

(No Model.)

W. J. WOODS.
Whiffletree Hook.

No. 229,790.

Patented July 6, 1880.

Fig: 1.

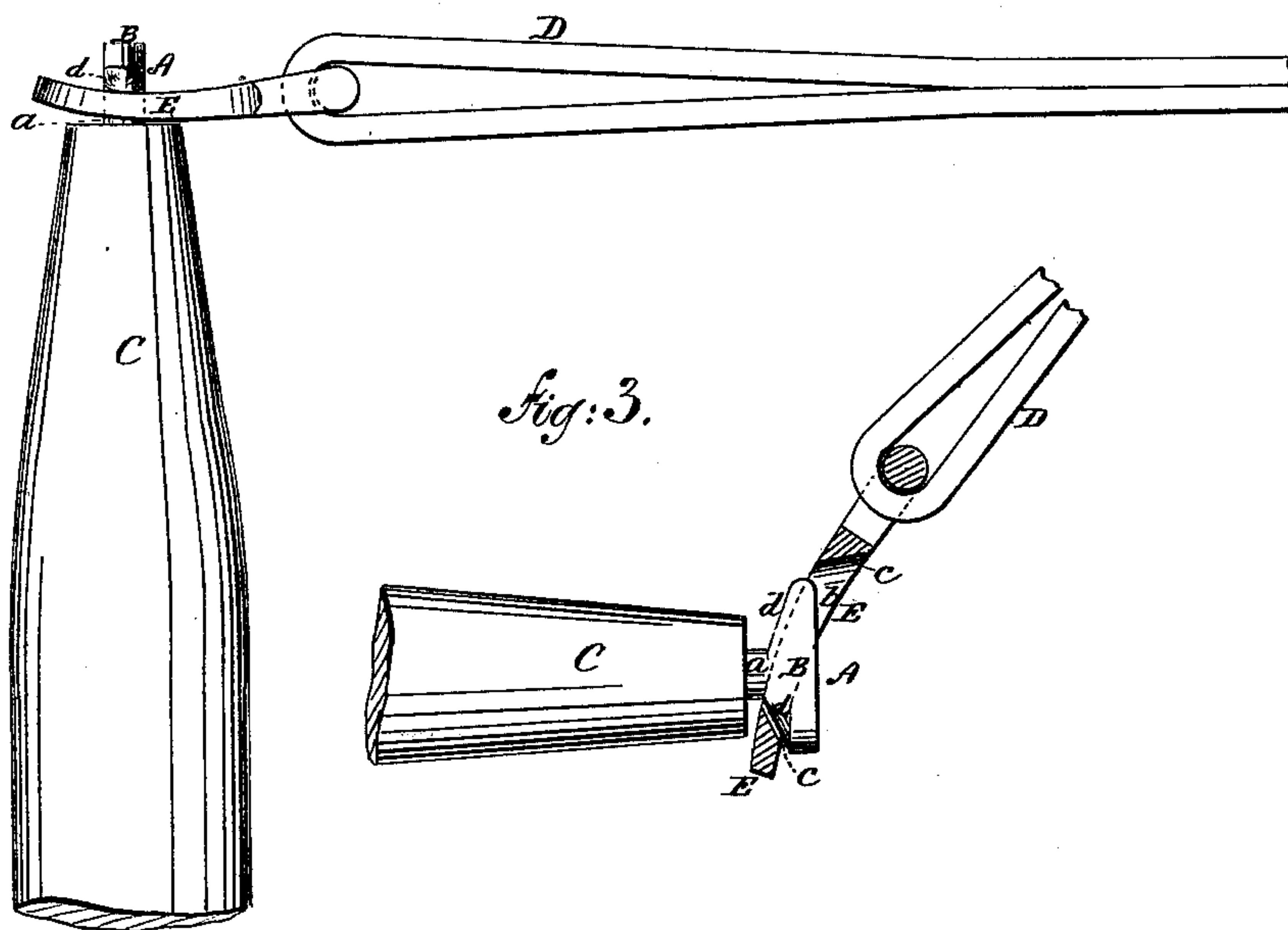


Fig: 3.

