

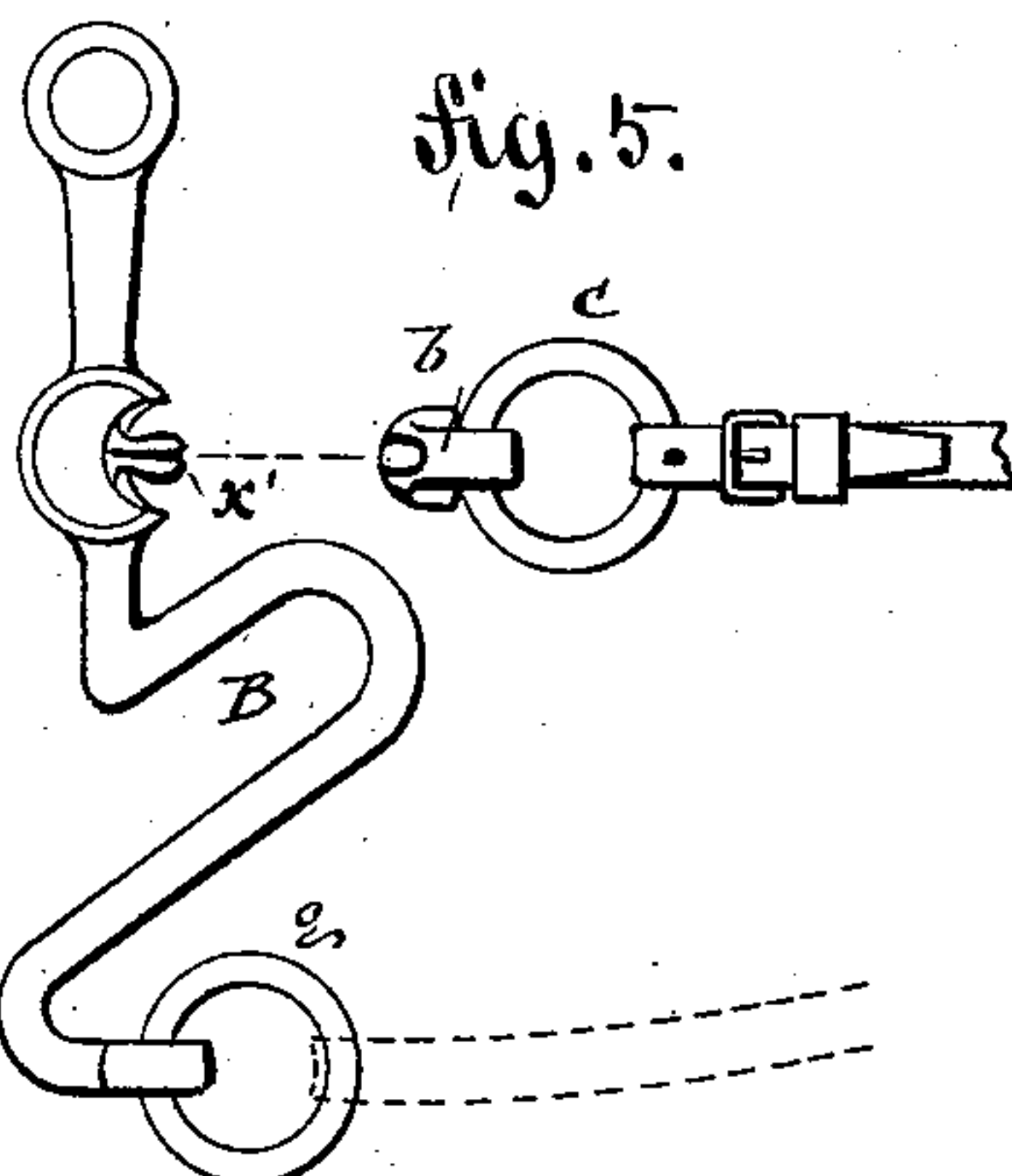
