

(Model.)

A. SCHRAY & A. BRAENTIGAM.

MACHINE FOR GRAINING AND DICING LEATHER.

No. 248,220.

Patented Oct. 11, 1881.

Fig. 1.

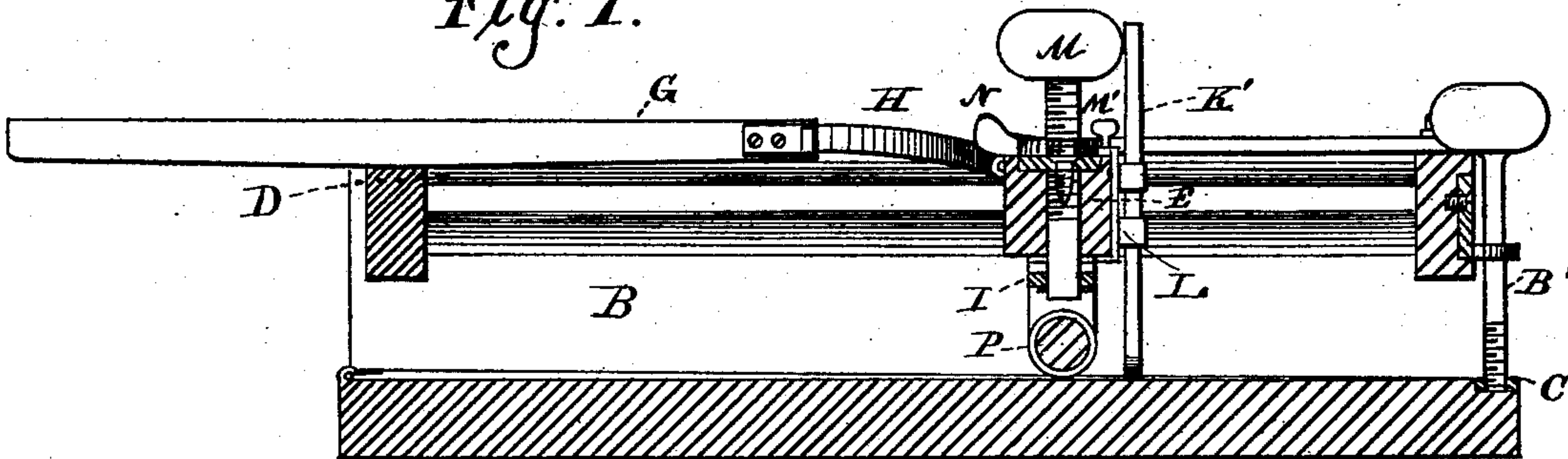


Fig. 2.

