

(No Model.)

2 Sheets—Sheet 1.

S. WHITE, Dec'd.

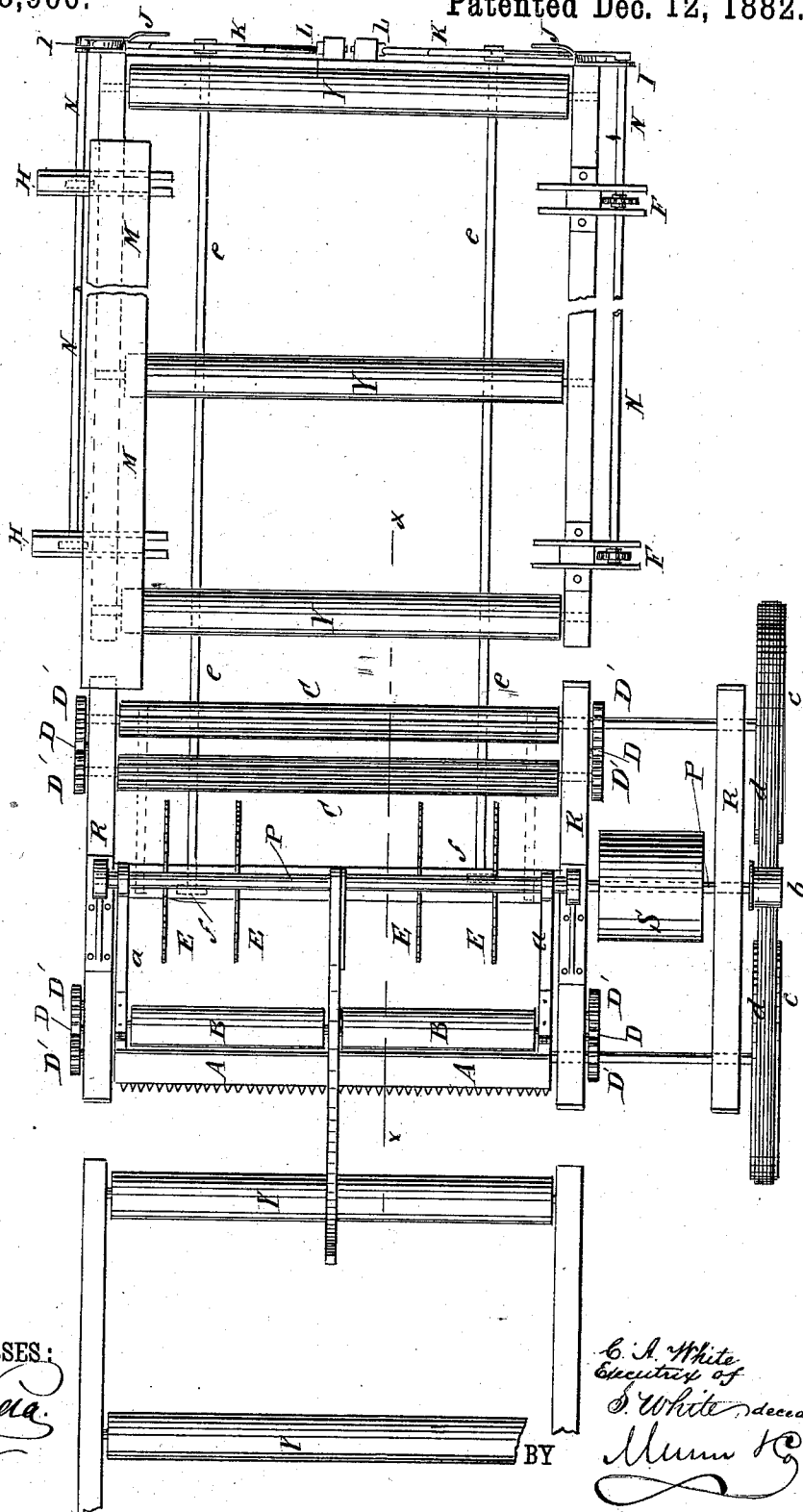
C. A. WHITE, Executrix.

GANG EDGER.

No. 268,966.

Patented Dec. 12, 1882.

fig. 1.



