

(No Model.)

2 Sheets—Sheet 1.

A. STIRK.

EMBOSSING MACHINE.

No. 283,829.

Patented Aug. 28, 1883.

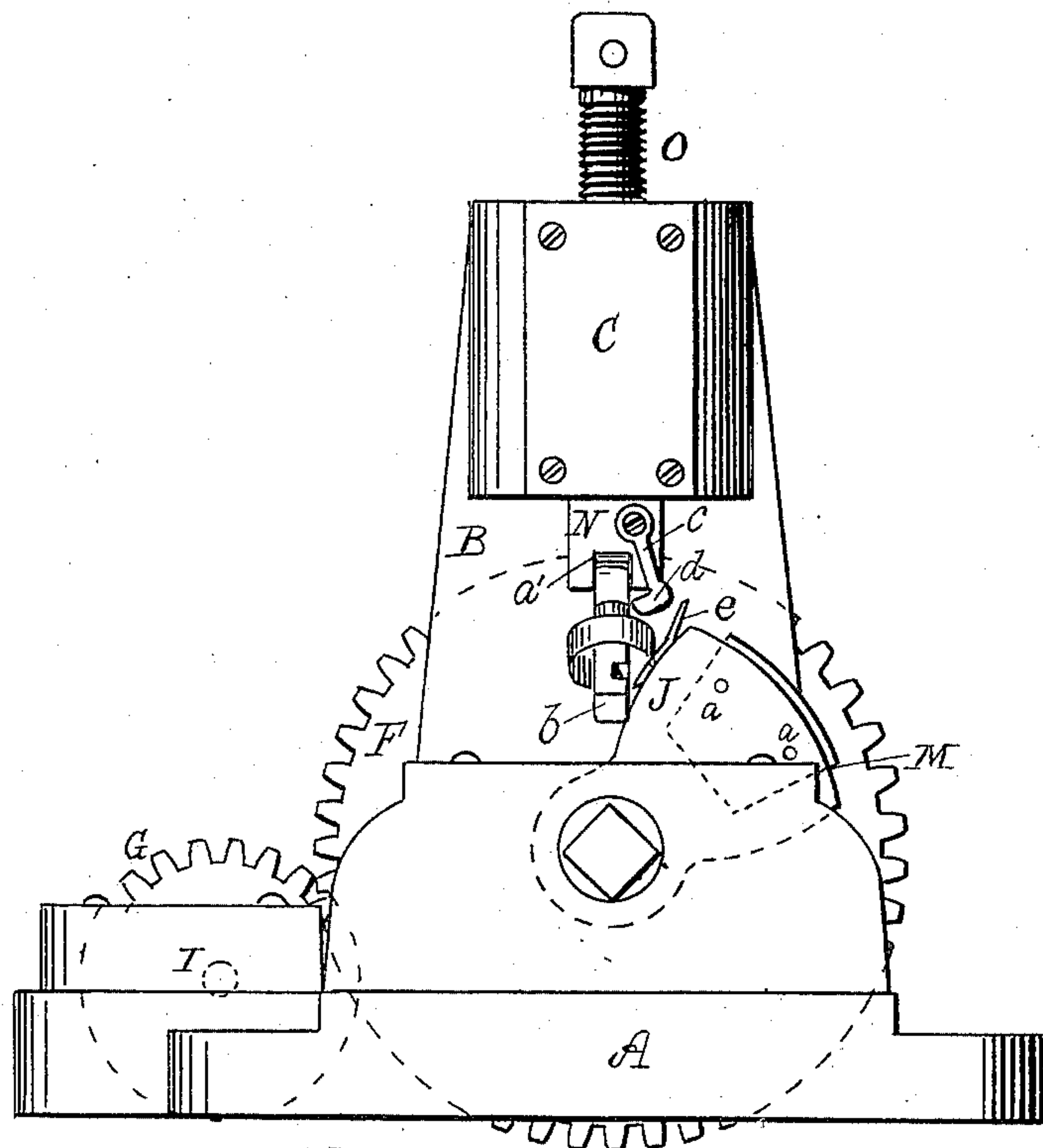


Fig. 1.

