

(No Model.)

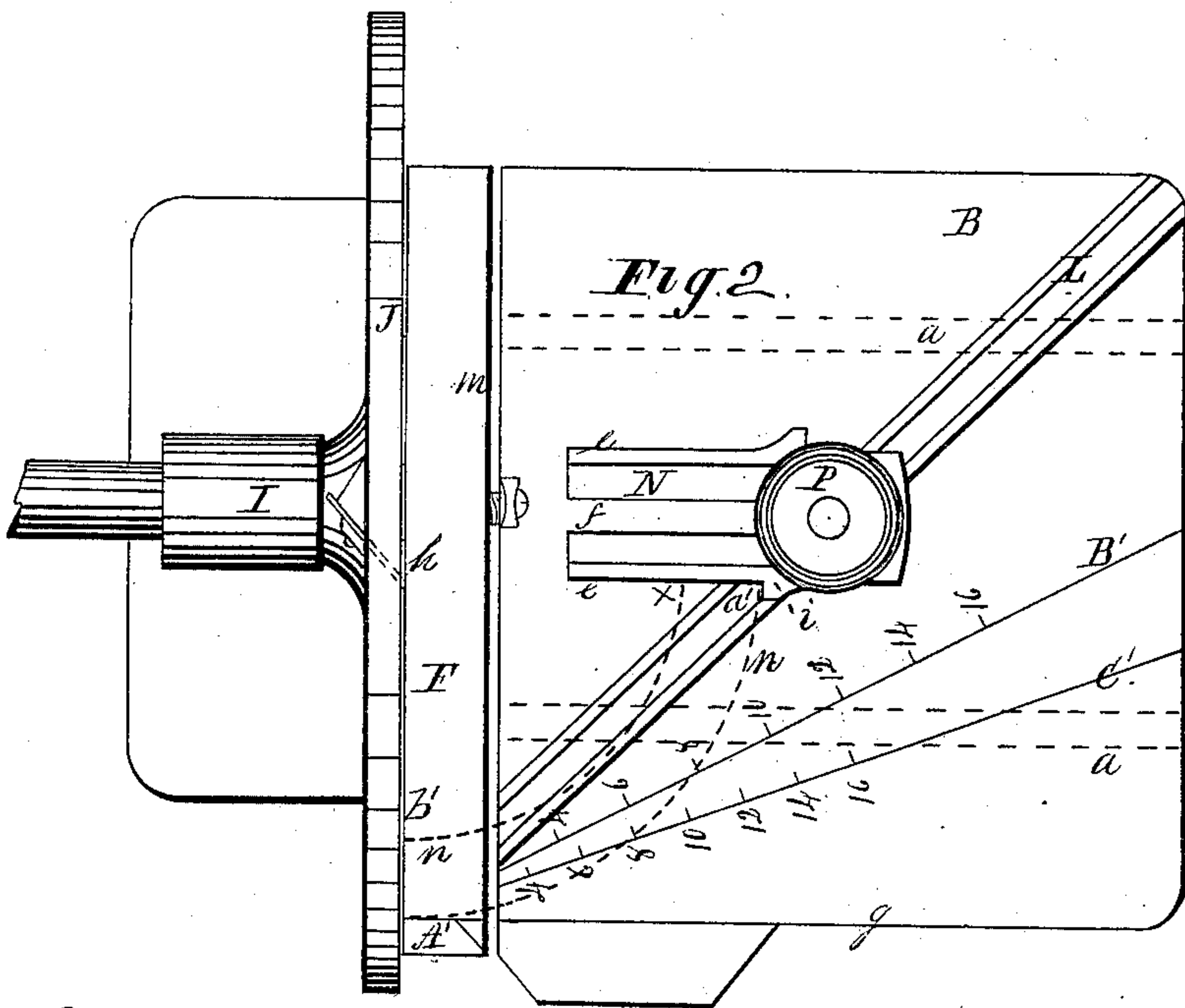
