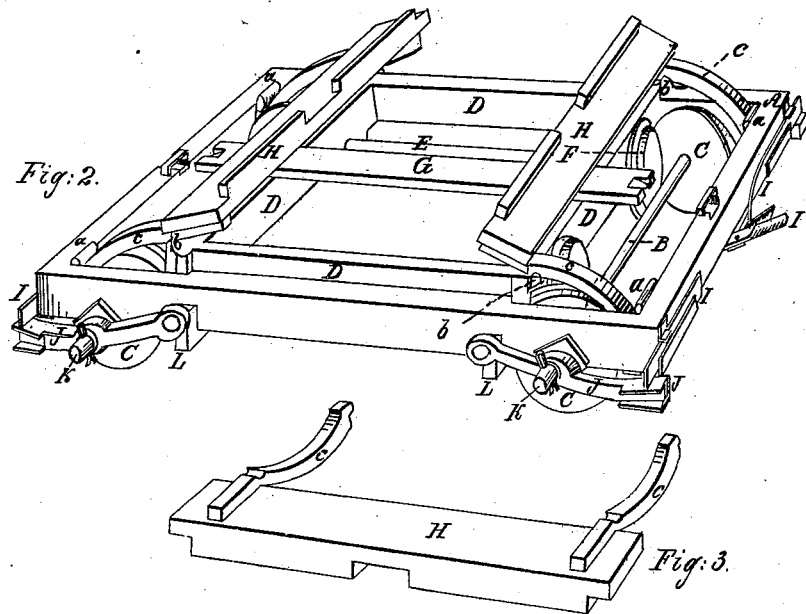
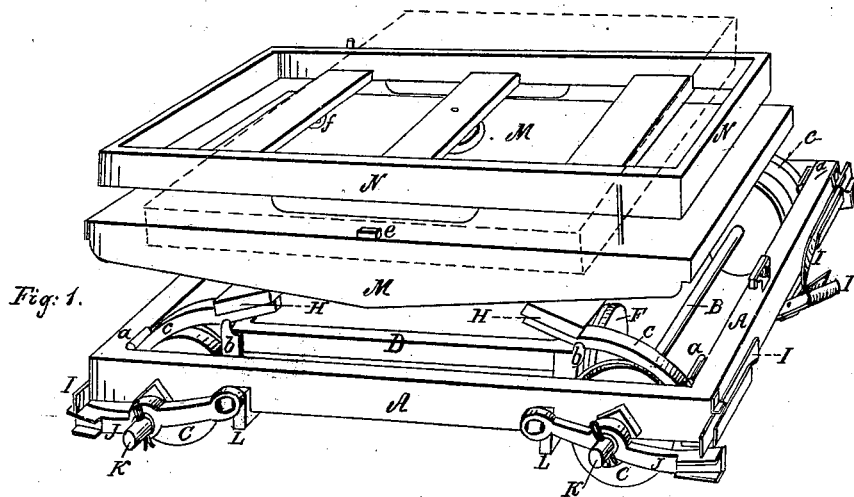


P. H. McWILLIAMS.

Car Truck.

No. 112,826.

Patented March 21, 1871.



Attest.  
*A. F. Dumb*  
*H. Stewart*

Inventor.  
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*per atty*  
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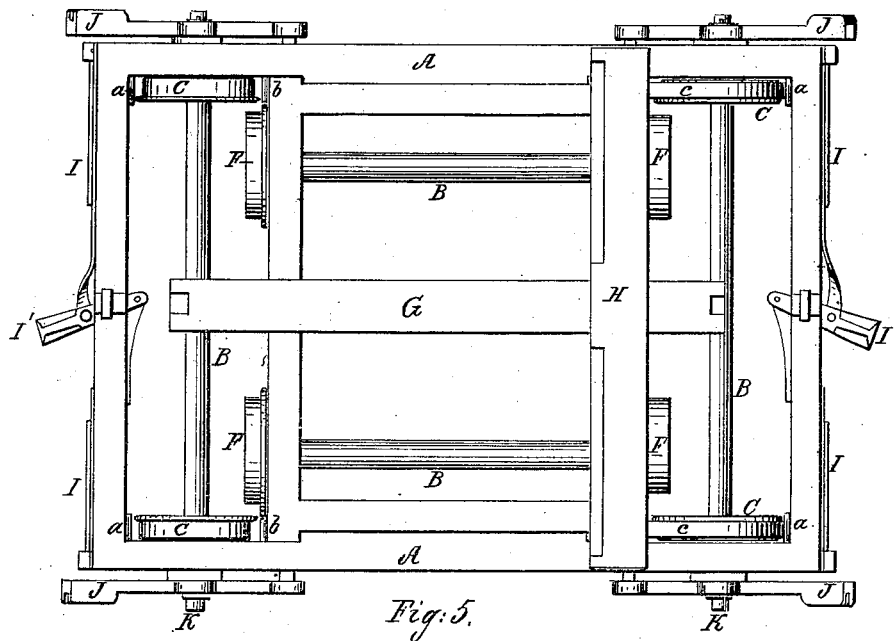
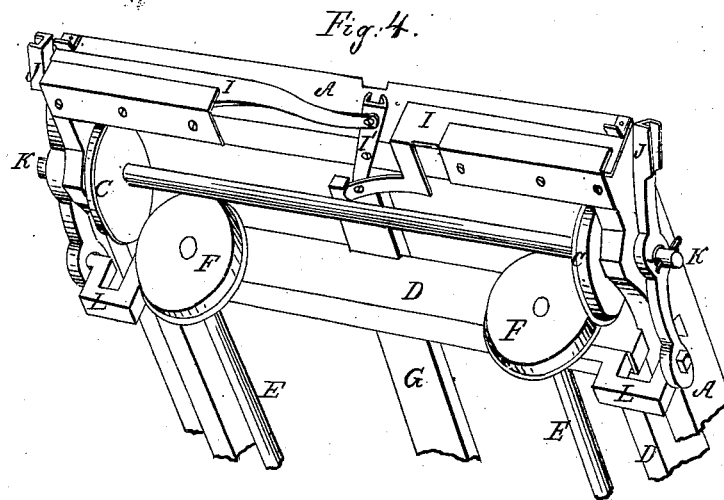
P. H. McWILLIAMS.

