

No. 771,209.

PATENTED SEPT. 27, 1904.

O. L. ROBERTS.  
SAWING MACHINE.

APPLICATION FILED MAR. 24, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

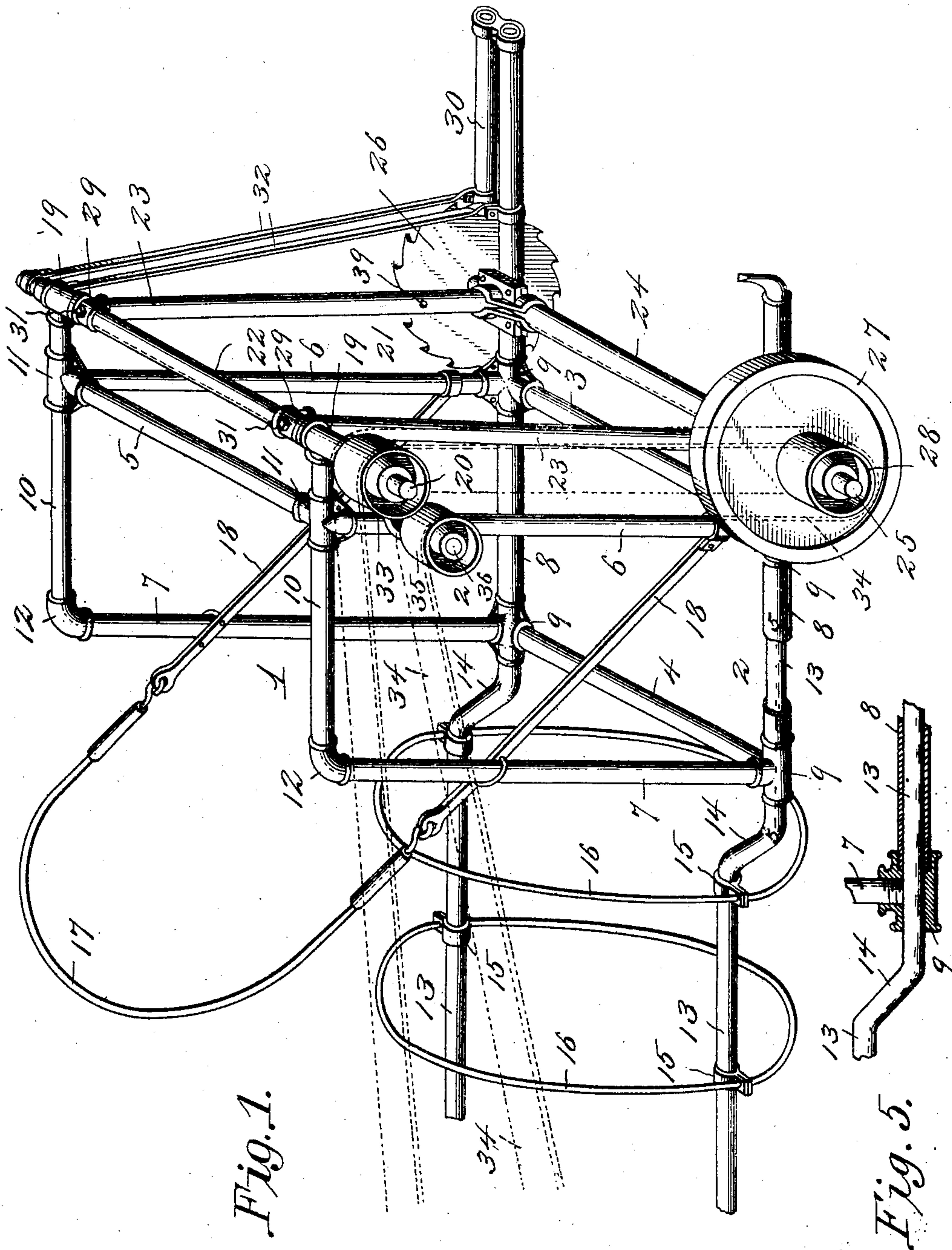


Fig. 1.

Fig. 5.

