

(No Model.)

B. M. JOHNSON & J. REICHERT.
BRIDLE BIT.

No. 422,529.

Patented Mar. 4, 1890.

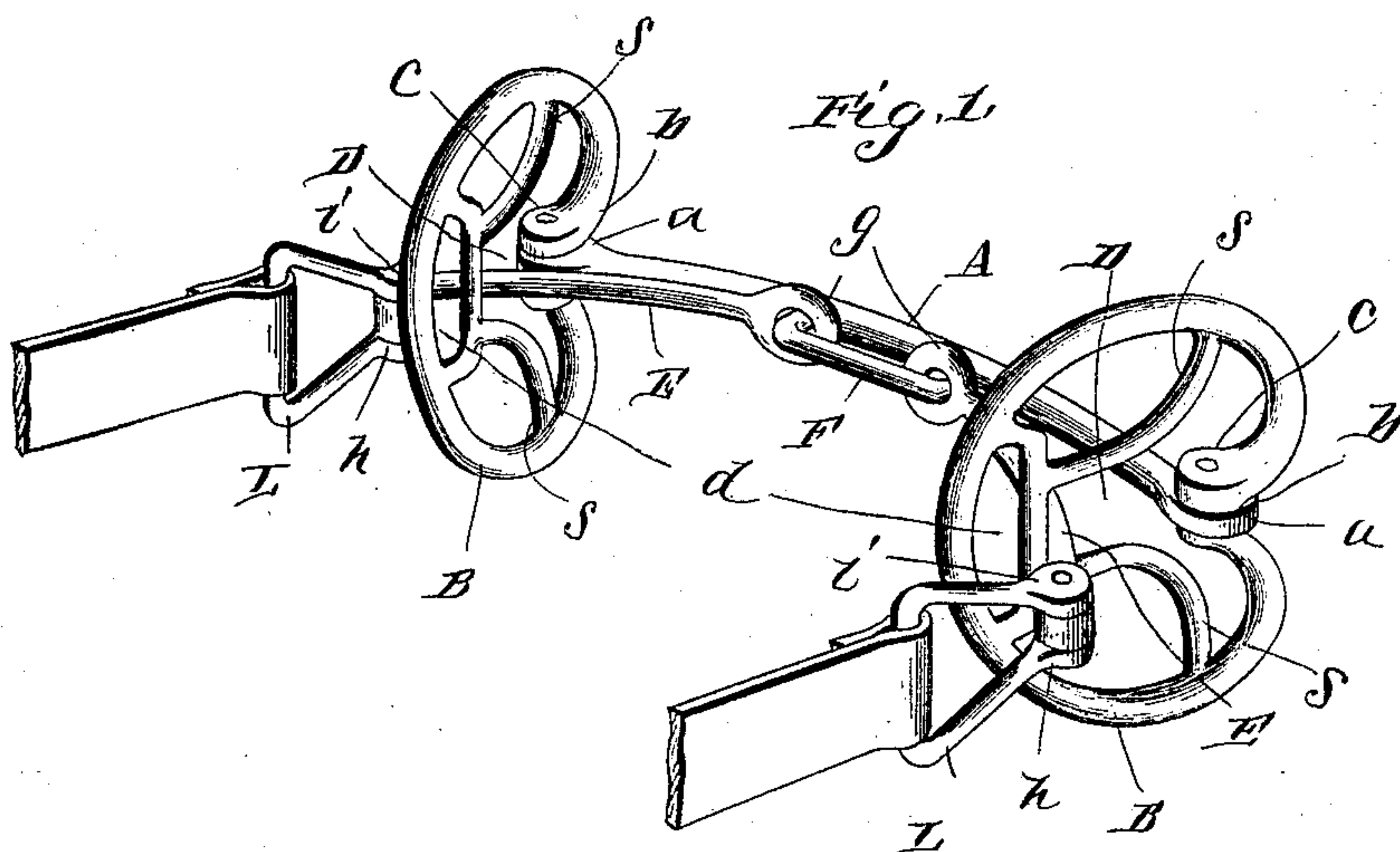


Fig. 2.