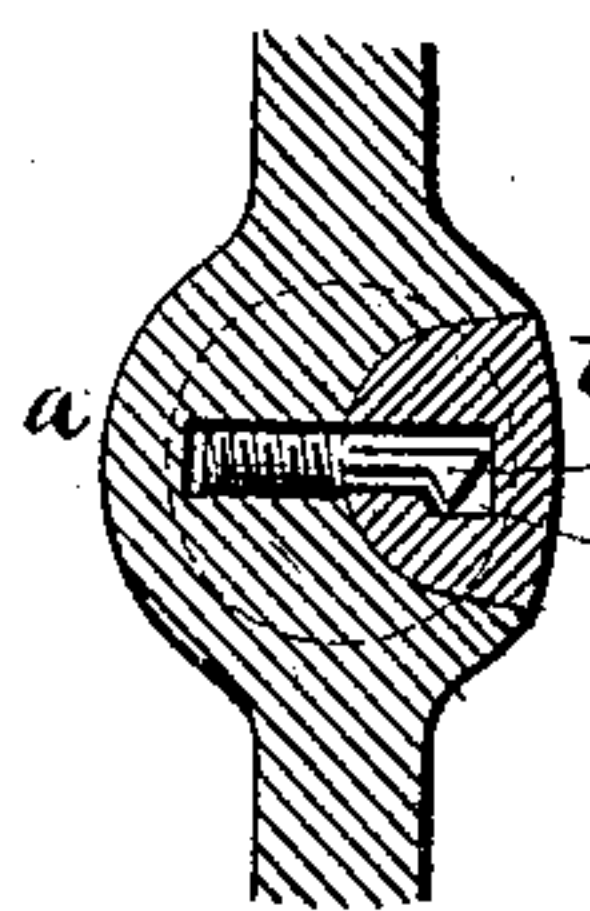
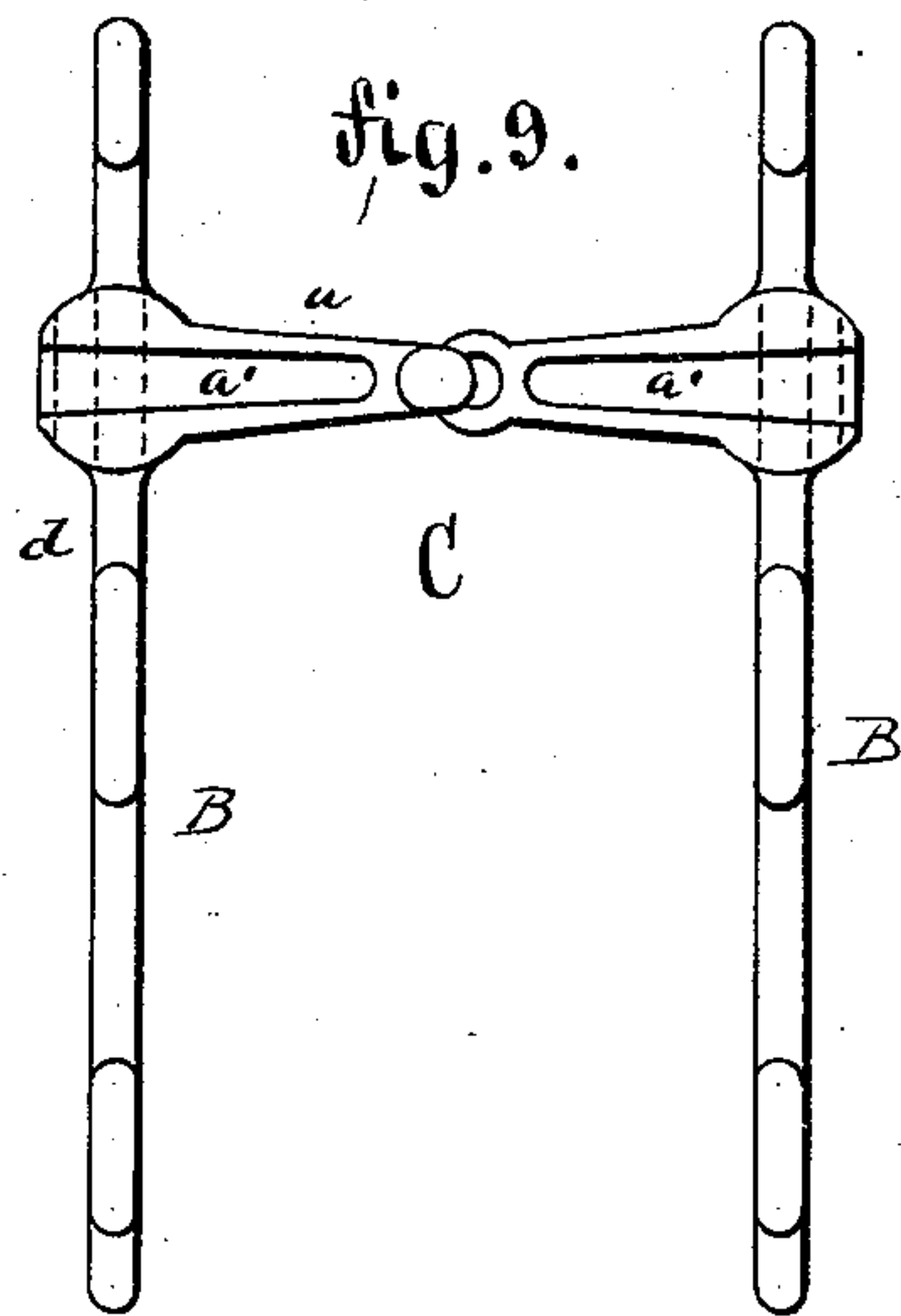