Witnesses  
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*A. J. Elmore*

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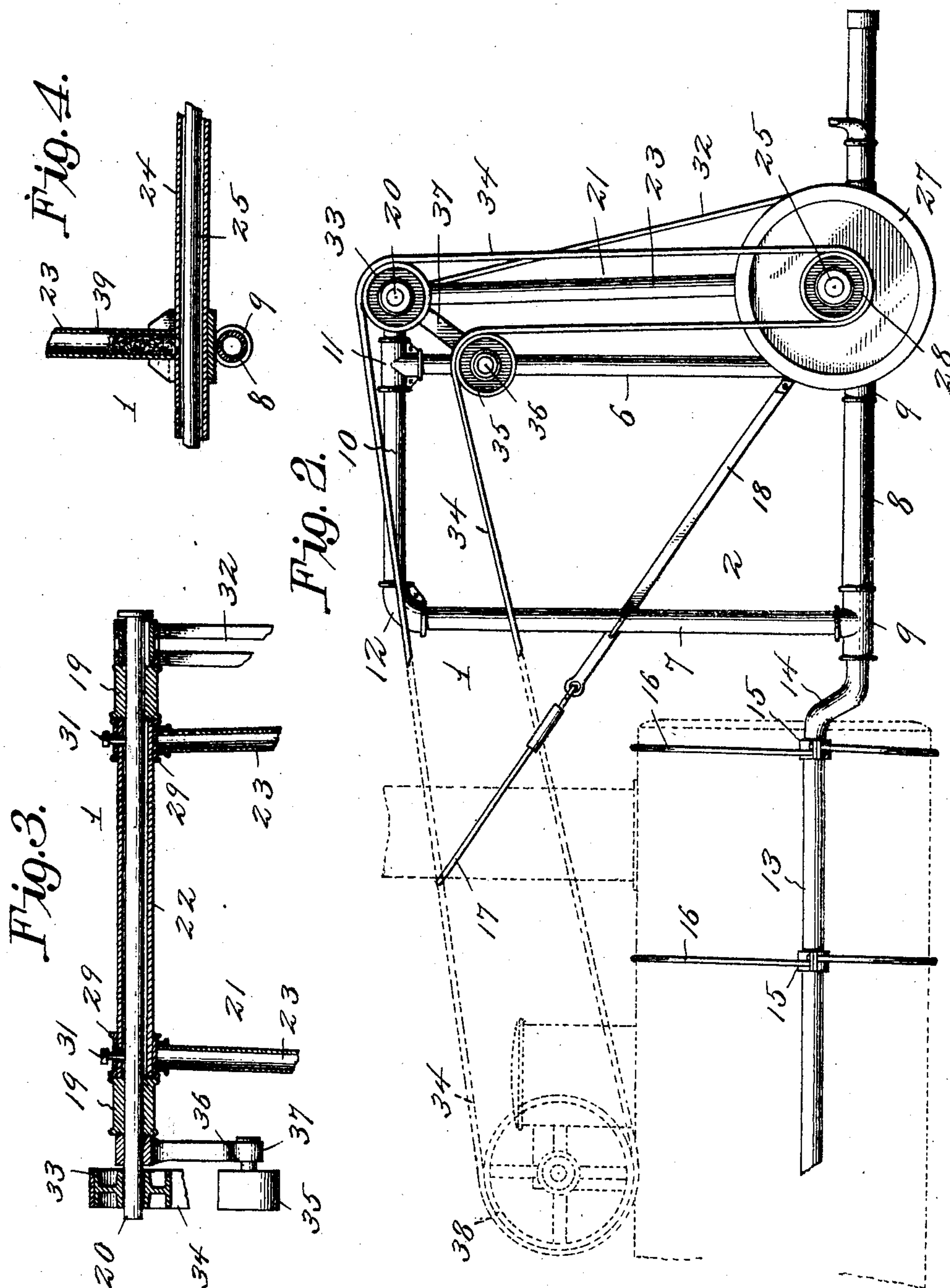
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# UNITED STATES PATENT OFFICE.

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## SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 771,209, dated September 27, 1904.

Application filed March 24, 1904. Serial No. 199,730. (No model.)

*To all whom it may concern:*

Be it known that I, OSCAR L. ROBERTS, a citizen of the United States, residing at Stockport, in the county of Van Buren and State of Iowa, have invented a new and useful Sawing-Machine, of which the following is a specification.

My invention relates to sawing-machines designed especially for attachment to traction-engines for use in preparing fuel for the latter, and has for its objects to produce a comparatively simple inexpensive device of this character which may be readily applied and adjusted for engines of varying widths and one which in practice will be exceedingly strong and durable.

To these ends the invention comprises the novel features of construction and combination of parts more fully hereinafter described. In the accompanying drawings, Figure 1 is a perspective view of my improved device. Fig. 2 is a side elevation illustrating the same applied to an engine. Figs. 3 and 4 are detail sectional views. Fig. 5 is a detail section on the line 5 5 of Fig. 1.

Referring to the drawings, 1 designates the main frame of my improved device, preferably composed throughout of pipe-tubing and as a whole comprising substantially rectangular side frames 2, suitably spaced transversely and connected at their lower ends by front and rear transverse connecting bars or members 3 4 and at their upper ends by a front transverse connecting-bar 5.

The side frames 2 each consist of a pair of vertically-disposed parallel bars or members 6 7, suitably spaced apart and connected at their lower ends by a horizontal tubular member 8, engaged at its ends with T-couplings 9, with which latter the lower ends of the members 6 7 and also the adjacent ends of the transverse connecting members 3 4 are engaged, the members 6 7 being connected at their upper ends by upper horizontal members 10, engaged at their forward ends with T-couplings 11, with which the adjacent ends of the front vertical members 6 and the upper transverse connecting member 5 are also engaged, while the rear ends of the members

10 are connected with the adjacent ends of the members 7 by means of coupling-elbows 12.

