

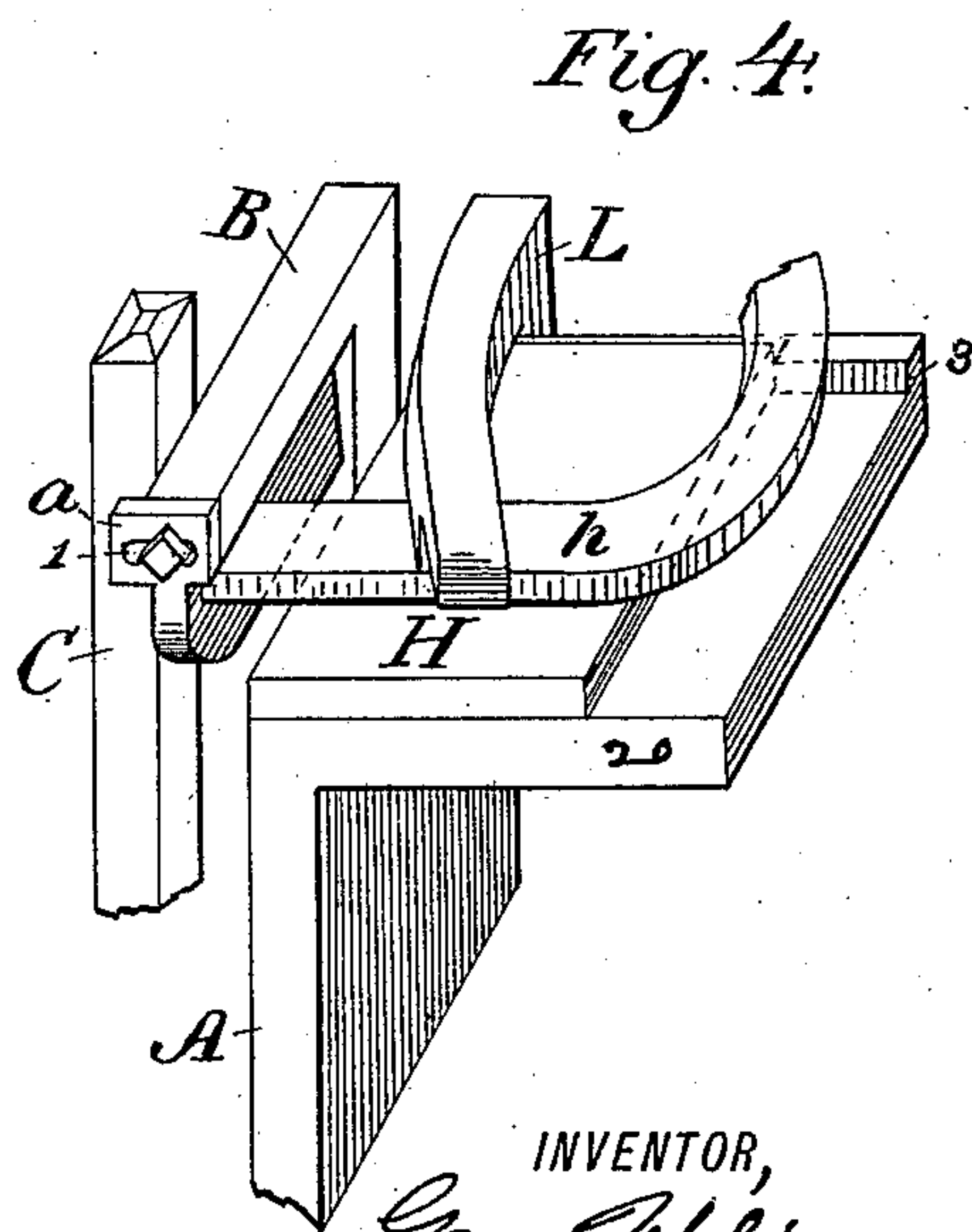
