

(No Model.)

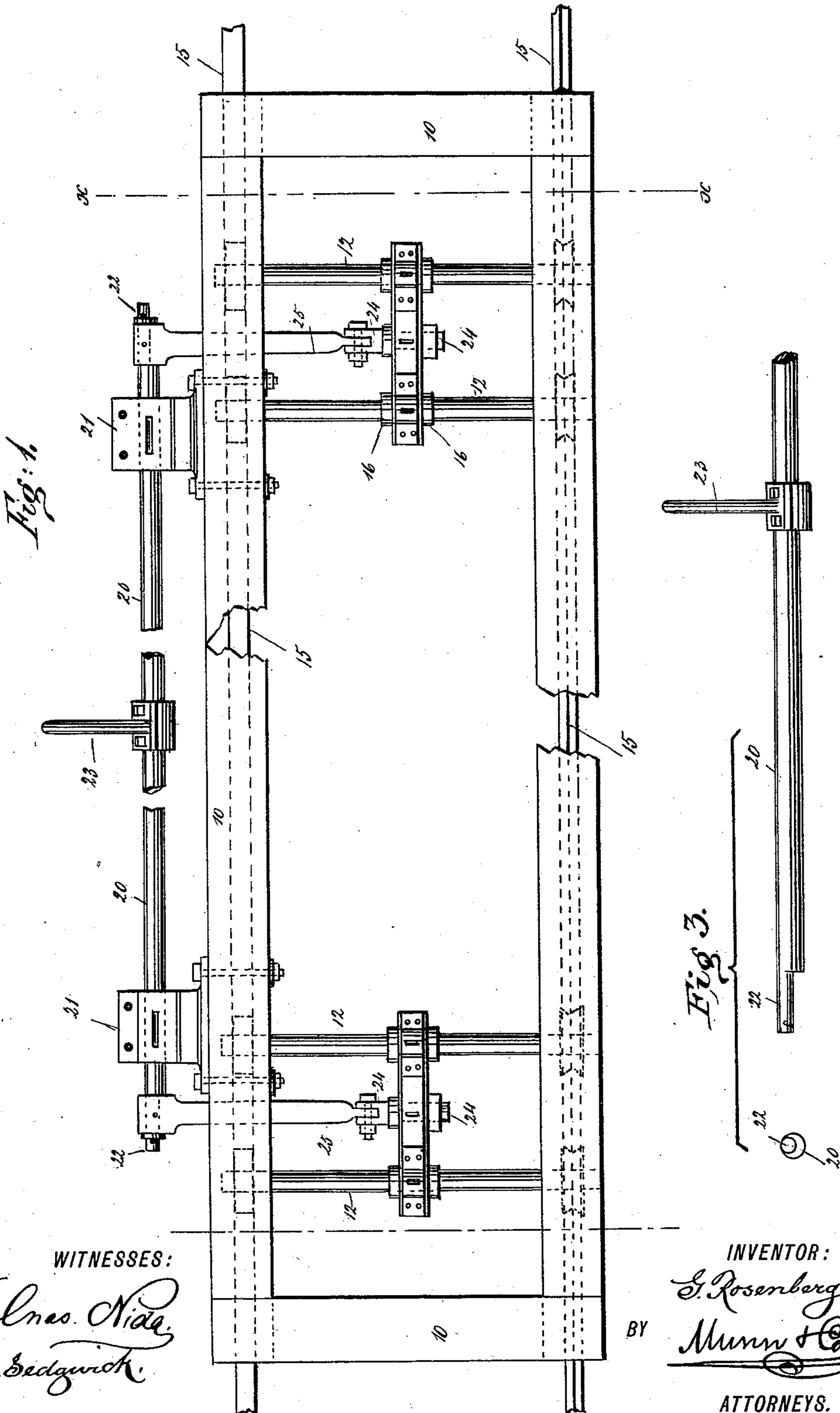
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OFFSET MECHANISM FOR SAW MILL CARRIAGES.

No. 393,927.

Patented Dec. 4, 1888.