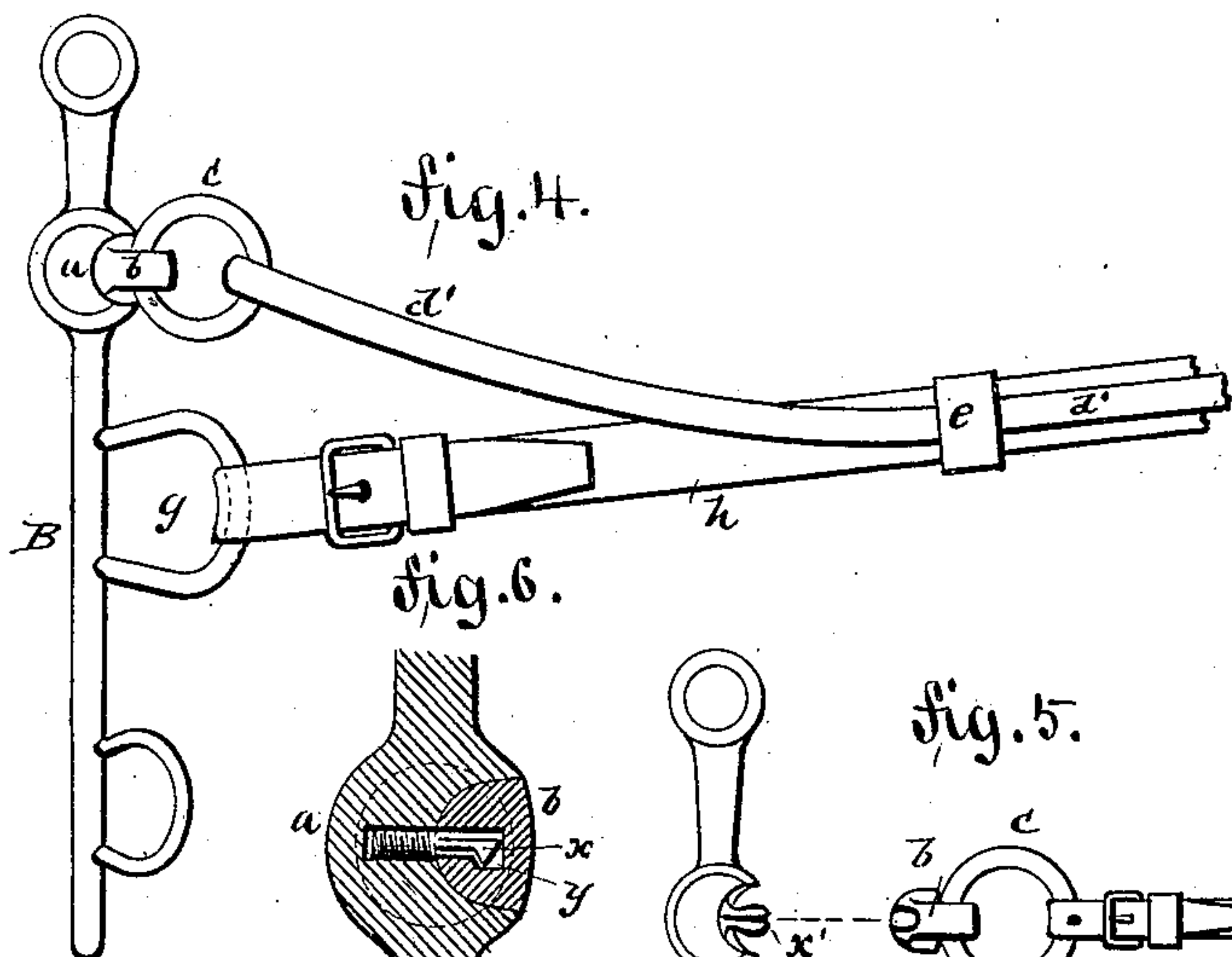
