

No. 885,156.

PATENTED NOV. 6, 1906.

T. B. FITTS.
WOOD SLICING MACHINE.
APPLICATION FILED JUNE 1, 1904.

Fig. 1.

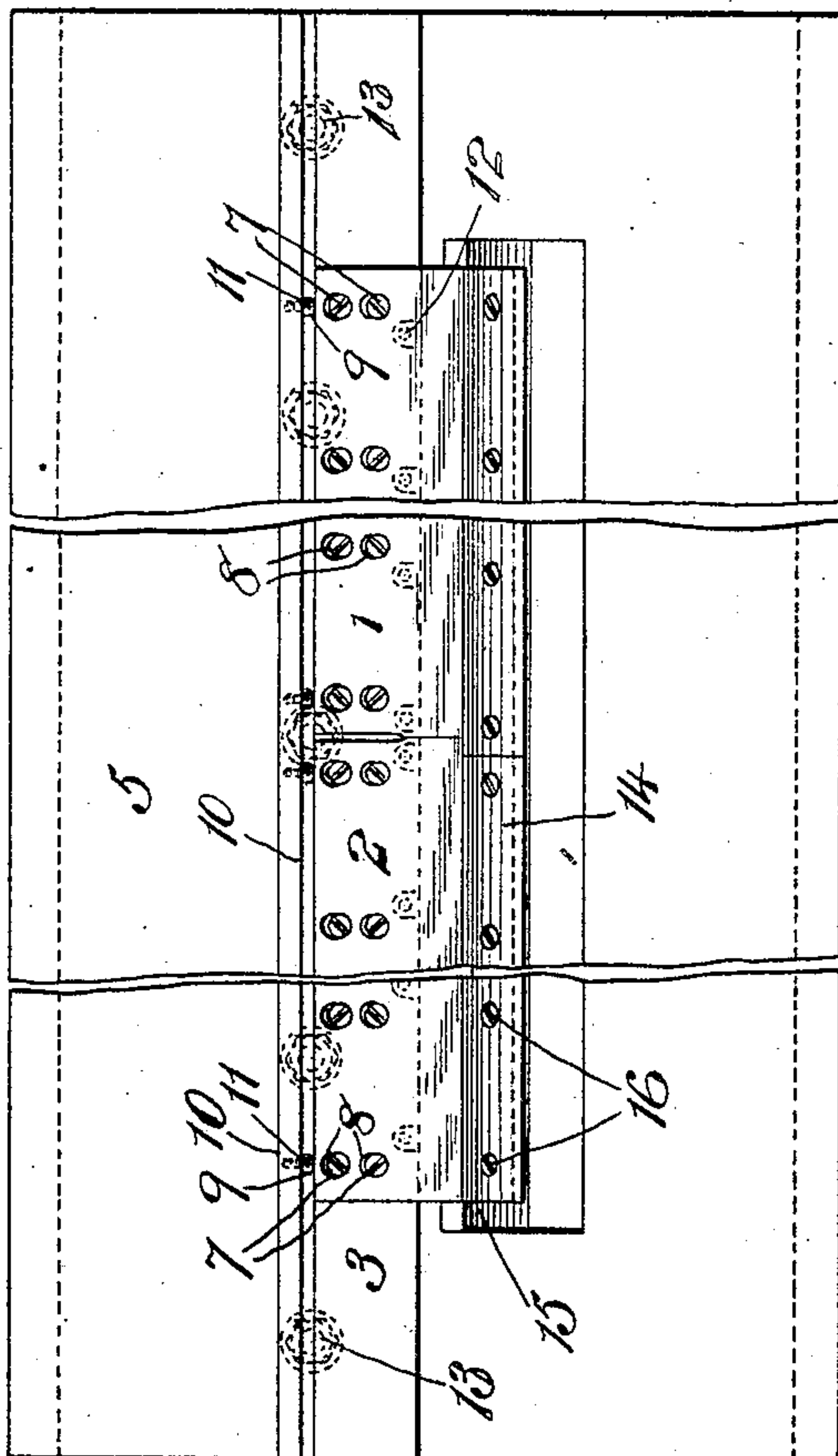


Fig. 2.

