

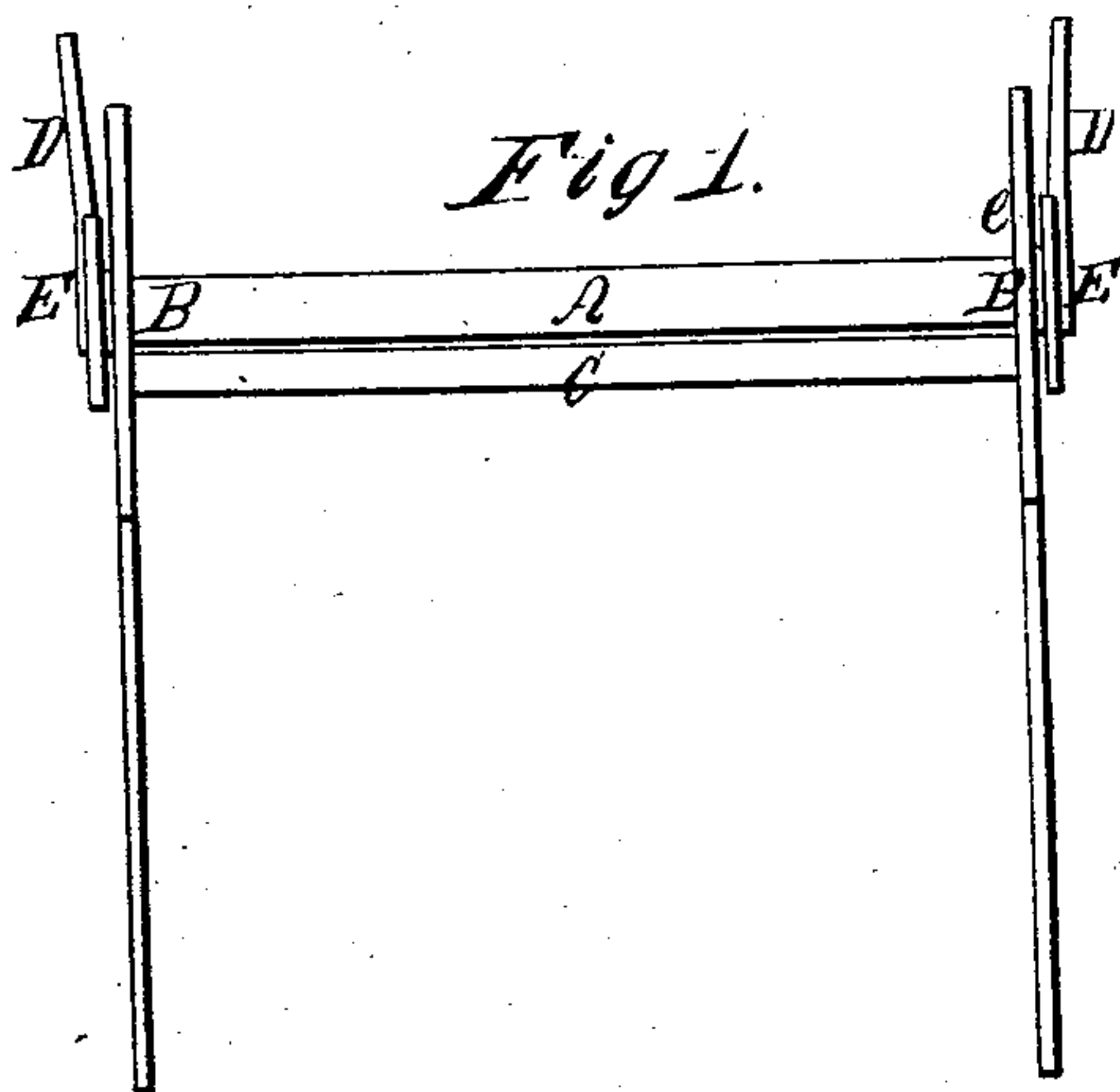
