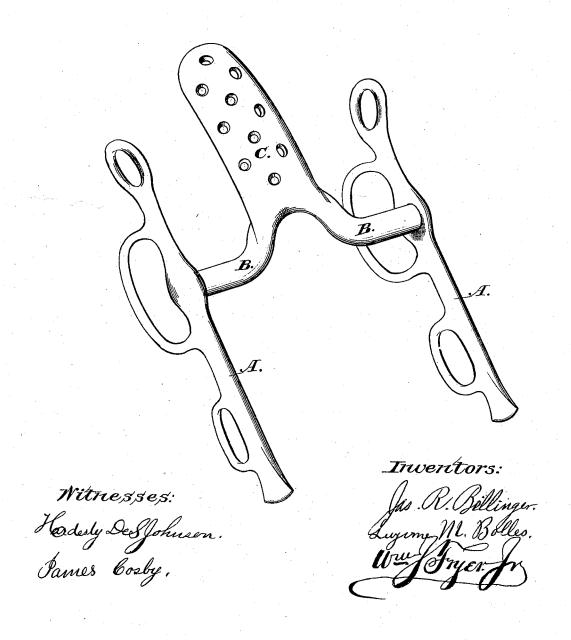
## J. R. BELLINGER, L. M. BOLLES & W. J. FRYER, Jr. BRIDLE BITS FOR HORSES.

No. 169,403.

Patented Nov. 2, 1875.



## UNITED STATES PATENT OFFICE.

JAMES R. BELLINGER, LUZERNE M. BOLLES, AND WILLIAM J. FRYER, JR., OF NEW YORK, N. Y.; SAID BELLINGER ASSIGNOR TO CHARLES L. FRYER, OF SAME PLACE.

## IMPROVEMENT IN BRIDLE-BITS FOR HORSES.

Specification forming part of Letters Patent No. 169,403, dated November 2,1875; application filed October 25, 1875.

To all whom it may concern:

Be it known that we, JAMES R. BELLINGER, L. M. Bolles, and William J. Fryer, Jr., all of the city of New York, in the county and State of New York, have jointly invented a new and useful Improvement in Bridle-Bits for Horses; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which-

Figure 1 represents a perspective view of

The object of our invention is to so make a bit for horses that it shall be perfectly easy in the mouth, and yet so powerful as to give the driver absolute control over the most vicious

A is the cheek-bar or side purchase, of any ordinary shape. B is the mouth-bar, made straight at its point of intersection with the cheek-bar, and arching in the center, (to pass over the horse's tongue,) with a concavity on the inner side. C is a perforated metal roofplate, attached to the convex side of the concave and arched mouth-bar. The shapes all conform nearly to the natural lines of a horse's mouth. The shape of the mouth-bar is to give room for the working of the horses's tongue, and at the same time making use of his tongue to hold the bit centrally in his mouth, while the straight part between the cheek-bar and the arching center makes the bit fit snug in the corners of the mouth. All side play is prevented; the roof-plate is steady, without wabbling or rubbing. Altogether, it is so easy and natural in its adaptation to the shape of the horse's mounth that he enjoys the freedom given to his tongue, and scarcely realizes that anything is in his mouth till a taut rein is drawn. By perforating the metal roof-plate it offers less resistance to the airpassage and to the moisture on the roof of the mouth, and lessens the weight of the plate. The plate can also be corrugated or grooved, or may be made an open web. When the driving-lines are hooked into the lower ring, and a taut rein pulled, a leverage power is exerted on the plate, and it presses on the roof of the horse's mouth, which pressure, in con-

nection with the pull in the corners of his mouth, compels the horse to obey the will of his driver. The plate extends high up in the mouth, and while it presses firmly it presses without pain, covering a larger area in comparison with a Mexican bit and its short tongue, (say an inch and a half,) or a Spanish bit with its longer (say four inches) tongue, and the cruel power these both exert on a horse's mouth.

With this bit the horse breathes easier, and can, therefore, be driven farther and faster than with the common bit. It is any easy bit for tender-mouthed horses, and a perfectly safe one for vicious horses. It will prevent running away, pulling, tongue-lolling, or driv-

ing on one rein.

This bit can be used with a nose-band, or with a chain under the lower jaw, or with any of the devices applicable to the ordinary make of bits. It also may be attached to an ordinary make of bit, being loosely attached on the mouth-bar, and the lines fastened to an inside cheek-bar connected to the tongue-piece.

We are aware that tongue-pieces pressing on the roof of the horse's mouth have been used, and are not new, as instanced in the Mexican and in the Spanish bits before referred to. We do not claim it. The distinctive feature of our invention is the peculiarshaped mouth-bar and the perforated roofplate attached to the same.

Having thus described our invention, what we claim as new, and desire to secure by Let-

ters Patent, is-

A bridle bit having its mouth bar made straight at its point of intersection with the cheek-bar, and arched and concaved in the center, to accommodate itself to the tongue of the horse, in combination with a perforated roof-plate, C, made concave to correspond to the shape of the tongue, and convex to bear against the roof of the horse's mouth, substantially as and for the purposes set forth.

JAS. R. BELLINGER. LUZERNE M. BOLLES. WM. J. FRYER, JR.

Witnesses:

HARDESTY DE S. JOHNSON, JAMES COSBY.