

(No Model.)

G. J. LETCHWORTH.

BRIDLE BIT.

No. 254,987.

Patented Mar. 14, 1882.

Fig. 1.

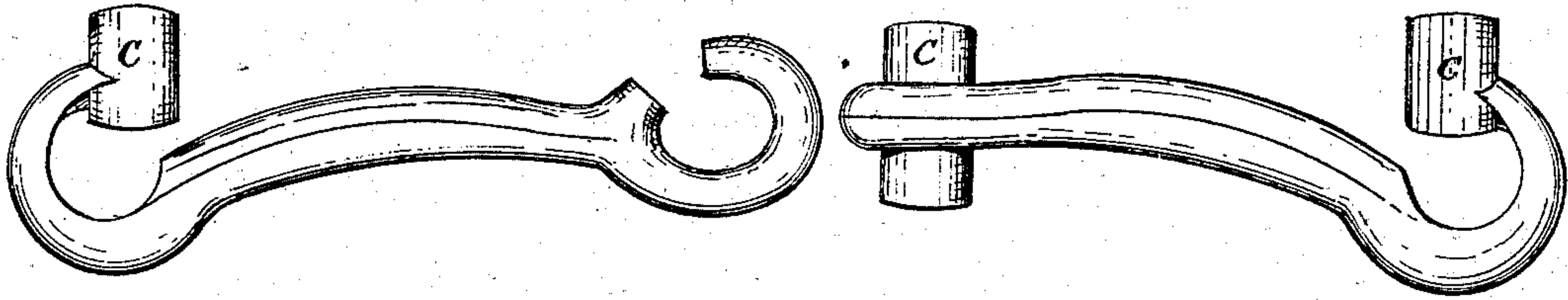


Fig. 2.

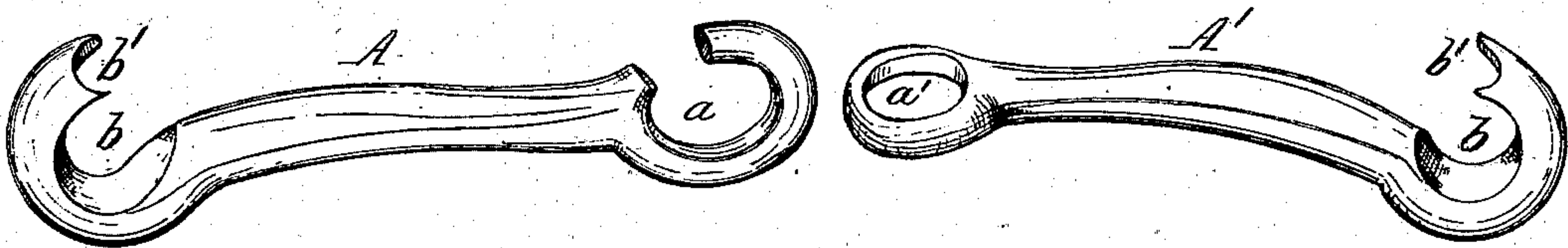
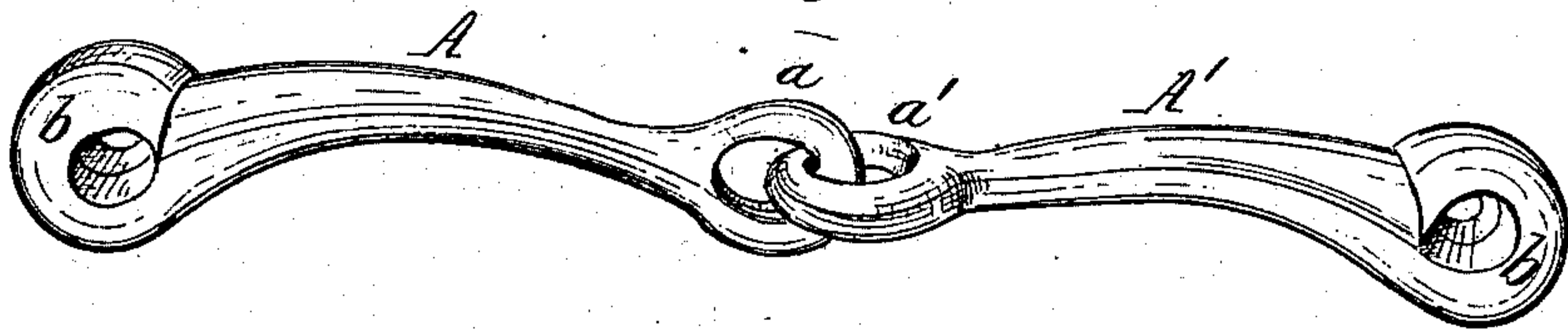


Fig. 3.



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UNITED STATES PATENT OFFICE.

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BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 254,987, dated March 14, 1882.

Application filed October 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. LETCHWORTH, of Buffalo, Erie county, State of New York, have invented a new and useful Improvement in Bridle-Bits, of which the following is a specification.

This invention relates more particularly to the manufacture of bridle-bits of cast metal:

Heretofore bits have been made by forming the eye which holds the ring or cheek pieces in such manner that the joint is made by the meeting of two plane surfaces at the place of the junction of the two parts of which the eye is formed. The two parts forming the eye, after annealing and after the insertion of the ring, are closed by pressure. This construction enables the eye to be cast without using a core; but it is objectionable in that it locates the joint of the eye away from the bit-bar, where it is plainly seen, and the line of junction being straight and it being nearly or quite impossible to make a tight close joint by that method, the appearance of the bit is greatly impaired, and its market value thereby much lessened.

The object of my invention is to obviate these objections; and it consists of the particular construction of the eye of the bit which holds the ring or cheek pieces, and is equally applicable to a bit whether made with a jointed or stiff bar.

In the accompanying drawings, Figure 1 is an elevation of the patterns for molding a jointed bit provided with my improvements. Fig. 2 is a perspective view of the parts of a jointed bit provided with my improvements. Fig. 3 is a perspective view, showing the two parts of a jointed bit attached together.

Like letters of reference refer to like parts in the several figures.

A A' represent the two parts of a jointed bit, and *a a'* the eyes whereby the inner ends of these parts are connected. One of these eyes is cast open and the other closed in the usual manner, as clearly shown in the drawings. *b* represents the eye formed at the outer end of each part of the bit for the purpose of holding the cheek-ring or cheek-piece. The eyes *b* are cast open, as shown in Fig. 2, the end of the open eye being concave, as shown at *b'*, to fit against the convex bar of the bit when closed down. This convex recess *b'* is formed by means of a core which is laid in a depression formed in the mold by a core-print, *c*, attached to the pattern. The bit cast with eyes *b*, of the form shown in Fig. 2, is next annealed in any suitable and well-known manner. The cheek-rings or cheek-pieces are then placed in the eyes *b*, and the latter are closed down by pressure in any suitable press or other apparatus. The concave end *b'* of the eye fits snugly against the convex body or bar of the bit, and the joint is located in the angle formed by the outer side of the eye and the body of the bit-bar, where the joint is not exposed and cannot be readily observed.

I claim as my invention—

A cast bit provided with eyes *b*, having concave ends *b'*, closed against the convex body of the bit, substantially as set forth.

Dated Buffalo, N. Y., September 29, 1881.

GEORGE J. LETCHWORTH.

Witnesses:

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