

(No Model.)

R. E. POINDEXTER.
SAW JOINTER.

No. 442,688.

Patented Dec. 16, 1890.

Fig. 1.

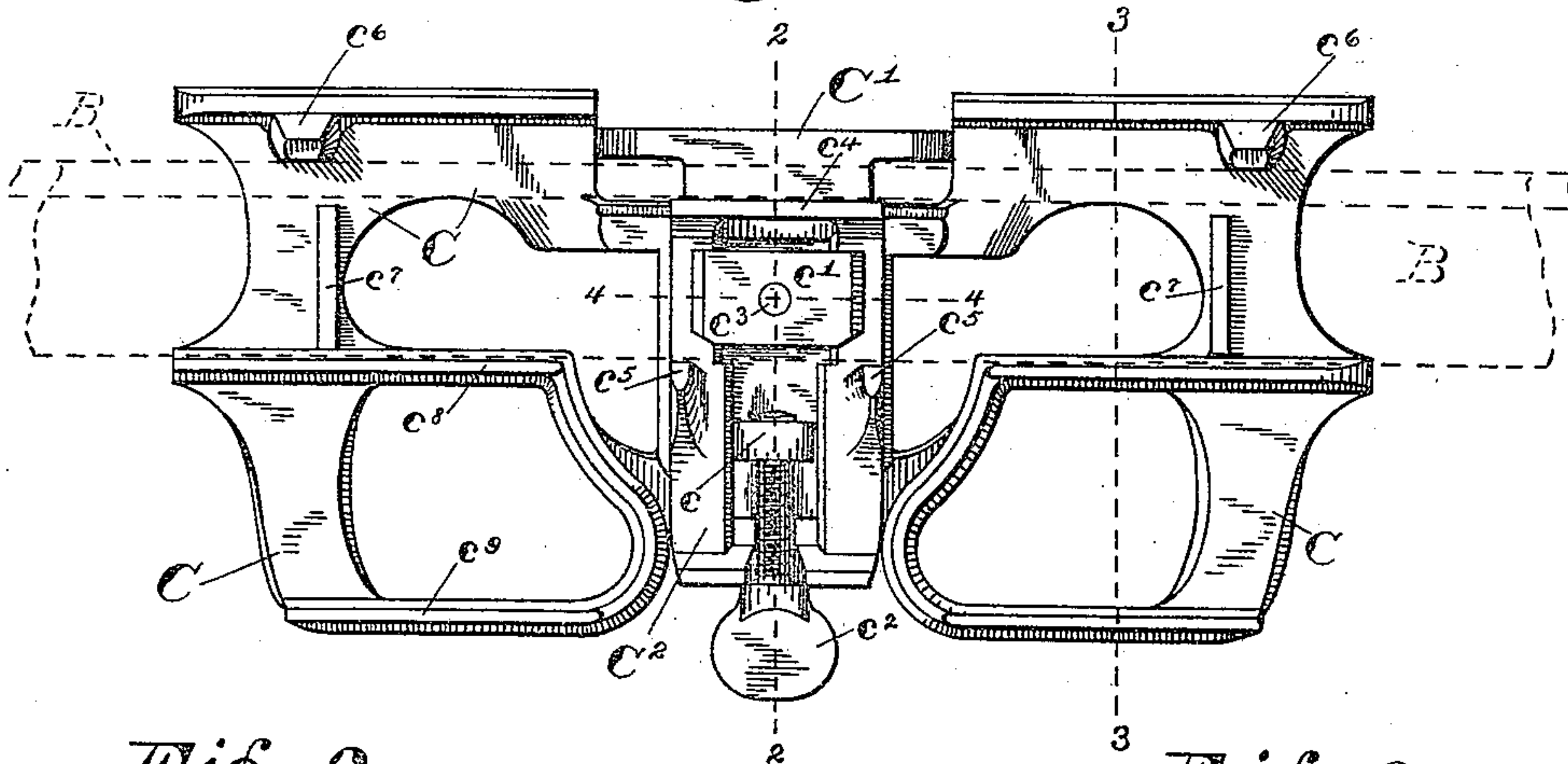


Fig. 2.

