

No. 886,195.

PATENTED APR. 28, 1908.

A. L. EVRETT.
WOOD SAWING MACHINE.
APPLICATION FILED MAY 25, 1907.

2 SHEETS—SHEET 1.

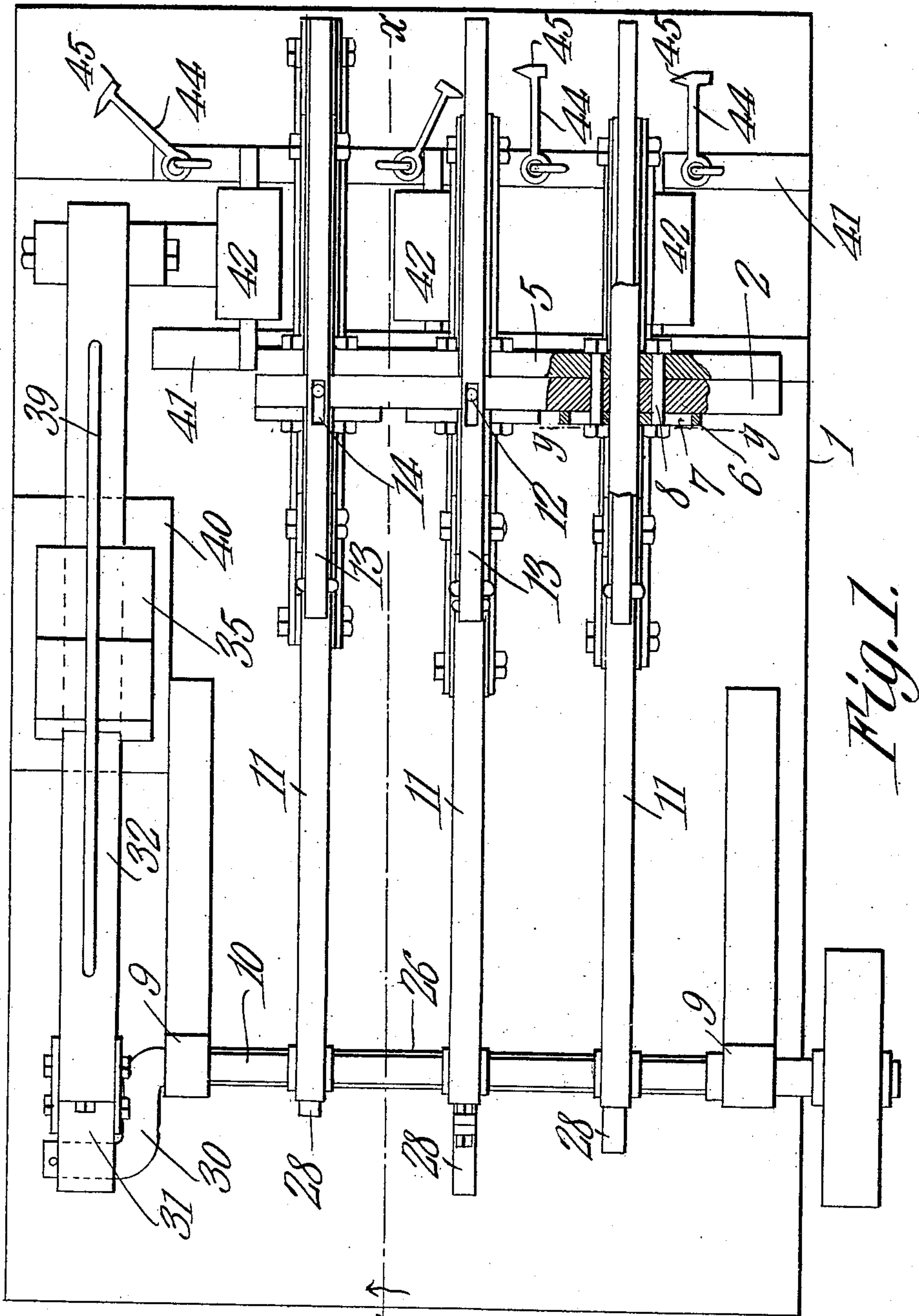


Fig. 1.

