

No. 637,358.

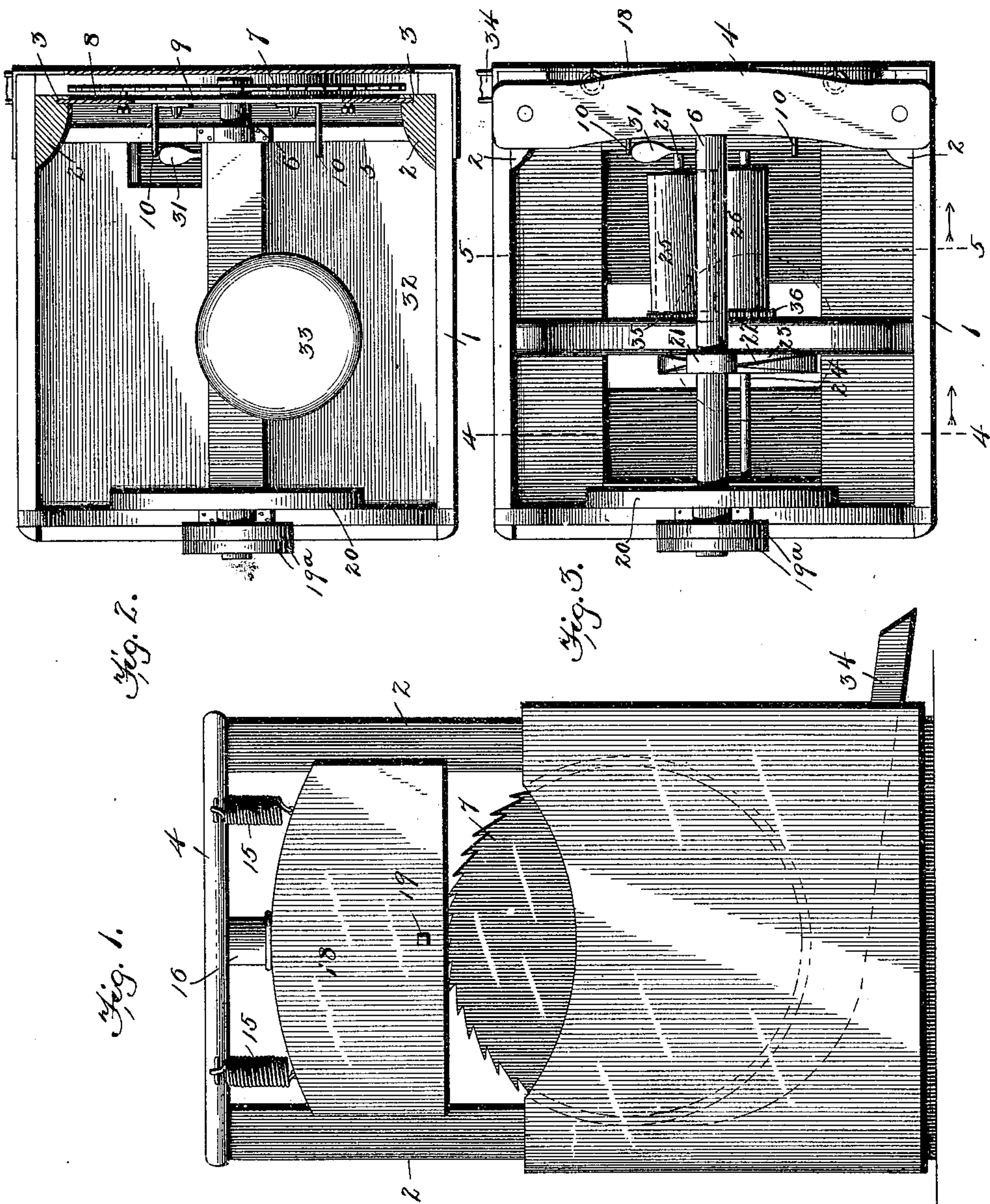
Patented Nov. 21, 1899.

