No. 702,592. Patented June 17, 1902.

A. E. ROE.

GANG EDGER SAWING MACHINE.

(Application filed Jan. 2, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 2.

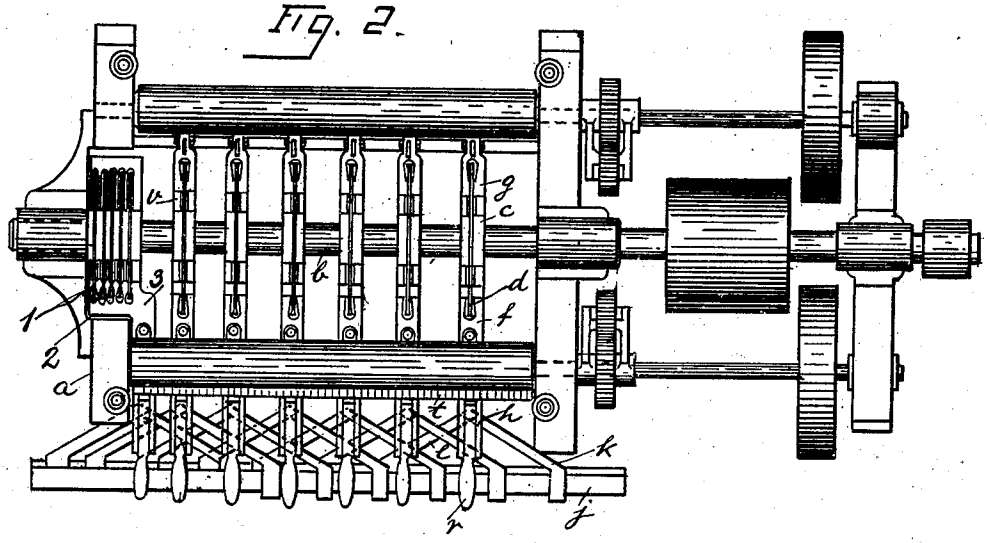
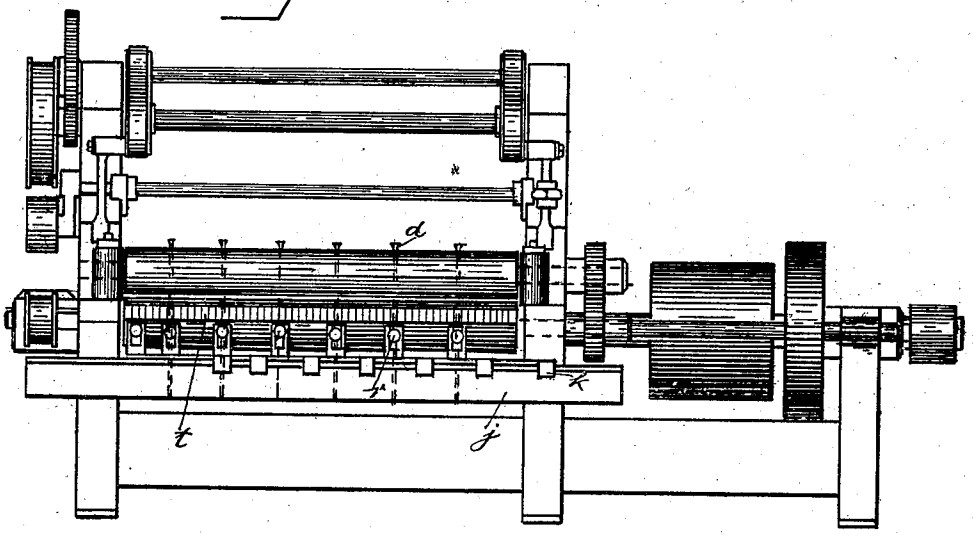


Fig. 1.



WITNESSES:
M. R. Daniels
M. D'Osa

A. E. Roe
INVENTOR.
BY Bruce & Cornwall
ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 702,592. Patented June 17, 1902.

A. E. ROE.

GANG EDGER SAWING MACHINE.

(Application filed Jan. 2, 1900.)

