

(No Model.)

2 Sheets—Sheet 1.

P. J. BUCK.

OFFSETTING MECHANISM FOR SAWMILL CARRIAGES.

No. 561,864.

Patented June 9, 1896.

Fig. 1.

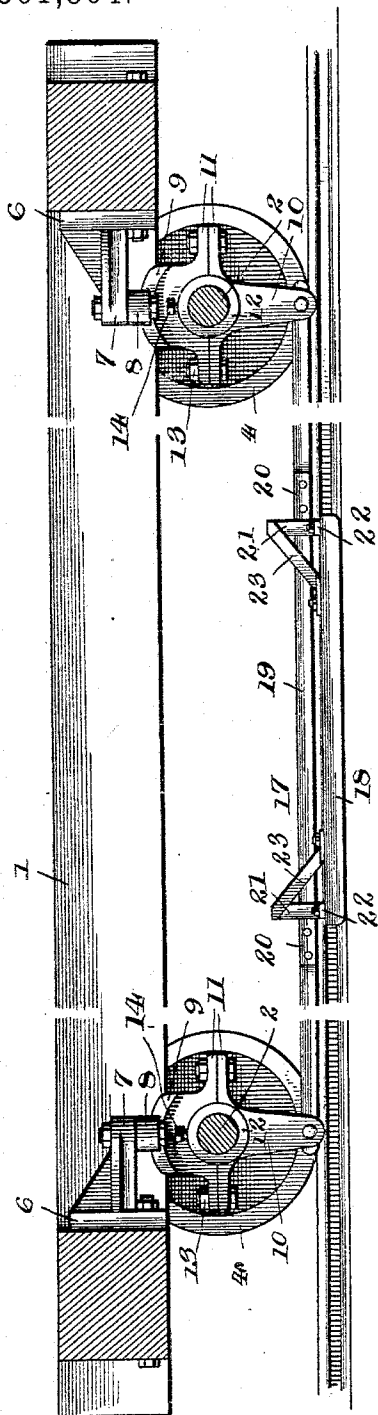
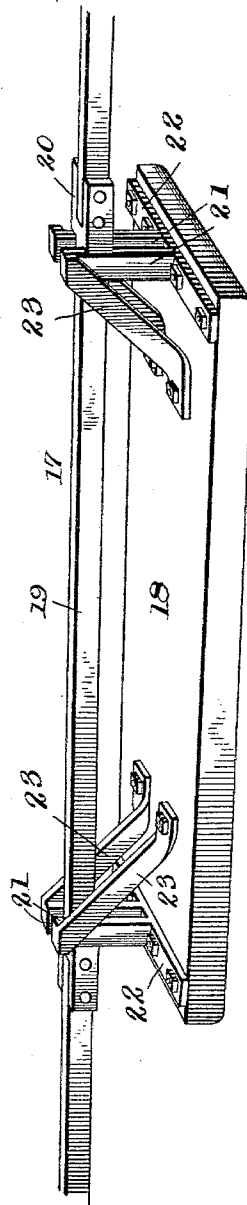


Fig. 6.



Witnesses

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

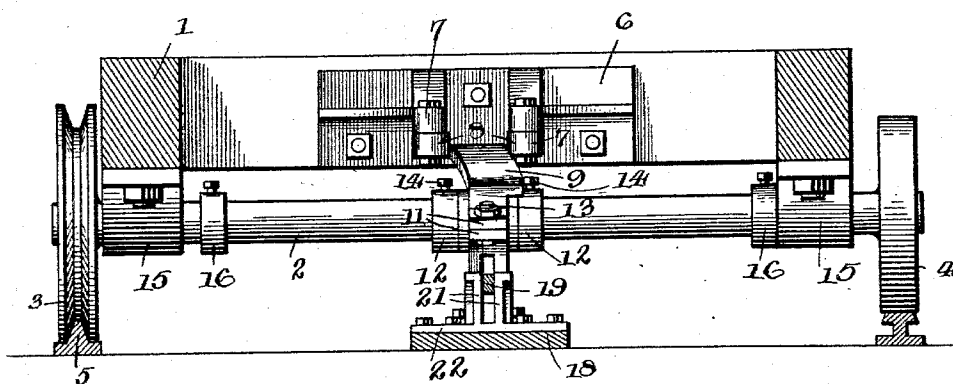


Fig. 3.