P. SOUCY.  
JOINTER.

(Application filed Oct. 14, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:  
T. L. Mockman  
Forace G. Deitz

Philippe Soucy, Inventor  
By Marion Marion  
Attorneys

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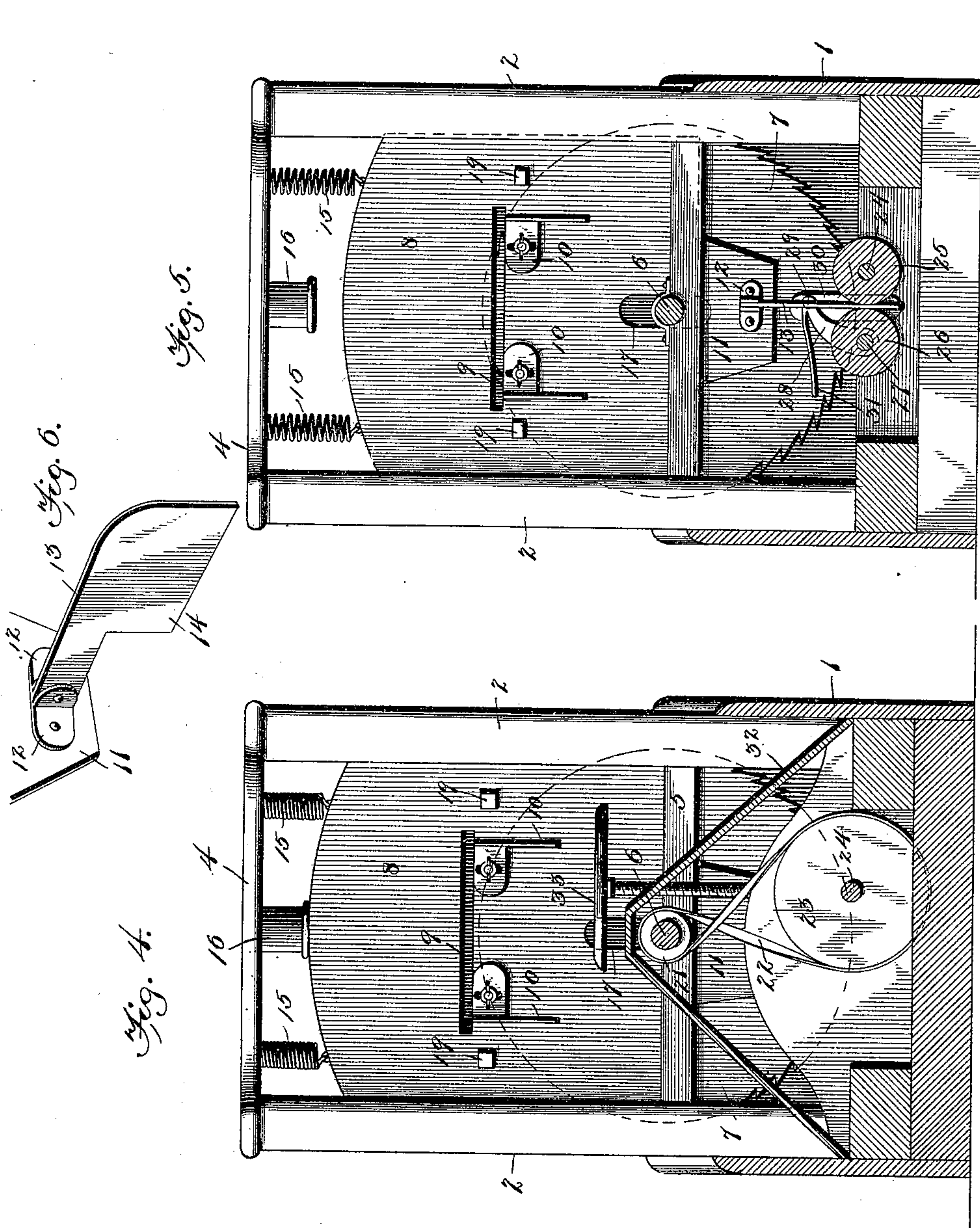
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(No Model.)

2 Sheets—Sheet 2.



Witnesses:

*D. L. Mockman*  
*Horace G. Deitz*

*Phillippe Soucy* Inventor

By *Marion Marion*

*His Attorneys*



# UNITED STATES PATENT OFFICE.

PHILIPPE SOUCY, OF KEEWATIN, CANADA.

## JOINTER.

SPECIFICATION forming part of Letters Patent No. 637,358, dated November 21, 1899.

Application filed October 14, 1898. Serial No. 693,551. (No model.)

*To all whom it may concern:*

Be it known that I, PHILIPPE SOUCY, a subject of Her Majesty the Queen of Great Britain, residing at Keewatin, county of Rainy River, Province of Ontario, Canada, have invented certain new and useful Improvements in Jointers; 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 jointers, and has especial relation to that class of such machines used for the purpose of providing a perfect joint in the making of barrel-heads.

The object of my invention is to provide a machine of this character in which the joining edge is formed by sawing, thus insuring a straight face.

A further object is to provide such machine by means of which the operator is enabled to support the work being done with both hands.

A further object is to provide means by which the head being prepared is carried downward onto the saw, the latter being stationary, the downward movement being accomplished by means of power derived from the mechanism of the machine, the movement being entirely under the control of the operator.

