

(No Model.)

S. F. BROWN.

WHEEL FOR GROOVING MACHINES.

No. 368,374.

Patented Aug. 16, 1887.

Fig. 1.

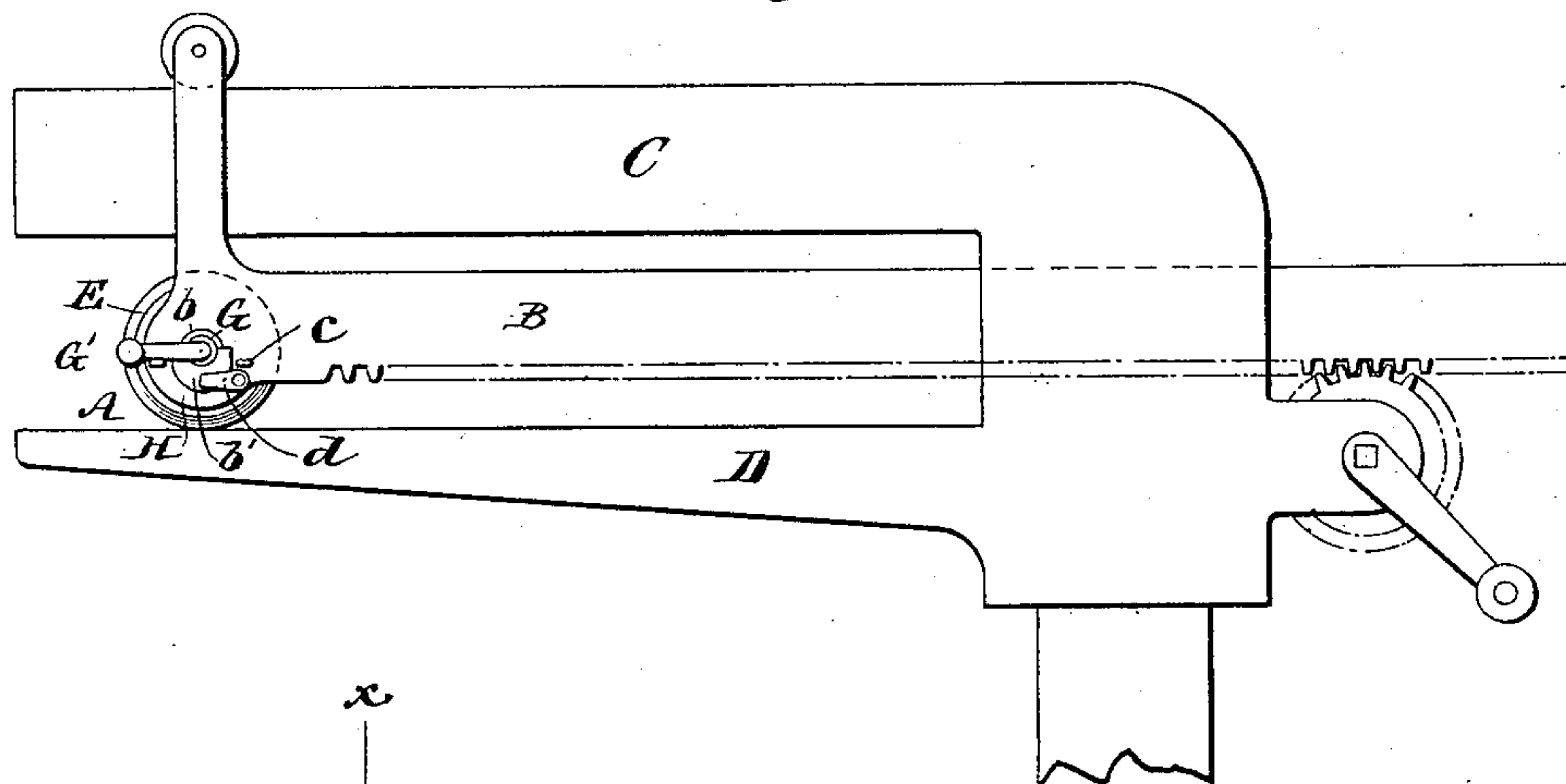


Fig. 2.