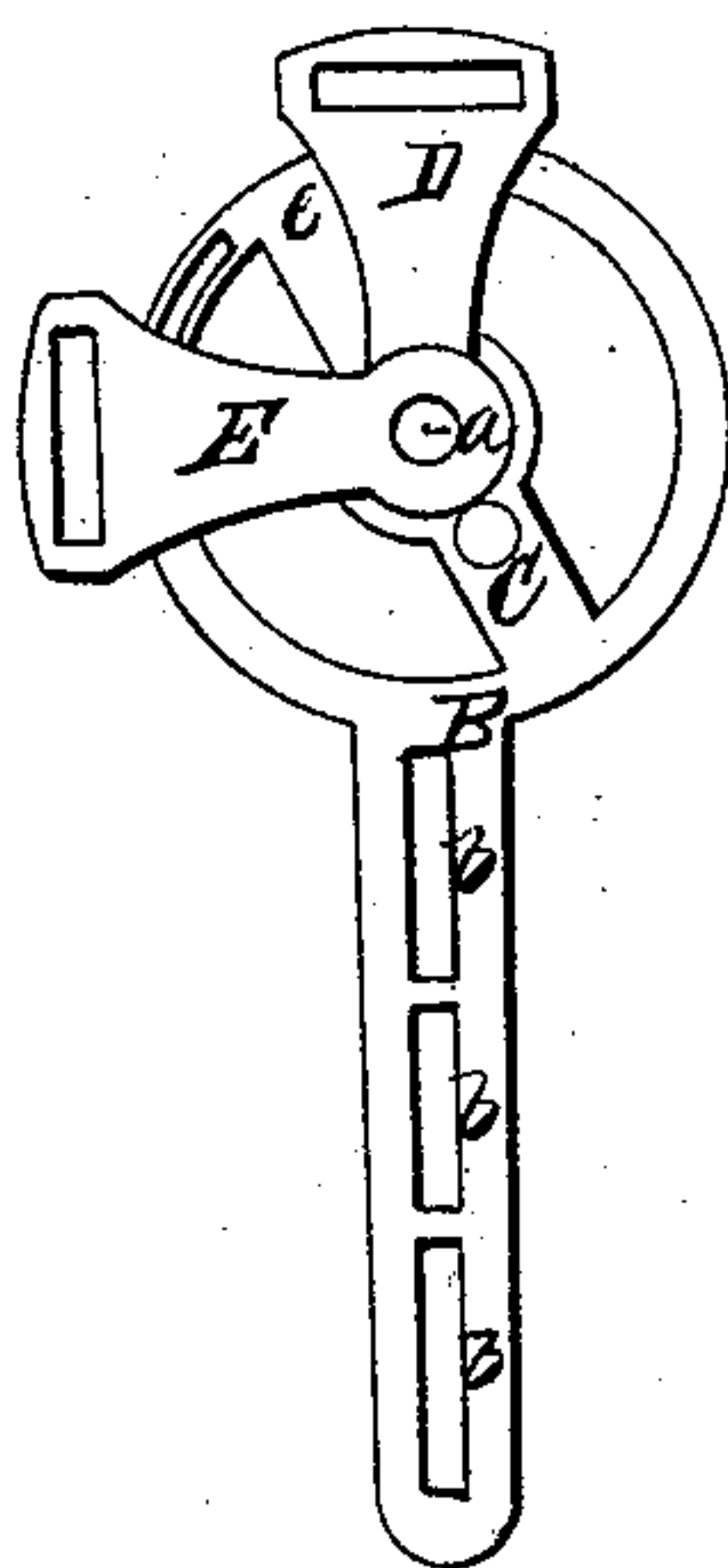
*T. S. Smith,*

