

(No Model.)

M. K. PIERCE.

MACHINE FOR FORMING AND THREADING SHEET METAL PIPES.
No. 326,516. Patented Sept. 15, 1885.

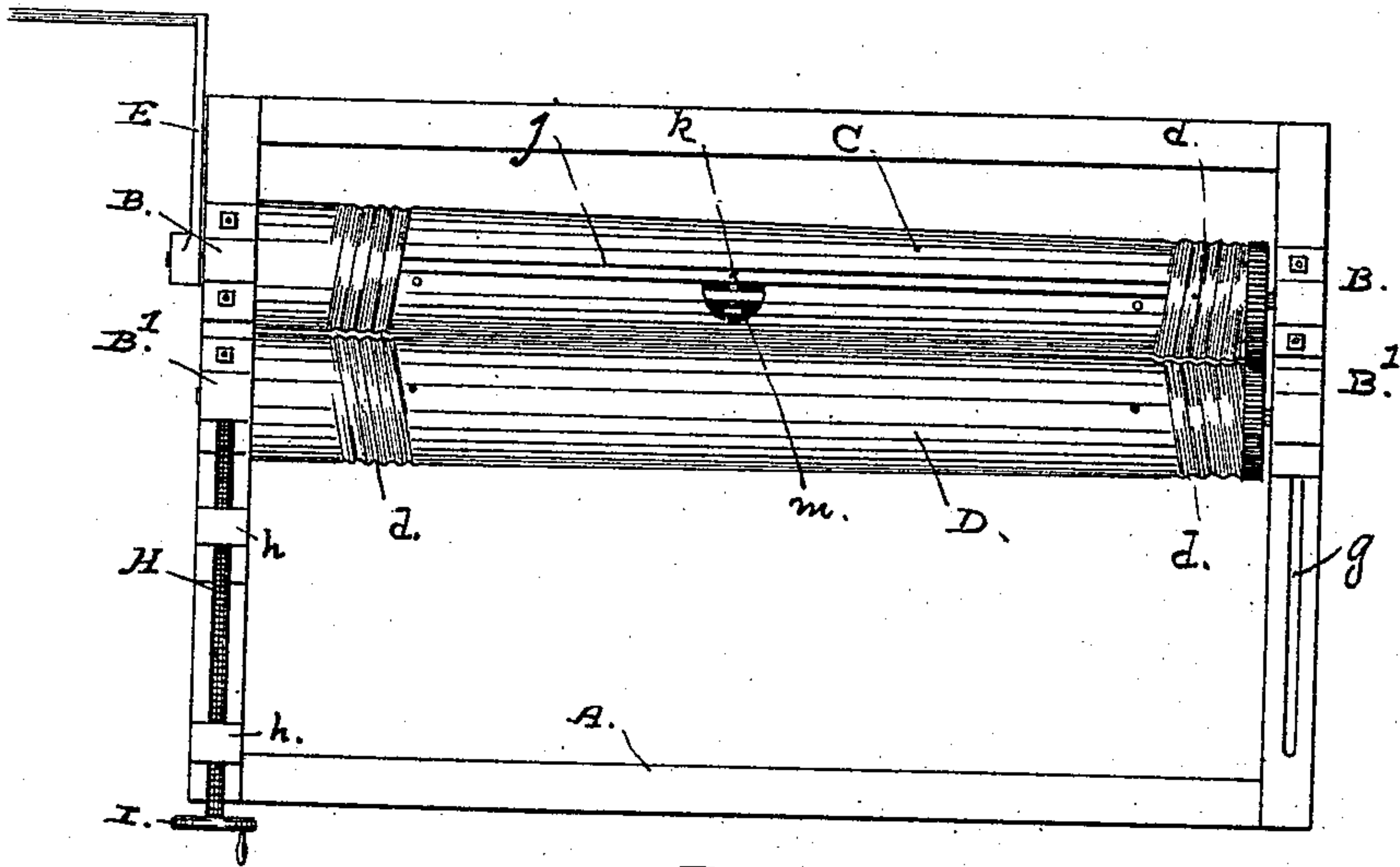


Fig. 1.