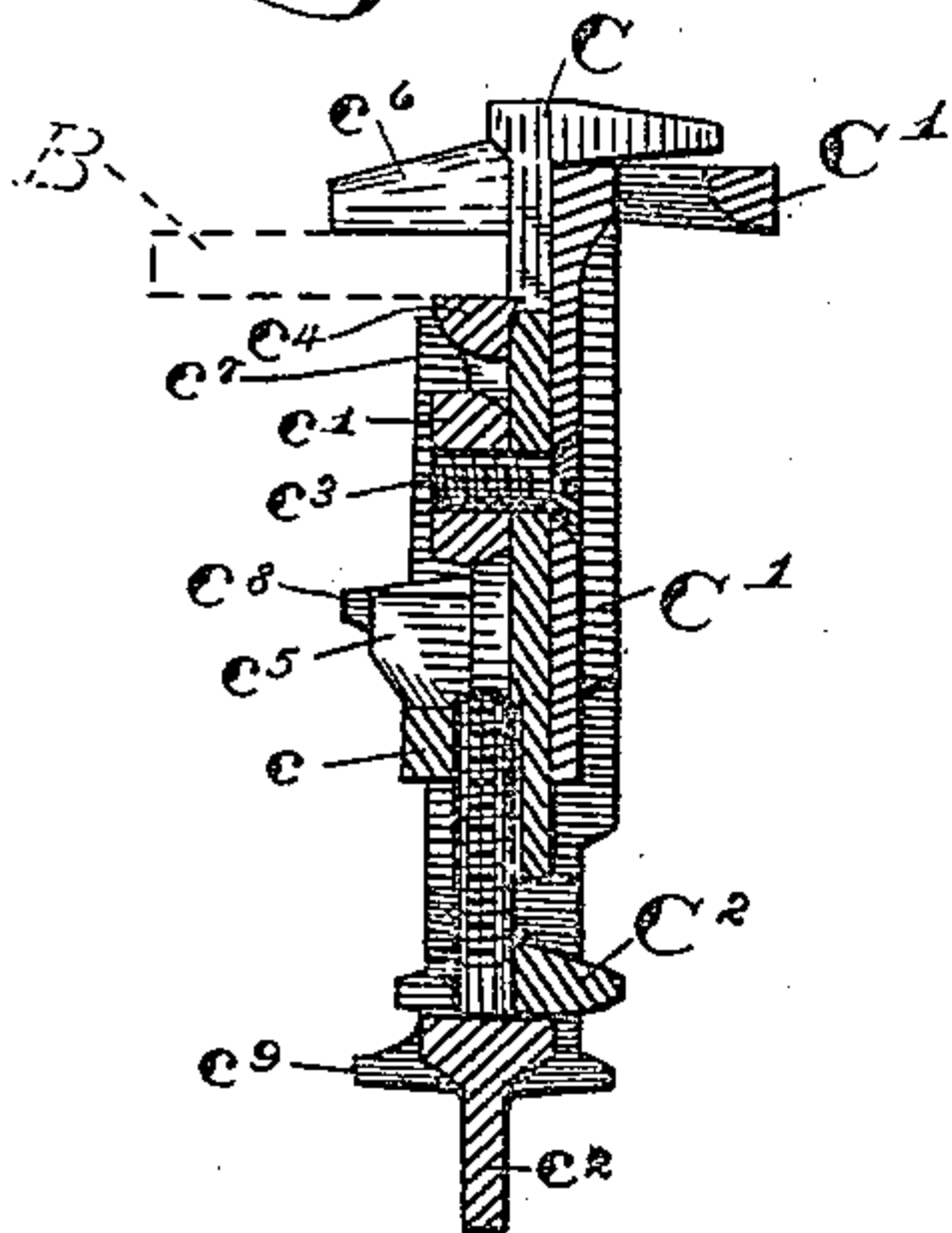


Fig. 3.

