

(No Model.)

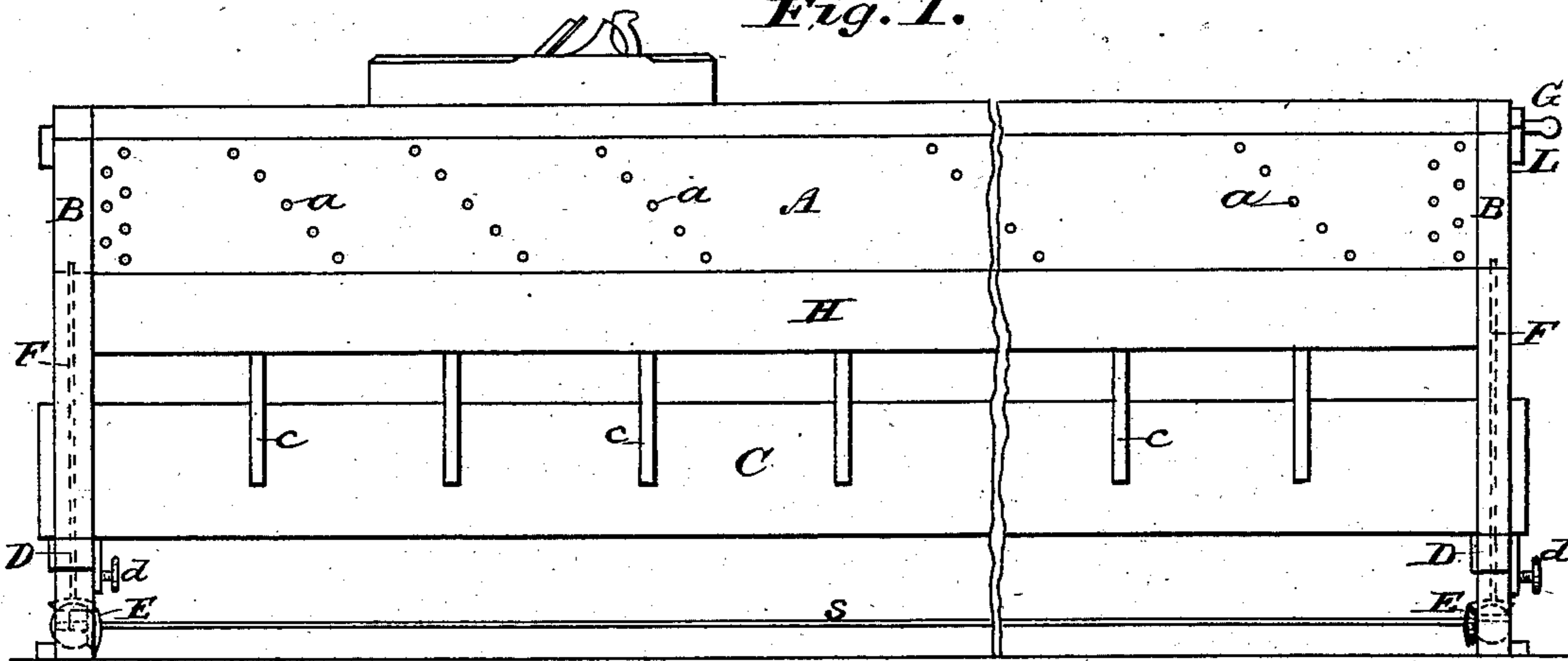
2 Sheets—Sheet 1.