To these ends my invention consists in the improved construction and combination of parts hereinafter fully described, and particularly pointed out in the appended claims.

In the drawings, in which similar numerals of reference indicate similar parts in all of the views, Figure 1 is a front elevation of a machine constructed in accordance with my invention. Fig. 2 is a top plan view of the same, a portion of the device being shown in section. Fig. 3 is a plan view showing the cover removed. Fig. 4 is a vertical cross-section taken on the line 4 4 of Fig. 3. Fig. 5 is a similar view taken on the line 5 5 of Fig. 3. Fig. 6 is a detail of the arm for imparting movement to the carrying-frame.

1 designates a frame having at its front end two standards 2, provided with slides 3, extending the entire length thereof, said standards being connected at their top by a suitable cross-piece 4 and intermediate the top

and bottom with a suitable cross-bar 5, the latter forming one of the bearings for the shaft 6, extending rearwardly in the machine. A saw 7 is removably mounted on the front end of the shaft 6.

Mounted in the slides 3 and having a movement therein, as hereinafter set forth, is a carrying-frame 8, having a slot 9 for the passage of the head being prepared, suitable supports 10, adjustably mounted on the carrying-frame, serving to support the head while being operated upon. The frame 8 has its lower end provided with an extension 11, extending downwardly, said extension being provided with a series of angle-plates 12, which extend rearwardly therefrom and between which is fixedly secured the arm 13, having its rear end enlarged, as at 14, for a purpose hereinafter described. The carrying-frame 8 is normally held in its upper position by means of suitable springs 15, connected thereto and with the cross-piece 4, a buffer 16, mounted on said cross-piece, forming a stop to limit the upward movement of said frame. The carrying-frame 8 is mounted on the rear side of the saw 7 and is provided with a suitable opening 17 for the passage of the shaft 6, while a plate 18, connected to said frame in a suitable manner, is located to have a movement in front of said saw, suitable pins 19 serving to keep the saw from moving out of its proper course.

As shown, the slot 9 is of a considerable width, a width greater than the thickness of the ordinary barrel-head. In view of the fact that the head while being sawed is held against the portion of the frame on the upper side of the slot, said portion of the frame forming the support, it is necessary, in order that barrel-heads of varying sizes may be operated upon, that the normal support (the supports 10) be adjustable in order that the head will have no tendency to be carried out of the true horizontal position, which would be the case if the head were of less thickness than the width of the slot 9. In operation the operator adjusts the position of the supports 19 so that when the head is in true horizontal position its upper face will contact with the upper portion of the slot 9, thus holding the head in absolute horizontal position, the supports 10 preventing any down-



ward movement of the exposed end of the head when the frame 8 carries the head into contact with the saw.

The shaft 6 extends rearwardly, as herein-  
5 before set forth, and has its rear end provided with suitable driving-pulleys 19<sup>a</sup>, preferably a loose and a fixed pulley, which pulleys are operated from any suitable source of power. The shaft 6 is also provided with a  
10 suitable balance-wheel 20.

Mounted on the shaft 6 at a suitable point is a pulley 21, which is connected by means of a belt 22 with a pulley 23, mounted on a  
15 suitable shaft 24, located in the frame 1 near the bottom of the machine, said pulley 21 serving to impart a movement to the shaft 24. Mounted on the shaft 24, near the front end thereof, is a suitable roll 25, in connection with which a similar roll 26, mounted on a  
20 stub-shaft 27, is adapted to coact, the enlarged portion 14 of the arm 13 being adapted to normally rest between said rolls. The two rolls are geared together by means of two gear-wheels 35 and 36, mounted at the rear end of  
25 the shafts 24 and 27, respectively, said gear-wheels having an operative connection at all times regardless of the position of the roll 26. The shaft 27 has its rear end mounted in the frame 1, while the front end is mounted in  
30 one end of an angular bell-crank lever 28, pivotally mounted, as at 29, to a suitable upright 30, secured on the frame 1, the free end of the lever 28 being adapted to form a foot-rest and at the same time to serve to place the roll  
35 26 into and out of operative contact with the roll 25, this contact being brought about in the following manner: The rear end of the shaft 27 being practicably fixed in its bearing, while the front end is located in a bearing  
40 which is movable, it will be readily seen that the roll 26 will be held inclined, as best shown in Fig. 3, when the machine is not in operation and will remain in such inclined position until the foot is placed on the end 31  
45 of the bell-crank lever 28, when the forward end of the shaft 27 will be carried toward the roll 25, which serves to bring the roll 26 into contact with the enlarged portion 14, which remains between said rolls, and that when  
50 sufficient pressure is applied to the foot portion 31 the contact between the rolls 25 and 26 and the portion 14 will be sufficient to cause the portion 14 to have a movement downward caused by the rotary movement of the  
55 roll 25, which, it is to be understood, is rotating during the entire period the machine is operated. This movement of the arm 13 causes the frame 8 to be drawn down, thus bringing the head of the barrel into operative  
60 contact with the saw 7, thus cutting the edge in an exact manner, it being apparent that as long as the pressure of the foot remains on the foot portion 31 the carrying-frame 8 will continue this downward movement, but  
65 that when this pressure is released the contact between the arm 13 and the rolls 25 and 26 will be broken, and thus stop any fur-