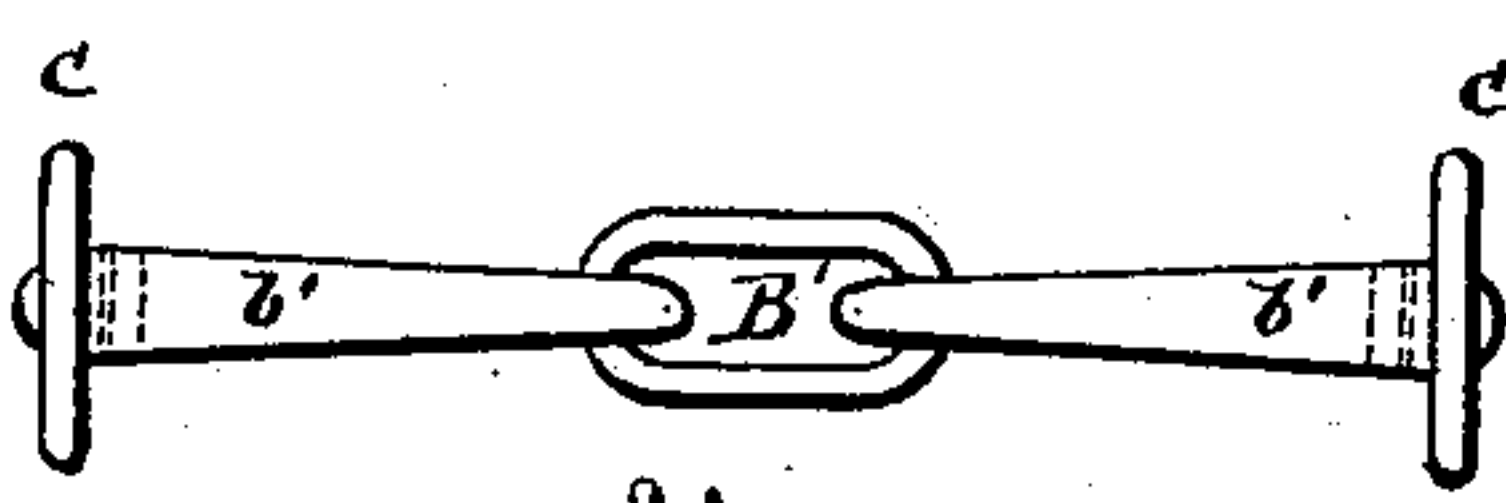