(No Model.) 2 Sheets—Sheet 2.

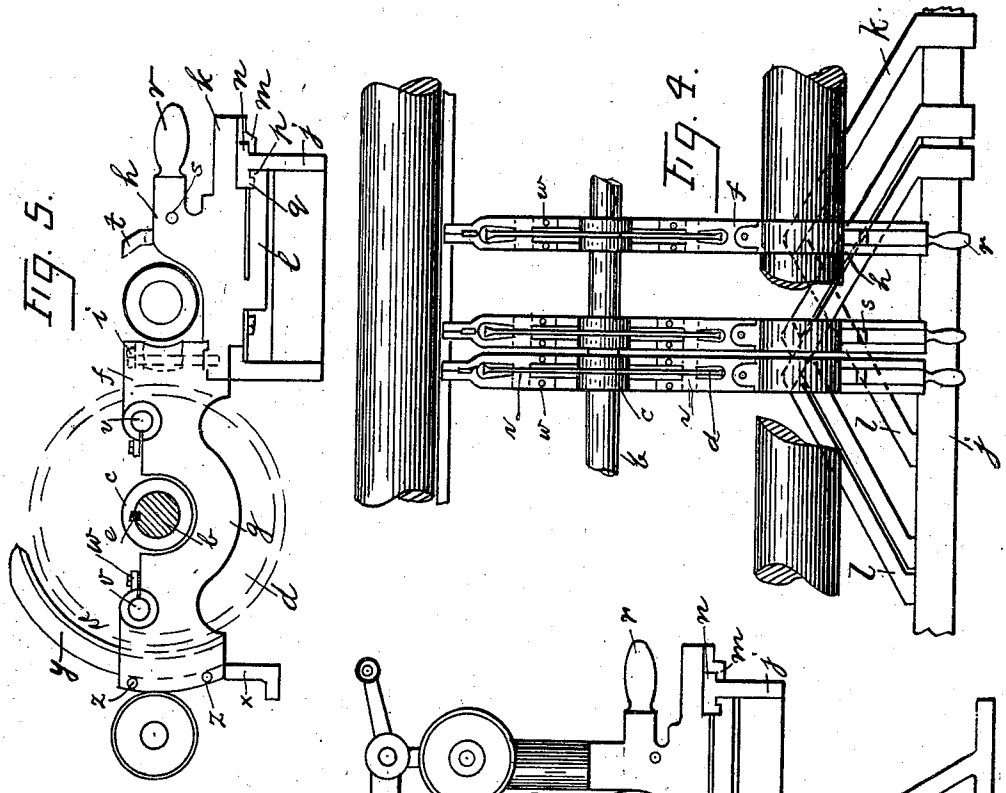


Fig. 5.

Fig. 4.