C. A. WILLIAMS.  
DEVICE FOR JOINTING LUMBER.

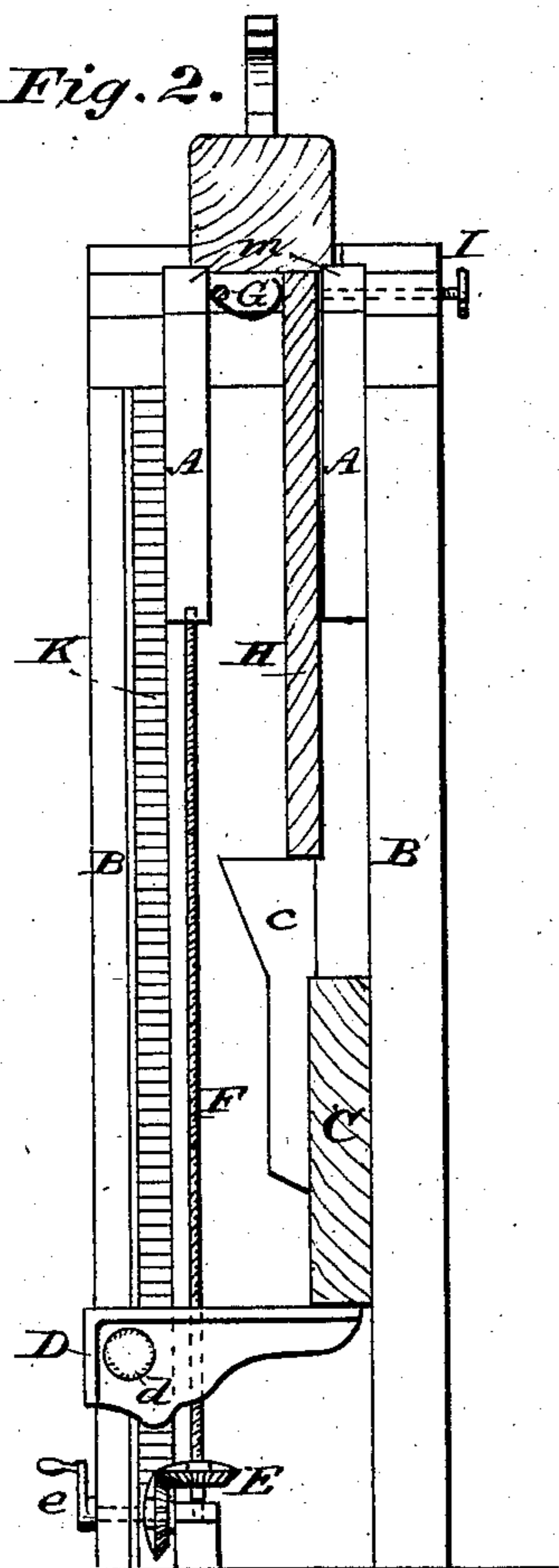
No. 289,948.

Patented Dec. 11, 1883.