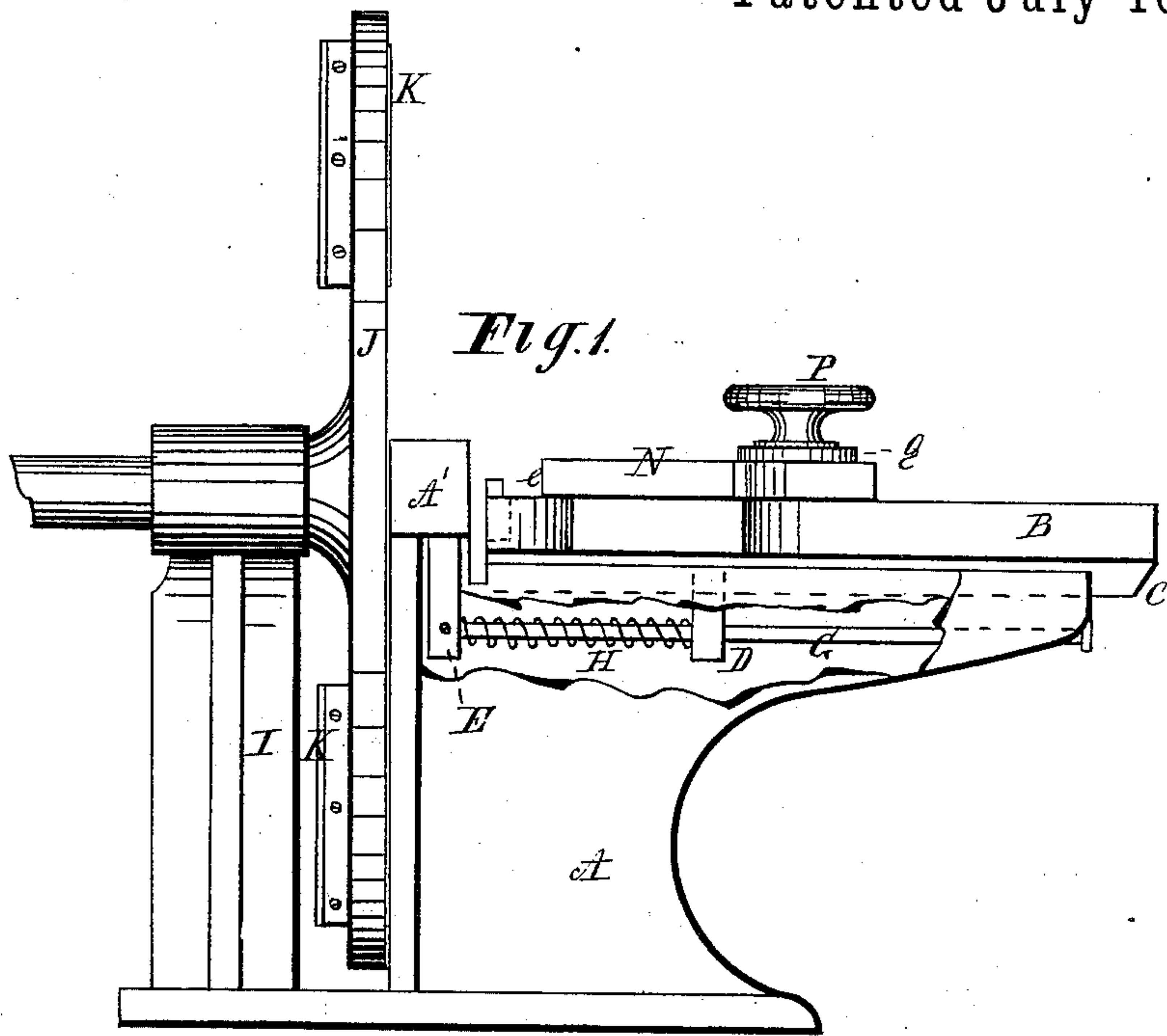
2 Sheets—Sheet 1.