*Bridle Bit,*

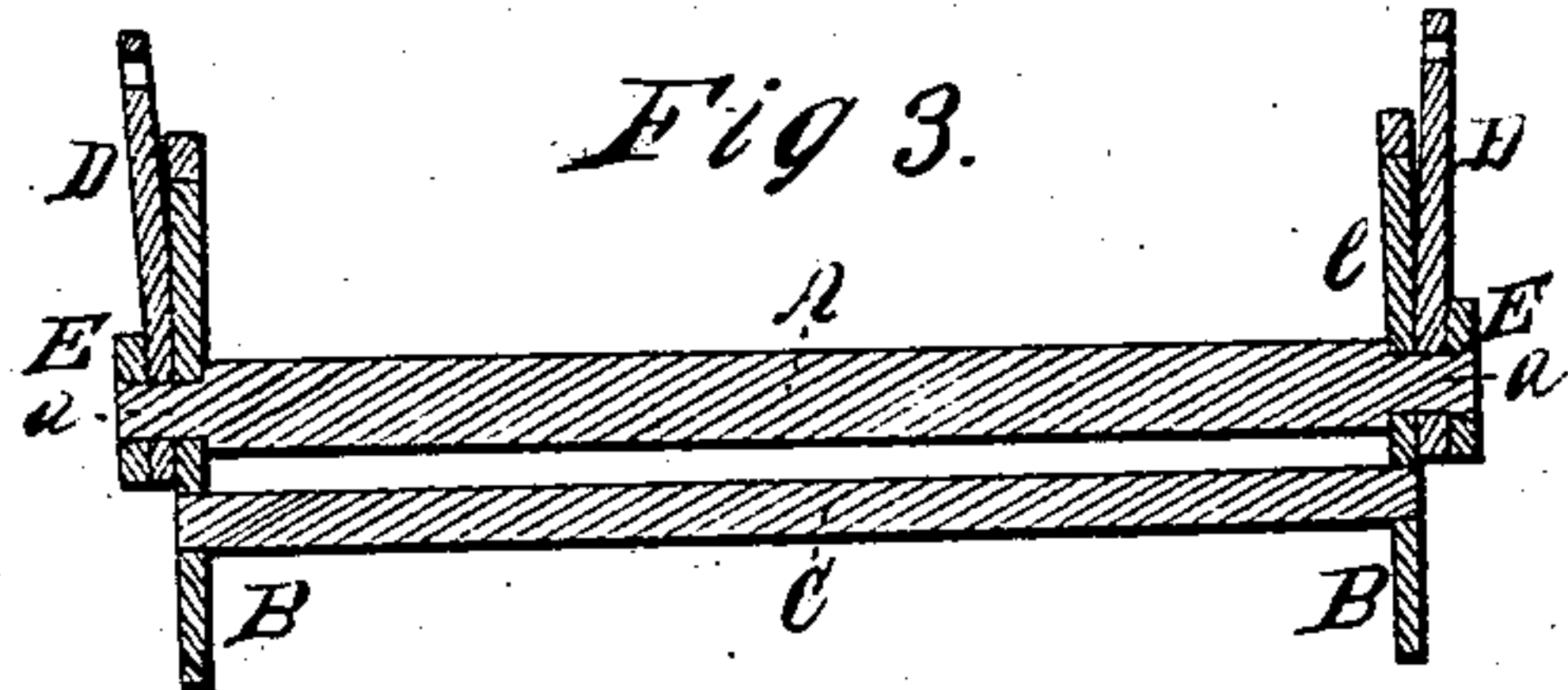
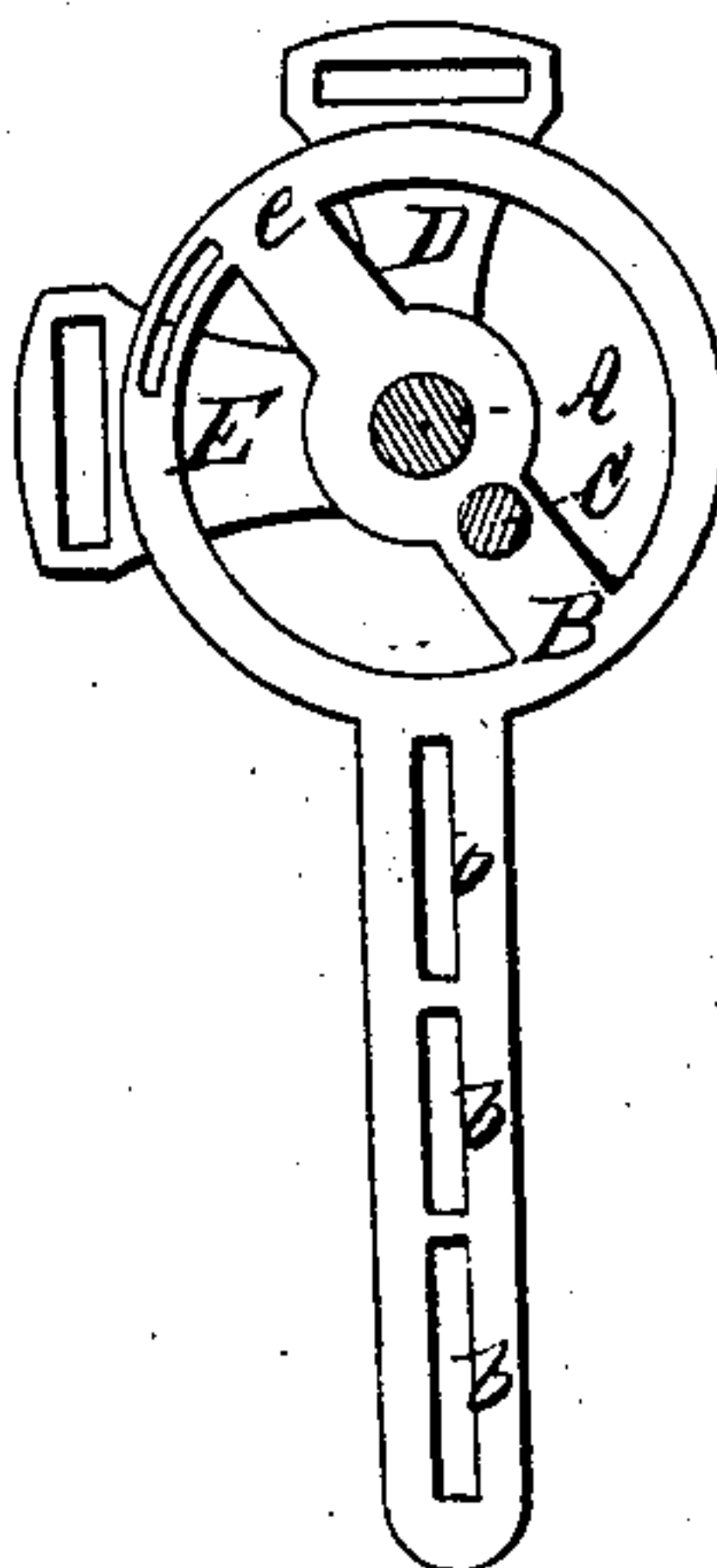
*N<sup>o</sup> 40,312.*