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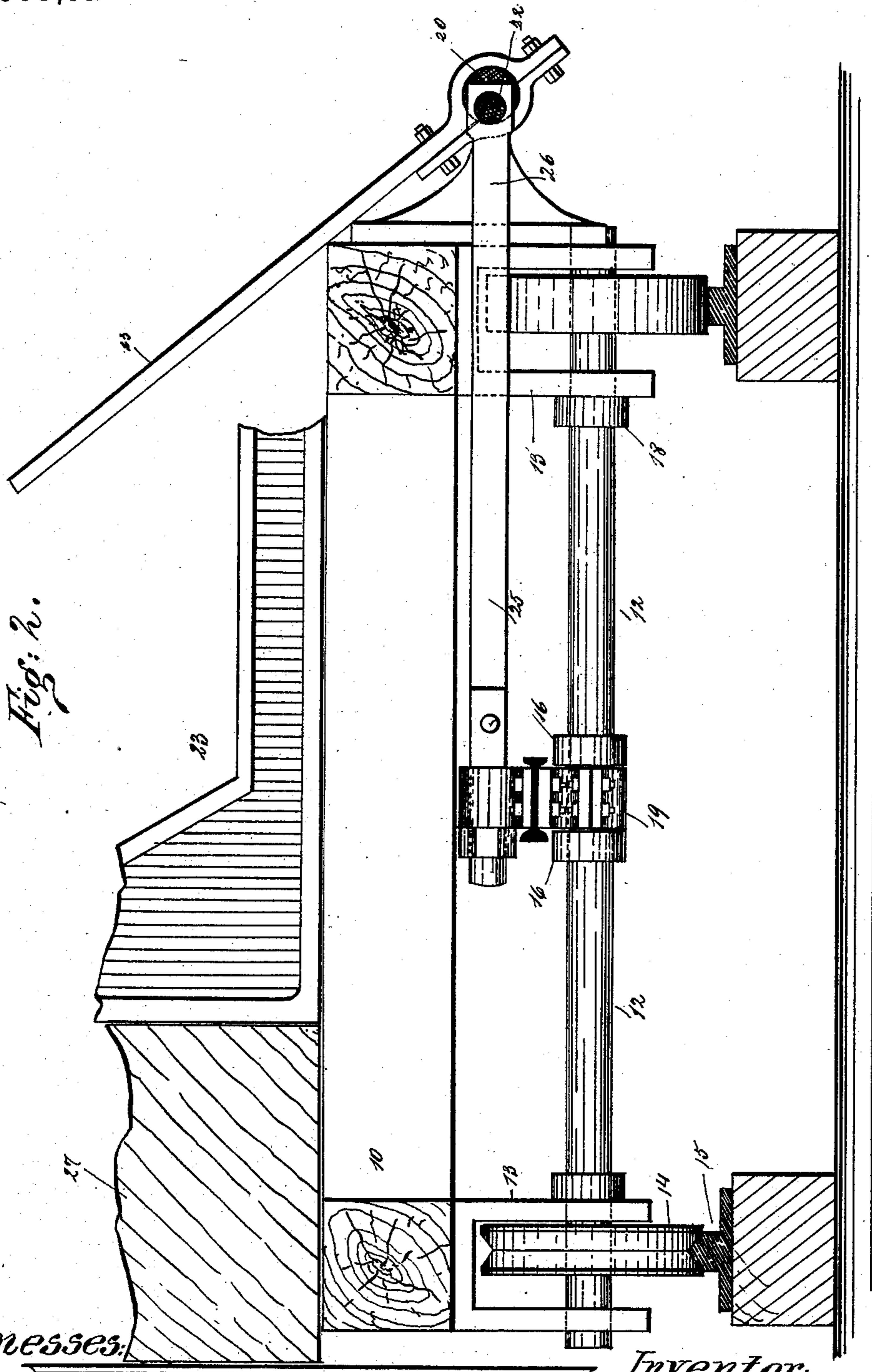
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Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE ROSENBERG, OF MUSKEGON, MICHIGAN.

OFFSET MECHANISM FOR SAW-MILL CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 393,927, dated December 4, 1888.

Application filed July 6, 1888. Serial No. 279,179. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ROSENBERG, of Muskegon, in the county of Muskegon and State of Michigan, have invented a new and useful Improvement in Offset Mechanism for Saw-Mill Carriages, of which the following is a full, clear, and exact description.

My invention relates to an improvement in saw-mill carriages, and has for its object to provide a means whereby the log-frame and the mechanism carried thereby may be shifted bodily in a line at right angles to the line of travel by the carriage preparatory to "gigging back;" and the further object of the invention is to provide a simple, durable, and conveniently-manipulated device to accomplish the aforesaid end, and also to provide a device which may be readily attached to any ordinary saw-mill carriage.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a plan view of a saw-mill carriage having my improvement applied, the said carriage being partially broken away to disclose the track. Fig. 2 is a transverse section taken partially on the line *xx* of Fig. 1, and Fig. 3 is a side elevation of a portion of the rock-shaft and an end view of the same.