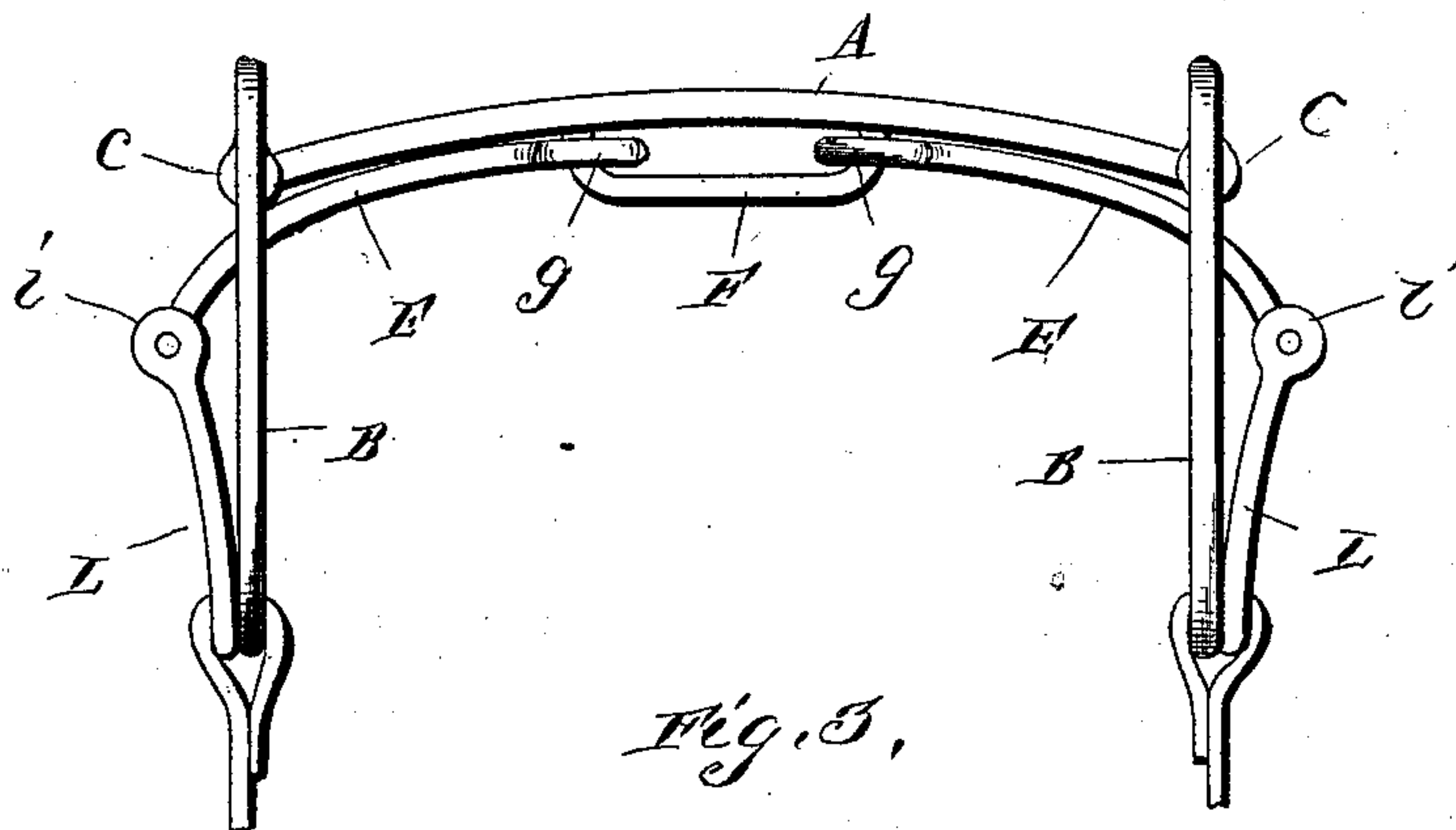