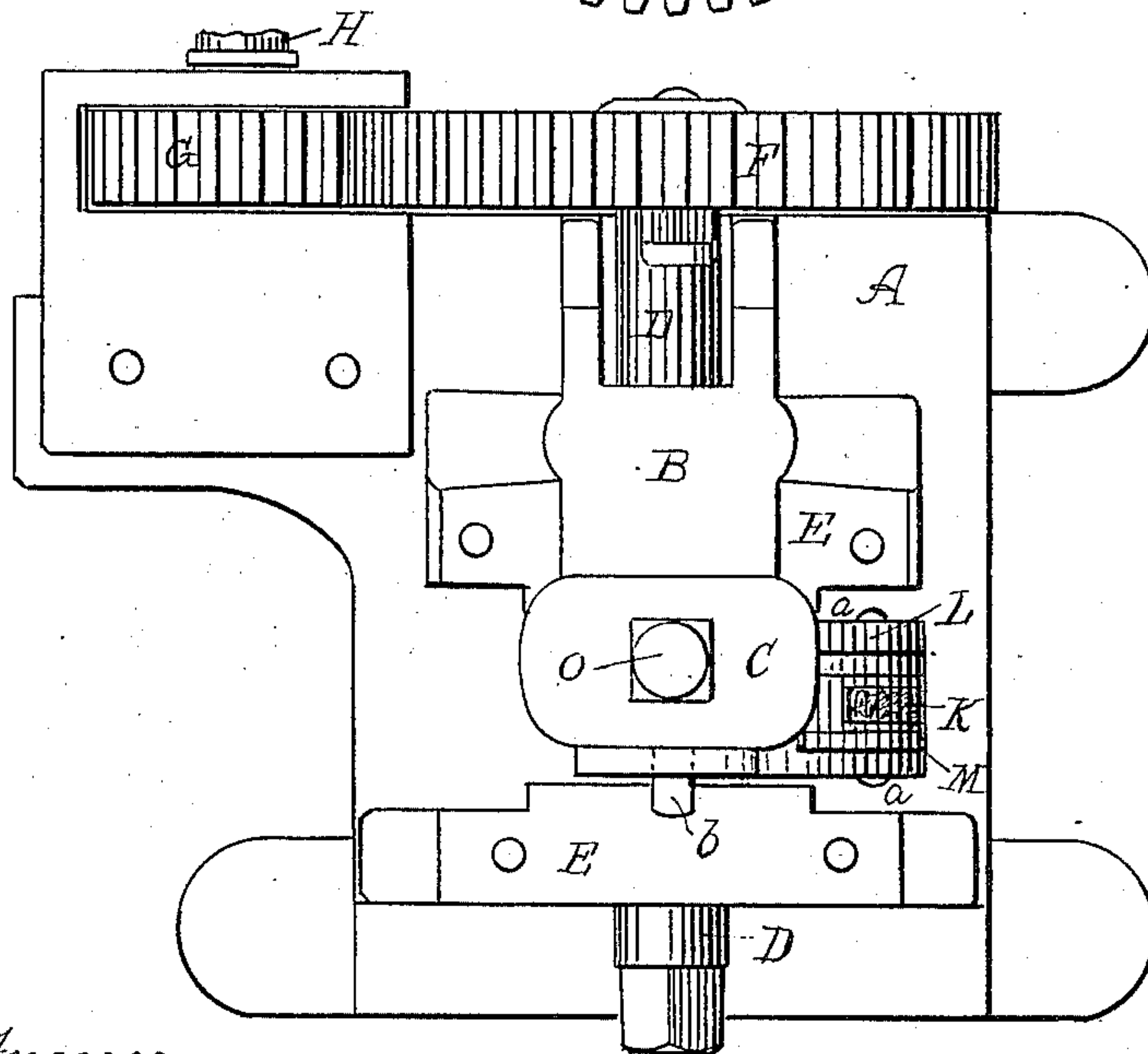


Fig. 2.

