

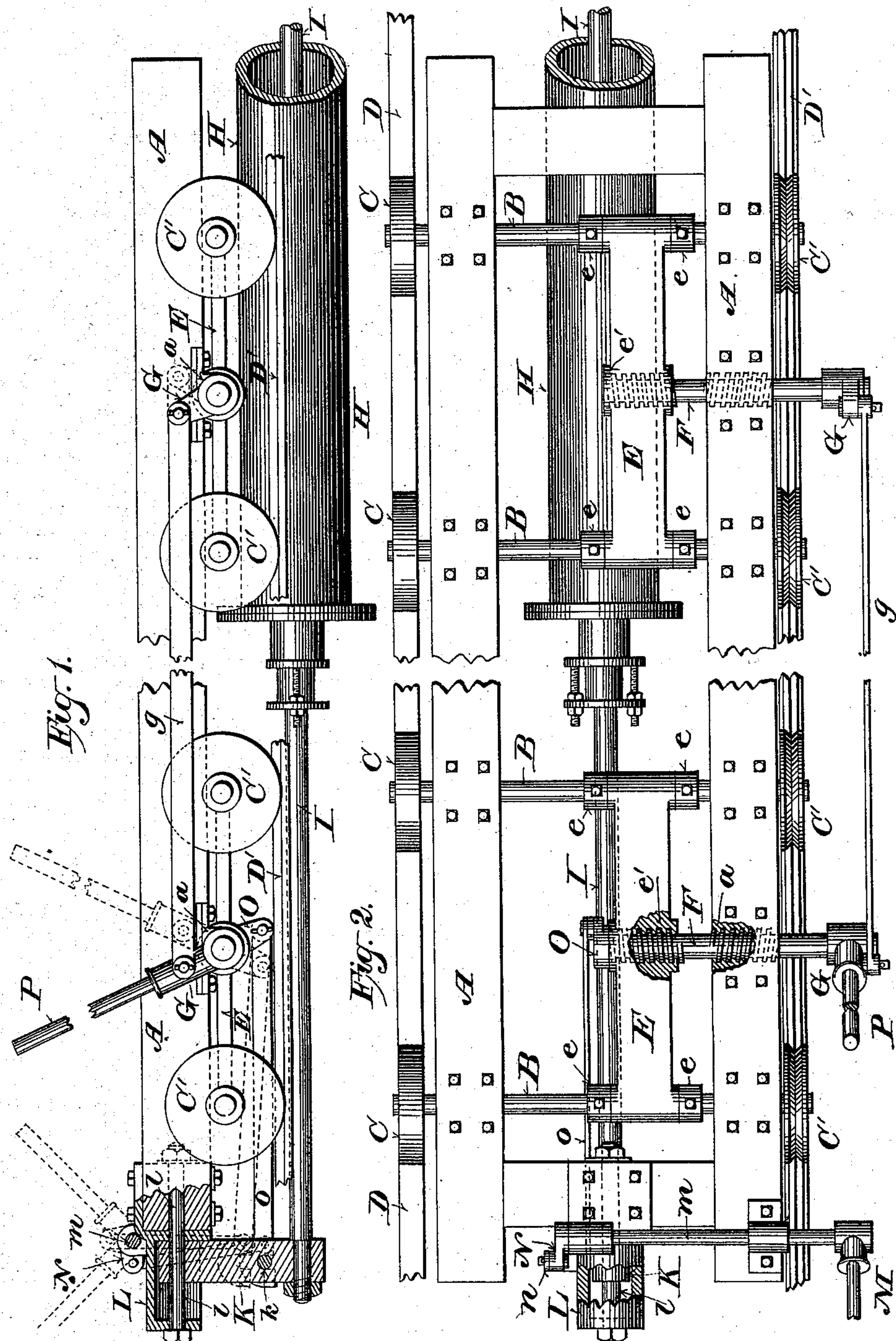
(No Model.)

W. GOWEN.

OFFSETTING DEVICE FOR SAW MILL CARRIAGES.

No. 401,945.

Patented Apr. 23, 1889.



Witnesses:
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UNITED STATES PATENT OFFICE.

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OFFSETTING DEVICE FOR SAW-MILL CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 401,945, dated April 23, 1889.

Application filed January 18, 1887. Serial No. 224,704. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GOWEN, of Wausau, in the county of Marathon and State of Wisconsin, have invented certain new and useful Improvements in Offsetting Devices for Saw-Mill Carriages; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to move the log away from the saw in "gigging" or running the carriage back.

It consists, essentially, of a yoke applied to two or more axles and connected with a log-supporting frame laterally adjustable upon said axles with reference to the line of travel of said carriage, and of offsetting mechanism connected with the carriage-feeding piston.

In the accompanying drawings like letters designate the same parts in both figures.

