(No Model.)

G. B. BROWNSON.

PIPE BENDING MACHINE.

No. 361,487. Patented Apr. 19, 1887.

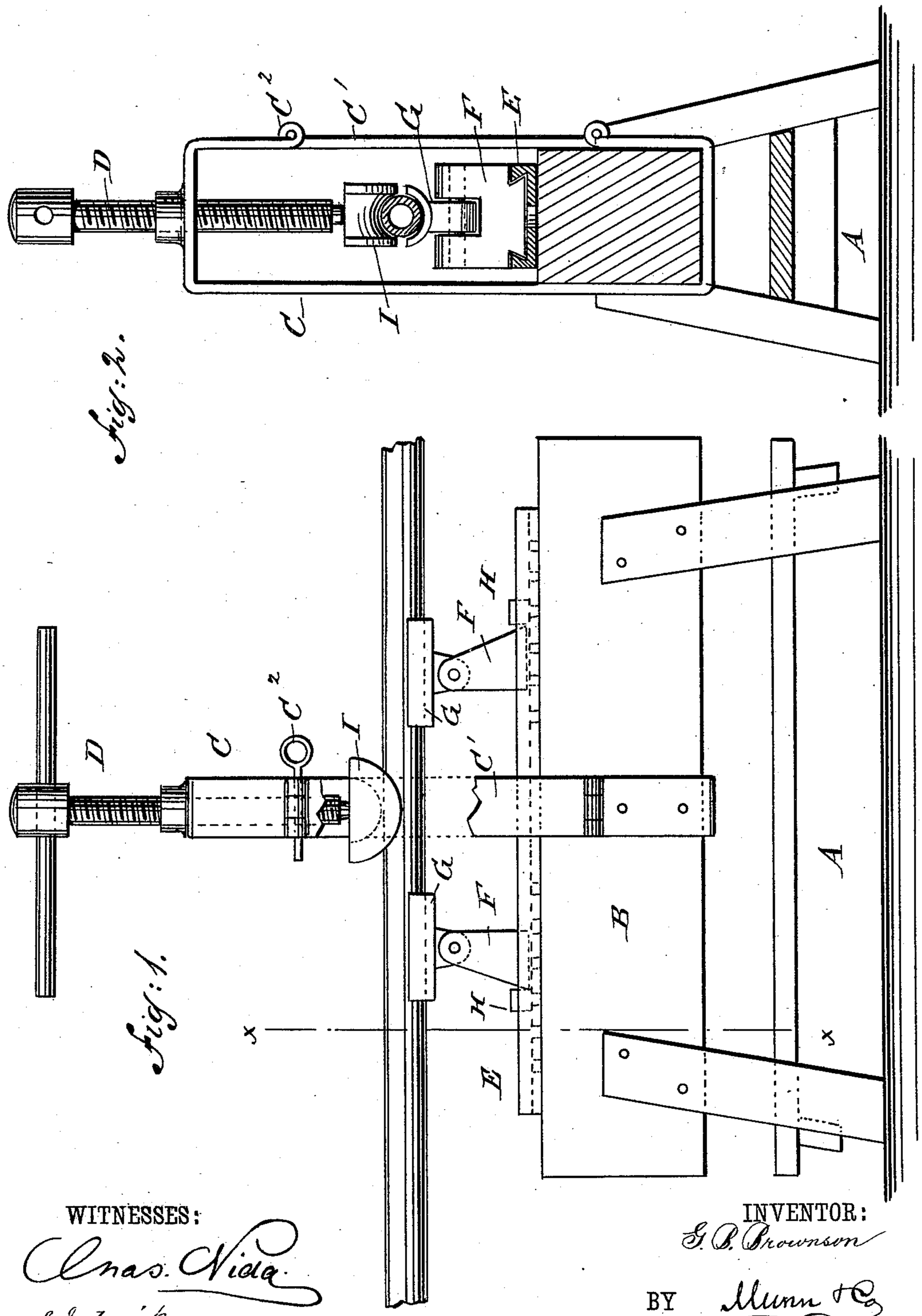

Fig: 2.

Fig: 1.

WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE B. BROWNSON, OF NORTH SPRINGFIELD, MISSOURI, ASSIGNOR TO HIMSELF AND JAMES R. McCABE, OF SAME PLACE.

PIPE-BENDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 361,487, dated April 19, 1887.

Application filed January 28, 1887. Serial No. 225,794. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. BROWNSON, of North Springfield, in the county of Greene, and State of Missouri, have invented a new and Improved Pipe-Bending Machine, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved pipe-bending machine which is simple and durable in construction and very effective in operation.

The invention consists in the construction and arrangement of various parts and details, and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of my improvement with parts broken out, and Fig. 2 is a sectional end elevation of the same on the line *x x* of Fig. 1.

A suitable frame, A, supports the bed-plate B, on which is secured, in the middle, the frame C, in the top-plate of which screws the screw D.

The bed-plate B supports the bottom plate, E, having a longitudinal dovetailed groove, in which are adapted to slide the heads F, on the upper end of each of which is pivoted the supporting-block G, having a half-round groove for the reception of the pipe to be bent. The sliding heads F are held in place by pins H, inserted in apertures formed in the bottom plate, E.

The frame C is provided on one side with a pivoted drop-plate, C′, held in place by a pin, C^2, which, when removed, permits of opening the side drop-plate, C′, for the insertion of very crooked pipes.

The semicircular bending-block I is straight on its top, and is provided with a semicircular groove in its rim.

The operation is as follows: The pipe J to be bent is placed on the supporting-blocks G, which are placed at such a distance as to correspond to the bend to be given to the pipe. The bending-block I is then placed on top of the pipe J, with its groove fitting into the pipe, the center of its straight top being directly under the end of the screw D. The latter is then moved downward by hand, hydraulic power, steam-power, or other suitable means. The pressure exerted by the screw D against the block I causes the bending of the pipe, and the blocks G, turning on the pivots, follow the bent pipe. The semicircular shape of the block I permits of bending the pipe J into a U shape, if desired.

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

1. In a bending-machine, the combination, with a semicircularly-grooved block receiving a downward motion, of two grooved supporting-blocks placed one at each side of the said semicircular block, and adjustable heads on which the said supporting-blocks are pivoted, substantially as shown and described.

2. In a bending-machine, the combination, with a semicircularly-grooved block and means, as described, for moving the said block downward, of grooved supporting-blocks placed at the sides of the said semicircular block, and longitudinally-adjustable heads on which the said supporting-blocks are pivoted, substantially as shown and described.

3. In a bending-machine, the combination, with a semicircularly-grooved block and means, as described, for moving the said block downward, of grooved supporting-blocks, dovetailed heads on which the said supporting-blocks are pivoted, and a dovetailed bed-plate in which the heads are held and can slide, substantially as shown and described.

4. In a bending-machine, the combination, with a semicircularly-grooved block and means, as described, for moving the said block downward, of grooved supporting-blocks, dovetailed heads on which the supporting-blocks are pivoted, a dovetailed bed-plate having apertures in which the said heads can slide, and pins fitting into the said apertures for holding the said heads in place, substantially as shown and described.

GEORGE B. BROWNSON.

Witnesses:
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