J. L. GOBEILLE.

JOINTER FOR DRESSING ANGLES FOR JOINTS.

No. 280,813.

Patented July 10, 1883.



Witnesses

Witnesses
N. A. Tuttle
J. G. Burridge

Inventor:

Inventor.
J. L. Gobrien
W. H. Pinnings atty

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

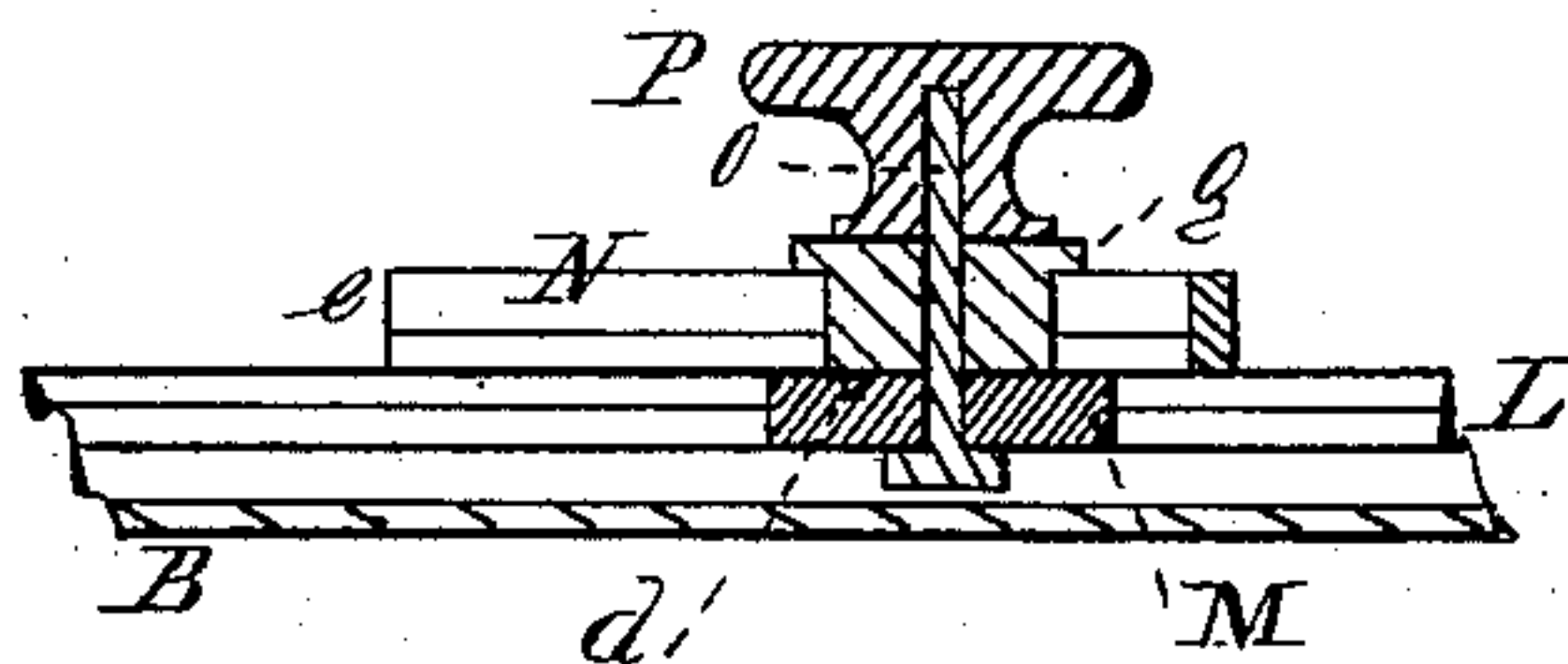


Fig. 4.