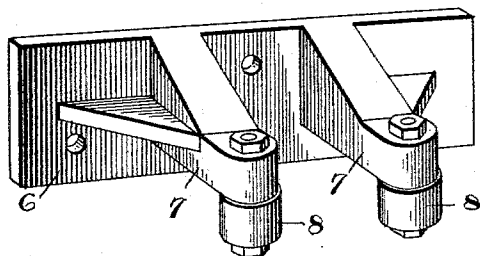


Fig. 5.

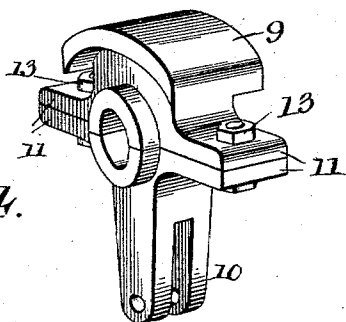
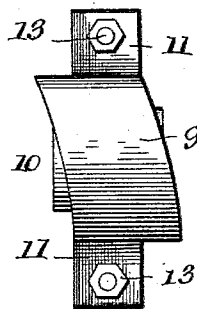


Fig. 4.



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UNITED STATES PATENT OFFICE.

PHILLIP J. BUCK, OF THOMPSON, MICHIGAN, ASSIGNOR OF ONE-HALF TO
JAMES B. FITCH, OF SAME PLACE.

OFFSETTING MECHANISM FOR SAWMILL-CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 561,864, dated June 9, 1896.

Application filed December 23, 1895. Serial No. 573,097. (No model.)

To all whom it may concern:

Be it known that I, PHILLIP J. BUCK, a citizen of the United States, residing at Thompson, in the county of Schoolcraft and State of Michigan, have invented a new and useful Offsetting Mechanism for Sawmill-Carriages, of which the following is a specification.

The invention relates to improvements in offsetting mechanism for sawmill-carriages.

The object of the present invention is to improve the construction of offsetting mechanism for sawmill-carriages and to provide means for automatically offsetting and on-setting a sawmill-carriage frame as the latter is moved from or toward a saw.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a longitudinal sectional view of a sawmill-carriage constructed in accordance with this invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail view of one of the brackets of the sawmill-carriage frame. Figs. 4 and 5 are detail views of the cam-lever. Fig. 6 is a detail perspective view of the automatic shifting device.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a sawmill-carriage frame designed to be constructed in the ordinary manner and to be mounted on the usual number of axles, end axles 2 only being shown in the accompanying drawings, and the wheels 3 and 4 of the carriage are of the ordinary construction, those at one side being preferably grooved, as shown, and employed in connection with the rail 5. The wheels at the other side of the carriage are provided with flat treads and are arranged on ordinary construction of rail.

The sawmill-carriage frame is provided at each end on the inner faces of the end bars with a bracket 6, having substantially horizontally-disposed arms 7, carrying depending antifriction-wheels 8, which cooperate with a cam-head 9 of a lever 10. The lever 10 is composed of two sections provided with simi-

lar perforated flanges 11 and secured to the axle between collars 12 by fastening devices 13. The collars are located at opposite sides of the cam-lever and are provided with clamping-screws 14 and are readily secured at the desired adjustment. The lower section of the lever depends from the axle to form an arm, the axle being the fulcrum of the lever, and the cam-head is arranged in the form of an arc. The cam-head is disposed slightly diagonally of the sawmill-carriage frame, and when swung in an arc is adapted to shift the frame laterally of the line of cut of the saw to offset to prevent a log, after the completion of a cut, and when the carriage is being gigged back for another cut, from injuring the saw or being injured by the same.

