J. A. SIMON.

TRACK CLEANER.

APPLICATION FILED AUG. 13, 1910.

1,013,078. Patented Dec. 26, 1911.

Fig. 1.

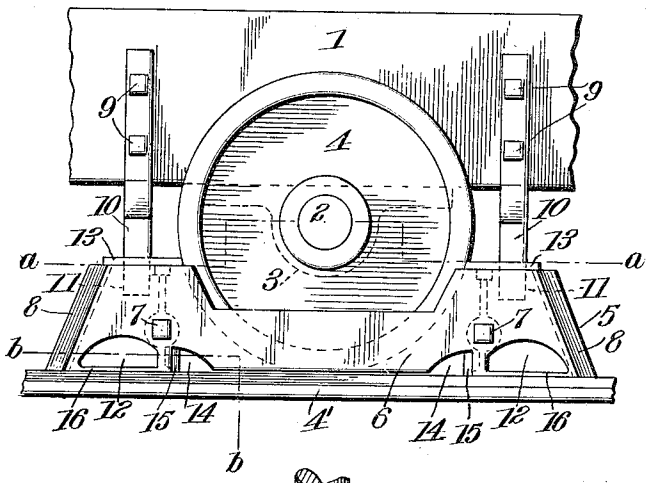
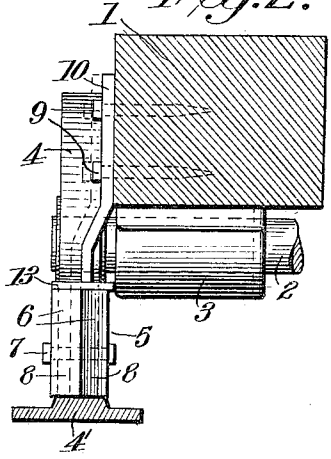


Fig. 2.



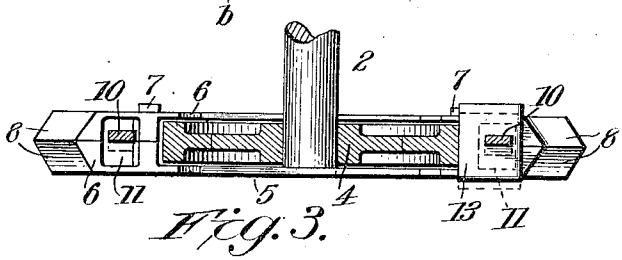


Fig. 3.

Fig. 4.

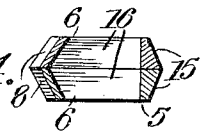
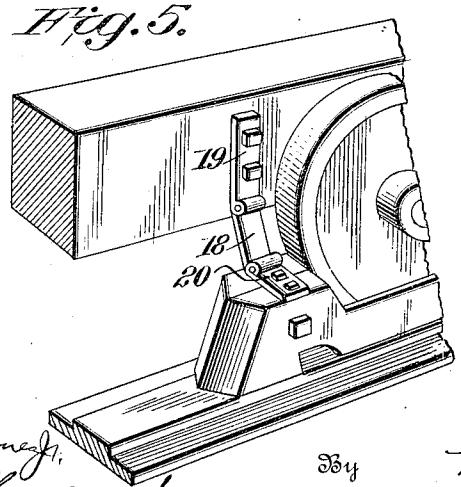


Fig. 5.



Witnesses

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TRACK-CLEANER.

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To all whom it may concern:

Be it known that I, JOSEPH A. SIMON, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Track-Cleaners, of which the following is a specification.

My invention relates to an improved track cleaner and wheel guard and it is particularly adapted to be used in connection with the wheels of saw-mill carriages.