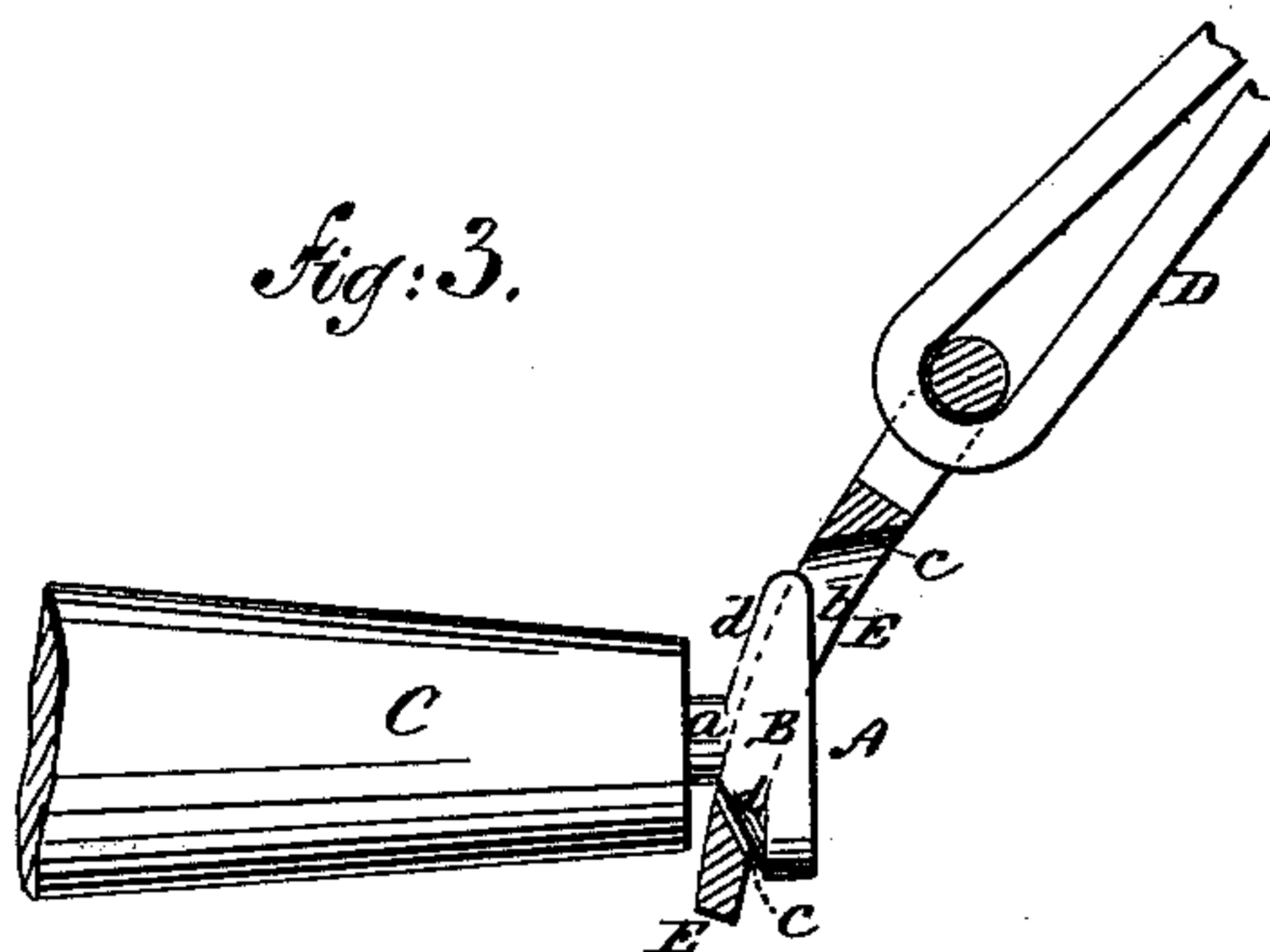
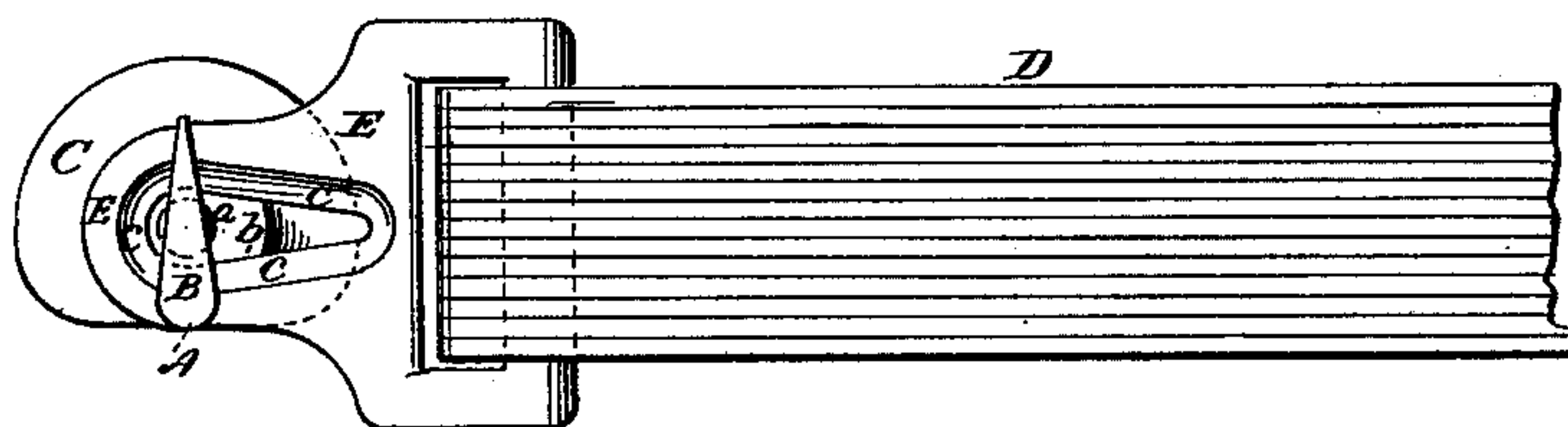