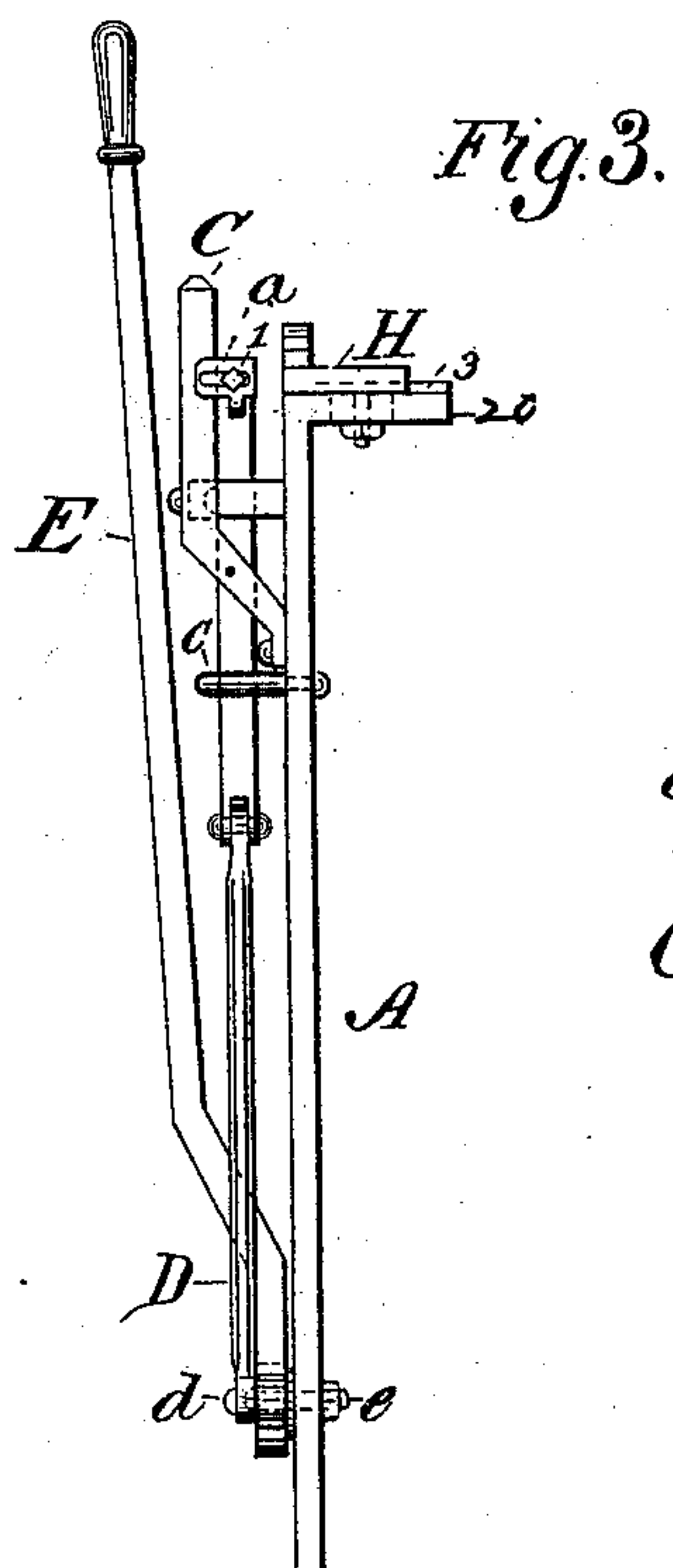
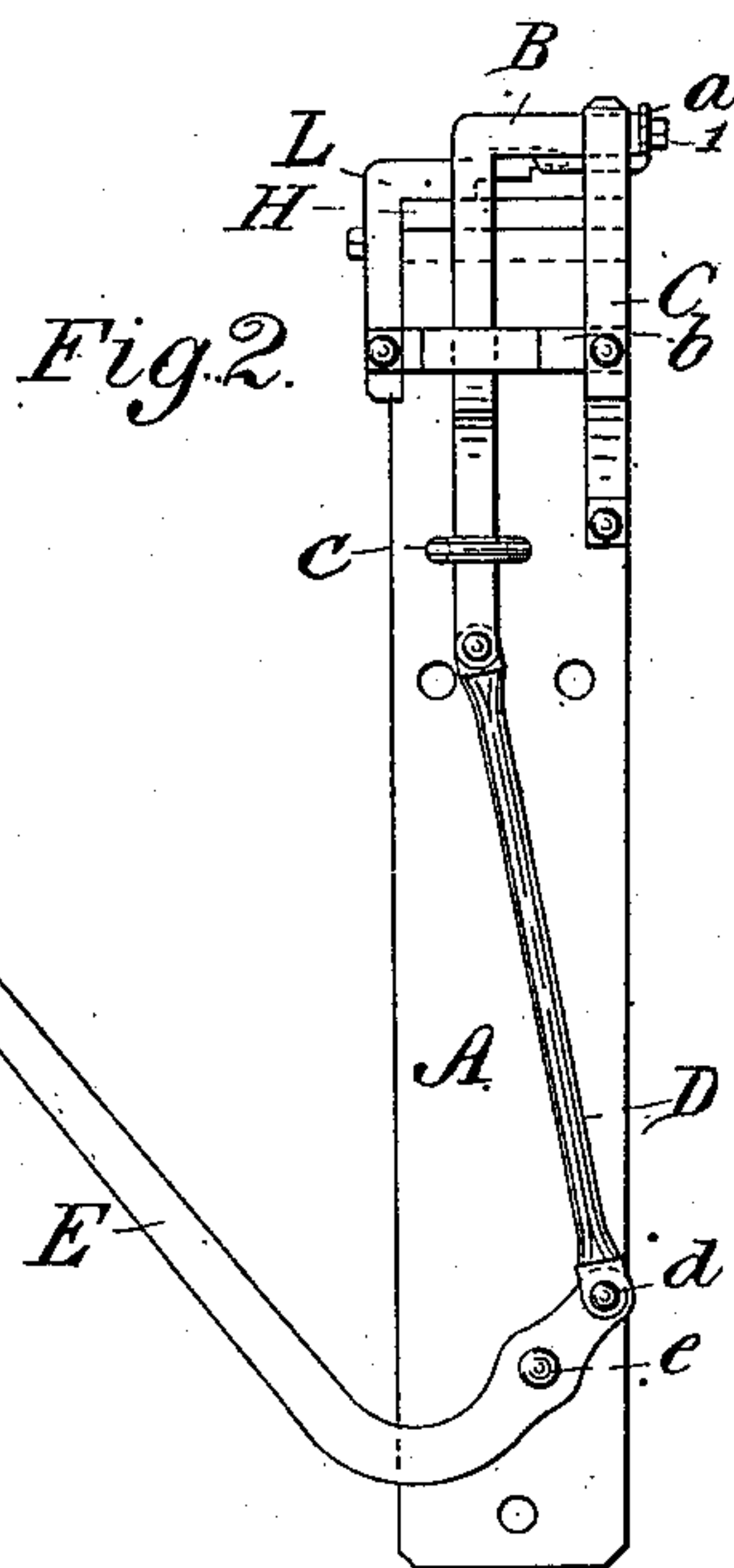
