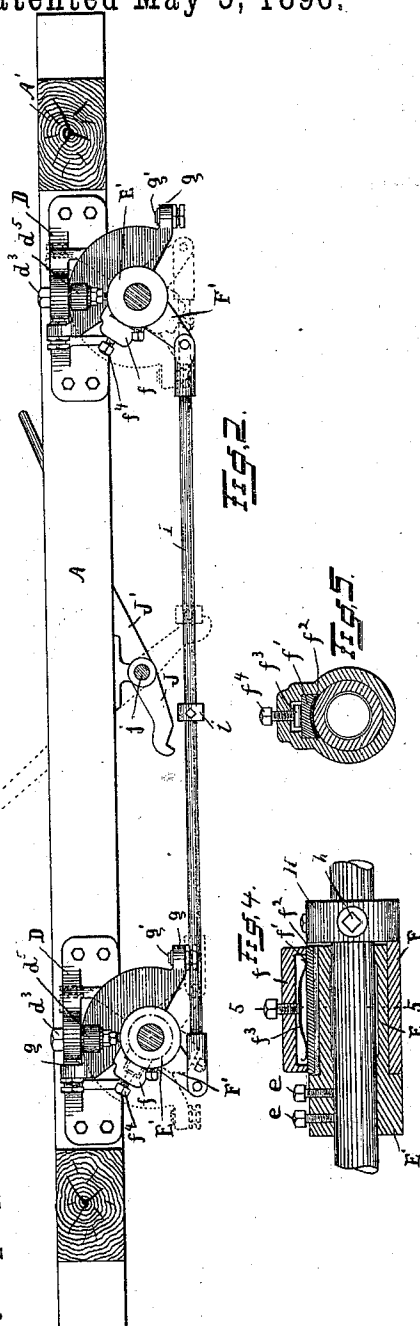
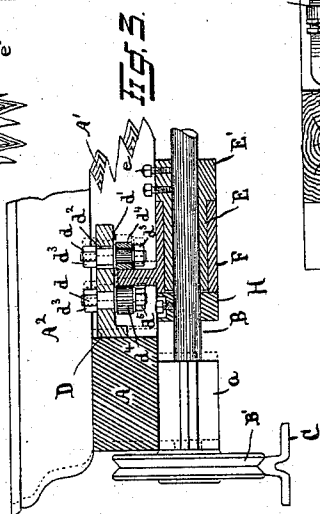


W. M. WILKIN.
SAWMILL CARRIAGE.

Patented May 5, 1896.



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Atty's.

UNITED STATES PATENT OFFICE.

WILLIAM M. WILKIN, OF ERIE, PENNSYLVANIA.

SAWMILL-CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 559,428, dated May 5, 1896.

Application filed April 25, 1895. Serial No. 547,084. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. WILKIN, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Sawmill-Carriages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to sawmill-carriages; and it consists in certain improvements in the construction thereof, as will be hereinafter fully described, and pointed out in the claim.

More particularly my invention relates to a set-off mechanism for sawmill-carriages—*i. e.*, a mechanism for moving the carriage to and from the saw.

The invention is illustrated in the accompanying drawings as follows:

Figure 1 shows a plan of a fragment of a carriage, showing my improvements thereon. Fig. 2 is an elevation of the same parts. Fig. 3 is a section on the line 3 3 looking from the left. Fig. 4 is an enlarged view of the friction mechanism. Fig. 5 is a section on the line 5 5 in Fig. 4.

A marks the carriage side; A', the cross-girths; A², a head-block; a, the axle-boxes; B, the axles; B', the carriage-wheels, and C the track. These parts are as commonly made.

Brackets D are bolted on the inside of the carriage side over the axles. Studs *d* with collars *d'* are passed through perforations in the brackets and secured in place by nuts *d*³ on top. One of the perforations, as *d*², is elongated, so the stud therein may be positioned to or from its companion, to take up wear of parts, hereinafter described. On the studs 40 below the collars *d'* are rollers *d*⁴, which are secured in place by nuts *d*⁵. This mechanism forms what may be termed "cam-posts" fixed with the carriage.

On the axle just below the bracket is a sleeve E, having collar E' at the inner end, preferably integral therewith, and this sleeve is fixed with the axle by means of set-screws *e*. Journaled on this sleeve is a friction-sleeve F, which is held in place thereon by a collar H, secured with set-screws *h*. A spiral cam-segment is carried by and turns with

the sleeve F, and turns between the rollers *d*⁴. The cam-segment has stops *g*, provided with stop-cushions *g'*, which contact the brackets and so limit the movement of the 55 cam-segment.

It will be readily seen that as the spiral cam is turned, it being locked against side movement on the axle, it will move the carriage sidewise on the axle to the extent of the 60 throw of the spiral cam, and so accomplish the offset movement. While I prefer the true spiral cam-segment it will be operative if perfectly flat and set at an angle, as shown in the drawings, the only requirement being 65 that one end of the segment be nearer the carriage side than the other.

To effect the turning of the cam-segment, the following friction mechanism is provided: At one side of the friction-sleeve there is a hollow enlargement *f*, in which is a friction-plate *f'*, lined with friction material *f*². Back of the friction-plate is a spring *f*³, the tension of which is adjusted by a screw *f*⁴. The friction 75 formed by the plate *f'* is sufficient to start the cam, so that when the carriage is reversed the cam is turned with the axle to the limit of its movement. The direction of the throw of the cam is such as to move the carriage from the saw on the back or reverse 80 movement and to the saw on the forward movement. As soon as the cam starts the sleeve F is crowded endwise against either the collar E' or H, according to the direction the carriage is moving, and this end thrust 85 creates a friction, which assists materially in the further movement of the cam.

Extending below the friction-sleeves are arms F', which are connected by a connecting-rod I, so that both mechanisms are controlled to move in unison, keeping the carriage parallel to the saw at all times.

A collar *i* is placed on the connecting-rod, and a throated lever J, carried by a rod *j*, is adapted to engage said collar. A hand-lever 95 J' is placed on the rod *j'* for operating the lever J. When it is desired to back the saw out of a log, the lever J is thrown against the collar *i* and held with sufficient force to overcome the friction of the offsetting mechanism 100 and so locks the carriage against the offset movement until released.

What I claim as new is—

In a sawmill-carriage, the combination with the frame; and the axle thereof; of a friction-sleeve journaled on a bearing moving with the axle, and having a hollow enlargement there-
5 on; a friction-plate within said enlargement; means of adjusting said plate; a cam-segment carried by said friction-sleeve; and cam-posts fixed with the carriage-frame so placed rela-

tively to said cam as to be contacted thereby in its movement.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM M. WILKIN.

Witnesses:

H. A. STRONG,

J. KEESE HALLOCK.