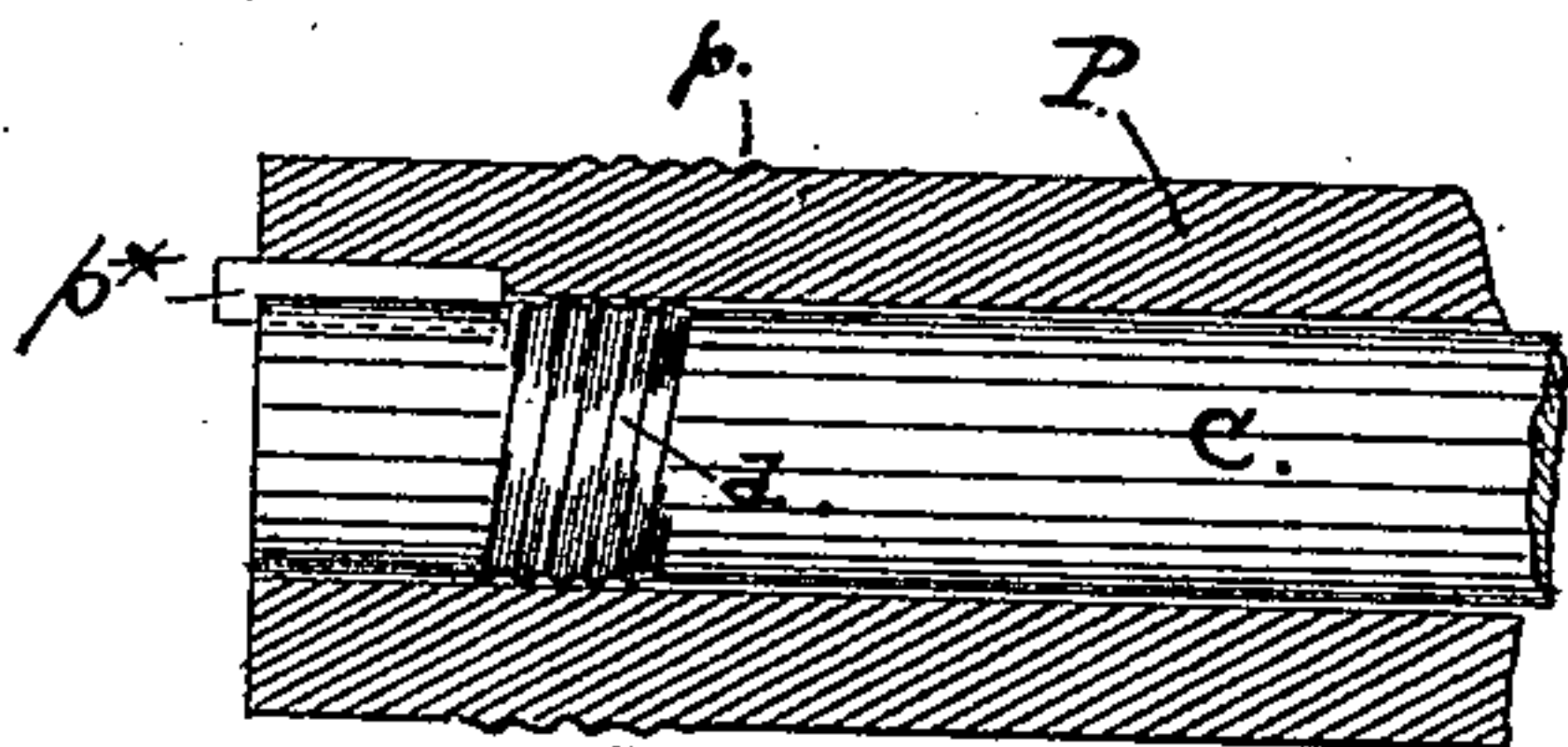


Fig. 3.