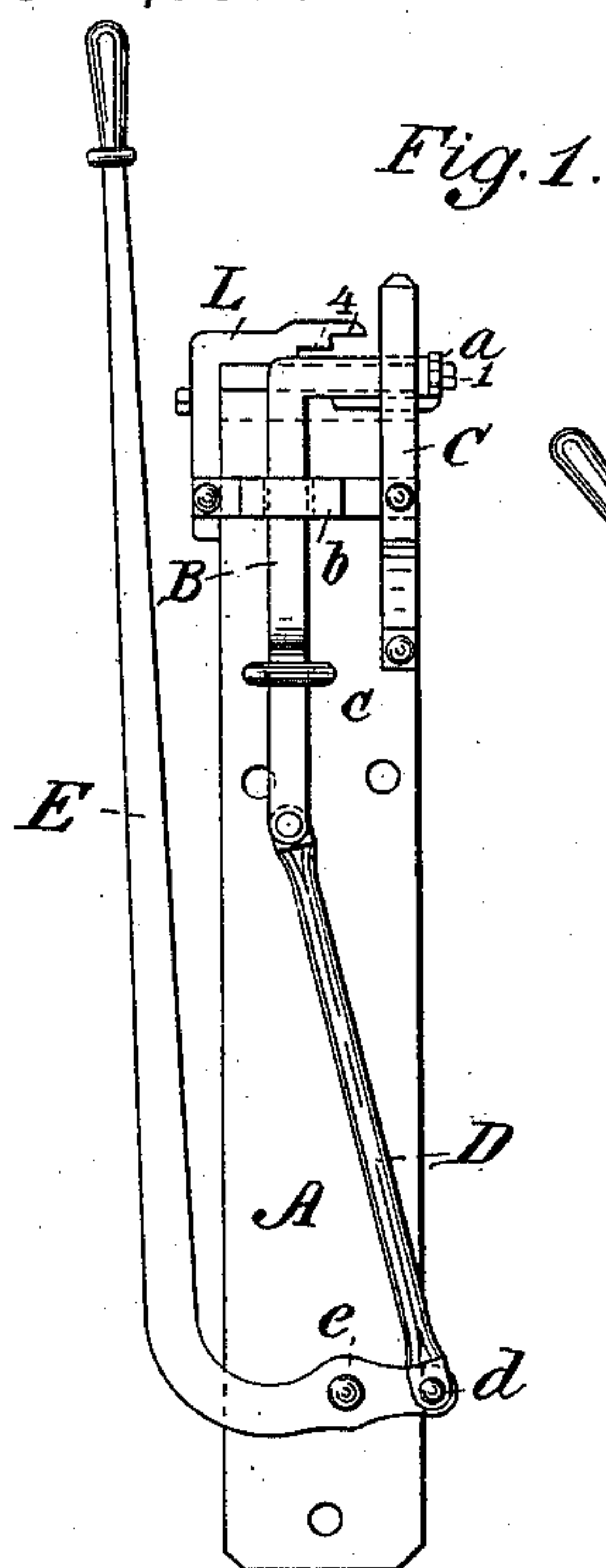
(No Model.)