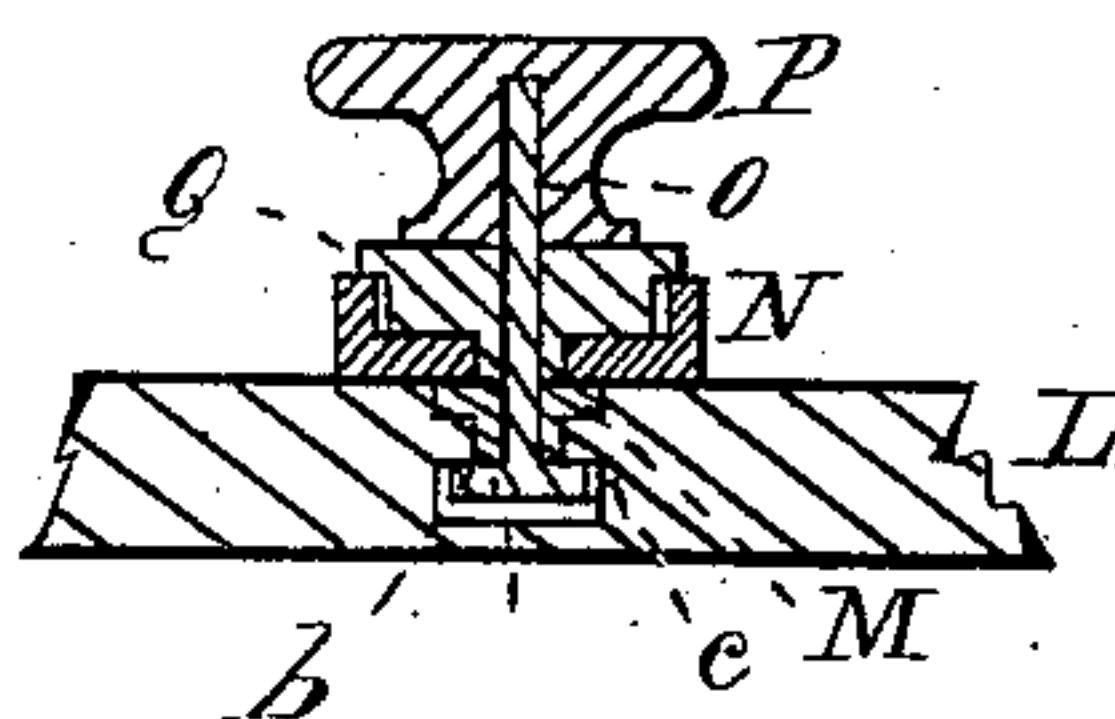


Fig. 5.

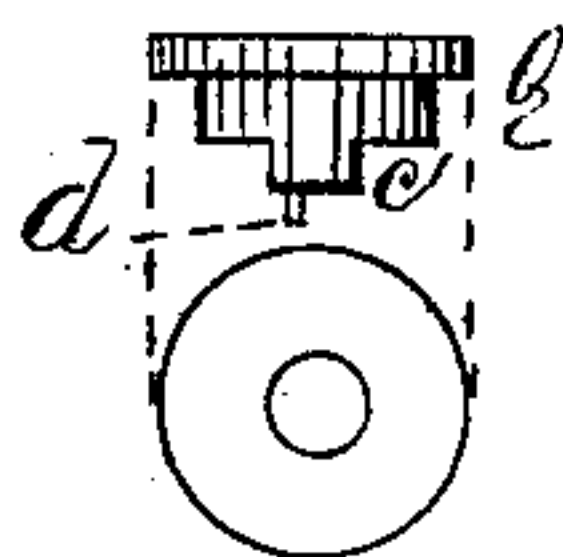
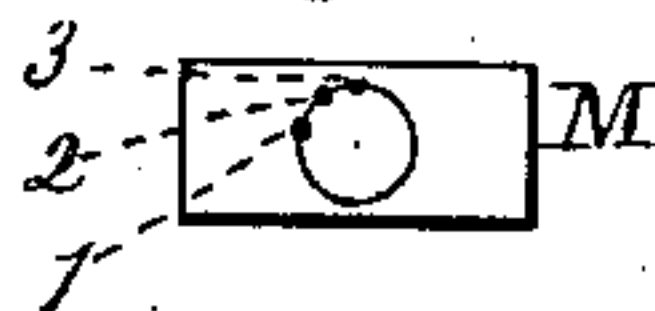


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOSEPH L. GOBEILLE, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO
WM. M. GOBEILLE, OF SAME PLACE.

JOINTER FOR DRESSING ANGLES FOR JOINTS.

SPECIFICATION forming part of Letters Patent No. 280,813, dated July 10, 1883.