Fig: 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 229,790, dated July 6, 1880.

Application filed March 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. WOODS, of the city, county, and State of New York, have invented a new and Improved Trace-Fastener, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making part of this specification.

This invention is in the nature of a device for attaching traces to whiffletrees and breeching to shafts, &c.; and the invention consists in a device for attaching traces to whiffletrees, &c., constructed with a T-shaped head of dovetail form immovably fixed to its shank, in combination with a metal eye with a dovetail slot, as is hereinafter more particularly described.

In the accompanying sheet of drawings, Figure 1 is a plan or top view of my device applied to a whiffletree; Fig. 2, a side view of same; and Fig. 3, a front view, partly in section, showing method of detaching trace from whiffletree.

Similar letters of reference indicate like parts in the several figures.

A in the drawings represents a stud of metal, which consists substantially of a shank, *a*, provided with screw-threads, or not, as may be desired. Extending across the upper end of this shank, in T form, is the head B. This head is in the general shape of a dovetail—that is, it is broader at one end than the other, as is shown in Fig. 2, and this stud is intended to be fastened at the ends of a whiffletree, C, for holding the traces in place, or it may be secured to the shafts for the purpose of fastening the ends of the breeching.

To the ends of the traces D, or the breeching, are fixed plates E, which plates have formed in them slots *b*. These slots are also in the form of a dovetail, to correspond in that particular with the form of the heads B, and one surface of the plate E immediately surrounding the dovetailed slot *b* is beveled or countersunk, (see *c*, Figs. 2 and 3.)

Now, my device, when constructed substantially as I have described it above, is made useful by inserting the stud A into the ends of a whiffletree, C, and the plate E, attached in any suitable manner to the traces, is placed over the stud, which passes through the slot *b* in the plate, and when the plate E is turned so as to bring the head of the stud at right

angles to the slot in the plate the plate will not become released from the stud. No ordinary amount of shaking or jarring will release the plate from the stud, since it is necessary to place the plate E parallel, or nearly parallel, with the stud, in order to place the plate on or to take it off of the stud, and it is only when it is so placed that it can be either put on or taken off, for the reason that the head of the stud is somewhat longer than is the slot in the plate, and one can only be placed within the other by first slipping the rear and larger end of the head into the slot in the plate.

The under side of the head B of the stud is beveled, as at *d*, to correspond with the beveled or countersunk surface *c*, formed in the face of the plate E, so that the surface of the plate and the under side of the stud will fit snugly together, and while the plate may freely turn on the stud it does so without unnecessary noise or rattle.

In securing the stud A to the whiffletree it is important that the larger part of the wedge-shaped head B should be placed downward, the slot *b* in the plate E having its smallest part pointing toward the trace, so that no slacking of the trace when going downhill, or otherwise, can result in detaching it from the stud, and, for like reasons, when the stud is employed for the holdback or breeching, it should be inserted in the shafts with the larger end of the cross-head B inward or toward the horse.

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

1. A device for securing traces or breeching, consisting of a stud with a cross-head of dovetail form immovably fixed to its shank, in combination with a plate having a dovetailed slot formed therein, which slot is of less length than is the cross-head of the stud, substantially as and for the purpose described.

2. In a device for securing traces or breeching, a stud with a cross and dovetailed head permanently fixed to its shank, in combination with a dovetail slotted plate secured to the end of the trace or breeching, and having a countersunk face, substantially as and for the purpose described.

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