WITNESSES:

E. J. Stewart
Herbert Lawson

Arch L. Everett, INVENTOR.

By

C. A. Snow & Co.

ATTORNEYS

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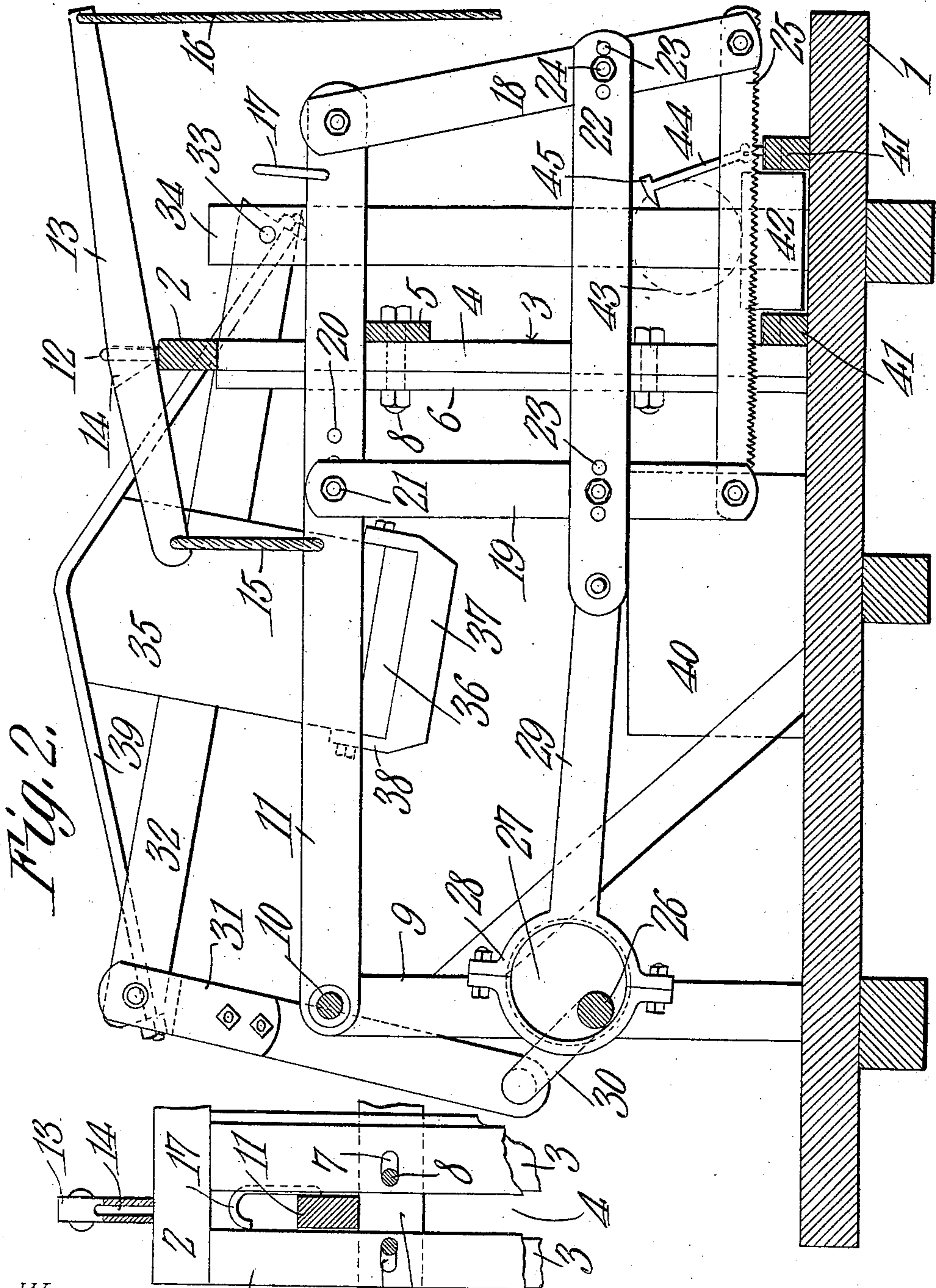


Fig. 2.