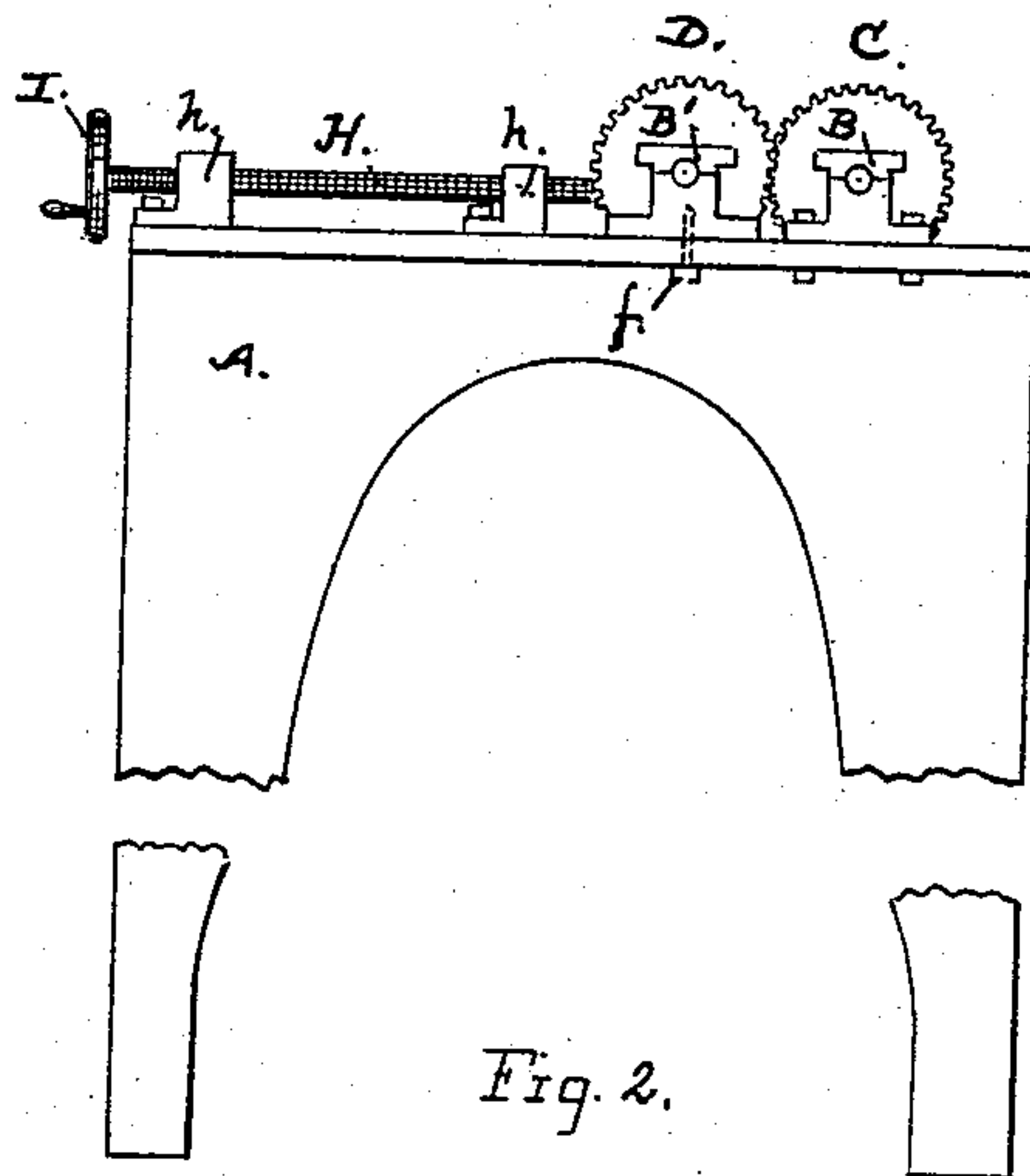


Fig. 2.