Extending through and adapted for rotation in the lower horizontal bars 8 of the side frames are attaching bars or members 13, adapted to lie, respectively, upon the opposite sides of the engine-boiler, to the front end of which the device is in practice applied, as seen in Fig. 2, the members 13 immediately in rear of the main frame 1 being angularly bent, as at 14, whereby upon rotation in the members 8 they may be adjusted relatively for application to boilers of varying widths. The rear portions or extensions of the members 13 have secured thereto, by means of adjustable clips 15 or in any other suitable manner, attaching straps or bands 16, adapted to embrace the boiler for securing the device in position, there being also provided a strap or band 17, which in practice engages around the engine smoke-stack and has its ends detachably connected with diagonal brace-bars 18, engaged with and sustained by the members 6 7 of the side frames.

The upper horizontal members 10 of the side frames are extended forwardly a suitable distance, as shown, and carry at their outer ends T-couplings 19, which constitute a bearing for and in which a shaft 20 is journaled for rotation, there being suspended from said shaft a swinging frame 21, comprising an upper tubular member 22, mounted upon and inclosing the shaft 20, a pair of vertical side members 23, and a lower tubular connecting member 24, through which latter extends a rotary shaft 25, carrying at one end a circular saw 26 and at the other a balance-wheel 27 and belt-pulley 28, the meeting ends of the members of the swinging frame being connected, as in the instance of the main frame, by T-couplings 29. The saw 26 lies upon the outer side of the adjacent bar or member 13 and is disposed between the latter and a supplemental bar or member 30, extending parallel with said member 13, from which it is slightly spaced and to which it is connected by suitable couplings, as shown, attention being here directed to the fact that the members 13 project in advance of the main and



swinging frames for the purpose of supporting logs to be acted upon by the saw 26.

The swinging frame is fixed by means of set-screws 31, tapped through the upper coupling-  
 5 T's 29 to the upper shaft 20, which projects at one end beyond the frame for the reception of the upper ends of the pair of spaced members 32, the lower ends of which are attached, respectively, to the members 13 and  
 10 30, said shaft 20 being extended at its other end beyond the frame for the reception of an idler 33, disposed vertically above the belt-pulley 28, over which latter is passed a driving-belt 34, one flight of which travels upon the idler 33 and the other flight upon a companion idler 35, journaled upon a stub-shaft 36, fixed to a casting 37, which is in turn fixed upon the shaft 20, said belt being driven  
 15 from a suitable fly-wheel 38, carried by the engine.  
 20

It is to be noted that the shaft 25 is housed within the tubular member 24, being thus protected from dust and dirt, and is lubricated during rotation by a supply of oil carried by  
 25 the tubular members 23, which for this purpose have a suitable portion of their lower ends packed with waste or other absorbent material, the oil being introduced through suitable openings or ports 39.

30 From the foregoing it is apparent that I produce a comparatively simple inexpensive device which is admirably adapted for the attainment of the ends in view; but it is to be understood that I do not limit myself to the precise details herein set forth, inasmuch as  
 35 minor changes may be made therein without departing from the spirit of the invention.

Having thus described the invention, what I claim is—

40 1. In a device of the class described, the combination with a main frame, of a swinging frame pivotally connected therewith, a saw operatively sustained by and movable with

the swinging frame, and a pair of supporting members rotatably connected with the main 45 frame, said members being angularly bent to adapt them for relative adjustment.

2. In a device of the class described, the combination with a main frame having lower tubular members, of a swinging frame pivotally 50 connected with the main frame, a saw operatively sustained by and movable with the swinging frame, and supporting members rotatably mounted in the tubular members of the main frame, said supporting members being 55 angularly bent in rear of the frame to adapt them for relative adjustment.

3. In a device of the class described, the combination with a main frame having lower tubular members, of a swinging frame pivotally 60 connected with the main frame, a saw operatively sustained by and movable with the swinging frame, supporting members rotatably mounted in the tubular members of the main frame, said supporting members being 65 angularly bent in rear of the frame to adapt them for relative adjustment, and attaching-straps carried by the supporting members and adapted to embrace the engine-boiler.

4. In a device of the class described, the combination 70 with a main frame, of means for attaching the same to an engine, a swinging frame pivotally connected with the main frame and having tubular side members provided with oil-openings and a lower tubular member, a rotary shaft extended through the lower 75 tubular member, means for operating the shaft, and a saw carried by the latter.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 80 the presence of two witnesses.

OSCAR L. ROBERTS.

Witnesses:

M. J. MUNSON,  
 M. L. POULTER.