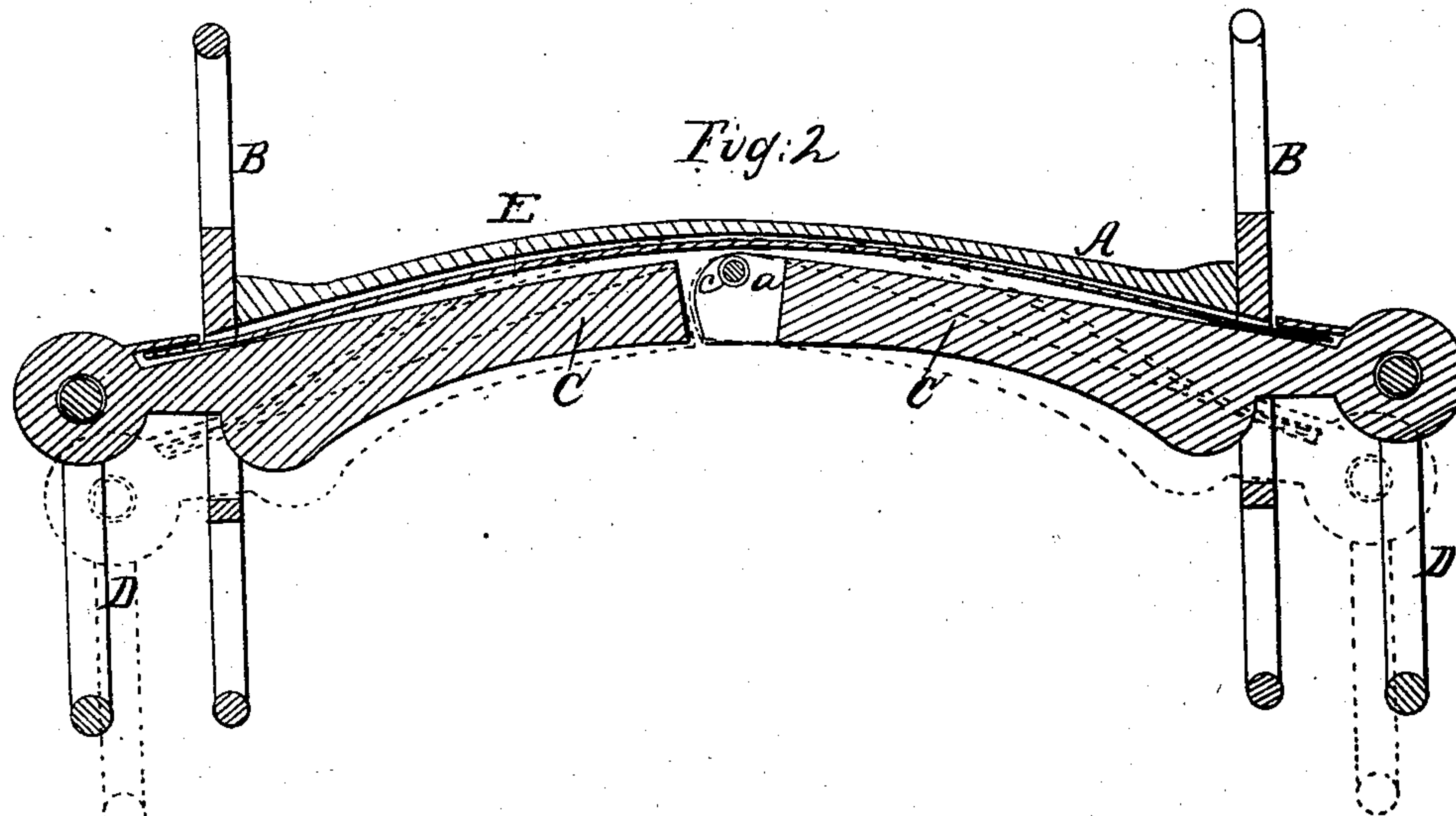
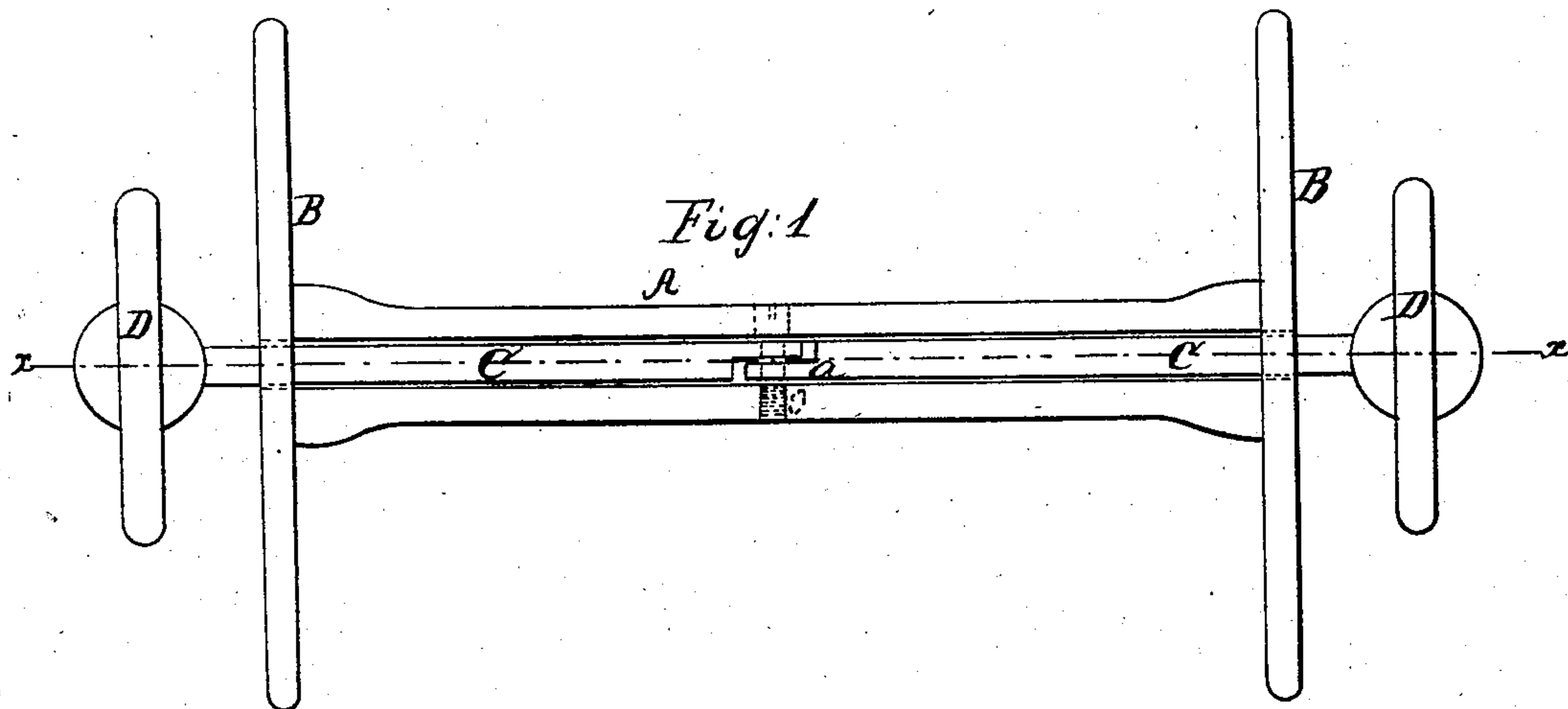