The objects of the invention are to provide a device that will permit a slight lateral movement of the carriage on its axles and which will itself not move laterally but will remain in position covering the wheel and track; to provide means which will allow the guard to freely yield vertically on an uneven track surface; and to provide in combination therewith means to clear the track of sawdust or other refuse which may enter the guard and to so construct the guard as to relieve the wheel of friction. The lateral movement of the carriage referred to is provided for in most carriages and is for the purpose of permitting an "offset" of the carriage, that is, a movement permitting the carriage to be moved by mechanical means a slight distance away from the saw so that when the carriage and log are carried back past the saw, the log will clear the latter, which movement returns the carriage to a position preparatory to an "onset" movement, that is, a movement during which the log is being sawed.

The preferred form of the invention is hereinafter described and illustrated in the accompanying drawings.

In these drawings, Figure 1 is a side elevation illustrating the same; Fig. 2, an end view thereof; Fig. 3, a section on line *a—a* of Fig. 1; Fig. 4, a detail section on line *b—b* of Fig. 1, and Fig. 5, a detail perspective view of part of a modified form.

Referring to the drawings, 1 is a side beam of the frame of a saw-mill carriage, 2 is one of the axles journaled at 3, 4 is one of the wheels, and 4′ is one of the track rails.

5 is the improved guard and scraper. Removable wheel guard and scraper sections 6 are bolted together at 7 and at their outer ends are beveled at 8 to provide plow points.

Secured to the beam 1 by bolts or spikes 9 are arms 10 which are adapted to carry the guard along the rail with the carriage upon the operation of the latter. The lower extremity of the arms 10 extends freely into openings or pockets 11 between the sections 6, and the openings are enlarged to allow a slight lateral movement of the arms therein transversely of the track, and the openings also communicate with side openings 12 which permit the escape of sawdust. The arms will allow the guard to freely yield vertically when the carriage travels over an uneven portion of the track, owing to the provision of the loose connection. Such arms 10 extend through closely fitting central openings in plates 13. These plates rest upon the sections 6 above the openings 11 to prevent the entrance of sawdust into the guard. The openings 12 are provided so that fine particles of sawdust which may work under the plates 13 will not deposit in or clog up the openings 11. The arms 10 also have a very slight longitudinal movement in the openings of the guard in order to prevent binding therewith. The guard surrounds the lower part of the wheel in order to prevent the entrance of saw-dust to the track. The guard does not touch the wheel and by this construction, frictional contact therewith is avoided.

14 are side openings in the sections and adjacent thereto are interior plow points 15 beveled at an angle to the transverse direction of the track so as to throw sawdust from the track rail. Saw-dust or other refuse which falls upon the track exterior of the guard will be thrown off by the beveled ends 8, and should any enter the guard and fall upon the track, the plow points 15 will throw the same off the track through the openings 14. Plate portions 16 cover the track rail beneath the openings 11 and should saw-dust enter the openings, it would fall upon these plate portions and be shaken therefrom by the movement of the carriage, througth the adjacent openings 12. The guard 5 is also adapted to cover the tread of the rail.

Preparatory to an "offset" movement, the carriage is moved by mechanical means in a horizontal plane transversely of the track away from the saw and the arms 10, as they are of less width than the openings 11 move laterally in said openings 11 while the guard itself remains stationary, and upon the "offset" movement taking place, the

arms will carry the guard along the rail in a position covering the tread and guarding the wheel. Preparatory to the "onset" movement, the carriage in moving in a horizontal plane transversely of the track toward the saw, owing to the openings 11 being wider than the arm, will move the arms 10 in said openings 11 in the same direction, without moving the guard. In Figs. 2 and 3, the position of the arms is shown in the "offset" position of the carriage in full lines and in the "onset" position thereof in dotted lines.

In the modified form shown in Fig. 5, I employ in place of the arms 10 of the other form, links 18 which are hinged to plates 19 fastened to the side beam and which are also hinged to plates 20 fastened to the guard. This hinge construction owing to the provision of the intermediate link 18 hinged at both ends will permit the carriage to move a sufficient distance in a horizontal plane transversely of the track to permit the carriage to be operated for an offset movement or an onset movement without moving the guard to the carriage. In this form of the invention the openings designated 11 and 12 in the other figures are dispensed with.

It is clear that various changes may be made without departing from the spirit and scope of my invention.