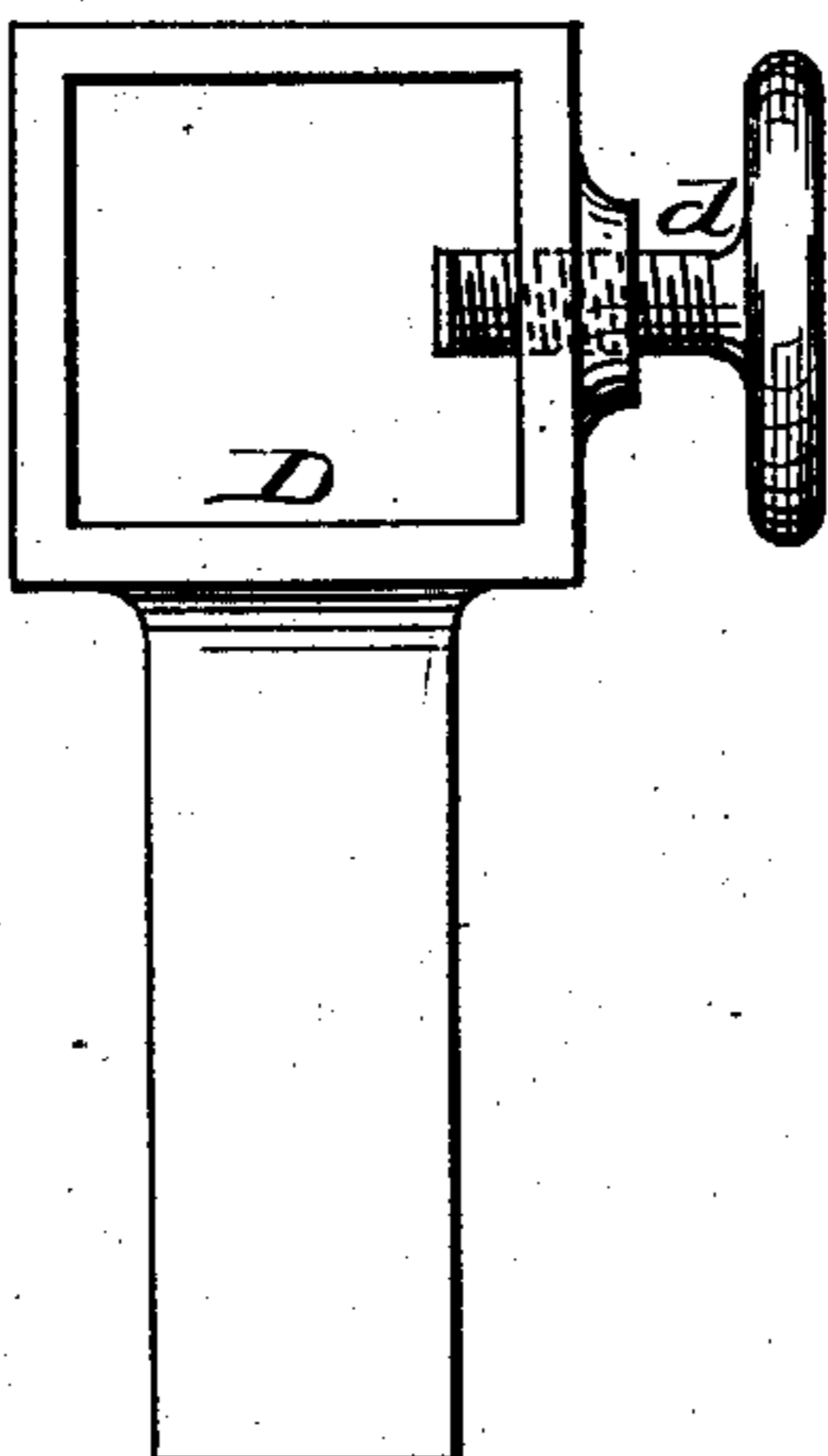
*Fig. 1.*



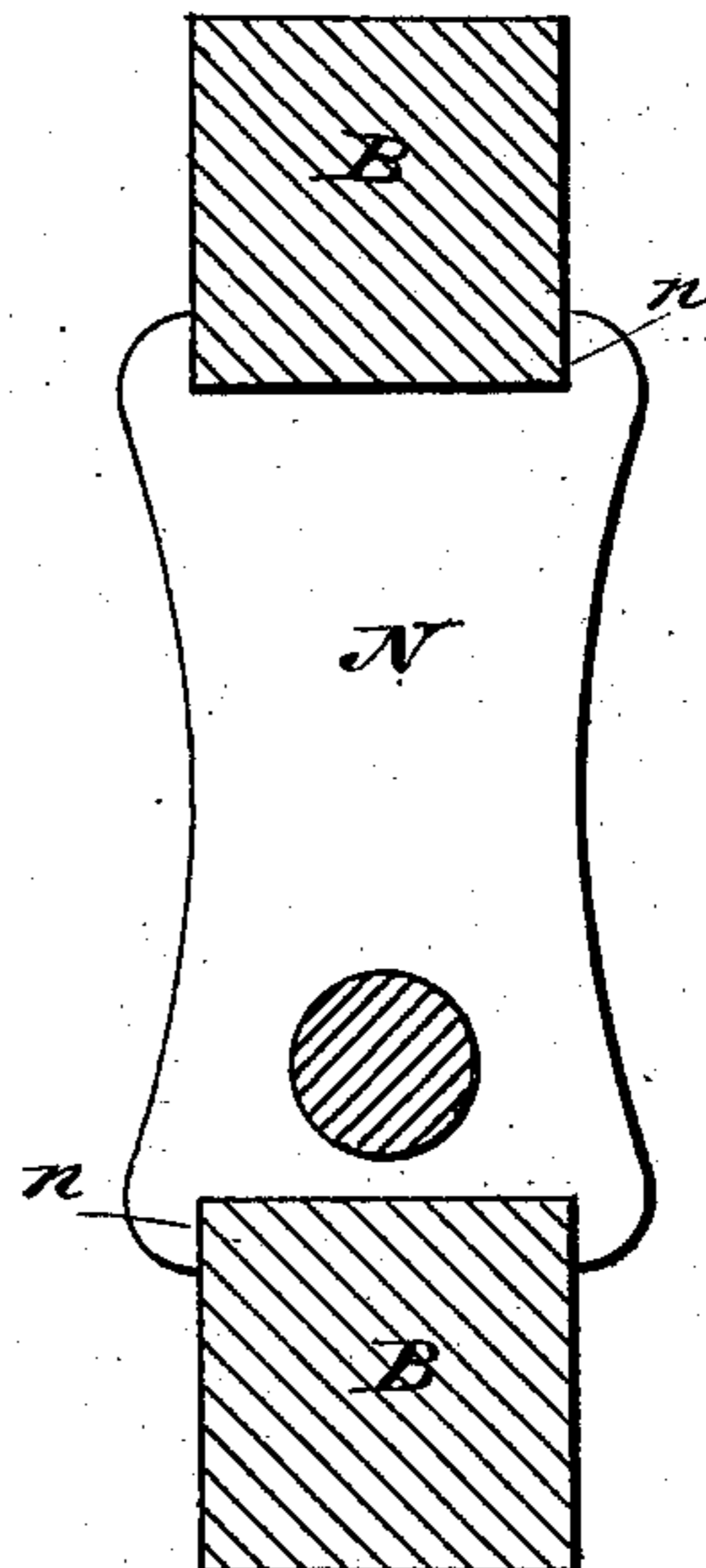
*Fig. 2.*



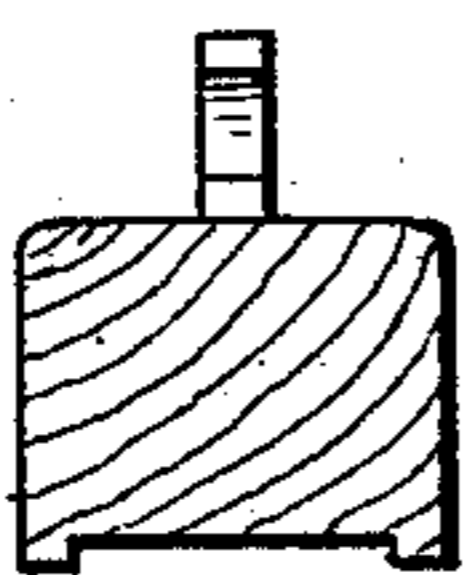
*Fig. 3.*



*Fig. 5.*



*Fig. 4.*



*Fig. 6.*



Witnesses:

Samuel S. Chase.  
L. F. Deleher.

*Fig. 7.*



Inventor:

Clarence A. Williams

By J. C. Bruckley  
Attorney.

(No Model.)