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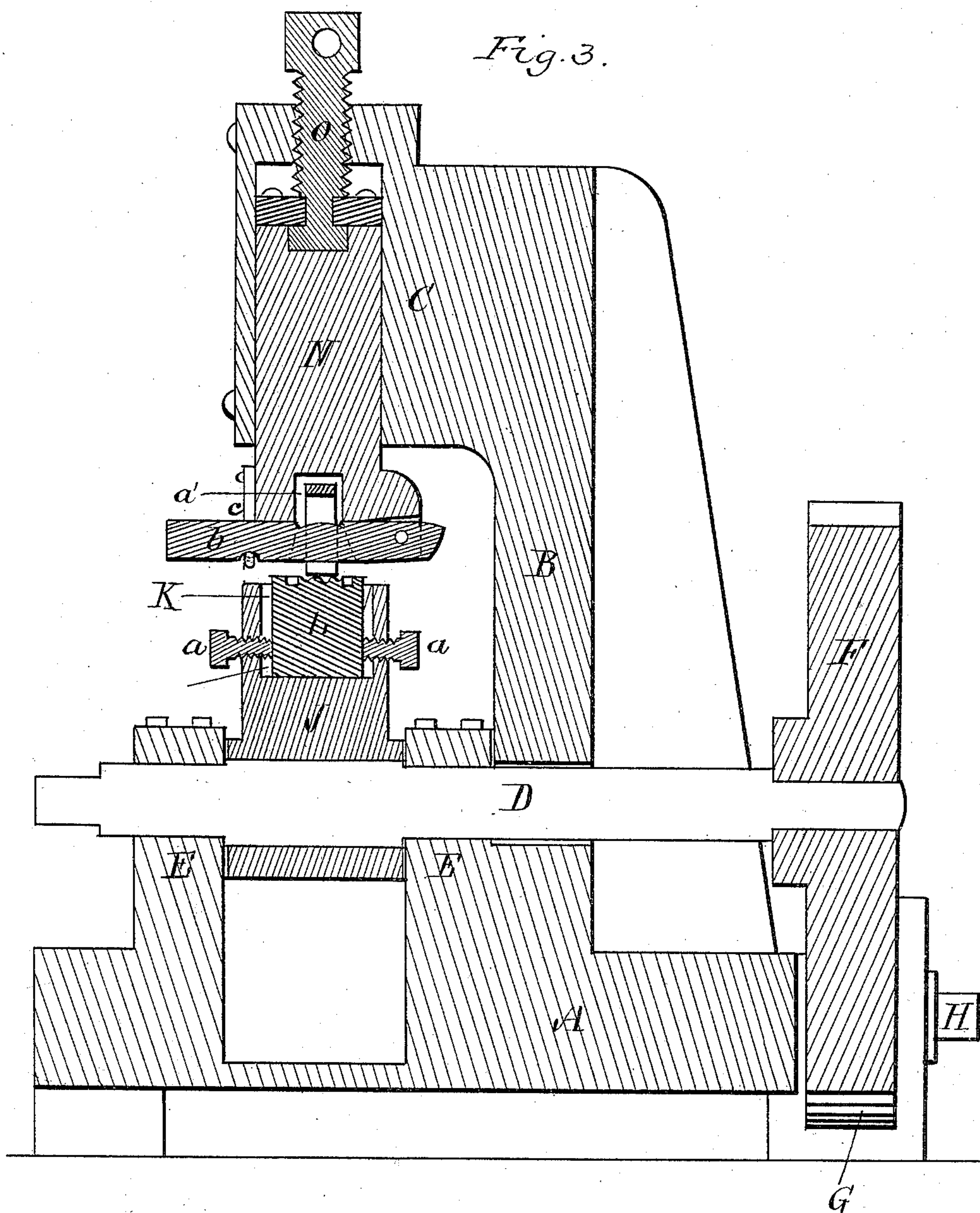
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2 Sheets—Sheet 2.

A. STIRK.
EMBOSSING MACHINE.

No. 283,829.

Patented Aug. 28, 1883.



Witnesses,
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J. Curtis, Atty.

UNITED STATES PATENT OFFICE.

ALBERT STIRK, OF BOSTON, MASSACHUSETTS.

EMBOSSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 283,829, dated August 28, 1883.

Application filed January 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT STIRK, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Embossing-Machines; and I do hereby 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to machinery for embossing finger-rings and analogous articles; and it consists in certain details of construction, as hereinafter explained.