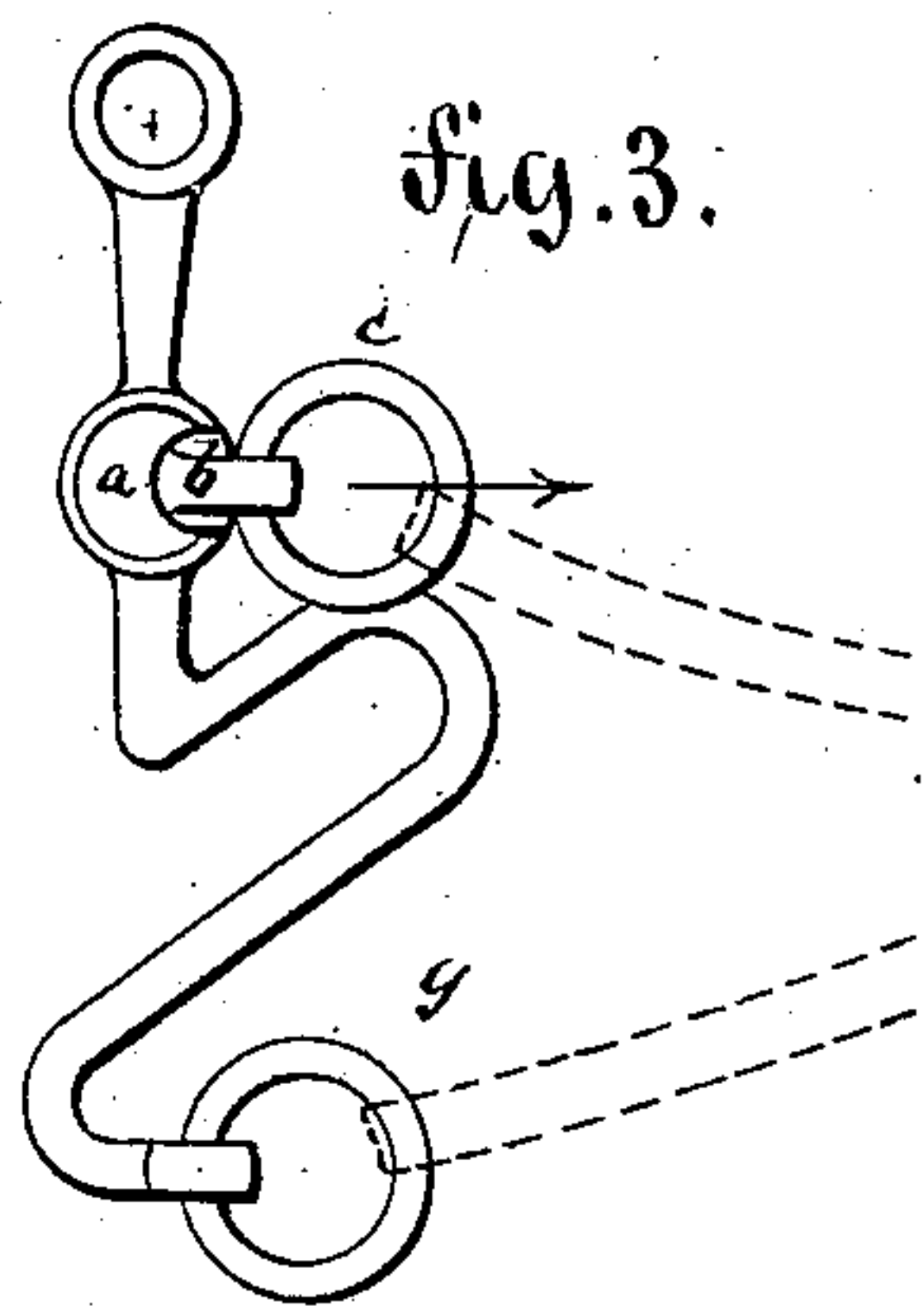
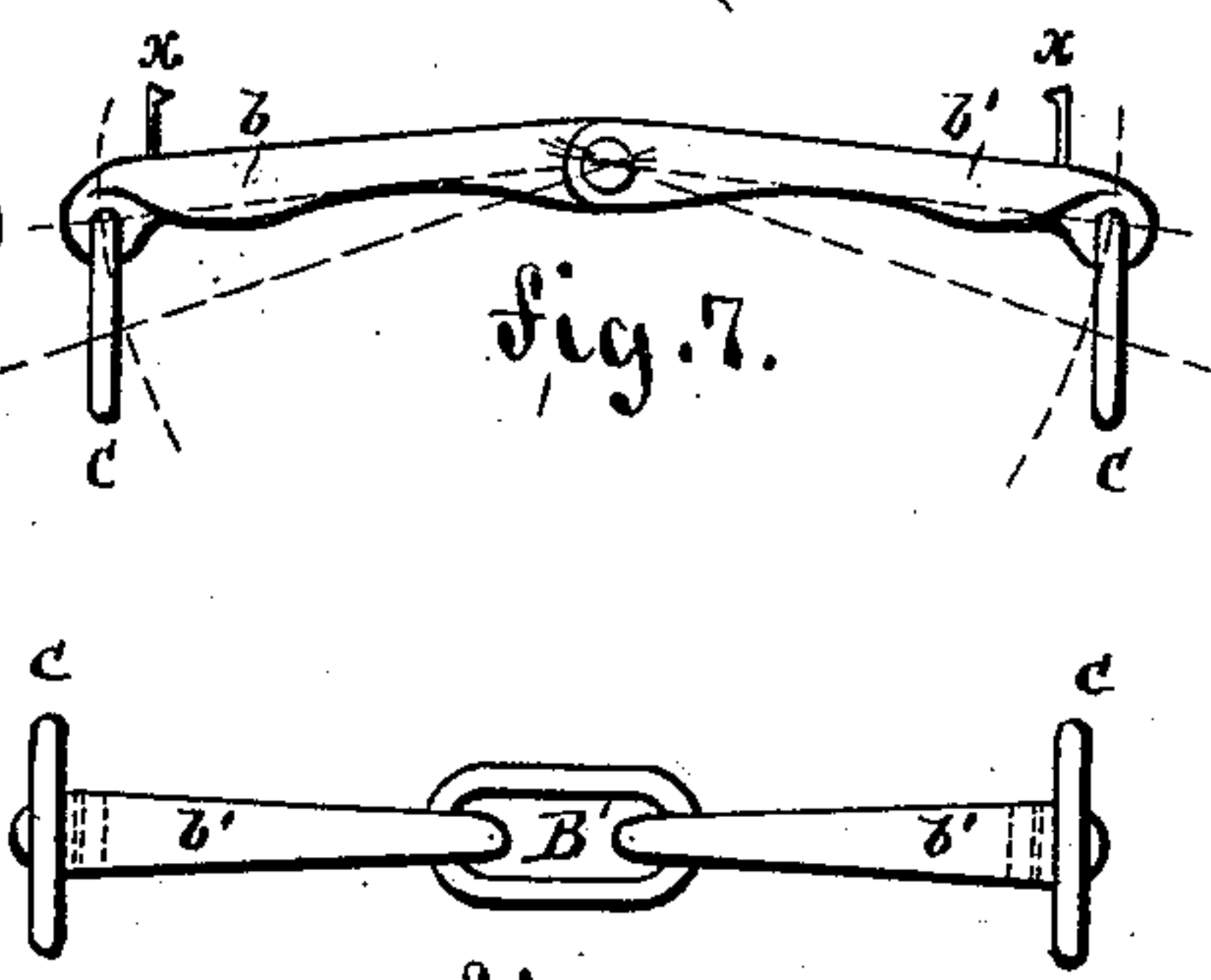