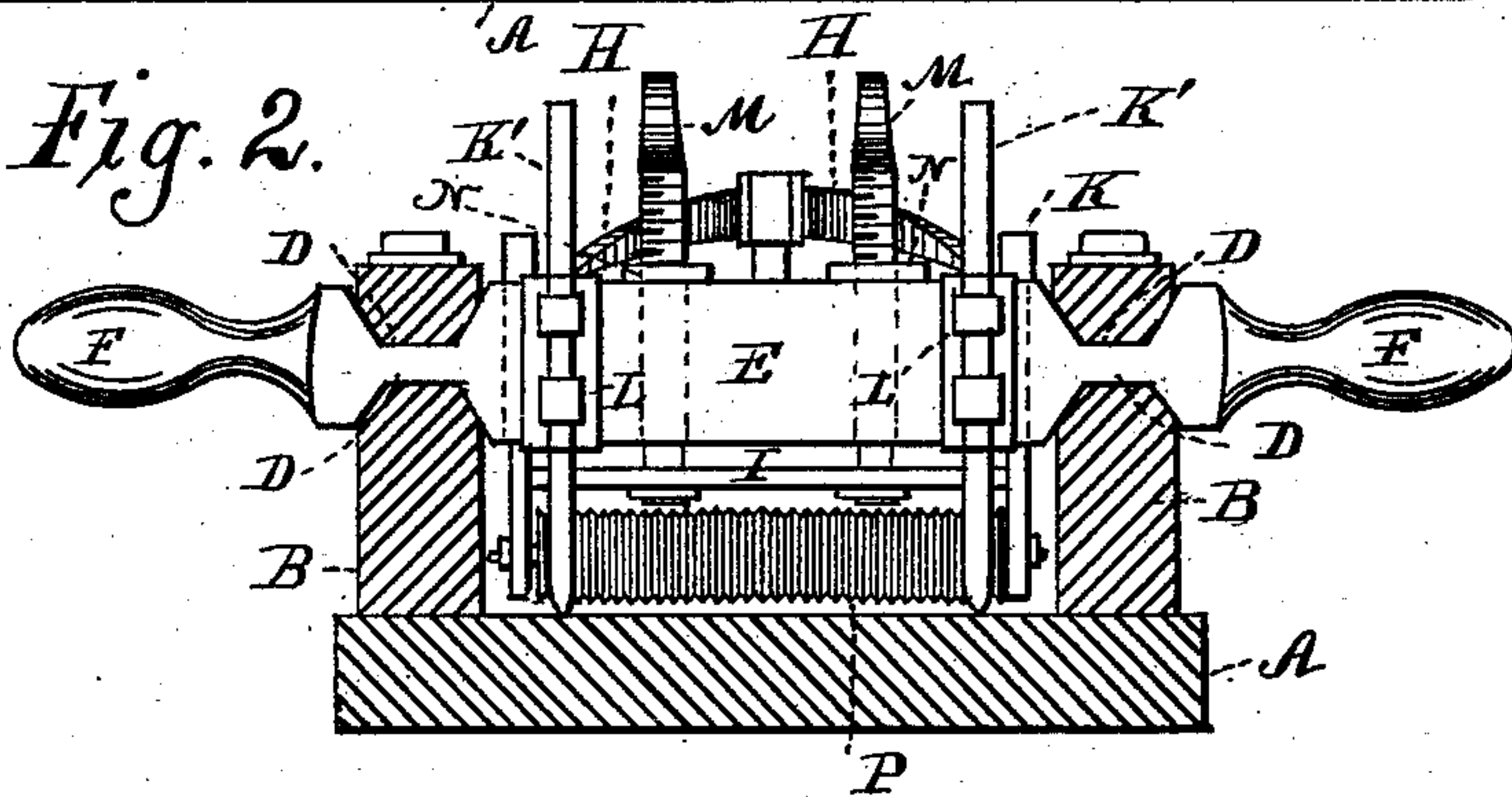


Fig. 3.

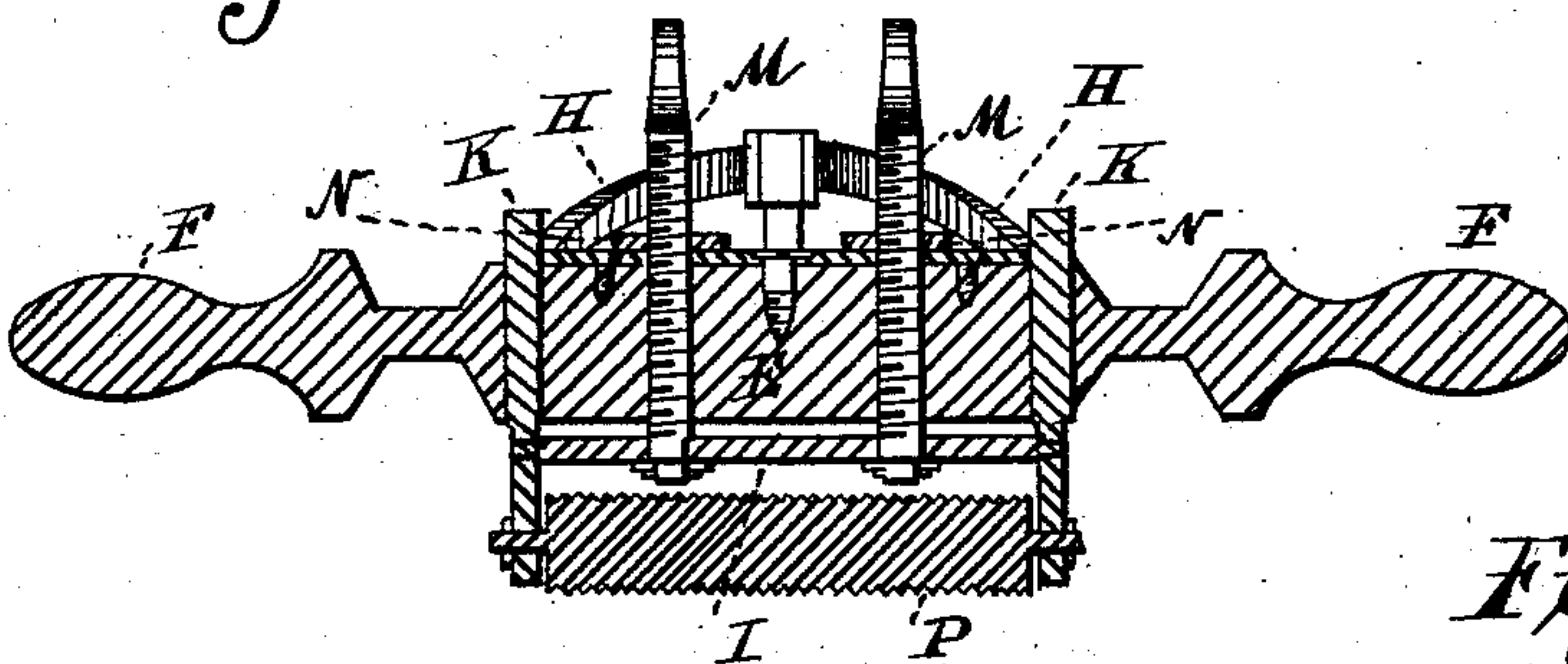
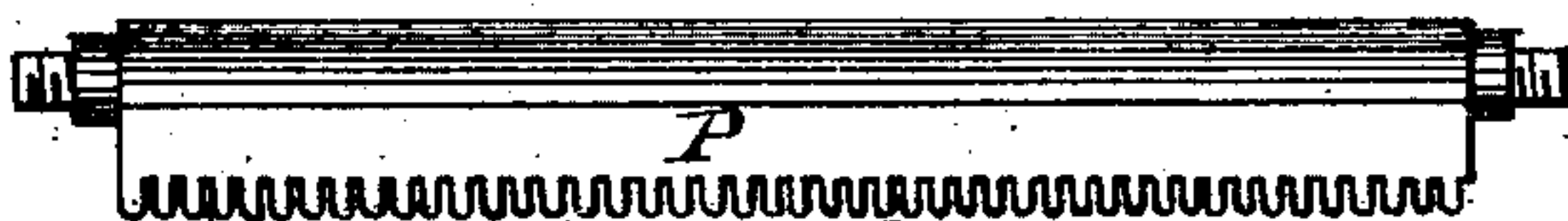