In carrying out the invention timbers 10, constituting the carriage-frame, are bolted or secured together in any suitable or approved manner, the said frame, being adapted to receive and support the ordinary head-blocks and the usual movable knees, 11. The carriage and its appurtenances are supported upon axles 12, which axles may be two or more in number, as desired, the said axles being journaled in hangers 13, secured to the under face of the longitudinal timbers of the carriage, as best shown in Fig. 2. The said hangers are preferably U-shaped in cross-section, and the wheels 14 are secured upon the axles intermediate of the members of the hangers. The wheels 14 are adapted to travel upon the tracks 15.

Upon the axles 12, at each side of the center, collars 16 are keyed or otherwise fastened, and adjacent to the inner member of the hangers 13, suspended from the longitudinal side of the frame farthest from the saw, a third collar, 18, is rigidly fixed to the axles.

Each pair of axles 12 is connected by a cross-bar, 19, the ends of which bars are adapted to encircle the said axles between the collars 16, as best shown in Fig. 1. Upon the side of the longitudinal beam of the carriage farthest from the saw a rock-shaft, 20, is journaled in boxes 21, parallel with the said longitudinal beam, two or more of which boxes may be employed. An eccentric or short crank, 22, is formed on each end of the rock-shaft 20, the said eccentric faces being turned down when the carriage is carried back for a cut.

A lever, 23, is secured to the rock-shaft 20 at or near its center, by means of which lever the said rock-shaft is manipulated. A short rod, 24, is passed centrally and transversely through the cross-bars 19, provided at each side of the said cross-bars with a lock-nut or other suitable retaining device, and having a slot produced longitudinally in the end facing the rock-shaft. The rock-shaft and the short fixed bar 24 are united by a link or connecting-rod, 25, the inner end of which rod is pivoted in the slotted end of the short fixed rod 24, the outer end being provided with an integral sleeve, 26, in which the eccentric surface of the rock-shaft is held to revolve.

In operation, when the carriage is to be gigged back, the lever 23 is moved from the saw 17, whereby the rotation of the rock-shaft 20, through the pivoted connecting-rod 25 and the eccentrics upon said shaft, causes a tension to be exerted upon the cross-bars which are held between the central collars on the axles, so that through the medium of the wheels the entire frame 10 and all its appurtenances are drawn away from the saw, the hangers 13 sliding upon the axles. The log 27 to be cut is thus freed from the saw and the carriage may be moved in any desired direction. When it is desirable to throw the log into contact with the saw, the lever 23 is carried in the direction of the same, whereupon the frame 10 slides upon the axles in direc-

tion of the saw, the forward movement being limited by the collar 18, as best illustrated in Fig. 2. The collar 18 insures at all times a uniform forward throw of the carriage, where-
5 by a uniform cut is made in the log.

It will be observed that the jointed or pivoted connection between the rock-shaft and the cross-bars of the axles is necessary in order that the side motion of the eccentric faces
10 of the rock-shaft will raise and lower the rods connecting said shaft and cross-bars.

I desire it understood that the short crank or eccentric may be otherwise located upon the shaft 20, and also that there may be as
15 many cross-bars 19 employed as the construction of the carriage may demand.

The rock-shaft 20 may, if desired, be journaled inside the carriage-frame, either above or below the axle.

20 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a saw-mill carriage, the combination, with the frame provided with hangers attached to its under side, and axles loosely
25 journaled in said hangers, of a longitudinal rock-shaft having an eccentric face at its extremities, cross-bars fixed to the axles, and pivoted connecting-rods uniting the said cross-
30 bars and rock-shaft, substantially as shown and described.

2. The combination, with the frame, hangers secured to the under face of the frame, axles loosely mounted in said hangers, and collars secured upon the axles at each side of
35 their center, of a rock-shaft having an eccentric face at its extremities, a cross-bar uniting each pair of axles and retained in position by said collars, and connecting-rods pivoted to
40 said cross-bars and engaging the eccentric faces of the rock-shaft, all combined to operate as shown and described.

3. The combination, with the frame, hangers secured to the under side of said frame, axles loosely journaled in said hangers, col-
45 lars attached to the axles at each side of their center, and a stop-collar also attached to said axles adjacent to the inner faces of the inner hangers, of a longitudinal rock-shaft having
50 an eccentric face at each extremity, a lever secured to said rock-shaft, cross-bars uniting the said axles and retained in position by the central collars, and connecting-rods pivoted
55 to said cross-bars and engaging the eccentric faces of the rock-shaft, substantially as shown and described, whereby the body of the carriage may be laterally reciprocated upon the axles to or from the saw, as set forth.

GEORGE ROSENBERG.

Witnesses:

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