WITNESSES:

Chas. Nicola
C. Sedgwick

BY

C. A. White
Executrix of
S. White, deceased.
Munn & Co
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

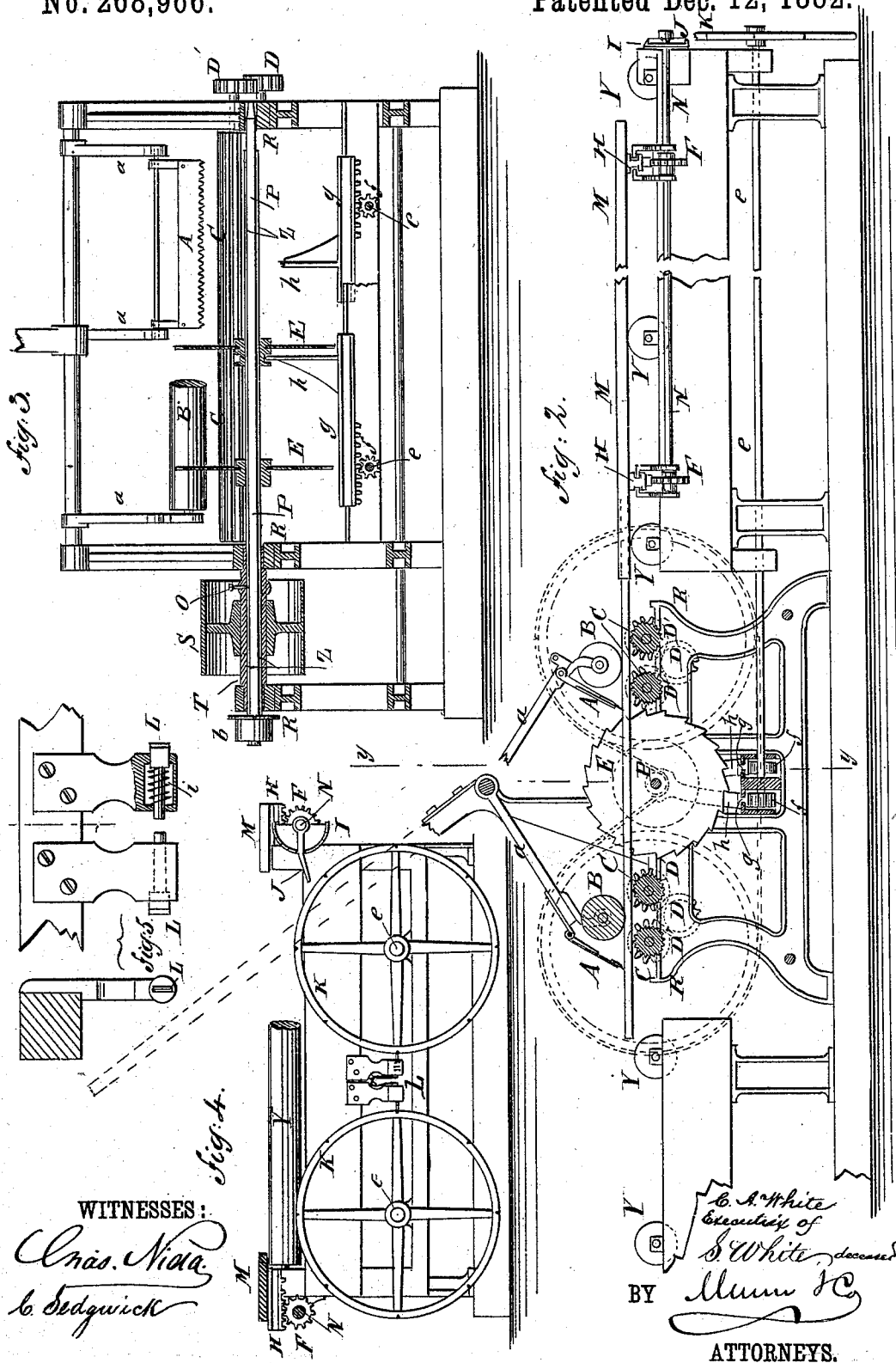
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UNITED STATES PATENT OFFICE.

CLARA A. WHITE, OF EAU CLAIRE, WISCONSIN, (EXECUTRIX OF SAMUEL WHITE, DECEASED,) ASSIGNOR TO THE PHOENIX MANUFACTURING COMPANY, OF SAME PLACE.

GANG-EDGER.

SPECIFICATION forming part of Letters Patent No. 268,966, dated December 12, 1882.

Application filed August 24, 1882. (No model.)

To all whom it may concern:

Be it known that SAMUEL WHITE, deceased, late of Eau Claire, in the county of Eau Claire and State of Wisconsin, did invent a new and useful Improvement in Gang-Edgers, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1, Sheet 1, is a plan view of my improvement. Fig. 2, Sheet 2, is a side elevation of the same, partly in section through the line *x x*, Fig. 1. Fig. 3, Sheet 2, is a sectional end elevation of the same, taken through the line *y y*, Fig. 2. Fig. 4, Sheet 2, is an end elevation of the same, parts being broken away. Fig. 5, Sheet 2, is a front and side elevation, partly in section, of the hand-wheel catches.

The object of this invention is to promote the efficiency, increase the convenience of manipulation, and simplify the construction of gang-edgers and other sawing-machines.