WITNESSES:
E. J. Stewart
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Fig. 3.

Arch. L. Everett, INVENTOR.
By *C. A. Snow & Co.*
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UNITED STATES PATENT OFFICE.

ARCH LETROBE EVRETT, OF NORTH FORT WORTH, TEXAS.

WOOD-SAWING MACHINE.

No. 886,195.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed May 25, 1907. Serial No. 375,684.

To all whom it may concern:

Be it known that I, ARCH LETROBE EVRETT, a citizen of the United States, residing at North Fort Worth, in the county of Tarrant and State of Texas, have invented a new and useful Wood-Sawing Machine, of which the following is a specification.

This invention relates to machines for sawing and splitting wood and its object is to provide simple and efficient mechanism of this character having saws which are independently movable in a vertical direction but which are disposed to be simultaneously operated from a common drive shaft.

Another object is to provide means whereby any one of the saws can be locked out of operative position without, however, interfering with the actuation of the remaining saws.

Another object is to provide means for holding the saws against lateral movement during the cutting operation.

A still further object is to provide simple and efficient means whereby the wood can be split by the machine during the sawing operation.

With these and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings: Figure 1 is a plan view of the machine, a portion of the saw guide being broken away; Fig. 2 is a longitudinal section on the line $x-x$, Fig. 1; and Fig. 3 is a section on line $y-y$, Fig. 1 and showing the upper portion of one of the saw guides in elevation.

Referring to the figures by characters of reference, 1 designates a base or platform of any preferred construction and extending therefrom near one end is a supporting frame 2 made up of upstanding strips 3 spaced apart to form slots 4. These strips are connected midway between their ends by a transverse stop strip 5 which is bolted or otherwise secured thereto. Guide strips 6 are arranged longitudinally upon one face of each of the strips 3 and have transverse slots 7 designed to receive bolts 8. By fastening these bolts the strips 6 can be adjusted toward or away from each other to diminish or increase the width of the slots 4.

Standards 9 are mounted upon the base near one end and connecting the upper ends

thereof is a bar 10 constituting a pivot for a plurality of supporting beams 11. One of these beams extends through each slot 4 and all of the beams are disposed to normally rest upon the stop strip 5. Extending upward from the frame 2 directly above each of the slots 4 is a pin 12 and mounted on each of these pins is a lever 13 having a tapered opening 14 therein into which the pin projects. One end of this lever is connected by means of a rope 15 or other flexible device with the beam 11 thereunder while the other end of the lever has a rope or other flexible device 16 secured thereto and hanging downward to a point within convenient reach of the operator. Each of the beams 11 is provided with a rigid hook 17 near its free end and by pulling down on the rope 16 the beam 11 can be swung upward so that by swinging lever 13 laterally it can be placed in engagement with the hook 17 and support the beam in raised position.

Pivotaly connected to the free end of each beam 11 is a hanger 18 and another hanger 19 is pivotaly connected to said beam between the bar 10 and the frame 2. A plurality of openings 20 is formed within beam 11 and any one of them is designed to receive a pivot bolt 21 of hanger 19. Both of the hangers are connected between their ends by a brace strip 22 there being two sets of openings 23 within the brace strip and any opening in each set being designed to receive a pivot bolt 24. The lower ends of the hangers are secured in any preferred manner to the end portions of a saw 25. It is of course understood that the strip 22 and the saw 25 as well as the beam 11 extend through the slot 4 provided for them. A drive shaft 26 is journaled in the standards 9 and carries a plurality of eccentrics 27. Each eccentric is surrounded by a strap 28 connected by means of an arm 29 to one of the strips 22.