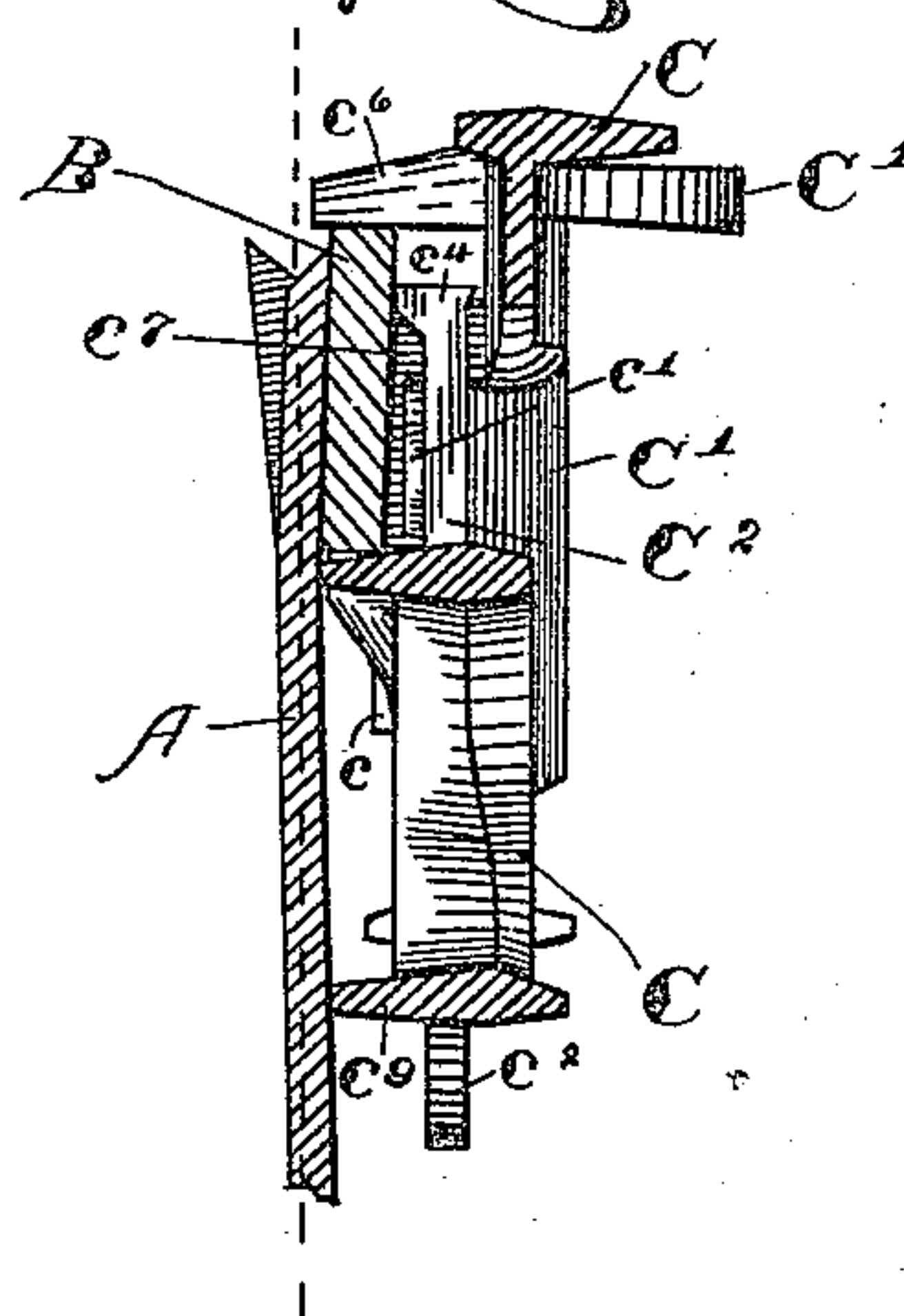
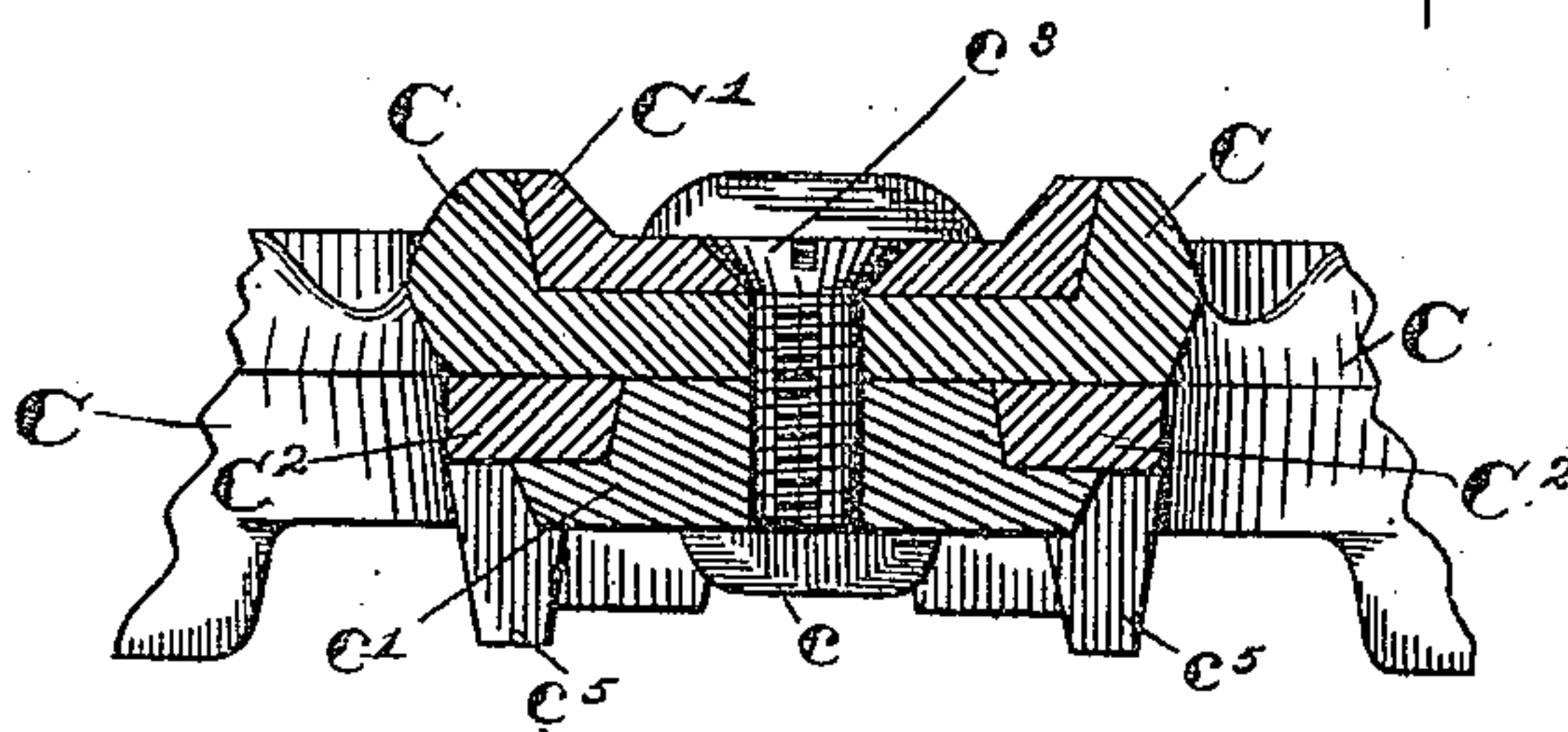


