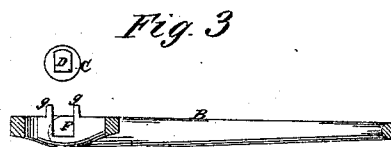
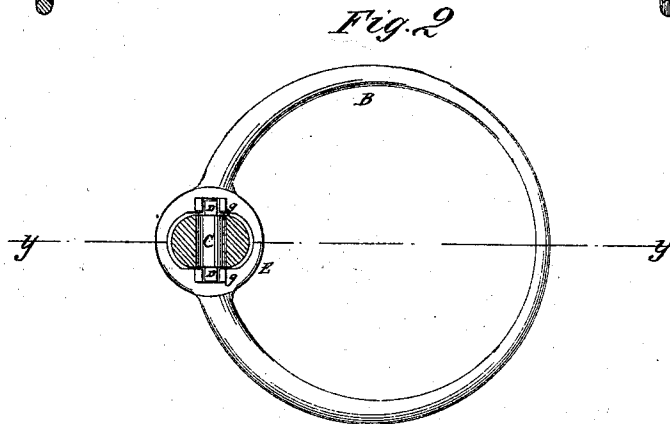
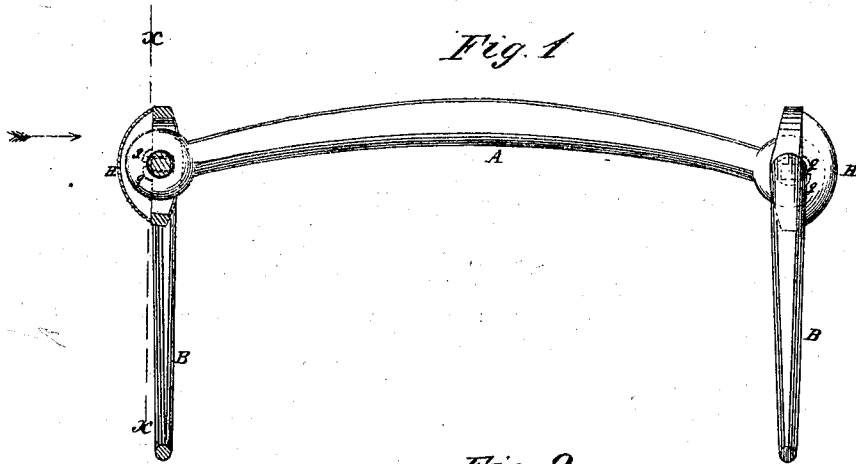


C. E. HEINZE.
Horse-Bits.

No. 151,024.

Patented May 19, 1874.



Witnesses.

A. W. Almqvist
Chetquick

Inventor.

C. E. Heinze.
Per *mm*
Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES E. HEINZE, OF NEWARK, NEW JERSEY, ASSIGNOR TO WIENER & CO., OF SAME PLACE.

IMPROVEMENT IN HORSE-BITS.

Specification forming part of Letters Patent No. **151,024**, dated May 19, 1874; application filed March 7, 1874.

To all whom it may concern:

Be it known that I, CHARLES E. HEINZE, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Horse-Bits, of which the following is a specification:

This invention relates to a new and useful improvement in the construction of bits for horses, whereby they are rendered more useful and more effective than they have heretofore been; and it consists in the peculiar construction and arrangement of the parts of which the bit is formed and hereinafter described.

In the accompanying drawing, Figure 1 represents a front view of the bit, one end being shown in section as through the line *y y* of Fig. 2. Fig. 2 is a view of Fig. 1, looking to the right (as indicated by the arrow) from the line *x x*. Fig. 3 is a detail, showing the construction of the cheek-piece with a cross-section of the pivot-pin.

Similar letters of reference indicate corresponding parts.

A is the mouth-piece. B is the cheek-piece, to which the lines or reins are attached. These two parts are connected together by means of pivot-pins C. These pins fit holes made in the ends of the mouth-piece, in which holes they freely turn. These pins have square ends D, which project from the sides of the mouth-piece, as seen in Fig. 2. The cheek-pieces B are formed with small rings E, the interior of

which receive the ends of the mouth-piece and allow the mouth-piece to "render" freely or turn back and forth. F is a small recess in each of the cheek pieces or rings E, having square sides, which receive the square ends of the pivot-pins. (See Fig. 2.) Each of these recesses is provided with two small lugs, *g*, which are bent down onto the square ends of the pin, as seen in Fig. 1, and thus permanently fasten the pivot-pins and the cheek-pieces together. The pins therefore turn in the ends of the mouth-piece when the cheek-pieces turn, and when the mouth-piece turns on one pivot it turns on both, thus allowing the lines to adjust the cheek-pieces to suit the position of the mouth-piece.

The advantages of this bit over the bits now in use will be readily understood by all who are acquainted with the subject.

H is a cap soldered onto each end of the bit, which covers the pins and makes a handsome finish.

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

The combination, with mouth-piece A, of the cheek-piece B, having angular recesses F F and lugs *g*, and the pin C, having angular ends D D, as and for the purpose specified.

CHARLES E. HEINZE.

Witnesses:

T. B. MOSHER,
ALEX. F. ROBERTS.