2 Sheets—Sheet 2.

Car Truck.

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*Attest*  
*A. F. Dunlop*  
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*Inventor.*  
*P. H. McWilliams*  
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# United States Patent Office.

PATRICK HENRY McWILLIAMS, OF DETROIT, MICHIGAN.

Letters Patent No. 112,826, dated March 21, 1871.

## IMPROVEMENT IN RAILWAY SHIFTING-TRUCKS.

The Schedule referred to in these Letters Patent and making part of the same.

*To whom it may concern:*

Be it known that I, PATRICK HENRY McWILLIAMS, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in a Railway Transfer or Shifting-Truck; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying sheets of drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1, sheet 1, is a perspective view of my truck complete.

Figure 2 is the same, but with the platform and revolving rack removed.

Figure 3 is a perspective view of one of the lever-bolsters, inverted.

Figure 4, sheet 2, shows, in perspective, the construction of the under part of the truck.

Figure 5 is plan of the truck proper, with one bolster in place.

The nature of this invention relates to the construction of a railway truck, which is so arranged that it may be run from one track to another, crossing it at right angles, thereby dispensing with all turn-tables, transfer-tables, or their equivalents.

The invention consists in two trucks, one within and at right angles to the other, provided, respectively, with axles and wheels, and with a platform in common, and all arranged and connected in a peculiar manner, for the purpose of enabling either truck to be depressed and support the load and other truck, as more fully hereinafter set forth.

In the drawing—

A represents the outer rectangular truck-frame, having journaled therein, near each end, the axle B, carrying the flanged wheels C. The extremities of the axles do not project outwardly from the sides of the frame.

L is the inner truck-frame, in like manner provided with axles E and wheels F, but disposed at right angles to those of the outer frame, the wheels of both trucks being set to the same gauge. The inner frame is so arranged as to play freely in a vertical direction between guides in the outer one.

G is a sill across the center of the inner truck, extending beyond its sides, in line with the longitudinal center of the outer one.

a are socket-pieces in the end corners of the outer frame, and b are bearings at the corners of the inner frame, in line with them.

H are lever-bolsters, having arms or levers c curved to clear the wheels C, and whose ends are inserted under the socket-pieces a, their main portions resting upon the bearings b, as shown in figs. 1 and 2.

A pair of strong bolts, I, sliding in suitable guides, is placed across each end beam of the outer frame, the bolts of each pair being pivoted to, and operated simultaneously by, a lever, I'.

J are lifting-levers, four in number, each being pivoted to a fulcrum, K, on the side-beams of the outer frame, their outer ends projecting beyond the ends of the beams, so that the bolts I may be shot out above or below them.

With the inner end of each lever a lug, L, projecting from the corner of the inner frame, engages. These lugs are bent or formed to pass under the side-beams of the outer frame.

The outer ends of the levers I' and J are provided with sockets for the reception of hand-spikes, to enable them to be more easily operated.

M is the platform or deck of the truck, resting upon and supported by the bolsters H.

The operation of the truck may be explained as follows, premising that the various parts are in the position shown in figs. 1 and 2:

In this position the truck, with its load, bears upon the wheels C of the outer truck-frame, consequently, will travel upon a line of rails parallel with said wheels. Now, if it be desired to transfer the load to a line of rails crossing the first track at right angles, the car or truck is stopped with the wheels over the crossing rails; then, by means of the levers I', the bolts I are withdrawn from above the levers J, when the inner truck will no longer be held up by them. The weight of the load, acting upon the bearings b of the inner frame, through the bolster-levers, forces said inner frame down and the outer one up. The truck can now be run off upon the second or crossing line of rails. In this last position of the various parts, to transfer the truck again, the attendants insert the end of a handspike under the end of the sill G of the inner frame, making a fulcrum of the outer one, when, by bearing down on the handspike, the inner truck may be raised and secured by the bolts I, operating upon one end at a time; or, if the load be very heavy, two handspikes may be used, inserting them in and operating the levers J simultaneously.

For greater convenience in moving about with long timbers or other material in lumber-yards, depot-grounds, and in similar locations where the alleys or spaces in which the tracks are laid are narrow, I provide the truck with a revolving rack, N, shown in fig. 1. This rack is pivoted by a central king-bolt to the platform M, any lateral motion in the rack being overcome by side-blocks e on the platform under the rack.

The rack is provided with rollers, f, underneath, traveling on the platform, supporting the rack in its

rotation. In passing from one track to another the rack, with its load, may be swung around into the new direction.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the truck-frames A and D, provided, respectively, with the axles B and E and the wheels C and F, with the platform M, the sockets *a*, the bearings *b*, the lever-bolsters H, the lugs L, the

fulcrums K, the levers J and I, and bolts I, all constructed substantially as described and shown, for the purpose of enabling either truck to be depressed and support the other truck and platform M, or be elevated and be supported in turn.

PATRICK HENRY McWILLIAMS.

Witnesses:

THOS. S. SPRAGUE,  
M; STEWART.