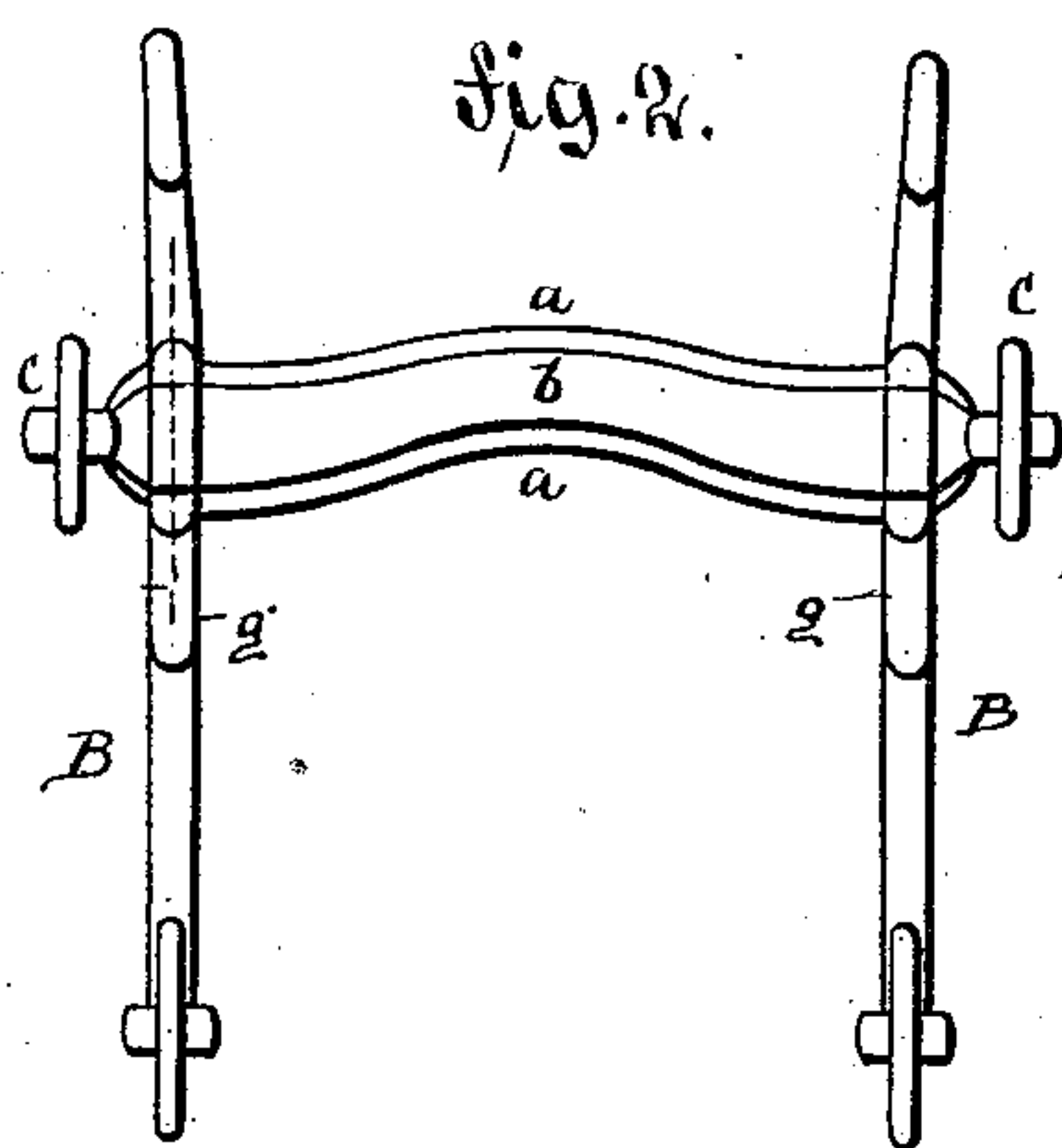