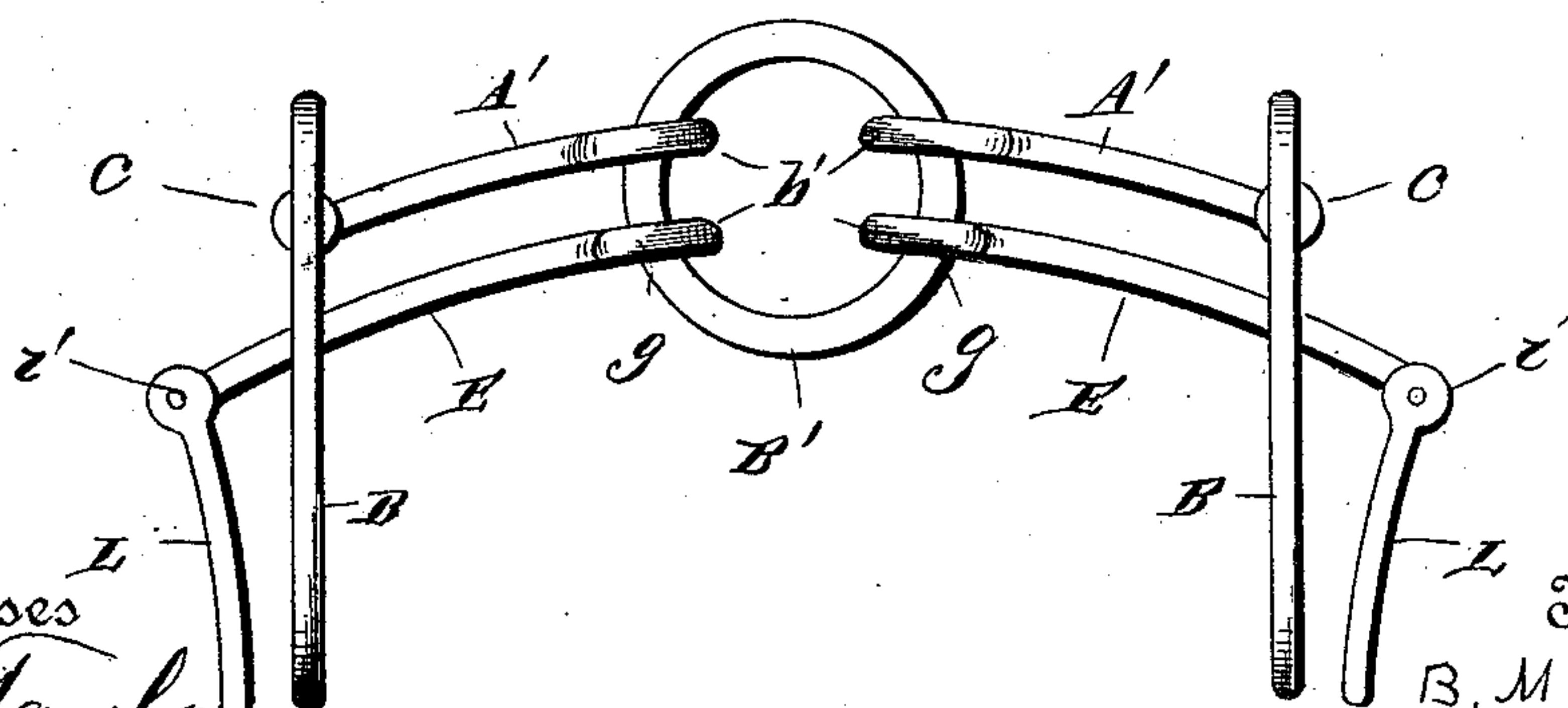


