R. S. Eastham,

Reciprocating Saw Mill.

No. 13,544. Patented Sep. 11, 1855.

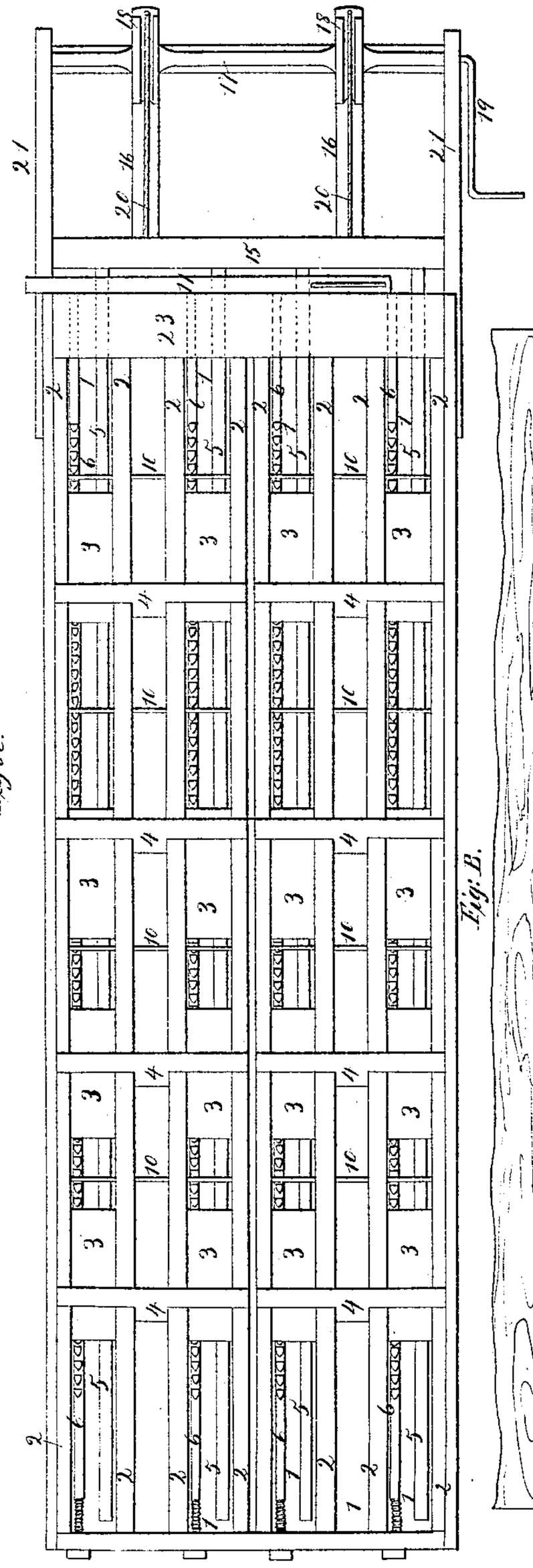

Fig. A.

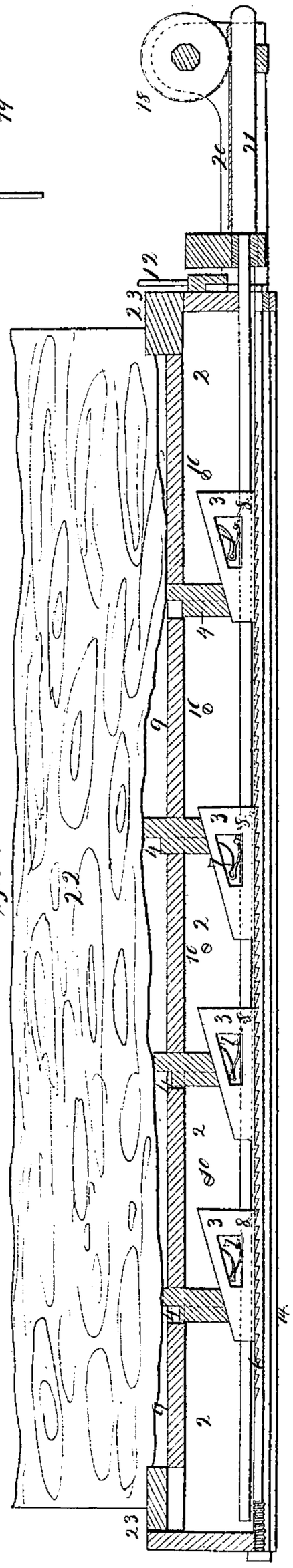

Fig. B.

Fig. C.

UNITED STATES PATENT OFFICE.