Figure 1 is a side elevation of a saw-mill carriage embodying my improvements and of a portion of the carriage-feeding cylinder and piston, and Fig. 2 is a plan view of the same.

Referring to the drawings, A A is the carriage or log-supporting frame capable of lateral movement upon its axles B B between the carriage-wheels C C'. The wheels C C' on one side of the carriage have grooved faces, which engage with and run upon a V-rail, D', thus preventing their deviation laterally from the line of travel of the carriage. The wheels C C on the opposite side of the carriage may have plane faces and run upon a square rail, D. The axles B B are connected in pairs by yokes E E, placed at right angles thereto and formed at their ends with sleeves through which said axles pass. The yokes E E are prevented from moving endwise upon the axles B B by collars e e, fixed thereon and bearing against the ends of said sleeves.

F F are screw-shafts preferably formed with right and left screws working with nuts a and e', applied, respectively, to the carriage-frame A and yokes E E. To the ends of the screw-shafts F F, outside of the frame A, are secured cranks G G, connected by a rod, g. H repre-

sents the cylinder and I the piston-rod of an ordinary steam-feed. The piston-rod I is secured at the end in a block, K, which depends from a rod, l, secured at one end in a cross-girt of the carriage-frame parallel with said piston-rod and supported at the other end in a bracket, L, attached to said cross-girt.

The block K is movable lengthwise upon the rod l within the bracket L, which incloses its upper end. To the inner end of the nearest screw-shaft F is fixed a crank, O, which is connected at will by a latch, o, with a pin, k, in the sliding block K. The latch o is connected by a link, n, with the crank N of a transverse shaft, m, supported in bearings on the carriage-frame A and provided with a lever, M, by means of which the operator may lift said latch from the pin k and thereby disconnect the offsetting mechanism from the piston I. The lever M may be placed in any position upon the carriage most convenient for the operator, and connected by a rod with the crank-shaft m.

A lever, P, secured to one of the cranks G, forming a shank therefor, furnishes means for operating the offsetting mechanism by hand.

My improved offsetting device operates as follows: When the piston-rod I begins its outward stroke, the block K is moved upon the rod l to the outer end of the bracket L without advancing the carriage, but acting through the pin k and latch o upon the crank O turns the screws F and their cranks G G, connected by the rod g, as indicated by dotted lines, Fig. 1, thereby shifting the log-supporting frame A upon the axles B B toward the saw. When the block K reaches the limit of its movement upon the rod l and engages the end of the bracket L, it acts upon the log-supporting frame A and feeds the carriage forward. The piston upon being reversed first acts upon the block K and through it operates the offsetting mechanism in the manner described, turning the cranks G G to the left, as shown by full lines in Fig. 1, and shifting the carriage-frame A upon its axles B away from the saw into the position shown in Fig. 2. The block K, meeting and engaging the inner end of the bracket L, then acts upon the carriage and "gigs" it back in the usual man-

ner, retaining the log out of contact with the saw during the operation. The crank O may be made sufficiently short to prevent by the resistance of the offsetting mechanism a too sudden movement of the block K and its violent concussion with the ends of the bracket L.

Various changes may be made from the construction and arrangement shown in the drawings in the application of my invention to practice without effect upon its operation or departure from the spirit thereof.

It will be observed that by the use of right and left screws working with the nuts *a* and *e'* the lateral movement of the carriage-frame A is not only doubled to any given angular movement of the cranks G without increase of friction, but the end-play of the screwshafts incident to the use of collars is thus avoided.

I claim—

1. The combination, in a saw-mill, with a carriage having a log-supporting frame laterally movable upon its axles, of a yoke mounted and laterally immovable upon its axles, offsetting mechanism connecting said frame and yoke, a crank connected with and arranged to operate said offsetting mechanism, and a carriage-feeding piston having a sliding connection with said frame and connected with said crank, substantially as and for the purposes set forth.

2. The combination, in a saw-mill, of a car-

riage having a log-supporting frame laterally movable upon its wheels and axles, offsetting mechanism connecting said frame with said axles and wheels, a carriage-feeding piston having a sliding connection with said frame, and a detachable connection with said offsetting mechanism, substantially as and for the purposes set forth.

3. The combination, in a saw-mill, with a carriage having a log-supporting frame laterally movable on its wheels and axles, of a yoke mounted upon two or more of said axles and laterally immovable thereon, and a screw-shaft connecting said frame and yoke and arranged to shift said frame laterally upon its axles, substantially as and for the purposes set forth.

4. The combination, in a saw-mill, with a carriage having a log-supporting frame laterally movable on its wheels and axles, of yokes, each mounted upon two or more of said axles and laterally immovable thereon, screwshafts connecting said yokes with the log-frame, and a rod connecting said cranks, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM GOWEN.

Witnesses:

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GEORGE M. GOLL.