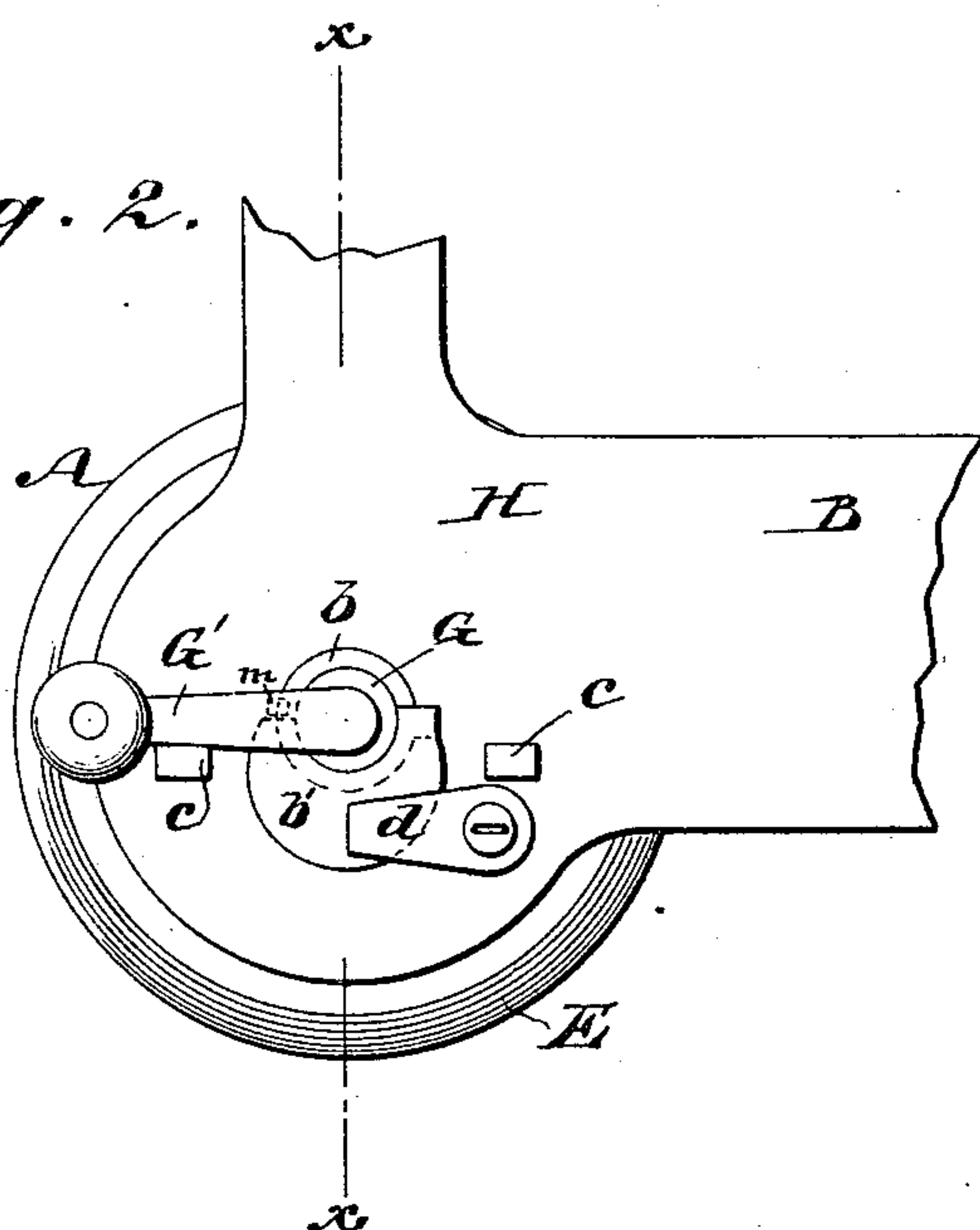
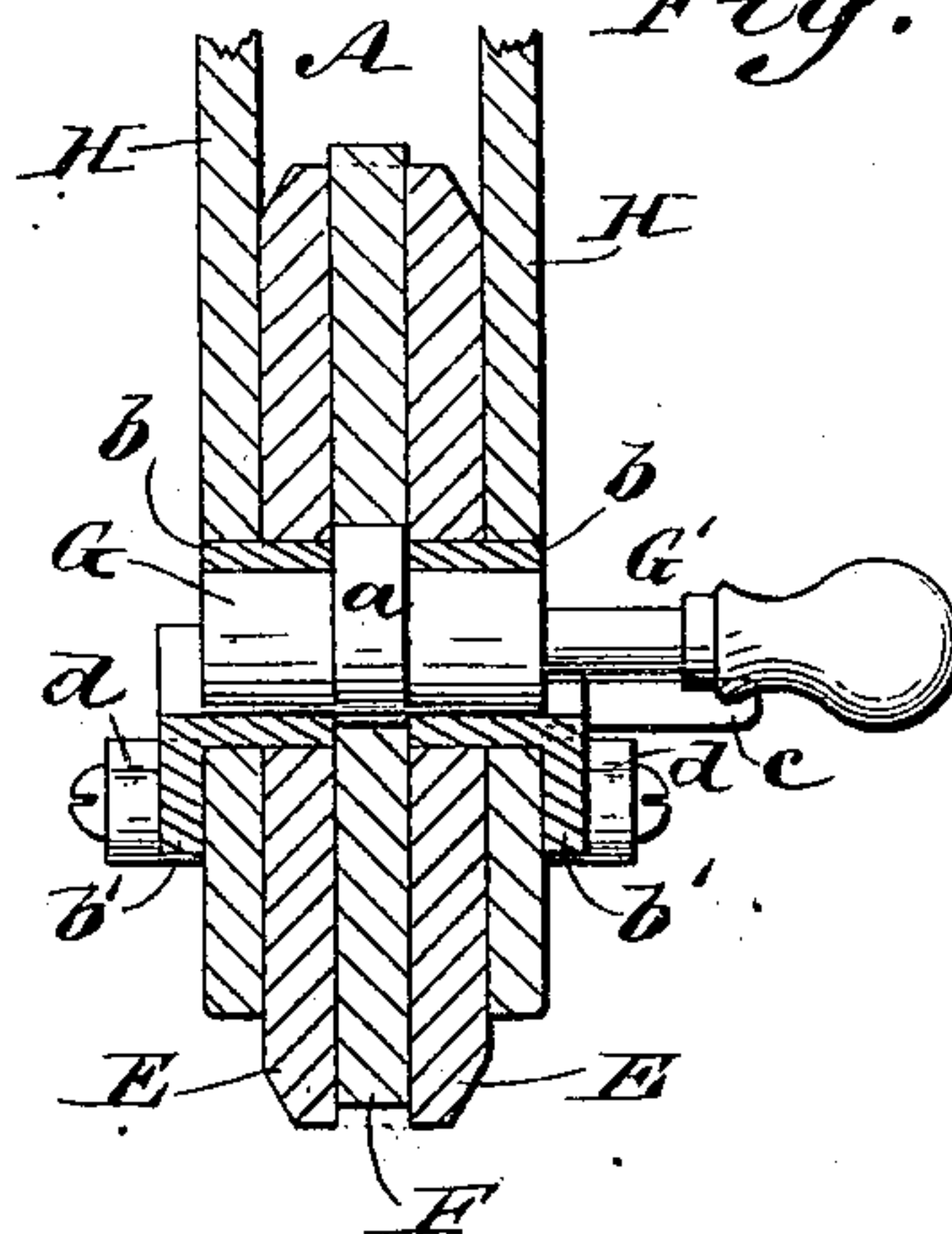