G. UHLIN.

MACHINE FOR FORMING THE HEEL CALKS OF HORSESHOES.

No. 360,932.

Patented Apr. 12, 1887.



WITNESSES:

Richd W. Yake
J. P. Rhodes

INVENTOR,

Geo. Uhlin
BY *J. P. Rhodes*
ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE UHLIN, OF ROSEDALE, ASSIGNOR OF ONE-HALF TO THOMAS ROE,
OF RED CLOVER, KANSAS.

MACHINE FOR FORMING THE HEEL-CALKS OF HORSESHOES.

SPECIFICATION forming part of Letters Patent No. 360,932, dated April 12, 1887.

Application filed November 23, 1886. Serial No. 219,546. (No model.)

To all whom it may concern:

Be it known that I, GEORGE UHLIN, of Rosedale, Wyandotte county, Kansas, have invented a new and Improved Horseshoe-Heeling Machine, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a new and improved hand-power machine for turning the heels of horseshoes; and the object thereof is to provide a machine of this class which will be simple in construction and convenient to use.

The invention may be said to consist in the novel construction, combination, and co-operating arrangement of the different parts hereinafter set forth, and pointed out in the claims.

In the drawings, which illustrate the manner of carrying out my invention, Figure 1 is a side elevation of the machine with the parts in position after a bending stroke has been made. Fig. 2 is a like view with the parts in position to make a stroke, or just after a heel has been formed and the shoe removed from the machine. Fig. 3 is a view of the machine at right angles to that shown in the first-mentioned figures, and looking toward the right-hand side thereof; and Fig. 4 is a detail view of the bending mechanism of the machine.

A represents the main framing-plate of the machine, which is preferably to be bolted to the anvil-block, so as to be convenient to the farrier's use; and on the side that is opposite the block a bending-head, B, is mounted in suitable guides or stirrups, (b and c, respectively,) so that it may be moved up and down a limited distance by the action of an operating-handle.