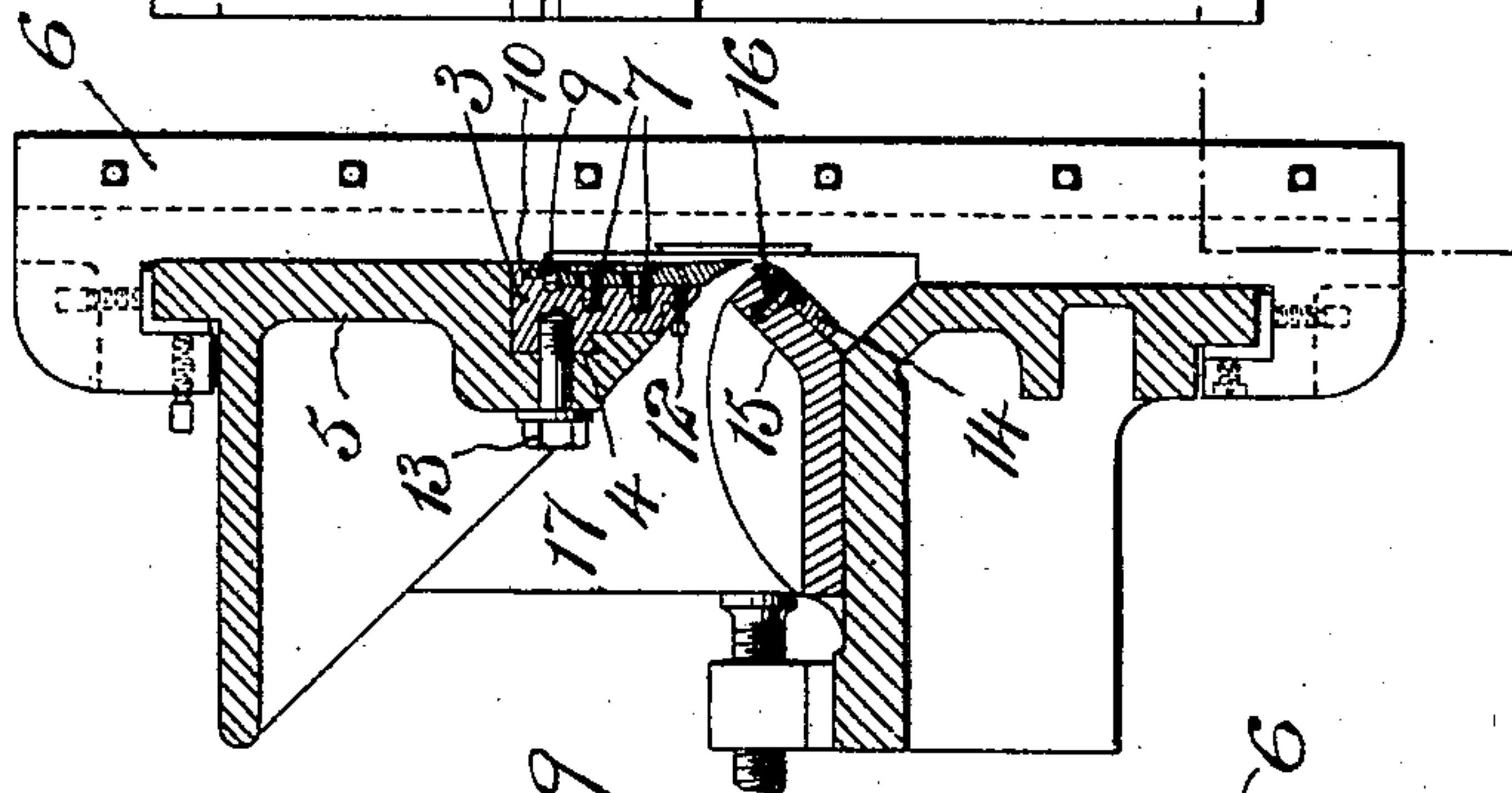
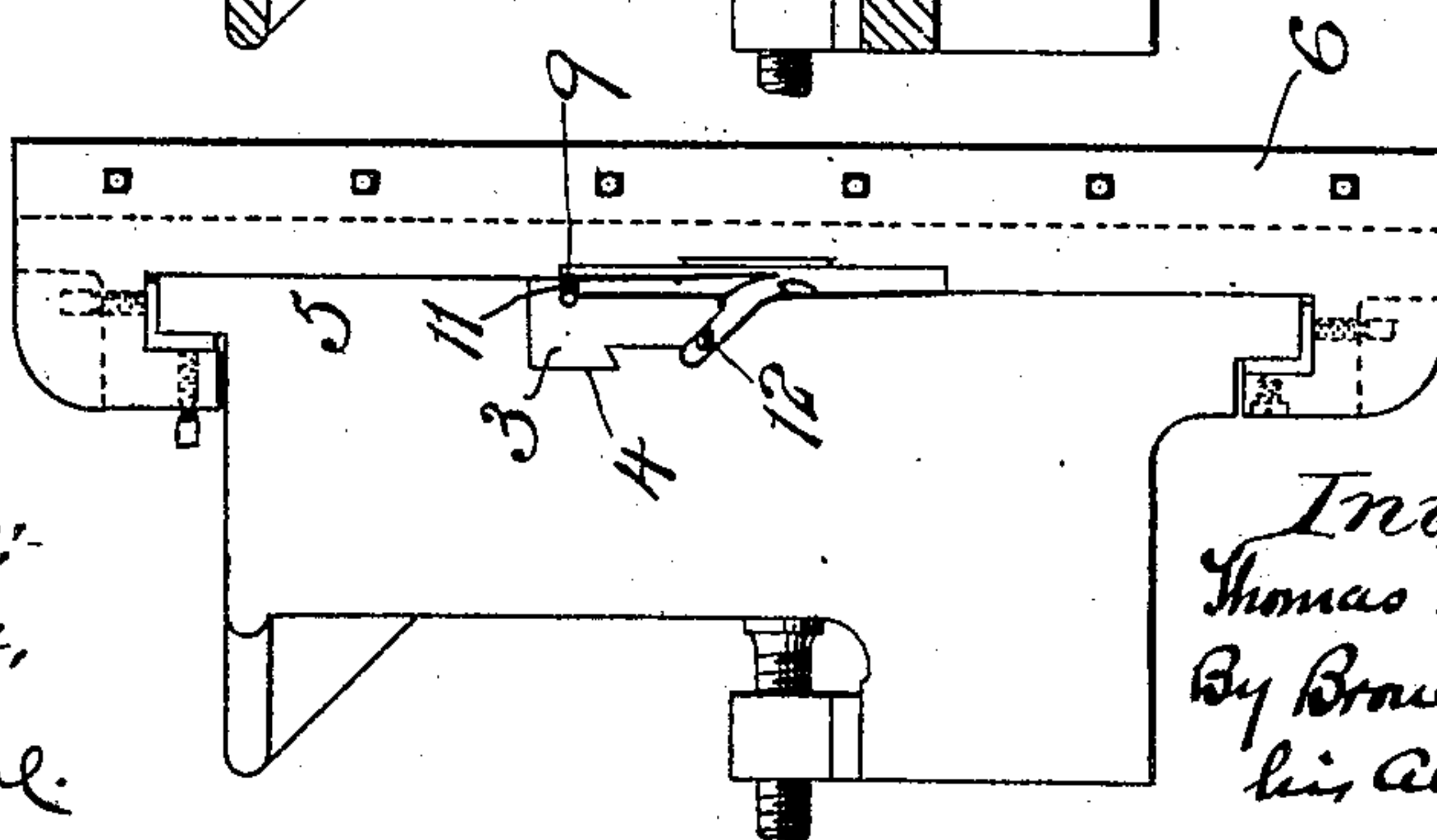