Application filed March 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. GOBEILLE, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Jointer for Dressing Angles for Joints; and I do hereby declare that the following is a full, clear, and complete description thereof.

The special purpose of the above-said jointer is for dressing the ends of segments for circles of various diameters, so that the ends of all the segments for a circle of a given diameter shall have true radial lines and be of equal length to complete the circle.

The invention is also for dressing off the ends of pieces of moldings for frames—as picture-frames, for instance—so that the separate pieces may have the requisite miter to enable them to fit properly.

A further and more full description of the construction and operation of the jointer is substantially as follows: For illustration, reference will be had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the jointer. Fig. 2 is a plan view. Figs. 3, 4, 5, and 6 are detached sections, and will be alluded to in the course of this description.

Like letters of reference refer to like parts in the several views.

On the top of the frame or standard A is a reciprocally-sliding table, B. Said table is arranged to slide in grooves by means of ribs adapted to fit in said grooves, one of which ribs is shown at C, and both are indicated by the broken lines *a* in Fig. 2.

D is a hanger depending from the under side of the table. E is also a hanger depending from the under side of the stationary head-piece F, Fig. 2. In the hanger F is made fast one end of the rod G, passing freely through the hanger D to the end of the standard by which it is supported. Between the two hangers alluded to is coiled around the rod a spring, H, by which the table is moved back after being pushed forward, for a purpose presently shown.

In the standard I is journaled a revolving cutter or planer, consisting of the wheel or

disk J, provided with planing-bits or cutters K. Said disk and cutters are substantially like those in ordinary use, and form no part of this invention; hence a detailed description thereof is not necessary, as the same is well known in the arts.

Diagonally across the table B, above alluded to, is a T slot or groove, L, Fig. 2. Said groove is at an angle of forty-five degrees in its relation to the face of the revolving plane J. In said groove is fitted, so as to slide therein, a block, M, Fig. 3. Said figure represents a vertical section of the table longitudinally through the T-groove, and Fig. 4 shows a vertical section of the table transversely through the groove. A plan view of the said block M is shown in Fig. 6, in which are three holes—viz., 1, 2, and 3. The use of said holes will hereinafter be shown.

N is an adjustable gage arranged on the table directly over the groove L, and retained in place or relation therewith by the screw-bolt O and nut P, Figs. 3 and 4. In said figures it will be seen that the head of the bolt is under the shoulders *b* and *c* of the groove, and thereby prevented from being pulled upward on screwing down the nut upon the clamp Q for binding the gage N to the table. Fig. 5 shows a detached view of the clamp Q, from the under side or rib, *c'*, of which projects a pin, *d*, adapted to fit in the holes 1 2 3 in the block M, above referred to, and as seen in Fig. 3.

Practically, the use of the above-described jointer is as follows: For illustration, a circle is required having a diameter of eight inches and four segments to make up the circle. To this end the gage is adjusted in its relation to the groove L and the face of the planer as seen in Fig. 2. To obtain this position of the gage the side *x* thereof is arranged parallel to the line *g* and four inches therefrom. The said line *g* is at right angles to the face of the planer. This adjustment of the gage will place the corner *a* thereof at a central longitudinal line of the T-groove L. The line of the side *x* of the gage will be a radius of the supposed circle; also, the face of the planer will be a radius of said circle, the center being

at the point *h* when the table is pushed forward to the line *m* of the head-piece F. The narrow space between the edge of the table and the said head-piece is in width equal to the amount to be planed off from the ends of a segment to make it the exact length to form one of the four composing the circle above suggested. The segments of which the circles are to be made are first sawed out in the rough as near as practicable to the required size or length, the ends of which are to be dressed off in a radial line to form the joint with the adjoining segment. For this purpose a rough segment is laid on the table, as indicated by the broken lines *n* in Fig. 2, in which it will be seen that one end, *a'*, of the segment rests against the side of the gage, and that the other, *b'*, is near the face of the planer, with its peripheral line against the check or shoulder A'. Now, on pushing the table slightly forward the end *b'* of the segment will be smoothed off and dressed at a radial line, and when this is done, the segment is taken up and replaced with the end *a'* near the planer, with the dressed end resting full against the side of the gage. The table is now pushed forward full against the head-piece F, thereby dressing off the end of the segment, which will be left the exact length to fill up its place as a quadrant of the circle.