The drawings accompanying this specification represent, in Figure 1, an end elevation, and in Fig. 2 a plan, of an embossing-machine containing my invention. Fig. 3 represents a vertical longitudinal sectional view of the machine, showing the spindle held up out of position to operate.

In said drawings the frame of the machine is shown as composed of a suitable bed-plate, A, having erected upon one side a vertical standard, B, terminating at top in a lateral head, C, overhanging the center of the bed-plate.

D represents a horizontal rotary shaft situated below the head C and supported in bearings E E, erected upon the base-plate A. One end of the shaft D extends through the standard B, and has affixed to it a spur-gear, F, which engages and is driven by a pinion, G, secured to a short driving-shaft, H, mounted in bearings I I, erected upon one corner of the bed-plate A. The shaft D may be driven by power applied to the pinion-shaft H; or the front end of said shaft D may be provided with a square tenon to receive a wrench by which to enable the machine to be driven by hand.

J in the drawings represents a sectoral block or die-carrier, secured at its base to the shaft D, this die-carrier being situated between the bearings E E, before named, and carrying upon its periphery the die K, by which the desired embossing is accomplished. This die K is se-

cured to a block, L, let loosely into a pocket, M, in the top of the sectoral die-carrier J, and adjusted within such pocket by clamp-screws *a*, in order that the position of the carrier and of the die may be changed laterally as circumstances require.

To support a ring while being embossed I employ a carrier in the form of an upright bar, N, contained within vertical ways or guides in the lower part of the head C, and in order to be able to adjust this carrier vertically with respect to the embossing-die to accommodate rings or bands of varying thickness, I swivel the upper end of the carrier N to the lower end of a screw, O, which screws through the top of the head C. The lower end of the carrier N is notched or furcated at its lower end, as shown at *a'*, to receive the ring to be embossed, and to support the ring while undergoing the embossing process I employ a horizontal spindle or bar, *b*, which is pivoted at one end to the rear side of the lower end of the carrier N, and is contained in a slot in the opposite side of such carrier. To uphold the bar *b* while a ring is being embossed I pivot to the front side of the carrier N a swinging latch, *c*, the lower end of which has a tooth or catch, *d*, to take under the free end of the bar *b*. To automatically release the spindle *b*, and allow it to drop and the ring to escape from it, I add to the front side of the sector J a tooth, *e*, which intercepts and releases the latch *c*, and, by allowing the free end of the bar *b* to drop, permits the embossed ring to escape from it.

The operation of this machine is, briefly, as follows, it being understood that the sectoral die-carrier J in its idle position is below and away from the lower end of the carrier N, and the bar or spindle *b* is disengaged from the latch *c*, and standing idle, in readiness to receive a ring to be embossed: The attendant takes a ring to be embossed, slips it over the bar or spindle *b* until it is immediately beneath the notch in the carrier N, when he raises the said bar *b* to a horizontal position and locks it in such position with the latch *c*. The shaft D being in rotation, the sectoral die-carrier rotates past the ring upon the spindle *b*, the die carried by such carrier coming in

contact with the ring upon the spindle and embossing the outer surface of such ring. As the die-carrier passes by the spindle *b* the tooth *e* upon said carrier intercepts and removes the latch *c* from beneath the spindle, and the free end of the latter drops and the ring is discharged from it. The under side of the spindle is a segment of a circle of the diameter of the inside of the ring. The ring tumbles about the spindle as the rocking die carries it along.

I claim—

1. A rotary shaft, and a die-carrier and embossing-die, which turn with said shaft, in combination with a carrier, N, which is notched to receive a ring, and a spindle which is pivoted to said carrier N and adapted to support said ring, and a screw and block for vertically adjusting said carrier and spindle, substantially as set forth.

2. The latch *c*, in combination with the spin-

dle *b* and the spindle-carrier N, said catch being pivoted to said spindle-carrier, substantially as described.

3. In combination, the latch *c*, pivoted to the spindle-carrier and operating to uphold the spindle thereof, and the tooth *e*, carried by the sectoral die-carrier to thrust the latch aside and release the spindle, substantially as described.

4. In combination with the sectoral die-carrier, the embossing-die applied adjustably to the carrier in order to be capable of lateral adjustment, substantially as described.

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

ALBERT STIRK.

Witnesses:

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