Fig. 4.



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MACHINE FOR GRAINING AND DICING LEATHER.

SPECIFICATION forming part of Letters Patent No. 248,220, dated October 11, 1881.

Application filed June 27, 1881. (Model.)

To all whom it may concern:

Be it known that we, AUGUST SCHRAY and AUGUST BRAENTIGAM, of New Albany, in the county of Floyd, and in the State of Indiana, have invented certain new and useful Improvements in Machines for Graining or Dicing Leather; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to an improved machine for graining leather; and it has for its object to provide a machine which will be simple and inexpensive in construction, by which the leather may be held while subjected to the action of the graining or dicing tool, which may be moved accurately over the surface of the leather in suitable guides, as more fully hereinafter specified. These objects we attain by the apparatus illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal section of our improved apparatus; Fig. 2, a transverse section; Fig. 3, a transverse section of the tool-carrier and tool detached, and Fig. 4 a view of a modification of the tool.

The letter A indicates the base of the apparatus, which has hinged to it at one end a frame, B, which is provided with a screw, B', at the other end, adapted to engage a screw socket-plate, C, secured to the base.

The frame is provided with guides or ways D, between which the tool-carrier E is adapted to travel back and forth. The said carrier is provided with handles F, on opposite sides, by which it may be operated, or with an operating-rod, G, secured to the arms H, pivoted to the front of the carrier.

The letter I indicates an adjustable frame provided with uprights K, which extend upward through suitable apertures in the carrier, being adapted to move vertically in said apertures.

The letter M indicates two adjusting-screws extending through the carrier and secured loosely to the frame I. The screws are provided with lock-nuts N, by which the screws can be secured.

The letter P indicates the grainer, which

may consist of a grooved roller journaled at the ends in bearings in the frame I or a transversely-grooved plate secured at each end to the frame.

The letter K' indicates two vertically-adjustable gages secured in guides L, clamped to the carrier by means of clamping-screws M'. The said gages serve to set in the grooves at either side of the grained surface and form a means for keeping the lines true and parallel as the leather is shifted laterally to either side for operating upon successive fresh surfaces.

The operation of our invention is as follows: The frame is elevated at its forward end, and the leather is placed between it and the base and the frame clamped down on the leather by means of the clamping-screw. The tool is then adjusted by means of the clamping-screws, and the gages are also adjusted to proper position. The carrier is then reciprocated back and forth until the proper surface is produced upon the leather by means of the tool. When a portion of the leather has been grained or diced in parallel lines, the clamp is lifted and the leather shifted to either side and one of the gages, according to the direction in which the leather is shifted, is brought into line with one of the side marks on the leather. The clamp is then secured, and the operation is repeated until the entire surface of the leather is grained or diced.

It is important to have the elevations and depressions or lines made in the surface of the leather all parallel to each other. This could, of course, be easily effected if the width of the machine were sufficient to allow the entire surface of the leather to be operated on at once; but as such a wide machine could not be conveniently manipulated we work on parts of the leather sheet.

To adjust the leather properly on the bed of the machine after the completion of each graining operation, the side clamps are raised, as described, to free the leather. The sheet is then moved to one side a proper distance to present a new surface, and one or the other of the gages K' is loosened and adjusted downward a short distance below the "cutters," (the other gage is, of course, raised out of the way of the leather surface.) The leather sheet is then moved on the bed until the set-gage will fol-

low exactly one of the grooves previously formed in the surface of the leather. It is now positively determined that the graining-lines to be made will be parallel to those last formed. The leather is again firmly clamped in its place on the bed by the screw B', the gage K' raised, and the work of graining proceeded with.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a leather dressing or graining machine, the combination, with the carrier and the adjustable tool-frame, of the set-screws and lock-nuts, substantially as described.

2. The combination, with the base, the hinged clamping-frame and fastening device therefor,

of the carrier adapted to reciprocate in the ways of said frame, the graining-tool, and adjustable frame for this tool, substantially as described.

3. The combination, with the reciprocating tool-carrier and the graining-tool, of one or both adjustable gages, the bed A, and the hinged clamping-frame B, substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands this 25th day of April, 1881.

AUGUST SCHRAY.

AUGUST BRAENTIGAM.

Witnesses:

JAMES E. WILSON,

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