From the above it will be obvious that, as the table can be pushed forward no farther than to the edge of the head-piece F, the segments must all be of an equal length and the ends dressed in radial lines, so that the segments can be placed at once without further fitting in their respective places in the circle. As above said, the resiliency of the spring H pushes back the table from the head-piece after having been pushed forward for the purpose specified.

Circles of less or of larger diameters than that above mentioned and having four segments are made by simply adjusting the gage more or less distant from the line *g*, according to the size of the circle. If more than four segments are necessary to make a circle, it can be done as follows: Suppose a circle twelve inches in diameter and of six segmental sections is to be made. For this purpose the gage N is shifted so as to bring the side *x* of the gage at an angle of sixty degrees to the face of the planer and the shoulder *i* thereof to the index-mark at 12 on the line B', Fig. 2, in which position it is made fast by the nut P, as in the former case. The rough segments prepared for this circle are then laid upon the table, with one end resting against the side of the gage and the shoulder *i*, and the opposite end near the planer, as in the case above described. The ends of the segments are smoothed and dressed off by the planer substantially in the same way as were the segments for the eight-inch circle. For circles of greater or of less diameter than twelve inches—as, for instance, any one of the

numbers, and having six segments to complete the circle—the gage is adjusted to such number, as before described, which will give the exact length of each segment and the radii for the joints. In some instances it is expedient to use eight segments to complete a circle. In that case the gage N is adjusted to the line C', so that the side *x* of said gage will be at an angle of forty-five degrees to the face of the planer, and the shoulder *i* will be at the index-mark of the figures, which figures indicate the diameters of circles each composed of eight segments, which are dressed in the same way as those above mentioned. The lines B' and C' and the figures or scale of diameters thereon are mathematically laid out, for the purposes specified.

Other lines may be laid out to obtain a larger or smaller number of segments for circles. Those shown, however, are sufficient for all ordinary work, embracing circular molding, composed of segments.

To facilitate the changing of the gage for the purposes specified is the use of the holes 1 2 3, above referred to. Said holes correspond to the T-groove L and the lines B' and C', and are used as follows: On inserting the pin *d* (projecting from the clamp *g*, above alluded to) in the hole 1, the gage will be placed in the position shown in Fig. 2 for dressing the four segments first mentioned. Inserting the pin in the hole 2 will adjust the gage for the six segments, and inserting the pin in the hole 3 will place the gage in position for the eight segments last mentioned. It will be obvious that by this means some little time is saved in changing the position of the gage.

To adjust the gage to small circles the open end of the gage may be so long as to interfere with the face of the planer. To avoid this the gage may be turned half-way around, so that the closed end may be toward the planer, and then used in the same way as before.

I wish it to be understood that I do not confine myself to the particular form of the gage N herein shown and described, as other forms of a gage can be used in connection with the table, lines and groove therein, without changing the nature of the invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a machine for dressing the ends of segments for circles and the miters of right-angular frames, the reciprocally sliding table B, having in the surface thereof a T-groove, L, arranged at a definite angle in relation to the face of the planer J, and provided with an adjustable gage adapted to said groove and secured thereto, substantially as described, in combination with the revolving planer, as set forth, and for the purpose specified.

2. In a machine for dressing the ends of segments for circles and the miters of right-angular frames, the sliding table B and T-groove L, adjustable gage, and lines, as B' and C', with their respective scale of figures arranged

in relation to the face of the revolving planer at definite angles, and in combination therewith, substantially as described, and for the purpose set forth.

- 5 3. In combination with the gage N and table, the block M, having therein holes 1 2 3, clamp and pin d, adapted to engage said holes, screw o, and nut, substantially as described, and for the purpose specified.

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

JOSEPH L. GOBEILLE.

Witnesses: *

J. H. BURRIDGE,

W. H. BURRIDGE.