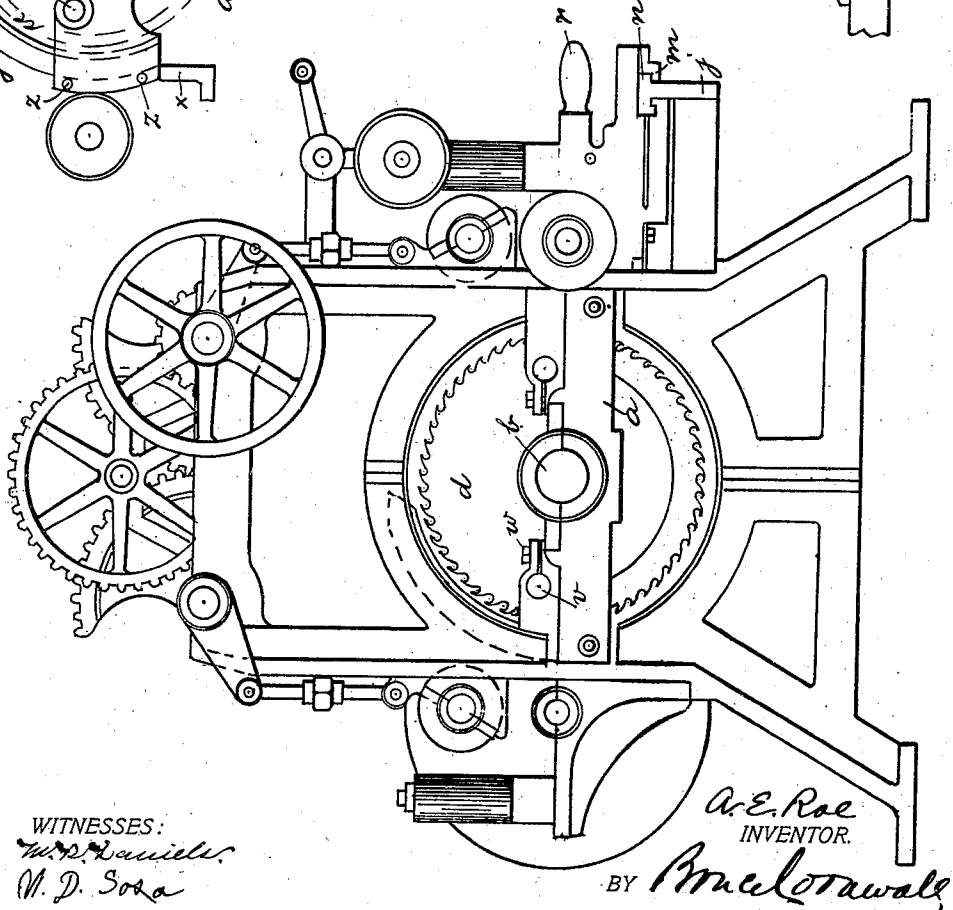


Fig. 3.

WITNESSES:
M. D. Soza

A. E. Roe
INVENTOR.
BY Macdonald
ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALPHEUS E. ROE, OF NEW WHATCOM, WASHINGTON, ASSIGNOR TO HIMSELF, AND BRUCE CORNWALL, OF SAN FRANCISCO, CALIFORNIA.

GANG-EDGER SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 702,592, dated June 17, 1902.

Application filed January 2, 1900. Serial No. 192. (No model.)

To all whom it may concern:

Be it known that I, ALPHEUS E. ROE, a citizen of the United States, residing at New Whatcom, in the county of Whatcom and State of Washington, have invented certain new and useful Improvements in Gang-Edger Sawing-Machines, of which the following is a specification.

My invention relates to improvements in gang-edger sawing-machines, the object of my invention being to provide improved means for adjusting the several saws of the gang, also improved means for spreading the sawed lumber, also an improved construction of the machine whereby a battery of saws may be operated when desired, said battery being adapted to be withdrawn out of the way when not in use.

In the accompanying drawings, Figure 1 is a front elevation of the improved machine. Fig 2 is a top plan view. Fig. 3 is an end view. Fig. 4 is a plan view showing the shifters carrying the saws either singly or in combination, and Fig. 5 is a side elevation of a saw and its corresponding shifter in position upon a gang-edger frame.