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS B. FITTS, OF PORT RICHMOND, NEW YORK, ASSIGNOR OF ONE-HALF TO JOHN F. WILTS, OF MONTCLAIR, NEW JERSEY.

WOOD-SLICING MACHINE.

No. 835,156.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed June 1, 1904. Serial No. 210,636.

To all whom it may concern:

Be it known that I, THOMAS B. FITTS, a citizen of the United States, and a resident of Port Richmond, in the county of Richmond and State of New York, have invented a new and useful Wood-Slicing Machine, of which the following is a specification.

My invention relates to wood-slicing machines, and more particularly to means for mounting and adjusting the slicing-knife with a view of obtaining accuracy of adjustment and a material saving in time and labor in removing the knife for grinding it.

The machine to which my invention relates is of that type in which the log from which the boards are to be sliced is held stationary and the slicing-knife, together with its support, is moved simultaneously in a vertical and longitudinal direction, the resultant of these two motions being a shearing action.

In the accompanying drawings, Figure 1 is a view of the knife in elevation and the parts in proximity thereto looking at the knife from the side on which the log to be sliced is intended to be located. Fig. 2 is a transverse section, and Fig. 3 is an end view, of the same.

The knife is represented as formed in two sections, (denoted, respectively, by 1 and 2.) These sections are arranged end to end, as shown in Fig. 1, so as to make, in effect, one continuous knife.