A crank 30 is formed at one end of shaft 26 and is connected by a pitman 31 with one end of a beam 32. This beam is fulcrumed as at 33 upon a standard 34 extending upward from the base 1. The beam extends through a block 35, the lower end of which is tapered as shown at 36 and provided with a metallic wedge 37. This wedge is secured upon the tapered end of the block by means of ears 38 which lap opposite faces of the block and are fastened thereto by means of screws or in any preferred manner. The upper end of the block abuts against a reinforce

in the form of a rod 39, the ends of which are extended through the ends of the beam 32 and secured by nuts or in any other suitable manner. This wedge 37 and the block 35 constitute a wood splitting device and it is disposed above a block 40 on which the wood to be split is designed to be placed.

Supporting strips 41 extend along the base and below the saws 25 and journaled within these strips are rollers 42 on which is placed the wood to be cut, and which has been indicated at 43. Holding devices are pivotally connected to one of the strips 41 and consist of shanks 44 having heads 45. Each head consists of a butt designed to be struck by a suitable hammer and a point designed to be driven into the wood so as to prevent it from moving out of proper position while being sawed.

In using the machine herein described all of the saws are raised out of operative position by pulling downward on rope 16. Levers 13 will therefore pull upward on beams 11 and when the hooks 17 have been raised to position at one side of the levers 13 said levers are swung laterally so as to assume positions beneath the hooks whereupon the saws will be held supported. The wood to be sawed is then placed on the rollers and moved in position beneath the saws after which the holding devices 45 are driven thereinto. The saws are then released from the levers 13 by pulling said levers out of engagement with hooks 17 whereupon the saws will drop into position upon the wood 43. When shaft 26 is rotated, as by means of a pulley 46, the eccentrics 27 will reciprocate the strip 22 and the hangers 18 and 19 will be oscillated to cause the saws 25 to move back and forth upon the wood. The weight of the beams 11 and the parts connected thereto will be sufficient to feed the saw into the wood. After the wood has been cut into desired lengths the sections are placed end-wise upon the block 40. Rotating crank 30 of course actuates the beam 32 and causes the splitting device to work upward and downward and when said device moves downward it will strike the section of wood and split it. It is of course apparent that any one or more

of the saws may be maintained out of operative position.

It will be seen that the apparatus is very compact and durable in construction and is particularly desirable for sawing and splitting kindling wood.

Should any of the beams 11 become worn the guide strips can be adjusted toward them so as to prevent lateral movement.

What is claimed is:

1. In a machine of the character described the combination with a standard, a supporting beam pivotally connected thereto, and adjustable guides for the beam; of hangers pivotally connected to the beam, one of said hangers being adjustable, a saw carried by the hangers and extending between the guides, a brace strip adjustably and pivotally connected to the hangers and parallel with the saw and beam, a lifting lever pivotally supported upon the guides, a connection between said lever and the supporting beam, means upon said beam for engaging the lever to support the beam and saw in raised position between the guides, a drive element, and means for transmitting motion from said element to the brace strip.

2. In a machine of the character described the combination with guides adjustable toward or from each other, a supporting beam extending between the guides and pivoted at one end, oscillatory hangers depending from the beam, a saw carried by the hangers, adjustable means for holding the hangers at a desired angle to each other, and means for oscillating the hangers; of an upstanding pivot device carried by the guides, a lifting lever mounted to swing either vertically or laterally upon said device, a connection between one end of the lever and the supporting beam, and means upon said beam for engaging the lever to hold the beam and saw in raised position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ARCH LETROBE EVRETT.

Witnesses:

JACK JENKINS,
GUS WALLACE.