Having thus described my invention, what I claim is:—

1. In combination with a saw-mill carriage and wheel adapted for use on a track rail, a guard for the wheel, means carried by the carriage adapted to move the guard with the carriage along the rail, and means to permit horizontal movement of the carriage transversely to the rail relative to the guard, the guard being stationary during the horizontal movement, substantially as described.

2. In combination with a saw-mill carriage and wheel, a guard for the wheel, and connecting means between the carriage and guard having a free horizontal transverse play between the carriage and guard, to permit the carriage to move in a horizontal direction transversely of the rail, the guard being stationary during the horizontal movement, substantially as described.

3. In combination with a saw-mill carriage and wheel adapted for use on a track rail, means to protect the track rail beneath the wheel against the falling of sawdust thereon, and means interior of the guard and integral therewith and having a face at an angle to the transverse direction of the rail adapted to remove saw-dust from the rail, substantially as described.

4. In combination with a saw-mill carriage and wheel adapted for use on a track rail, a guard for the wheel, an opening therein, said opening being enlarged in a horizontal direction transversely of the track rail, a member of less width in said direction than the width of the opening in said direction, said member being carried by the carriage and adapted to loosely enter said opening, whereby the member may move transversely of the track rail in said opening, substantially as described.

5. In combination with a saw-mill carriage and wheel adapted for use on a track rail, a guard for the wheel, an opening therein, said opening being enlarged in a horizontal direction transversely of the track, a member of less width in said direction than the width of the opening in said direction, said member being carried by the carriage and adapted to loosely enter said opening, whereby the member may move in a horizontal plane transversely of the track rail in said opening, and covering means for the opening, substantially as described.

6. In combination with a saw-mill carriage and wheel adapted for use on a track rail, a guard for the wheel, an opening therein, said opening being enlarged in a horizontal direction transversely of the track rail, a member of less width in said direction than the width of the opening in said direction, said member being carried by the carriage and adapted to loosely enter said opening, whereby the member may move in a horizontal plane transversely of the track rail in said opening, and rail-protecting means beneath said opening and an adjacent opening in the guard, substantially as described.

7. In combination with a saw-mill carriage and wheel adapted for use on a track rail, a guard for said wheel loosely resting on the track and out of contact with the wheel, and members carried by the carriage having loose abutting contact against the guard to move the guard with the carriage along the rail and maintain the guard out of contact with the wheel, substantially as described.

8. In combination with a saw-mill carriage and a wheel adapted for use on a track rail, a guard for the wheel, openings in the guard enlarged in a horizontal direction laterally of the track rail, arms carried by the carriage adapted to enter the openings and of less width in said direction than the width of the opening in said direction to move the guard with the carriage along the rail and also adapted to move in the openings in a horizontal direction transversely of the track rail, and track clearing means carried by the guard, substantially as described.

9. In combination with a saw-mill carriage and a wheel adapted for use on a track rail, a guard for the wheel, enlarged open-

ings therein, arms carried by the carriage and adapted to enter the openings and move the guard with the carriage along the rail and also adapted to move in a direction transverse to the rail, in the openings, cover-plates for said openings, and track-clearing means interior of the guard, substantially as described.

10. In combination with a saw-mill carriage and a wheel adapted for use on a track rail, said guard being made in removable sections, laterally enlarged openings between the sections, arms carried by the carriage and adapted to enter the openings and move the guard with the carriage along the rail and also adapted to move in the openings in a direction transversely to the rail, and means to cover and protect the track beneath the openings, track clearing means within the guard, openings adjacent thereto and track clearing means exterior of the guard, substantially as described.

11. In combination with a saw-mill carriage and a wheel adapted for use on a track rail, a guard for the wheel having means to protect the track rail adjacent the wheel against the falling of saw-dust on the track rail, and a member interior of the guard beveled at an angle to the transverse direction of the rail adapted to clear the track rail of sawdust falling through and within the guard onto the track rail, substantially as described.

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

JOSEPH A. SIMON.

Witnesses:
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