Fig. 4.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ROBERT E. POINDEXTER, OF INDIANAPOLIS, INDIANA.

SAW-JOINTER.

SPECIFICATION forming part of Letters Patent No. 442,688, dated December 16, 1890.

Application filed December 17, 1889. Serial No. 334,011. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. POINDEXTER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Saw-Jointers, of which the following is a specification.

My said invention relates to various improvements in that class of saw-jointers, which consists in a cast-metal block provided with suitable seats for receiving and a clamp for holding the file in position; and it consists, first, in a peculiar arrangement of the rests and the clamp, whereby the file may be clamped in both positions in the upper half of the block; second, in the arrangement of the bearing parts on the lower half of the block, whereby a positive rest at a certain angle is provided, thus constituting a gage in jointing the sides of the teeth, and in various other improvements in the details of construction, all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a front elevation of one of my improved saw-jointers with the file therein, indicated by dotted lines in both positions; Fig. 2, a central vertical section through the same on the dotted line 2 2, the file being indicated by dotted lines in the horizontal position; Fig. 3, a similar view on the dotted line 3 3, the file being shown in whole lines in the vertical position as when used for jointing the sides of the teeth, and a portion of a saw being also shown, against which the tool is resting as when in operation; and Fig. 4, a detail cross-section on the dotted line 4 4 in Fig. 1.

In said drawings the portions marked A represent the saw B, the file, and C the jointer-block. The saw A and file B are or may be of the usual and well-known form, and need no description herein. The jointer-block C is in general of a well-known form, such as is illustrated in my former patents, consisting of an open cast-metal block having a gage-plate C' of the usual construction, a sliding clamp C² for holding the file in different positions, and suitable rests and bearings for the file and

the tool when in operation, as will be now described.