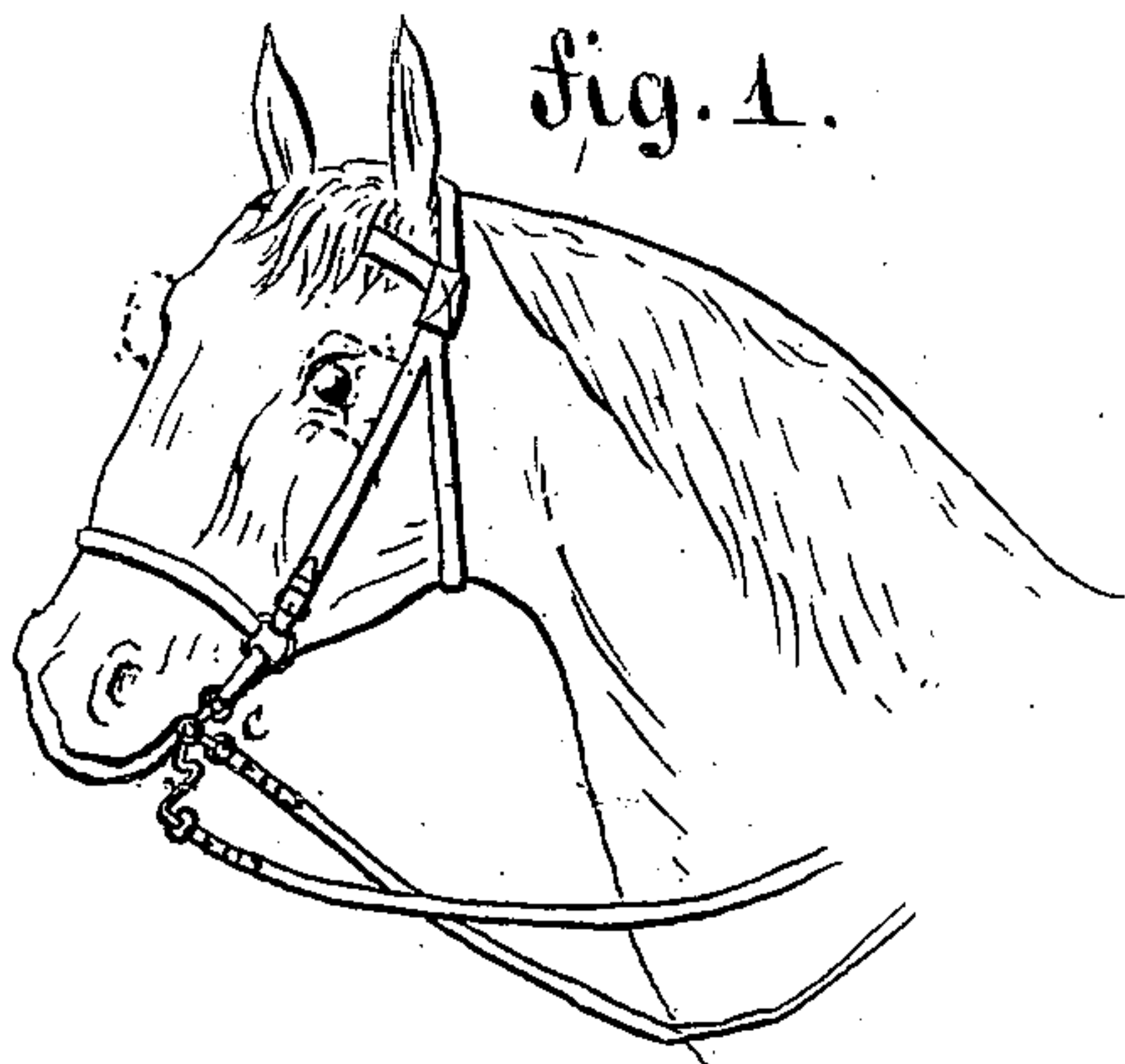
(No Model.)