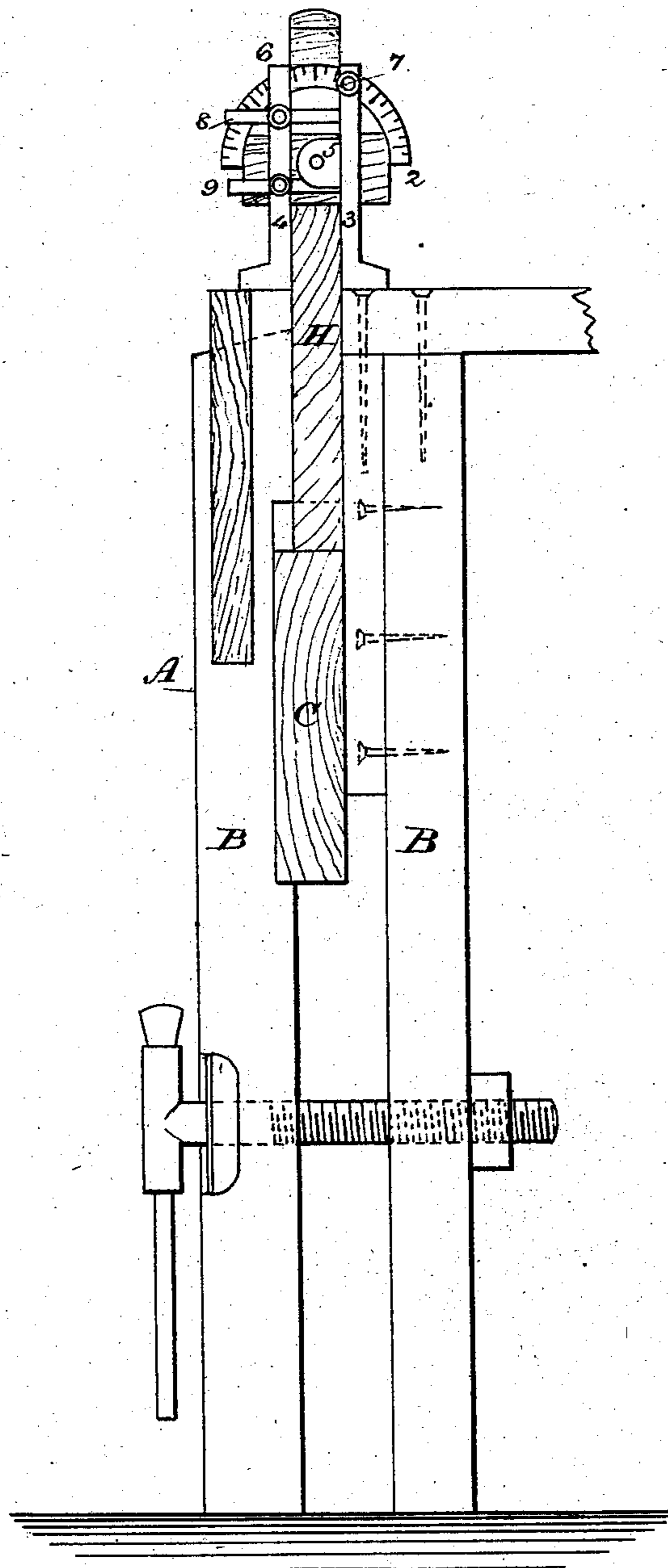
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*Fig. 2<sup>a</sup>*



Witnesses:

Guy. De Mott.

F. L. Browne

Inventor:

Clarence A. Williams

By J. C. Bruck

Attorney.

# UNITED STATES PATENT OFFICE.

CLARENCE A. WILLIAMS, OF WEBSTER CITY, IOWA.

## DEVICE FOR JOINTING LUMBER.

SPECIFICATION forming part of Letters Patent No. 289,948, dated December 11, 1883.

Application filed March 27, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CLARENCE A. WILLIAMS, a citizen of the United States, residing at Webster City, in the county of Hamilton and State of Iowa, have invented certain new and useful Improvements in Machines for Jointing, Beveling, &c., Wood or Lumber; 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.

My invention relates to improvements in devices for jointing, gaging, beveling, and tapering lumber of all kinds; and the object is to do such work in an expeditious and economical manner, and to enable such dressed lumber to be used for architectural, mechanical, and other purposes, by carpenters, joiners, cabinet-makers, coopers, and others, and of any kind, length, and thickness.

The invention consists in the construction and arrangement of parts, as will be more fully described hereinafter, and more specifically pointed out in the claims, reference being had to the accompanying drawings and the letters of reference marked thereon.

Like letters of reference indicate like parts in the different figures of the drawings, in which—

Figure 1 represents a side elevation of my improved apparatus for jointing, &c., lumber. Fig. 2 is an end elevation of the same. Fig. 3 is an enlarged view of the sliding clamp and set-screw. Fig. 4 is an end view of the jack-plane. Fig. 5 is an end view of the sliding nut. Figs. 6 and 7 are detail views of the pins and shaft for holding wood in position.