The sawmill-carriage frame is provided with suitable bearings 15 for the axles, and its transverse movement is limited by adjustable collars 16, secured to the axles by clamping-screws and located at the inner sides of the bearings, as clearly shown in Fig. 2 of the accompanying drawings. The cam-head of the lever of the offsetting mechanism may be constructed and the collars 16 may be arranged to cause the sawmill-carriage to have sufficient movement to clear the saw completely.

The levers 10 are connected by a horizontal bar 17, pivotally connected at its terminals to the lower ends of the levers and adjustably connected with a block 18, which is adapted to slide on the floor or other supporting-surface and to frictionally engage the same sufficiently to cause the lower arm of the levers to swing backward or in a direction opposite to that in which the saw-carriage is moving and to hold the levers in that position, whereby when the direction of the sawmill-carriage is changed the offsetting mechanism will be automatically shifted and operated and the sawmill-carriage frame will be moved to or from the saw according to the direction in which the carriage is traveling. The connecting-bar 17 is preferably composed of three sections. The central section 19 has its terminals 20 enlarged to form inner shoulders and bifurcated to receive the adjacent terminals of the end sections of the bar, and the block 18 is provided with vertical ways 21, which receive

the central section 19 and which are engaged by the shoulders of the terminals 20 thereof. The guides 21 consist of vertical bars rising from base-plates 22 and supported by inclined braces 23, and they permit the block to move vertically to adjust itself to the inequality of the surface over which it slides. The block 18 may be made of any suitable material and is designed to have sufficient weight to cause a positive shifting of the offsetting mechanism as soon as the direction of the sawmill-carriage is changed.

It will be seen that the offsetting mechanism is simple and comparatively inexpensive in construction, that it is positive and reliable in operation, and that it is capable of automatically offsetting and onsetting a sawmill-carriage frame according to the direction in which the same is traveling to cause a log to be moved inward to clear a saw and to carry it outward in position for a cut.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. The combination with a sawmill-carriage, of offsetting mechanism, a bar disposed horizontally and connected with the offsetting mechanism and provided with stops, and a shifting device arranged to slide on and frictionally engage the supporting-surface, and provided with vertical guides receiving the connecting-bar and located adjacent to said stops, substantially as described.

2. The combination of a sawmill-carriage, levers fulcrumed on axles of the carriage and depending therefrom and provided above the same with cam-heads, connected with the sawmill-carriage frame and adapted to move the same laterally, a horizontal bar connecting the levers and provided with stops, a rectangular block arranged to slide on and friction-

ally engage the floor or other supporting-surface, and the vertical guides receiving the horizontal bar and arranged adjacent to the stops, and comprising vertical bars, base-plates and inclined braces supporting the vertical bars, substantially as described.

3. The combination of a sawmill-carriage, offsetting levers fulcrumed intermediate of their ends on the axles and provided at their upper ends with cam-heads engaging the sawmill-carriage frame, a horizontal bar connecting the depending portions of the levers, a shifting device arranged to slide on and frictionally engage the supporting-surface and provided with vertical guides receiving the horizontal bar, and means for holding the horizontal bar and the shifting device against longitudinal movement on each other, substantially as described.

4. The combination of a sawmill-carriage, brackets mounted on the sawmill-carriage frame and provided with depending vertically-disposed antifriction-wheels, offsetting levers fulcrumed intermediate of their ends on the axles and provided at their upper ends with cam-heads engaging the antifriction-wheels, a horizontal bar connecting the depending portions of the offsetting levers and provided with stops, and a shifting device arranged to slide on and frictionally engage the supporting-surface, and provided with vertical guides receiving the horizontal bar and located adjacent to said stops, whereby the bar and the shifting device are prevented from moving horizontally on each other, substantially as described.

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

PHILLIP J. BUCK.

Witnesses:

ALVAH A. DICKERSON,
JOHN HILL.