2 Sheets—Sheet 1.

B. MILLER.

BRIDLE-BIT.

No. 169,718. Patented Nov. 9, 1875.

Fig 1.

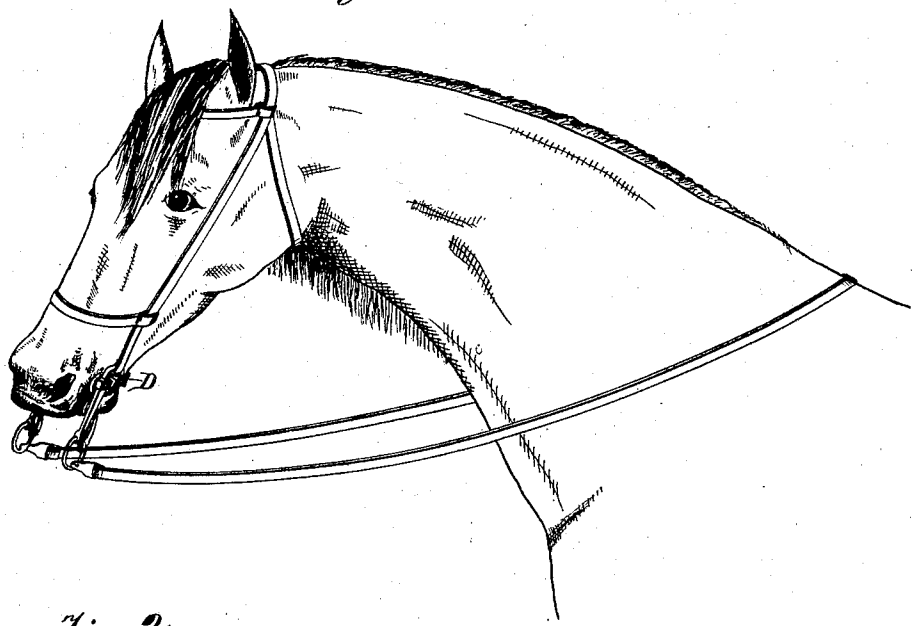


Fig 2.

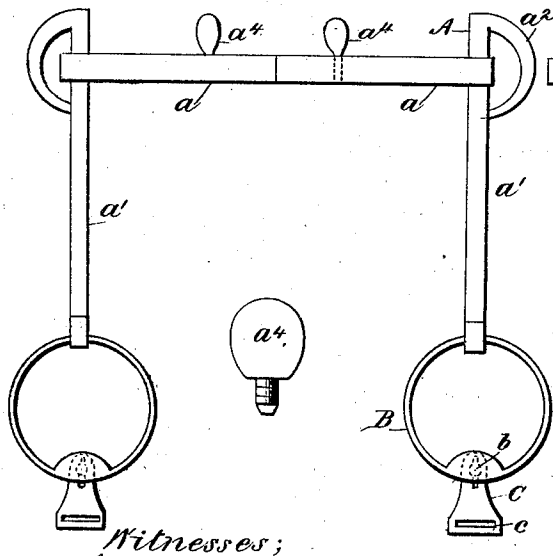
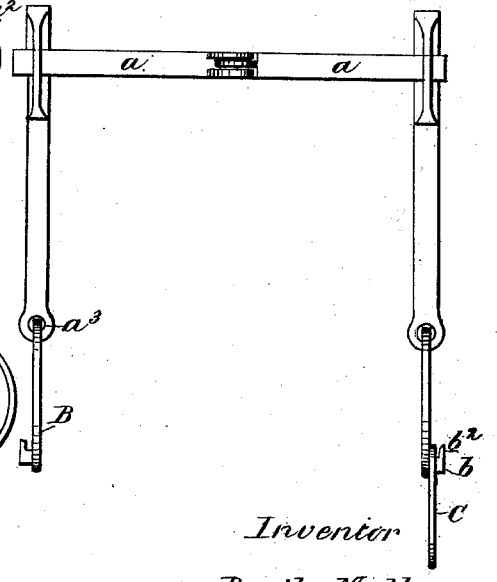


Fig 3



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2 Sheets—Sheet 2.

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BRIDLE-BIT.

No. 169,718. Patented Nov. 9, 1875.

Fig 4.