The sliding clamp C² consists of a slotted plate mounted in a vertical way provided therefor in the center of the block and adapted to be operated by a set-screw c², provided with a shoulder which rests against the lower face thereof, and is mounted to operate in a screw-threaded perforation in the lug c, which is cast on the block C and extends out through the slot of said plate. The upper portion of said plate is held firmly in place by means of a block c', formed to fit closely in the slot, which is provided with overhanging lips or edges which rest upon the outside face of the plate on both sides of said slot, said block c' being held in position by a bolt or screw c³, which is preferably the same screw which holds the gage-plate C' in position. The upper edge c⁴ of this sliding plate forms the lower jaw of the clamp which secures the file in position when put in the tool horizontally, and points c⁵, extending out from the face thereof near its edge and at a suitable position thereon, (about midway of its length,) serve as the lower jaw of the clamp which holds the file in position when placed in the tool vertically. Points c⁶ are provided at the top edge of the block, near each end, which extend out therefrom a suitable distance and serve as the upper jaw of the clamp for the file in either position. Short vertical ribs c⁷ are formed near each end of the block upon which the file rests and is supported when in the tool vertically, which ribs are formed slightly inclined or narrowing from their lower to their upper ends, and are thus adapted to give the file when resting upon them an inclined position in the tool. A bearing-ledge c⁸ extends longitudinally from the central portion of the block, and a similar ledge c⁹ parallel therewith extends from the lower edge of the block. Said central ledge c⁸ is preferably somewhat wider than that c⁹, and thus a straight line drawn through their points will be somewhat out of a perpendicular, or a perpendicular line drawn outside their points will pass nearer the ledge c⁸ than to the ledge c⁹, as shown in Fig. 3. The purpose of jointing the sides of saw-teeth, as is well known, is to smooth them off evenly, and this has

heretofore been a difficult and particular operation after the teeth were set, usually resulting in operating upon the points of the teeth more than on their sides and removing
5 said points instead of smoothing the sides of the teeth throughout their lengths as should be done.

By reason of the arrangement and construction of the tool above described, whereby the
10 top of the file is not only inclined away from the point of the tooth, but also by the arrangement of the bearing-ledges c^8 and c^9 , whereby the tool itself is supported against the side of the saw at an opposite angle, this
15 difficulty is overcome, and the file is presented to the teeth in a position substantially parallel with the angle thereof after having been set, and the operation of dressing the sides of the teeth evenly from their points to their
20 bases without removing the sharp points designed for cutting is rendered very simple. By reason of having the two bearing-ledges c^8 and c^9 both below the file and at a distance
25 from each other, the operator is enabled to rest the tool firmly against the side of the saw, and the operation is thus made very simple and easy, while heretofore much skill and care have been required in performing the work.

30 As will be readily understood, by placing thin strips of wood, paper, or any other material on the face of the ribs c^7 the file can be adjusted to just exactly the position and angle desired and then clamped in position,
35 and the uniform dressing of the teeth of the saw is assured, it being possible by this arrangement of the ledges and these supporting-ribs to gage the angle to just exactly that degree desired. As the file is clamped in both
40 positions in the upper half of the block, this positive rest for the tool against the side of the saw is secured when jointing the points

of the teeth, as well as when dressing their sides. By reason of securing the upper end of the sliding clamp C^2 firmly against the
45 block by means of the block c' no variation of the position of the file when once fixed can occur, as all parts are tight in their positions and prevented from any rattling or moving until released. 50

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

1. The combination, in a saw-jointer, of a block provided with a file-bearing in its upper part, a file, and a clamp provided with
55 jaws arranged to clamp the file against said file-bearing when placed against it either flatwise or edgewise, substantially as set forth.

2. In a saw-jointer, the combination of the jointer-block formed with points or projections near its upper edge, against which either one edge or one side of the file may rest when placed therein, said file and a clamping device mounted on said block and provided with
65 a bearing or jaw to engage with the other edge or side of said file when placed in said block either flatwise or edgewise, substantially as set forth.

3. The combination, in a saw-jointer, of the block, the file, a clamp for securing said file in position consisting of a sliding slotted plate operated by a set-screw, and a clip for holding the top end of said plate firmly and
75 steadily against the block, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 14th day of December, A. D. 1889.

ROBERT E. POINDEXTER. [L. s.]

Witnesses:

E. W. BRADFORD,
JAMES WALSH.