The object of making the knife in two sections is that it may be constructed and handled with greater facility, as it is commonly made twelve feet or more in length and very heavy with a view of slicing boards of a half-inch in thickness, more or less, from a solid log.

The knife is mounted, primarily, on a head block or bar 3, the latter being held within a dovetailed recess 4, extending longitudinally along the face of the cutter-head proper, 5.

The cutter-head 5 is in turn carried by a supporting-frame 6, the latter, in connection with the completed machine, being mounted so as reciprocate vertically, carrying with it the cutter-head 5 and the head block or bar 3, with the knife attached thereto, while at the same time the cutter-head 5 by well-known or approved means is given a longitudinal sliding movement in the frame 6, carrying with it the head block or bar 3 and knife attached thereto.

The knife 1, 2 is secured to the exposed face of the bar or block 3 by means of screws 7, which extend through vertically-elongated slots 8 in the knife into the bar 3. These screws 7 are arranged in pairs at intervals throughout the length of the knife, as clearly indicated in Fig. 1, and because of the vertically-elongated slots in the knife itself admit of the vertical adjustment of the knife.

The vertical adjustment of the knife is made by means of screws 9, tapped into the under side of the projecting top 10 of the bar 3 and provided through their heads with a perforation 11 for receiving a pin to act as a lever to turn the screws the necessary amount to force the blade downwardly after the screws 7 have been slightly loosened. The knife is adjusted toward the log to increase its lead by means of screws 12, seated in the block or bar 3 and bearing against the inner side of the knife near its lower end. The block or bar 3 is held in its seat in the head 5 against longitudinal displacement therein by means of screws 13, extending through the wall of the head 5 and tapped into the inner face of the block or bar 3.

A metallic pressure-bar 14 is fastened to the upturned flange 15 of the head 5 by means of screws 16 to coact with the knife-edge to produce the required thickness of cut.

The board which is sliced from the log passes between the edge of the bar 14 and the knife through the opening 17 in the head 5, from whence it may be removed in any well-known or approved manner.

When it is desired to remove the knife for grinding, the screws 13 are removed and the block or bar 3, with the knife attached thereto, is slid longitudinally through the end of the machine, and the grinding may be done while the knives are still attached to the block or bar 3, and when completed the bar 3, with the knives attached thereto, may be slid longitudinally into its seat in the head 5 and the screws 13 again put in place to hold it. This obviates the necessity of removing the knife from its immediate support and also obviates the necessity of readjusting either it or its support other than to simply slide the knife-supporting bar into the head, where it rests in position while the locking-screws for holding it are manipulated.

The weight of the head 5 is such that it would be quite impractical to remove it bod-

ily with the knife thereon, and this is avoided and still the adjustment of the knife maintained by the intermediate knife-carrying bar seated in the head 5, as hereinabove explained.

What I claim is—

1. The combination with the cutter-head of a slicing-cutter, the said head being mounted to move horizontally, of a knife-supporting bar having a longitudinal sliding movement into and out of position in the head and removable from the end of the head, a knife secured to the said bar, means for locking the bar to the head and means for locking the knife to the bar in different vertical and tilted adjustments.

2. The combination with the cutter-head of a slicing-cutter, the said head being mounted to move vertically and longitudinally, of a knife-supporting bar having a longitudinal sliding movement into and out of position in the head and removable from the end of the head, a knife secured to the said bar, means for locking the bar to the head and means for locking the knife to the bar in different vertical and tilted adjustments.

3. The combination with the cutter-head of a slicing-cutter, the said head being mounted to move horizontally, of a knife-support-

ing bar having a dovetailed engagement with the cutter-head, the said knife-supporting bar being arranged to slide longitudinally into and out of position through the end of the head, a knife secured to the said bar, means for locking the bar to the head and means for locking the knife to the bar in different vertical and tilted adjustments.

4. The combination with the cutter-head of a slicing-cutter, mounted to move horizontally and provided with a dovetailed recess extending longitudinally along its face, of a knife-supporting bar fitted to said recess and having a sliding engagement with the cutter-head into and out of position through the end of the head, a knife, knife-securing screws tapped into the bar and knife-adjusting screws seated in the bar and bearing against the edge and side of the knife for adjusting the knife in different vertical and tilted adjustments.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 26th day of May, 1904.

THOMAS B. FITTS.

Witnesses:

FREDK. HAYNES,
C. S. SUNDGREN.