Referring to the drawings, it will be seen that upon a frame a is mounted the saw-arbor b, driven from any suitable source of power. Upon said arbor are mounted the saw-collars c, to which the saws d are suitably secured. Said collars can slide longitudinally on said arbor, but are driven thereby through steel feathers e, engaging said arbor and collars. Thus it will be seen that said edger-saws d are driven rotarily by said arbor, while capable of free longitudinal movement thereon. The saws are moved longitudinally along the arbor to correspond with the size of the lumber which is to be edged, and for this purpose each saw is controlled by a shifter f. Said shifter comprises a yoke g, extending below the saw-arbor, and a shifter-frame h, to which the yoke g is secured by the bolt i. The frame h is adapted to slide along guide j by means of two arms k l, the upper one, k, of which has a downwardly and rearwardly extending finger m, which engages a front rib n on the guide j, while the lower one, l, has a forwardly and upwardly extending finger p, engaging a rear rib q. The arms k l diverge at a considerable angle, so as to furnish a long base or guiding-surface for the frame h, and thus permit the shifter to be moved longitudinally without binding. The shifter-frame has a handle-bar r, pivoted at s, the tooth of which normally engages the rack-bar t. By reason of the construction by which the upper arm of one shifter can pass over the lower arm of an adjoining shifter the saws can be placed close together when desired, as shown in Fig. 4. The yoke g is slitted vertically to receive the saw and has on each side of the saw sockets to receive guide-pins v, which may be adjusted in said sockets and are secured in the adjusted position by means of bolts w. Said guide-pins permit the saw to be maintained in perfect alinement with the toothed handle-bar. At its rear end the yoke g slides upon a guide x and carries a spreader y, curved to conform to the edge of the saw and adjustable in the rear end of said guide. Said spreader is secured by means of bolts z. The socket being curved of the same curvature as the upper part of the spreader, as shown in dotted lines in Fig. 5, the spreader can be dropped below the surface of the shifter to facilitate the sharpening of the saw. Since the spreader extends to the top of the saw, or even above the top, all danger of the saw engaging the timber with its rear edge and throwing the timber backward is removed, thus rendering the machine a perfectly safe one even in the hands of a novice.

1 represents a battery of saws, which when not in use are contained in a recess 2 in one end of the frame, but may be moved into any desired position for use by means of a shifter 3, conforming in general construction to the shifter f of the single saws.

This construction makes a sixty-inch edger equivalent to a sixty-six-inch edger as originally constructed, with a battery attachment, having a further advantage of being able to use both sides of the machine as "guide" sides.

I claim—

1. In a gang-edger, the combination of a saw-arbor; a series of saws mounted thereon; a series of slides of like form and dimensions, having their outer ends at an angle to the

body of the slide; and connections between said slides and the saws.

2. In a gang-edger, the combination of a saw-arbor; a series of saws mounted thereon; a series of slides of like form and dimensions, having their outer ends at an angle to the body of the slide; an arm connected to each of said slides; a guide for said slides and arms; and connections between said slides and the saws.

3. In a gang-edger, the combination of a saw-arbor; a series of saws mounted thereon; guides or ways adjacent to said arbor; a series of slides of like form and dimensions, mounted on said ways; said slides having a straight body portion with their outer ends bent at an angle thereto; an arm extending from each of the slides at an angle to the straight portion and in a direction opposite to that of the bent portion of the slides; a guide for said slides and arms, and connections between said slides and the saws.

4. In a gang-edger, the combination of a saw-arbor; a series of saws mounted thereon; guides or ways; a series of slides of like form mounted thereon, said slides having their outer ends bent at an angle substantially as described; arms extending from the under face of the slides to one of the guides; means for holding the slides in their adjusted position; and connections between said slides and the saws.

5. In a gang-edger sawing-machine, the combination of an arbor, a saw longitudinally movable thereon, a shifting device engaging said saw, said device having arms, diverging obliquely, one on each side thereof and a guide on which the extended ends of said arms slide, the arms extending in one direction sliding on one portion of said guide and those in the other direction on another portion thereof, substantially as described.

6. In a gang-edger sawing-machine, the combination of an arbor, a saw longitudinally movable thereon, a shifting device engaging said saw, said device having upper and lower spreading-arms, the upper arm of one shifter being adapted to pass over the lower arm of an adjoining shifter, and a guide on which the extended ends of the arms slide, substantially as described.

7. In a gang-edger sawing-machine, the combination of an arbor, a saw longitudinally movable thereon, a shifter for shifting said saw longitudinally, said shifter extending symmetrically and equally on both sides of the plane of the saw, and from the front to the rear thereof, and being provided at the front with means for operating said shifter, and a spreader carried in the plane of the saw by the rear end of said shifter, substantially as described.

8. In a gang-edger sawing-machine, the combination of a frame, recess at one end, an arbor, a battery of saws longitudinally movable on said arbor, said recess being adapted to receive said battery when not in use, and a shifter for shifting said battery along said arbor, substantially as described.

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

ALPHEUS E. ROE.

Witnesses:
W. P. FOWLE,
D. DAUN EGAN.