*Patented Oct. 13, 1863.*

*Fig 2.*



*Fig 4.*



*Witnesses.*

*O. P. Hale Jr.  
Frederick Curtis*

*Inventor.  
Theophilus S. Smith  
by his attorney -  
R. H. May*

# UNITED STATES PATENT OFFICE.

THEOPHILUS S. SMITH, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND ANDREW W. SMITH, OF SAME PLACE.

## IMPROVED CURB-BIT.

Specification forming part of Letters Patent No. 40,312, dated October 13, 1863.

*To all whom it may concern:*

Be it known that I, THEOPHILUS S. SMITH, a resident of Lowell, in the county of Middlesex and State of Massachusetts, have invented an Improved Curb-Bit; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Fig. 2 an end view, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of it.

My said invention consists in an improved curb-bit as made with its cross-bar so applied to its cheeks or levers as to be capable of revolving freely therein in manner and for the purposes substantially as hereinafter described; and my invention further consists not only in a bit so made, but as having an auxiliary bar extended from one cheek or lever to the other and fixed firmly in both of them; and my invention further consists in the arrangement of the headstall and check rein hangers with respect to the cheek-levers and the rotary cross-bar.

In the drawings, A is the cross-bar which, when the bit is in use, goes between the jaws of a horse and connects the cheeks or cheek-levers B B. This cross-bar in my improved bit is a roller having its journals *a a* so applied to the cheek-levers B B as to be capable of revolving freely therein, the same being in order that, should a horse, while the bit may be in his mouth, grasp the cross-bar firmly between and by the back teeth of his jaws, the cheek-levers may be free to revolve on the journals of the cross-bar, and thereby bring the curb-chain (which is to be hooked into a slot, *b*, of each cheek-lever) close into action against the lip of the lower jaw. Besides the roller-bar A, I make use of an auxiliary cross-bar, C, which I arrange parallel to the bar A, and at a short distance from it, and in other respects as shown in the drawings, and fix it at its ends firmly in the cheek-levers. This auxiliary bar serves not only to connect the two cheek-levers and give stability to the bit, but affords a means by which, when the curb-

rein is retracted, there is obtained a leverage to press the jaws of the horse asunder in order to prevent him from holding the bit too firmly by them. It also is an additional support to the bit in the mouth of the horse, and aids in causing the bit to set properly with respect to the head of the animal. Each of the journals of the cross-bar A projects through and somewhat beyond its cheek-lever, and has applied to it, so as to be capable of revolving or turning freely on it, two separate hangers or slotted pieces of metal, D E, the same being formed as shown in the drawings. The headstall of the bridle is buckled into two of these hangers, the check-rein also being buckled into the others. The driving-rein may be buckled either to the ring *e* or into any of the slots *b b b* of the cheek-levers. By having the hangers arranged on and so as to turn on the cross-bar A, as described, draft on the bit by the curb-rein will not twist or bend the headstall-straps nor the check-rein out of their ordinary positions; nor will they operate to counteract the action of the curb-bit.

Having thus described my said invention, what I claim, and desire to have secured to me by Letters Patent, is as follows:

1. The improved curb-bit as made with the cross-bar A so applied to the cheek-levers B B as to be capable of revolving therein in manner and for the purpose substantially as described.

2. The bit as so made and as having an auxiliary cross-bar, C, arranged with respect to the cross-bar A, and extended from one cheek-lever to the other substantially in manner and for the purposes or objects as specified.

3. The arrangement of the headstall and check-rein hangers with respect to the cheek-levers B B and the cross-bar A.

THEOPHILUS S. SMITH.

Witnesses:

R. H. EDDY,  
F. P. HALE, Jr.