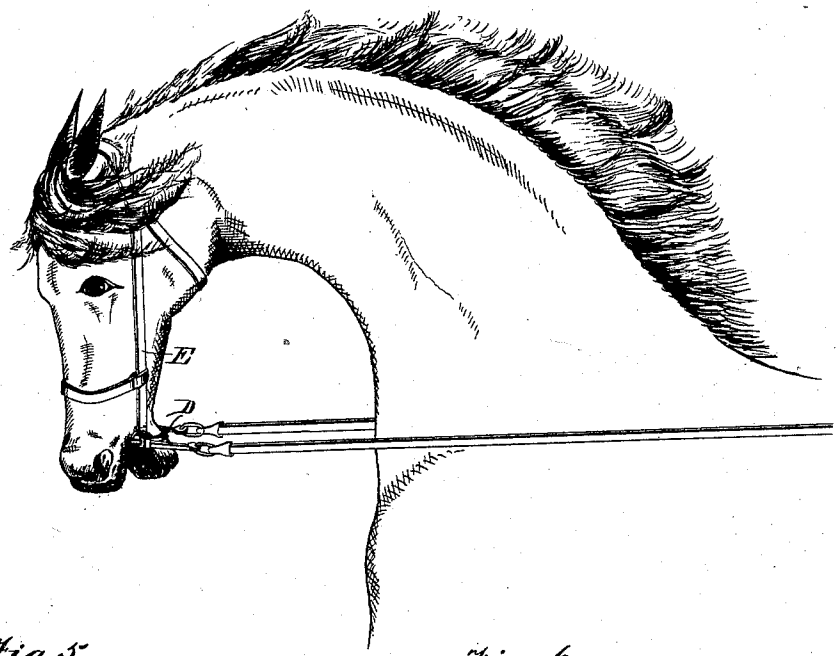


Fig 5

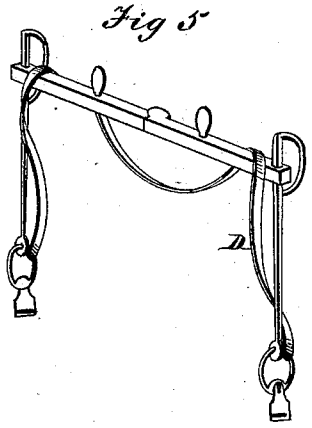


Fig 6.

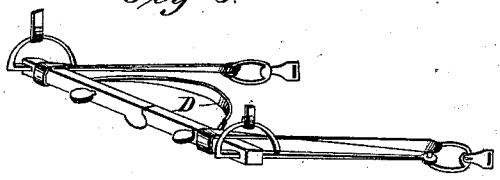
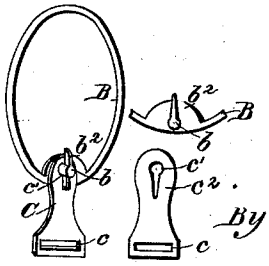


Fig 7.



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UNITED STATES PATENT OFFICE.

BASIL MILLER, OF COSHOCTON, OHIO.

IMPROVEMENT IN BRIDLE-BITS.

Specification forming part of Letters Patent No. **169,718**, dated November 9, 1875; application filed April 29, 1875.

To all whom it may concern:

Be it known that I, BASIL MILLER, of Coshocton, in the county of Coshocton and State of Ohio, have invented a new and useful Improvement in Bridle-Bit; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists, mainly, first, in the special construction of the bit proper; second, in the combination of the bit-ring, of peculiar construction, with a rein-plate or fastening device adapted to be secured to the ends of the reins; third, in the combination, with the bit, of a bridle-strap, peculiarly arranged, all of which will be fully described hereinafter.

In the drawings, Figures 1 and 4 represent the bit as applied to a horse in the different positions which it assumes in use. Figs. 2, 3, 5, and 6 represent various views of the bit detached; and Fig. 7, a detached view of the bit-ring and rein-plate.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents the bit proper, consisting of the bars *a a*, centrally united by a rule-joint, as shown, the side pieces a^1 journaled in the outer ends of the bars *a a*, and provided with the side strap-bail a^2 and the ring-opening a^3, as shown. a^4 a^4 represent ears or lugs, properly secured to the upper sides of the bars *a a*, the same being preferably provided with screw-shanks, as shown, in order that they may be readily removed, if desired. B represents the bit-ring, held in the opening a^3 of the side piece a^1, which is provided with an extension, *b*, having the projecting stud b^1, with right-angled arm b^2, as shown. C represents a metal plate, which has at one end the transverse opening *c*, by means of which it is adapted to be secured to the end of the rein, as shown, and at the other end the circular opening c^1 and the connecting longitudinal slot c^2. D represents a bridle-strap, secured at its ends to the bit-rings, and adapted in length to extend forward to the bit-bar, around the front of the same, and behind the horse's mouth, as shown in Figs. 1, 4, and 6. E represents the side strap of the bridle, the lower ends of which are attached to the bail of the bit for the purpose of holding the same in place.

The manner of using my improved bit is indicated in Figs. 1 and 4 of the drawing.

When in ordinary use, without any special strain exerted upon the reins, the side pieces are held by the side straps E in a vertical position, as shown in Fig. 1, and consequently, also, the projecting lugs or ears upon the bars *a a* are held in a vertical plane. The bridle-strap D is loose also, so that the animal is not inconvenienced in any respect by the bit. When, however, special strain is exerted upon the reins, the position of the side pieces is changed from a vertical to a horizontal plane, so that the bars *a a* are partially revolved in the horse's mouth, and the lugs or ears thrown forward against the roof of the mouth to separate the jaws, the bridle-strap also being tightly drawn at the same time by the rearward movement of the bit-ring, for the purpose of holding rigidly the lower jaw.

By means of the peculiar construction described a most severe check may be administered to an unruly animal.

By means of the peculiar construction of the bit-rings and the rein-plate or fastening device of the reins, the latter may be readily attached to or detached from the bit when desired.

The manner of securing the rein-plate to the bit-ring will be readily understood, the two being attached together by placing the slotted opening of the rein-plate in line over the stud and arm so that the two coincide, and then slipping it down over the same. If the rein-plate is now turned upon the stud its slot will no longer coincide with the stud-arm, and consequently it cannot be removed without being brought back to its original position.

It will be observed that the parts are relatively so arranged that the rein-plate can only be removed when in precisely the opposite position to that which it occupies when the rein is in use.

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

1. The bit described, having the bars *a a*, lever side pieces a^1 a^1, and removable ears a^4 a^4, constructed and arranged as described.

2. The combination of the bit-rings, having projecting studs *b*, and rein-plate C, having the transverse openings *c*, for the purpose described.

3. The combination of the lever-arms a^1 with the bridle-strap D, the latter being applied by the movement of the arms, substantially as described.

This specification signed and witnessed this 23d day of February, 1875.

BASIL MILLER.

Witnesses:
WILLIAM MCVICKER,
W. W. SPRAGUE.