In the accompanying drawings, A represents the side pieces of the device, supported by a suitable frame-work and legs, B, between which is arranged a movable gage, C, which can be adjusted to the desired height, and is held in place by the sliding clamp D and a set-screw, *d*. Instead of this, the clamp may be operated by a screw, F, and a pair of bevel-wheels, E, and crank-handle *e*. The gage C is provided with a number of brackets, *c*, upon which the board or piece H to be operated on is placed. It is held in position at its upper end by a shaft, G, running the entire length of the machine, and supported at one end in a hole in one of the legs, while the other is sup-

ported in a bearing, L, having a removable cap, so that the shaft can be readily removed when not required. For beveling the piece H, the set-screws I are used to give it the desired angle, while the other side is supported by a series of springs, *g*, secured to the shaft G.

Instead of the screws, the piece H may be gaged by placing pins *b* in any of the holes *a* in the side piece, A, so as to obtain the desired angle. The pins *b* may be provided with a flat side, as shown in Fig. 6, although they may be made round, if desired.

The shaft G may be provided with clamps made of metal, rubber, or other material, which bear against the side of the board or piece to be beveled or tapered and hold it in its proper position to be acted upon by the plane and rough off the piece, and it will then be finished in the jointer. (Shown in Figs. 1 and 2.)

To taper a piece of wood—such as a stave for a tank—one end only of the gage is raised according to the taper it is desired to obtain.

When the screws F are to be used, a sliding nut, N, is employed having a notch, *n*, at each side, which fit onto the legs of the machine, which serve as a guide for it. To operate the screws at the same time at both ends, a horizontal shaft, S, is employed with suitable bevel-gearing to mesh into the bevel-wheels on the screws F, although they may be operated separately at each end, if desired.

A guide-piece, *m*, may be arranged at the upper side of the frame-work, by which the plane may be guided over the piece to be operated upon.

A scale, K, is arranged on the front legs of the machine, by which the width of the piece of wood is indicated, as the clamp or nut can be moved to the width desired.

Fig. 2<sup>a</sup> is an end view of a bench having a plane with side-beveling attachment. In Fig. 2<sup>a</sup> the bench and common vise are shown on an enlarged scale with their connections. The plane attachment represents an end section of the plane, and the figures 3 and 4 show the guides with the center piece, 5, on which the plane turns, so that it can be adjusted to any bevel desired. The guide 4 slides on the arms 9, and is held in place by the set-screws 6. It can be adjusted to any thickness desired. The circular piece 8 is provided with a scale and firmly fastened to the plane-stock. The plane

can then be set at any angle and firmly held by the set-screw 7. The guides 3 and 4 will be placed on each end of the plane and adjusted on top of the bench. In this figure the board H to be beveled rests upon the gage C. This plane may be used independent of the frame-work, gage, &c., as a jointer or bevel, and may be applied to a common jointer or jack-plane. This plane attachment is a very important feature of my invention, as with it the edges of the boards, &c., can be beveled sidewise, as desired, especially useful for staves of barrels, &c.

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

1. In a wood-dressing machine, the combination of a bench and a gage, C, having a series of supporting-brackets, *c*, with the adjustable clamps D, operated by a shaft, S, and gearing E, and secured in place by set-screws *d*, as and for the purpose specified.

2. In a wood-dressing machine, the combination of a bench and adjustable gage C, constructed as described, with an adjustable plane provided with guides 3 and 4, a hinged center piece, 5, upon which the plane is adjusted, and having the arms 9, and secured by set-screws 6 and 7, as and for the purpose set forth.

3. In a wood-dressing machine, the combination of a bench and adjustable gage C, provided with a number of brackets, *c*, for supporting the board to be dressed, with the clamps D, operated by gearing E and screws F, for adjusting said clamps, and the spring-clamps G, for holding the upper edge of said board, all arranged substantially as specified.

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

CLARENCE A. WILLIAMS.

Witnesses:

DANIEL D. CHASE,  
GILBERT B. PRUY.