E is the operating-handle, the lower end of which carries the lower end of a connecting-rod, D, and which is pivoted to the framing-plate at e. At a point that is near to the pivot e the handle or lever E is turned upward at or near a right angle to its remaining portion, so that it may be conveniently reached by the operator of the machine. The lower end of the bending-head B is pivotally connected to the upper end of the connecting-rod D by means of a bolt or similar device, and the said head is thereby securely connected to the operating-handle, as shown. The upper portion of the bending-head is bent to one side at a

right angle to its vertical portion, so that it may be caused to press down upon a piece of iron that may be located beneath it, as will be more fully explained further on. Upon the upper end of the framing-plate A, which is bent outwardly at a right angle to its vertically-located body, I arrange a bending-table, H. This table is made adjustable for different sizes of iron farther from or nearer to the working side of the bending-head; and to guide it while being adjusted, and after adjustment to hold it in position, I provide one edge of the horizontal portion 20 of the framing-plate with an upwardly-projecting flange, 3, against which one edge of said table bears. Of course, however, I may make the horizontal portion 20 of the framing-plate separate from the vertical portion, and secure it thereto in some way without departing from the invention. Still I prefer the construction shown, with the upper portion bent at a right angle to the main body, as it is very strong. Said table can be adjusted in any desired way—as, for instance, by a slot in the horizontal portion of the framing and a bolt carried by the table and located in the slot.

C is a stationary brace or guide rigidly secured to the side of the framing-plate A, and located outside of and projecting some distance above the horizontal portion of the bending-head B. Its purpose is to guide the said head in a vertical plane when said head comes in contact with the iron to be bent; for, were it not for this guide, the bending-head would be displaced laterally during the bending operation, and the result would be a badly-formed heel.

To illustrate the adjustment of the table H for different sizes of iron, I will say that if iron having a thickness of five-eighths of an inch is to be used, then the table will be set just five-eighths of an inch from the inner side of the bending-head B.

For the purpose of allowing different lengths of heel to be made on this machine, I locate an adjustable gage, a, upon the bending-head B, as shown. One end of the gage a is provided with a slot, I, (one,) and a set-screw is passed through the slot into the free end of the bending-head, and which may be loosened and tightened up, as desired, to set the gage. The main portion of the gage a is bent upward so

as to be located below the horizontal portion of the head, and so that it may intercept the end of the iron when the same is to be operated on. Thus it will be seen that when a very long heel is to be made the gage *a* is placed as far away as possible from the bending-edge of the table H; and in a similar manner, when a very short one is to be formed, the said gage is to be located quite near the said edge of the table. If desired, the gage *a* may be removed altogether, and the end of the iron *h* can be pushed in until its end comes in contact with the inner surface of the guide C, and thus permit extra long heels to be turned. For the purpose of holding the iron down upon the table while a heel is being formed, I locate a rectangular brace, L, upon the edge of the framing-plate that is nearest the operating-handle, so that its upper portion will project over the table some distance. The part it takes in the operation of the machine is as follows: When the handle E is forcibly raised to the position shown in Fig. 1 from that shown in Fig. 2, the horizontal portion of the bending-head B will turn the end of the iron or shoe *h* downward at a right angle to the main portion, which lies on the table H, and thereby form a complete heel at a single stroke; but, were it not for the presence of the brace L, under which the iron has previously been inserted, the powerful pressure of the head would cause the iron to raise off the table, and an imperfect heel would be the result.

To permit different sizes of iron to be inserted beneath the brace L, I may make it adjustable on the framing-plate, or I may provide its under side, which comes into contact with the iron, with a series of one or more steps or recesses 4, as shown.

Having thus described my invention, what I claim is--

1. A horseshoe-heeling machine composed of a main framing-plate, a bending-table mounted on the upper portion of said plate, a vertically-reciprocating bending-head, a guide for said head to prevent its displacement during the bending operation, an operating-handle, and suitable connections between the operating-handle and the bending-head, substantially as described.

2. The combination, in a horseshoe-heeling machine, of the main framing-plate, a vertically-reciprocating bending-head, and a bending-table mounted on the upper portion of the framing-plate and capable of adjustment in relation to said bending-head.

3. The combination, in a horseshoe-heeling machine, of a vertically-reciprocating bending-head and an adjustable gage mounted upon said head.

4. The combination, with the framing-plate A, of the bending-head B, guide C, table H, rectangular brace L, operating-handle E, and connections between the operating-handle and the bending-head.

5. The combination, with framing-plate A, of bending-head B, guide C, table H, rectangular brace L, gage *a*, located on said bending-head, operating-handle E, fulcrumed at *e* to said framing-plate, and rod D, pivoted at *d* to said handle and at its upper end to the bending-head.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE UHLIN.

Witnesses.

THOS. B. MCAULEY,
JNO. I. HAY.