(No Model.)

A. LENNON.

BLACKSMITH'S VISE.

No. 521,505. Patented June 19, 1894.

Fig. 1.

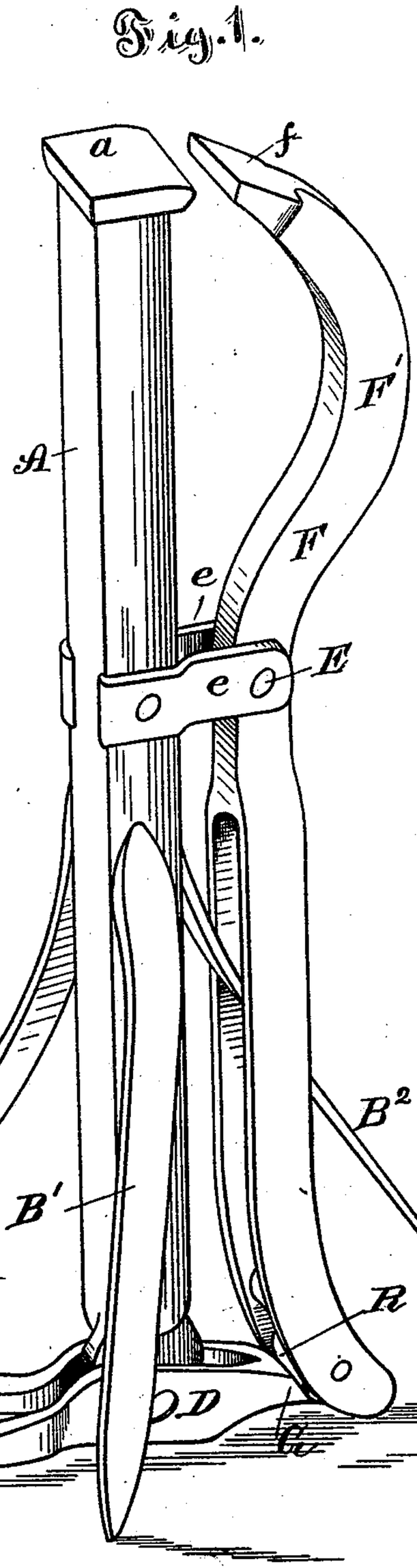

Fig. 2.

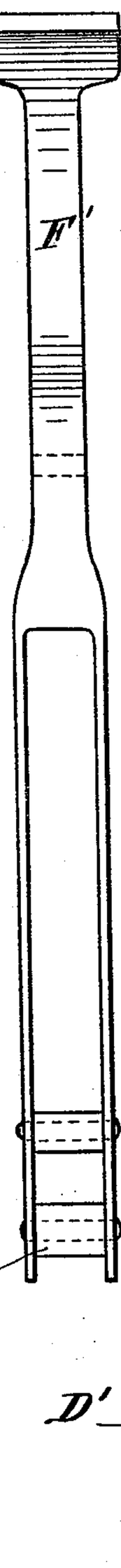

Fig. 3.

WITNESSES

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BLACKSMITH'S VISE.

SPECIFICATION forming part of Letters Patent No. 521,505, dated June 19, 1894.

Application filed January 31, 1893. Serial No. 460,377. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR LENNON, a citizen of the United States, residing at Fayette, county of Fulton, State of Ohio, have invented a certain new and useful Improvement in Blacksmiths' Vises; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to blacksmiths' vises, and has for its object an improved form of vise, in which great stability, quick action of the clamping jaws, and a firm grip between the jaws, are secured with very light weight of the machine, thus enabling it to be made in a form, such that it can be easily lifted from one place to another in the shop in accordance with the requirements of the user.

This vise is made entirely detached from the anvil, or any other support outside of itself, and is light and easily handled.

In the drawings, Figure 1, represents the vise in perspective. Fig. 2, shows a front view of the swinging jaw; Fig. 3, a side view of the treadle.

A, indicates the main or anvil standard, which may be called the standard supporting the fixed jaw *a;* this is preferably made of a square bar of steel or iron, and is supported by three standards or legs B, B′, B^2; these standards are secured to the main or body part A, of the vise, preferably by welding them to it. They support the body part of the vise and hold it clear from the floor; the foot end of each leg terminates in a sharp point, so that when in use the points of the legs take into the floor sufficiently to prevent the vise from bounding or recoiling when the upper end of it is struck by a hammer.

To the standard A, at about its middle part are secured two ears or lugs *e*, between which is pinned the movable jaw F. The upper end of the movable jaw F, above the pin E, reaches to the height of the fixed jaw *a*, in a curve providing a considerable opening between A and F, underneath the jaws *a*, *f*, and also providing a quantity of metal in the upper part of F, which serves as a weight to hold the jaws *a*, *f*, apart from one another when they are not held together by the user. The lower end of the jaw F, is provided with a long slot through which the leg B^2, passes. Across the lower end of this slot S, is a pin and friction roll R, with which engages the curved end G, of the treadle D.

To the lower end of the standard A, is hung a treadle D, of which one end D′, presents a a surface adapted to receive the foot of the user; the other end of the treadle D, engages with the roller R, and it terminates with a curved cam shaped bearing which pushes the lower end of the arm F, outward as the end D′, of the treadle is depressed.

The standard A, supported as described on three spreading and pointed legs furnishes a very firm resistance to the stroke of the hammer of the user and does not let it rebound. The heavy rearwardly extending portion F′, of the arm F, overbalances the slotted and lighter lower end, and causes the jaws to remain normally open, while the cam shaped wiper treadle enables the user to close the jaws quickly and very firmly.

What I claim is—

1. In a blacksmith's vise, the combination of a swinging jaw pivoted to the fixed jaw and provided with a fork terminating its lower end, between the prongs of which one leg of the tripod supporting the fixed jaw extends, a cam lever pivoted to the fixed jaw, a friction roller supported by the extreme lower ends of the fork of the swinging jaw and adapted to engage with the cam surface of said lever, substantially as and for the purpose specified.

2. In a blacksmith's vise, the combination of supports pointed at their lower ends, a fixed jaw rising from below through the standards, terminating at its upper end with an anvil face, and at its lower end with a support for a lever, a lever pivoted to said lower end, a swinging jaw hinged to said fixed jaw, provided below the hinge pivot with a fork, between the sides of which one of the supporting standards extends, and a roller bearing supported at the lower end of the swinging jaw adapted to engage with said lever and be moved outward by the same, thereby closing the grip of said jaws, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

ARTHUR LENNON.

Witnesses:
JOS. HARRISON,
HERBERT J. PRAYER.