R. S. EASTHAM, OF BLANCHESTER, OHIO.

SAWMILL-CARRIAGE.

Specification of Letters Patent No. 13,544, dated September 11, 1855.

To all whom it may concern:

Be it known that I, ROBERT S. EASTHAM, of Blanchester, in the county of Clinton and State of Ohio, have invented a new and useful Improvement in Sawmill-Carriages for Steadying Logs While Being Sawed; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, and to the letters and figures of reference marked thereon.

Similar letters and figures refer to corresponding parts.

In sawing long timber on the ordinary saw mill carriages it is subject to springing vertically and laterally, which creates considerable friction on the saw, and often prevents the sawing of timber to a uniform thickness.

The nature of my improvement consists in providing the carriage with what I denominate steadying strips, which are forced up against the log by means of wedge-blocks and rods, and held to their place with a catch and ratchet and thereby prevents the log from springing. The wedge-blocks on the rod which works them, are so attached, that as soon as the steadying strips come in contact with the log, the block slips and permits the rods to be shoved farther ahead if required, and by this mechanical arrangement the steadying strips may be elevated an inch or six inches above the surface of the carriage so as to suit the curvature of the log, as will be seen by referring to the accompanying drawing,

To enable others skilled in the art to make and use my improvement I will proceed to describe its construction and operation by referring direct to the drawings.

Figure A is a top view of the carriage with the floor removed, showing the manner of working the rods that move the wedge blocks, and the ratchet for holding them to their place when the steadying strips have been forced up against the log. Fig. B, is a longitudinal sectional view of the carriage, showing the manner of attaching the wedge block to the rod, and Fig. C is an end view of the carriage, showing the apparatus for working the ratchets employed for holding the wedge blocks to their place when set.

The carriage consists of a frame work, made with the longitudinal pieces 2, 2, which form the grooves 1, 1, in which the wedge blocks 3, 3, are made to slide.

4, 4, are the steadying strips which are forced up against the log by means of wedge blocks, 3, 3.

5, 5, are the rods on which the wedge blocks are placed by an opening being made in their lower part and the rod slipped through as represented in Fig. B.

6, 6, are the circular ratchets for holding the wedge blocks to their place by means of the catch 8, falling in the teeth cut in the ratchet 6 as shown in Fig. B.

7, 7, are springs placed in a recess cut in the wedge blocks, the lower part of which presses against the rods 5, and clamp the block to the rod, so that it may be carried with the rod and made to act on the steadying strips 4, 4, which are forced against the log as represented in Fig. B. The rod slips through the wedge blocks and forces the rest of the steadying strips up against the log and by so doing some will have to be raised higher than others, in order to bring them all in contact with the log as seen in Fig. B, and when each is brought in contact with the log, the face side of the ratchets 6, 6, are turned up by means of the connecting piece 11, and levers 13, 13, 13, 13, a lever being attached to each ratchet as represented in Fig. C.

As before stated, the catches 8, 8 fall into the racks 6, 6, or notches which prevents the wedge block from slipping back, and thereby holds the steadying pieces 4, 4, firmly against the log and prevents it from springing when being sawed.

15, 16, 17, and 18 are the frame work, shaft, and pulleys for working the rods 5, 5, to which the wedge blocks are attached. The rods are connected to the cross-piece 15 as represented in Fig. A, and the shaft 17 on which the pulleys 18, 18, are placed, work in the side pieces 21.

20 are cords passing around the pulleys and attached to the pieces 16, 16, for drawing the rods 5, 5, in and out of the carriage.

19, is the crank for working the shaft and its attachments.

14, 14, are strips nailed or otherwise fastened to the bottom of the carriage for guiding its movement. The end view of the strips are represented in Fig. C.

10, 10, are adjusting bars for drawing the large end of the wedge blocks against

so as to slip them on the rod, in order to give them sufficient motion to elevate the steadying strips against the log.

The catches 8, 8, are placed in a recess at the bottom of the wedge block, which drop in the notches of the ratchet bars when they are turned up.

What I claim as my improvement and desire to secure by Letters Patent is—

1. The wedge-blocks 3, 3, 3, 3, worked by the rods 5, 5, and springs 7, 7, for elevating the steadying strips 4, 4, up against the log for holding it steady while being sawed, the whole being operated by the machinery before described, and represented in the accompanying drawings for purposes before stated.

2. I also claim the combination of the catches 8, 8, attached to the bottom of the wedge blocks, and ratchets 6, 6, for holding the wedge blocks to their place, after elevating the strips against the log, for the purposes before stated.

ROBERT S. EASTHAM.

Witnesses:
MARTIN BENSON,
L. W. SMITH.