

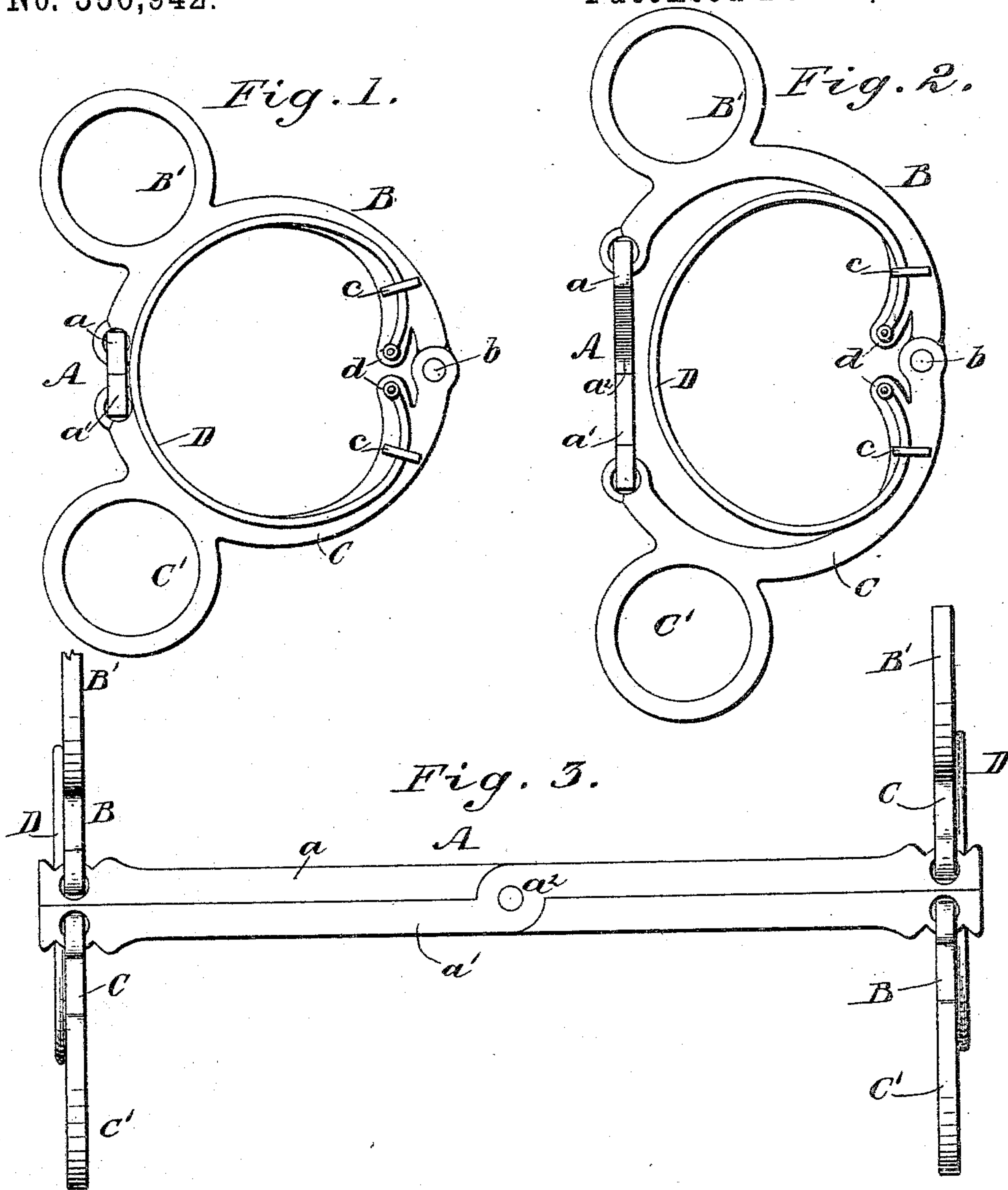
(No Model.)

A. S. JOHNSTON.

BRIDLE BIT.

No. 356,942.

Patented Feb. 1, 1887.



WITNESSES:  
*John M. Deemer*  
*C. Sedgwick*

INVENTOR:  
*A. S. Johnston*  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ALVA S. JOHNSTON, OF BOZEMAN, MONTANA TERRITORY.

## BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 356,942, dated February 1, 1887.

Application filed July 7, 1886. Serial No. 207,344. (No model.)

*To all whom it may concern:*

Be it known that I, ALVA SUTTON JOHNSTON, of Bozeman, in the county of Gallatin and Territory of Montana, have invented a new and  
5 Improved Horse-Bit, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate  
10 corresponding parts in all the figures.

Figure 1 is a side elevation of my new and improved horse-bit as it appears when closed. Fig. 2 is a similar view showing the bit open, and Fig. 3 is a front elevation of the bit closed.

15 The invention will first be described in connection with the drawings, and then pointed out in the claims.

A represents the mouth-piece or bar of the bit. This is made of the two parts  $a a'$ , crossed  
20 in the center and pivoted upon the central pin,  $a^2$ . Connected to each end of the bar  $a$  is a side piece, B, and connected to each end of the bar  $a'$  is a side piece, C. The side pieces, B C are by preference curved, and each pair  
25 is hinged together by a connecting-pin,  $b$ , so they constitute circular side pieces of the bit, and at the same time permit the bars  $a a'$  to open and close, as shown in Figs. 2 and 3. The upper side pieces, B C, are each formed  
30 with a ring, B', into which the cheek-strap of the bridle buckles, and each lower side piece is formed with a ring, C', into which the lines or reins buckle. The side pieces, B C, and bars  $a a'$  are normally held closed by the two

springs D, one applied to each set of side 35 pieces, B C. These springs are by preference made circular, and attached at their ends to the projections  $d d$ , and held from displacement by the loops or staples  $c c$ , as shown in Figs. 1 and 2. 40

The action of the bit is such that when no strain is put upon the reins the springs D close the parts of the bar A, so it is as easy in the horse's mouth as a plain or common bit; but when strain is put upon the reins the parts  $a$  45  $a'$  will open, turning upon the pivot  $a^2$ , and thus become very severe on the horse's mouth, so that he may be easily controlled.

Having thus described my invention, what I claim as new, and desire to secure by Letters 50 Patent, is—

1. The bar A, composed of the centrally pivoted and crossed pieces  $a a'$ , provided at their ends with the side pieces, B C, hinged together, in combination with springs arranged 55 to close the side pieces and the parts  $a a'$  of the bar A, substantially as described.

2. The side pieces, B C, each formed with a ring and hinged together, in combination with the springs D, and the bar A, composed of the 60 cross-pivoted bars  $a a'$ , the side pieces, B C, being connected to the bars  $a a'$ , respectively, substantially as described.

ALVA S. JOHNSTON.

Witnesses:

LLEWELLYN A. LUCE,  
F. K. ARMSTRONG.