H. Crane,
Bridle Bit,
No 28,563, Patented June 5, 1860.



Witnesses
P. G. Grouse
Wm. J. Livingston

Inventor
Henry Crane

UNITED STATES PATENT OFFICE.

HENRY CRANE, OF NEW YORK, N. Y.

BRIDLE-BIT.

Specification of Letters Patent No. 28,563, dated June 5, 1860.

To all whom it may concern:

Be it known that I, HENRY CRANE, of the city, county, and State of New York, have invented a new and Improved Bridle-Bit; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention. Fig. 2 is a longitudinal section of the same taken in the line *x, x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to place the horse, especially a vicious one, under the better control of the rider or driver than those bits hitherto constructed, and with the employment or use of but a single pair of reins. The ordinary bar bits are frequently rendered inefficient in consequence of the animal grasping the bar with his teeth, and thereby preventing the action of the bit on the lower jaw.

The within described invention consists in the employment of supplemental bars placed within the principal one, and having springs attached, the parts being so arranged as to admit of the action of the supplemental bars on the lower jaw of the animal, in case of the latter grasping with its teeth the principal bar.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents a metal bar, which is of slightly curved form, and provided at each end with a check-piece B. This bar, with its check-pieces, is similar to an ordinary bar bit. Within this bar A, there are placed two shorter bars C, C, the inner ends of which are connected by a joint *a*. The ends of the bars C, project beyond the ends of

the bar A, and each has a ring D, attached, to which the reins are connected. Within the bar A, a spring E, is placed, the ends of which are fitted in recesses *b*, into and near the ends of the bars C. This spring E, has a tendency to keep the bar C, within the bar A. This will be fully understood by referring to Fig. 2.

From the above description it will be seen that the bar A, serves as a case for the smaller ones, and that in the event of the animal grasping the outer one, with its teeth, the rider or driver, by pulling the reins, will draw out the bars C, which will act on the lower jaw of the animal, substantially the same as a snaffle bit.

The spring E, may be of any strength, as circumstances may require. For ordinary purposes it might be made sufficiently strong to allow the bar A, to perform the function of an ordinary bit, the withdrawing of the bars C, requiring additional strength only to be exerted when necessary.

The screw or pintle *c*, of the joint *a*, serves as a means for securing the bars C, to the bar A, as said pintle passes through the bar A, as shown by the dotted lines in Fig. 1.

The bars may be of malleable cast iron. That at least would answer a good purpose and be the most economical.

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

The combination of the bars A, C, C, the latter being fitted within the bar A, connected by a joint *a*, at their inner ends and having a spring E, attached, substantially as shown and described, for the purposes specified.

HENRY CRANE.

Witnesses:

B. GIROUSE,
M. M. LIVINGSTON.