H. PFÄNDNER.

BRIDLE BIT.

No. 356,546.

Patented Jan. 25, 1887.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HEINRICH PFÄNDNER, OF AUGSBURG, GERMANY.

BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 356,546, dated January 25, 1887.

Application filed October 8, 1886. Serial No. 215,644. (No model.) Patented in Germany November 18, 1885, No. 36,284; in France August 25, 1886, No. 165,387; in Belgium August 27, 1886, No. 54,968, and in England September 8, 1886, No. 11,434.

To all whom it may concern:

Be it known that I, HEINRICH PFÄNDNER, of Augsburg, in the Empire of Germany, have invented certain new and useful Improvements in Bridle-Bits, (for which Letters Patent have heretofore been granted to me in Germany, dated November 18, 1885, No. 36,284; in France, dated August 25, 1886, No. 165,387; in Belgium, dated August 27, 1886, No. 54,968, and in England, dated September 8, 1886, No. 11,434,) of which the following is a specification.

This invention relates to improvements in bridle-bits, especially of that class provided with means for controlling horses should they become unruly and unmanageable.

The object of my invention is to provide a bit which is provided with an additional cross-piece located in a recess of the ordinary cross-piece, the additional cross-piece being so located that it can be readily pulled out and placed in action when the horse becomes unmanageable.

The invention consists of the combination of a cross or mouth piece provided with a groove for receiving an additional cross-piece, the additional cross-piece being held on the ordinary cross-piece by springs, so that it can be easily withdrawn when necessary.

In the accompanying drawings, Figure 1 is a perspective view of a bridle with my improved bit. Fig. 2 is a front view of a riding-bridle. Fig. 3 is a side view of the same. Fig. 4 is a side view of a bridle used for driving from a vehicle. Fig. 5 is a modified construction of the same. Fig. 6 is a detail cross-sectional view of part of the same. Fig. 7 is a top view of the additional cross-piece, the same being hinged like a snaffle. Fig. 8 is a face view of the additional cross-piece hinged like a snaffle. Fig. 9 is a rear view of the bit, showing the grooves for receiving the hinged parts of the snaffle shown in Fig. 8.

Similar letters of reference indicate corresponding parts.

The cross-piece or mouth-piece *a* of the bit is fastened in the usual manner to the side bars, *B*, which are provided with rings *g*, either at the bottom or some distance above the bottom, for attaching the usual reins, *h*. The cross-

piece or mouth-piece *a* is provided in the rear surface with a longitudinal groove for receiving an additional mouth-bar, *b*, which is approximately semicircular in cross-section and fits snugly in its groove, as shown in Fig. 6. The thickness and height of the additional mouth-bar *b* are so small that the horse cannot grasp the additional mouth-bar within its teeth, thus leaving the additional mouth-bar always free to be withdrawn whenever required. Rings *c* are fastened to the ends of the additional mouth-bar, and can be connected by a strap, *d'*, guided by a loop, *e*, on the reins *h*.

For the purpose of holding the additional mouth-bar *b* in its groove in the cross-bar *a*, springs *x* are fastened in the end parts of the cross-bar *a* and engage in notches or offsets *y* in the inner surface of the additional mouth-bar *b* at the ends, so that when the additional mouth-bar is pressed into the groove in the mouth-bar or cross-piece *a* the springs *x* engage the notches *y* and hold the additional bar *b* in place.

If desired, the springs can be shaped as shown at *x'* in Fig. 5, the springs being split and bulged and passing into corresponding recesses in the ends of the additional mouth-bar *b*.

If desired, the mouth-bar *b* may be provided with a pivot at the middle, as shown in Fig. 7, or it may be made of two sections, *b'* *b'*, united by a link, *B'*, as shown in Fig. 8, said sections *b'* *b'* fitting into recesses *a'* *a'* in the inner side of the mouth-piece or cross-bar fastened to the end bars, *B*, said sections of the mouth-bar being united by a hinge, as shown at *C*, Fig. 9.

Ordinarily the additional mouth-bar *b* is in the groove in the mouth-bar or cross-piece *a*, and the horse is guided or governed by means of the reins in the usual manner. When the horse becomes unmanageable or unruly, the straps *B* are pulled, whereby the additional mouth-bar *b* is pulled out of its groove in the mouth-piece or cross-bar *a* and can be forced against the ends of the mouth of the horse, thus permitting of controlling the animal. After the animal has been quieted, the bar *b* can be pressed back into its recess in the bar *a*.

The bridle can be used for riding-harness, or for a bridle to be used for driving from a vehicle.

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

1. In a bridle-bit, the combination, with a cross-bar having a groove or recess in its rear side, of an additional mouth-bar fitting in said bar, and being entirely removable from the
10 above-mentioned cross-bar, and of releasing devices for releasing the removable additional mouth-bar from the groove of the ordinary mouth-piece of the bit while the latter is in the horse's mouth, substantially as shown and
15 described.

2. In a bridle-bit, the combination, with a mouth-piece having a longitudinal groove in its rear side, of an additional mouth-bar fitting in said groove, and springs for holding the additional mouth-bar in the groove, said ad- 20 ditional mouth-bar entirely removable from the ordinary cross-piece, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name in pres- 25 ence of two subscribing witnesses.

HEINRICH PFÄNDNER.

Witnesses:

ROBT. M. HOOPER,
JULES ELSUER.