Fig. 3.



WITNESSES:

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SABIN FRANK BROWN, OF DAWSON, MINNESOTA, ASSIGNOR OF ONE-HALF
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WHEEL FOR GROOVING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 368,374, dated August 16, 1887.

Application filed April 5, 1887. Serial No. 233,723. (No model.)

To all whom it may concern:

Be it known that I, SABIN FRANK BROWN, of Dawson, in the county of Lac Qui Parle and State of Minnesota, have invented a new and useful Improvement in Wheels for Grooving-Machines, of which the following is a full, clear, and exact description.

My invention is for the use of tinners and others in grooving together tin and other sheet metal; and the object of the invention is to provide a grooving-wheel whereby the work may be done by passing the wheel once forward and back over the seam. I construct the wheel in three parts, one part being adapted to be lowered to stand flush with the edges of the other parts or raised to form the offset necessary to groove the sheet metal. The movable part of the wheel is acted upon by an eccentric and crank or other suitable device for raising and lowering the same.

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 all the figures.

Figure 1 is a side elevation of a part of a grooving-machine having my invention applied thereto. Fig. 2 is an enlarged side elevation of the arm and wheel; and Fig. 3 is a sectional elevation of the same, taken on the line *x x* of Fig. 2.

My invention relates entirely to the wheel A, which is mounted in the reciprocating bar B, and acts between the parallel arms C D in the usual manner for grooving the sheet metal upon the lower arm, D. This wheel is composed, mainly, of the two cheek pieces or disks E E and the disk F, placed between the said cheek-pieces. The disks E F are placed upon the short axle G, which has an eccentric, *a*, formed in its center. The disks E F are placed upon this axle, as shown clearly in Fig. 3, so that by turning the shaft G the position of the disk F relative to the disks E E may be changed. Upon the shaft G, at each side of the eccentric, are the removable rings *b b*, the outer surfaces of which form the journals for the disks E E, so that they both have a central bearing, while only the central disk, F,

has a shifting axis. The shaft G is adapted to be turned in this instance by the crank G', attached to one end thereof, and the distance of movement is limited to one-half of a revolution by the stops *c c*, attached to one of the side plates, H, between which the disks E F are held, and in which the shaft G and rings *b b* are also held, like the axle or shaft of the ordinary grooving-wheel. The rings *b* are each formed at the outer end with a plate, *b'*, with which a fastening device or button, *d*, engages, as shown clearly in Figs. 1 and 2, so that the rings *b* and the shaft G and the disks composing the wheel may be easily removed from and replaced in and between the plates H H.

By forming the wheel as described the disk F may, by turning the shaft G, be shifted to and from the position shown in full and dotted lines in Fig. 3, in which latter position its periphery stands flush with the peripheries of the disks E, so that the lower edge of the wheel will be practically flat. When raised to the position shown in full lines in Fig. 3, a groove is formed at the lower edge of the wheel, to groove the sheet metal over which the wheel is passed.

The sleeves *b* are prevented from turning with the shaft G by small offsets, *m*, formed on the sleeves, which offsets enter small recesses in the plates H, as shown in dotted lines in Fig. 2.

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

1. The shaft G, formed with the eccentric *a*, in combination with the sleeves or rings *b* and the disks E F, substantially as described.

2. The shaft G, formed with the eccentric *a*, and the disks E F, in combination with the sleeves or rings *b*, flanges *b'*, and the buttons *d*, substantially as and for the purposes set forth.

SABIN FRANK BROWN.

Witnesses:

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