Fig. 3.



Witnesses

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BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 422,529, dated March 4, 1890.

Application filed August 19, 1889. Serial No. 321,292. (No model.)

To all whom it may concern:

Be it known that we, BERNT M. JOHNSON and JOHN REICHERT, citizens of the United States, and residents of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Bridle-Bits; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a perspective view. Fig. 2 is a top plan view, and Fig. 3 is a view of the modification.

This invention has relation to bridle-bits; and it consists in the novel construction and combination of parts, as hereinafter described, and pointed out in the claims.

In the accompanying drawings, the letter A designates the main bar or mouth-piece of the bit, which is curved from end to end, the concavity thereof being presented to the animal's mouth. The extremities of the curved bar A are broader transversely than the central portion and are pierced or bent over to form eyes or bearings *a a*, respectively, for the bit-rings B B. The rings B are circumferentially depressed at *b b* to form journals *c c* for the bearings *a a* of the bit-bar A and extend backward in vertical angular relation with the latter. A vertical elongated loop or slot *d* is formed within each ring diametrically opposite the journal *c* for the attachment of the reins. Each ring B is also provided with a diametrical slot or opening D, formed by curved branches *s s*, extending forward in opposite directions to the inner edge of the ring B at a right angle to the slot *d'* to receive the outer end of a short curved bar E.

The short curved bars E are similar and are provided with inner hooked ends or eyes *g* to engage loosely at opposite ends around an inner elongated central loop F of the bit-bar A. The curved short bars E correspond nearly in form with the curves of the ends of the bit-bar A, and their outer extremities project, respectively, through the diametrical

openings or slots D of the rings and terminate each in a hooked end bearing *h* for the pivotal end *i* of a vertical auxiliary loop attachment L for the reins. The short curved bars have a slight vertical and horizontal play in the curved slots or openings D of the ring, in order to compress the rings so as to bear externally against each side of the animal's mouth for the purpose described farther on.

The loop attachment L at the end of each curved short bar, being broader than the slot of the rings through which the said bar projects, limits the outward lateral play of the rings, and consequently prevents the bit from slipping transversely from the animal's mouth; but free lateral motion of the rings in the opposite direction is unobstructed. Therefore, when a harsh bit is desired, the reins are attached by their respective ends to the loops L of the curved short arms, and the latter serve as levers to force the rings externally against the sides of the animal's mouth when the reins are drawn forward by the driver.

When a soft bit is desired, the respective ends of the reins are attached both to the loops L of the short arm and the slots *d* of the rings, the said loops and slots registering with each other when the lines are drawn by the driver, thereby preserving a rectangular relation of the said rings and loops with the bit-bar A.

It will be observed that by varying the attachment of the reins to the loops of the short arms and the vertical slots of rings a purchase may be obtained separately on one side or the other of the animal's mouth, or on both sides, as occasion may suggest.

A modification of the invention is illustrated in Fig. 3 of the drawings, wherein the bit-bar A is superseded by two similar short arms A', loosely engaging around a central ring B' by their inner oppositely-hooked ends *b'* and by their outer ends engaging the outer rings B, as previously described. According to this modified construction the ring B' is equidistant between the outer rings B and takes the place of the central loop F of the bit-bar A, the attachment of the inner ends of the short arms to the said central ring be-

ing the same as originally described with reference to the central loop F.

What we claim, and desire to secure by Letters Patent, is—

5 1. In a bridle-bit, the combination of the curved bar A, having the inner central loop F and the end B, provided, respectively, with curved horizontal slots or openings D, and vertical slots d, with the curved horizontal
10 short bars, each loosely attached by one end to the inner loop F and having their outer ends projecting through the slots D of the rings, substantially as shown and described.

15 2. In a bridle-bit, the combination of the main or bit bar A, having at each end a ring B, slotted horizontally and vertically and circumferentially depressed to form journals for the end bearings of the said bit-bar, substantially as shown and described.

20 3. In a bridle-bit, the combination of the bit-bar having at each end a ring slotted horizontally and vertically and circumferentially depressed to form journals for the end bearings

of said bar, the loop formed on the concave central portion of the bit-bar, the short curved 25 bars journaled at their inner ends in said loop and their opposite ends passing through slots at the end ring, substantially as specified.

4. In a bridle-bit, the combination, with the 30 bit-bar having the loop secured to the central portion thereof, the rings slotted horizontally and vertically and circumferentially depressed to form bearings for the ends of said bar, the curved bars journaled at their inner 35 ends in said loop and having their outer ends passing through the slots of the rings, and the loop attachments L, secured to the outer ends of the short bars, substantially as specified.

In testimony whereof we affix our signatures 40 in presence of two witnesses.

BERNT M. JOHNSON.
JOHN REICHERT.

Witnesses:

ANTON FALBE,
CLOSE JUDD.