ther downward movement, at which time the springs 15 come into action and carry the frame 8 to its normal position. It will be  
70 readily seen that by this construction any-sized head can be prepared, the size being limited only by the length of the opening 9, and the movement of the carrying-frame 8 need only be maintained a sufficient length of time  
75 to allow the saw to cut the entire length of the portion being prepared, and consequently allowing of any desired length of movement.

As shown in Figs. 2 and 4, a cover 32 is provided, which serves to prevent the operator  
80 from any liability of having his clothing, &c., caught in the operative parts of the machine, while an adjustably-mounted seat 33 is provided to allow the operator to perform his  
85 work while seated.

At the front of the machine a suitable saw-dust-duct 34 is provided, by means of which the sawdust can be readily removed from the machine.

While I have herein shown a preferred form  
90 of carrying my invention into effect, yet I do not limit myself to such preferred detail of construction, but claim the right to use any and all modifications thereof which will serve to carry into effect the objects to be attained  
95 by this invention in so far as such modifications and changes may fall within the spirit and scope of my said invention.

Having thus described my invention, what I claim as new is—

1. A jointer, comprising a frame; a shaft journaled therein, said shaft carrying a saw; a carrier slidably mounted in said frame, said carrier being normally held in its upper position, and comprising a vertical plate having  
105 an elongated slot formed therein, said slot serving to form a passage-way for the article to be sawed, the upper edge of said slot holding the article being sawed; independently-adjustable brackets secured to said vertical  
110 plate in juxtaposition to said slot, said brackets being spaced and serving to retain the article in true horizontal position; and means, operated by the movement of said shaft, for moving said carrier downwardly, whereby the  
115 article will be sawed, its sawed edge being at true right angles with its faces, said frame being automatically returned to its normal position, substantially as described.

2. A jointer, comprising a framework; a  
120 saw rotatively mounted therein; a carrying-frame slidably mounted in said framework, said frame being adapted to carry the article being prepared into and out of the path of movement of said saw, said frame comprising a vertical plate having an elongated slot  
125 formed therein, said slot serving to form a passage-way for the article to be sawed, the upper edge of said slot holding the article being sawed; independently-adjustable brackets secured to said vertical plate in juxtaposition to said slot, said brackets being spaced  
130 and serving to retain the article in true horizontal position while being sawed; a roll



mounted in bearings formed in said frame-  
work, operatively connected to the drive-  
shaft; a similar roll mounted in said frame-  
work, said roll having one end mounted in  
5 a movable bearing; an arm secured to said  
carrying-frame, located between said rolls;  
means for moving said adjustable roll into  
close contact with said carrying-frame, where-  
by said arm will be drawn downward; and  
10 means for automatically returning said carry-  
ing-frame to its normal position when said roll  
is released from contact.

3. A jointer comprising a frame; a shaft  
journaled therein, said shaft carrying a saw;  
15 two rolls journaled in said frame, one of said  
rolls being mounted in movable bearings;  
connections between said shaft and said rolls  
for continuously imparting movement to said  
rolls during the movement of said shaft; a  
20 carrier slidably mounted in said frame, said  
carrier being normally held in its upper po-  
sition, and comprising a vertical plate having

an elongated slot formed therein, said slot  
serving to form a passage-way for the article  
to be sawed, the upper edge of said slot hold- 25  
ing the article being sawed; independently-  
adjustable brackets secured to said vertical  
plate in juxtaposition to said slot, said brack-  
ets being spaced and serving to retain the ar- 30  
ticle in true horizontal position; an operat-  
ing-arm connected to said carrier and nor-  
mally resting in inoperative position between  
said rolls; and means for moving said mov-  
able roll into operative contact with said arm  
and said fixed roll, whereby the carrier will 35  
be moved downward, the return movement  
being automatic upon the release of said  
means, substantially as described.

In witness whereof I have hereunto set my  
hand in the presence of two witnesses.

PHILIPPE SOUCY.

Witnesses:

J. A. MARION,  
HORACE E. SEITZ.