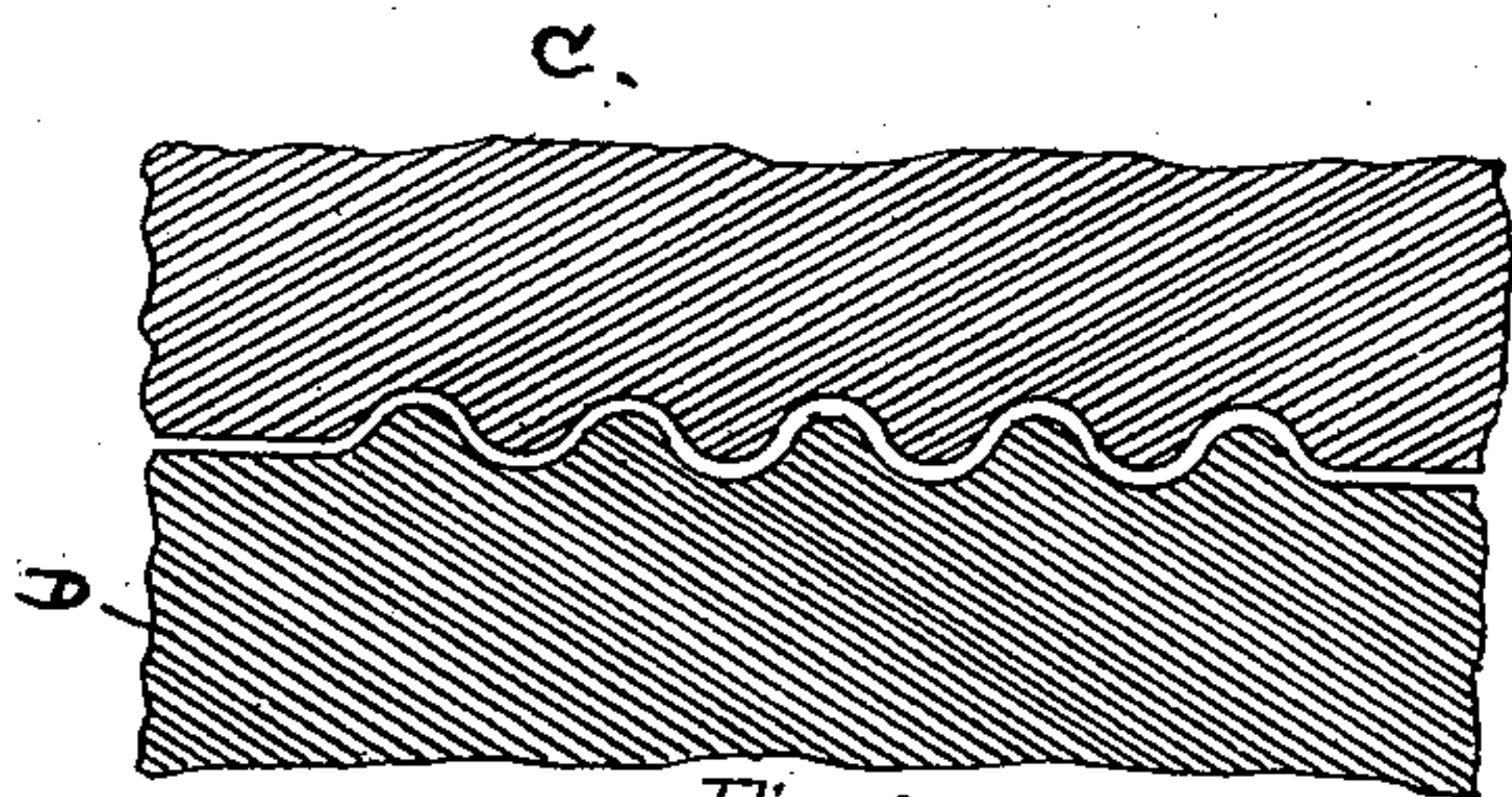


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

MORTIMER K. PIERCE, OF PERRYVALE, ASSIGNOR OF ONE-HALF TO
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MACHINE FOR FORMING AND THREADING SHEET-METAL PIPES.

SPECIFICATION forming part of Letters Patent No. 326,516, dated September 15, 1885.

Application filed March 25, 1884. (No model)

To all whom it may concern:

Be it known that I, MORTIMER K. PIERCE, a citizen of the United States, residing in Perryvale, county of Syskijon, and State of California, have invented certain new and useful Improvements in Machines for Forming and Threading Sheet-Metal Pipes; 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.

My invention relates to machinery for forming threads upon the ends of sheet-metal pipes; and it consists in certain improvements upon the machine which was patented to me on the 14th day of June, 1870, the nature whereof and their operation are herein-after fully set forth.

In the accompanying drawings is shown a machine embodying my said improvements, Figure 1 being a plan, Fig. 2 an end elevation, and Figs. 3 and 4 sections in detail of the rolls.

A represents a suitable bench with an open center, and with boxes B B B' B' upon the ends or shorter sides. One set of these boxes B is fixed and the other is movable. The rolls C D are mounted in the bearings thus provided, and are geared together at one end. A crank, E, on the other end of one of the rolls is used to rotate them. The roller D is adjustable toward and from the roller C, one box being held by a set-screw, *f*, working through the slot *g* in the bench, while the other is movable by means of a screw-shaft, H, that is mounted in bearings *h h* upon the end of the bench, that has a hand-wheel, I.

The roll C has a long slot, *j*, with a clamping-bar, *k*, inserted in it, and a screw, *m*, in a recess forms the means for moving the bar up against the edge of the strip of material to be rolled up. This clamp confines the material during the operation of forming and threading the pipe.

The clamping device above described is shown and described fully in a patent granted

to me on the 14th day of June, 1870, No. 104,196, and as I do not claim it broadly in this patent I do not deem it necessary to more fully describe or illustrate it.

The rolls have spiral grooves *d d* at the ends and a smooth-surface portion between, the grooves of one roller being in line with and taking into the grooves of the other roll.

To form and thread pipes of different sizes in the one machine I provide separate hollow rolls or sleeves P with threaded portions *p*, and of suitable diameter to slip over and be fixed upon the rolls by means of a groove and spline, as shown at *p**, Fig. 3. By setting out the roll from the other one of the pair these cylinders P can be applied to increase the size of the rolls and produce a threaded pipe of the required diameter.

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

1. In a machine for forming and threading sheet-metal pipe, the combination of a hollow roll having a threaded portion and a smooth or unthreaded part with a roll of smaller diameter having a threaded portion and a smooth or unthreaded part over which the hollow roll is placed and upon which it is secured, and with an adjustable roll, substantially as and for the purpose set forth.

2. In a machine of the character hereinbefore described, the combination of two rolls having threaded portions at the ends and the smooth or unthreaded parts, one of said rollers having a longitudinal groove, with a clamping-bar and screw, and the other roll being mounted in sliding bearings, whereby the distance between the rolls can be varied, and the slip rolls or cylinders with threaded portions at the ends, and means for securing said cylinders upon the principal rolls.

MORTIMER K. PIERCE. [L. S.]

Witnesses:

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