The invention consists in the construction and combination of parts hereinafter fully described and claimed.

A is a safety brake or stop for preventing the lumber from flying toward the front of the machine, and which in this case is applied upon the press-roller frame *a* in front and rear of the saws, but may be used upon either side of the saws, as desired, and hung upon a separate frame from that holding the press-roller, if preferred. In this case the frame must have a bearing on the lumber corresponding to roller B, so that the frame will rise and fall, as the lumber is thick or thin, to keep the brake A at the same angle relatively to the lumber of any thickness; otherwise when the lumber is very thick the brake would not operate.

The brake A is hung upon a hinge, allowing it to hang loosely and rest upon the lumber as it passes under the press-roller B. The brake or stop A has a series of teeth or points upon its lower edge, which, from the position in which the said brake hangs, allow the lumber

to pass freely toward the rear of the machine, but which, should the lumber begin to move in the other direction, take hold of the said lumber and hold it firmly.

B are the ordinary press-rollers for holding the lumber down upon the feed-rollers C. Three, four, or more feed-rollers, C, are used upon the machine—one or more in front and two or more in the rear of the saws. The outer feed-roller in each case is driven by a belt, *d*, passing around a small pulley, *b*, upon the end of the saw-arbor P, and over a large pulley, *c*, upon the end of each outside feed-roller.

The inside feed-rollers, C, are driven from the outer feed-rollers by the intermediate gear-wheels, D, which mesh into the gear-wheels D', attached to the ends of the said outer and inner feed-rollers, C.

The advantage of having four feed-rollers upon a machine instead of two is that each press-roller B, being placed over the space between two feed-rollers C, and resting upon the lumber passing over the feed-rollers, will hold the lumber down evenly and firmly, and will not allow it to twist or move forward at an angle while being worked up, as it is liable to do upon machines using one feed-roller upon each side of the saws and having the press-rollers placed directly over the centers of the feed-rollers.

Another advantage of using more than two feed-rollers is that the more feed-surface the lumber can rest upon while passing through the machine the straighter it will move and the more accurate it will be in size.

E are the edging-saws. F are the gear-wheels, which work the racks or toothed bars H upon the under side of the gages upon the edger-table.

I is the catch-plate, upon which moves the lever J, attached to the shaft N, that operates the gage and passes through and carries the gear-wheels F. The lumber, as it passes through the saws, is guided by the gage-bars M, which rest upon the top of the rack-bars H. The lumber, as it passes through the machine, rests upon the idle-rollers Y. With

this construction, by moving the levers J up and down, the shafts N will be turned to move the guide-bars M toward and from the center of the table, the catch-plates I serving as dials 5 to indicate the distance through which the said guide-bars M are moved. With this construction, also, strips of an even and very narrow width can be cut from the side of lumber passing through the machine, and their exact width 10 can be gaged by means of the dial catch-plates I. One or more of these attachments can be used upon the table, as may be desired.

K are hand-wheels attached to long shafts e, which have upon their farther ends small 15 gear-wheels f, working into the under sides of rack-bars g, attached to forked levers h, to move the saws in the ordinary manner. The hand-wheels K are held at any desired point by spring snaps or catches L, which engage 20 with notches in the said hand-wheels K. The notches in the hand-wheels K are made V-shaped and not very deep, so that the said hand-wheels K can be turned when desired. The catches L are held forward by spiral 25 springs i, as shown in Fig. 5, so as to always rest against the hand-wheels K. The spring-catches L enable the sawyer to determine with ease and certainty when the saws are set at the desired distance apart, as the notches in 30 the hand-wheels show the exact distance the saws have been moved.

P is the saw-arbor, which revolves and slides

in bearings attached to the bars R of the saw-frame.

T is a hollow sleeve or mandrel, through which 35 the arbor P can slide, but which is made to revolve with the said arbor by the feather-keys Z, attached to the arbor, and which slide in grooves in the inner surface of the said sleeve T. The arbor P is kept from slipping in the 40 sleeve T when in operation by a set-screw, O, which passes in through the said sleeve T and rests against the side of the said arbor P. The sleeve T turns upon two bearings, and to it is keyed the pulley S, by which the saws 45 are driven.

To remove the saws the set-screw O is loosened and the arbor P is slipped back, when the saws can be taken off without interfering with any other part of the machine. 50

Having thus described this invention, I claim as new and desire to secure by Letters Patent—

The combination, with the swinging frame a, provided with a roller, B, or its equivalent, to rest on the lumber, the feeding-rollers D, 55 and the circular saw or saws E, of the safety-brake A, hinged to the swinging frame a, substantially as and for the purpose described.

CLARA A. WHITE,

Executrix of Samuel White, deceased.

Witnesses:

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