

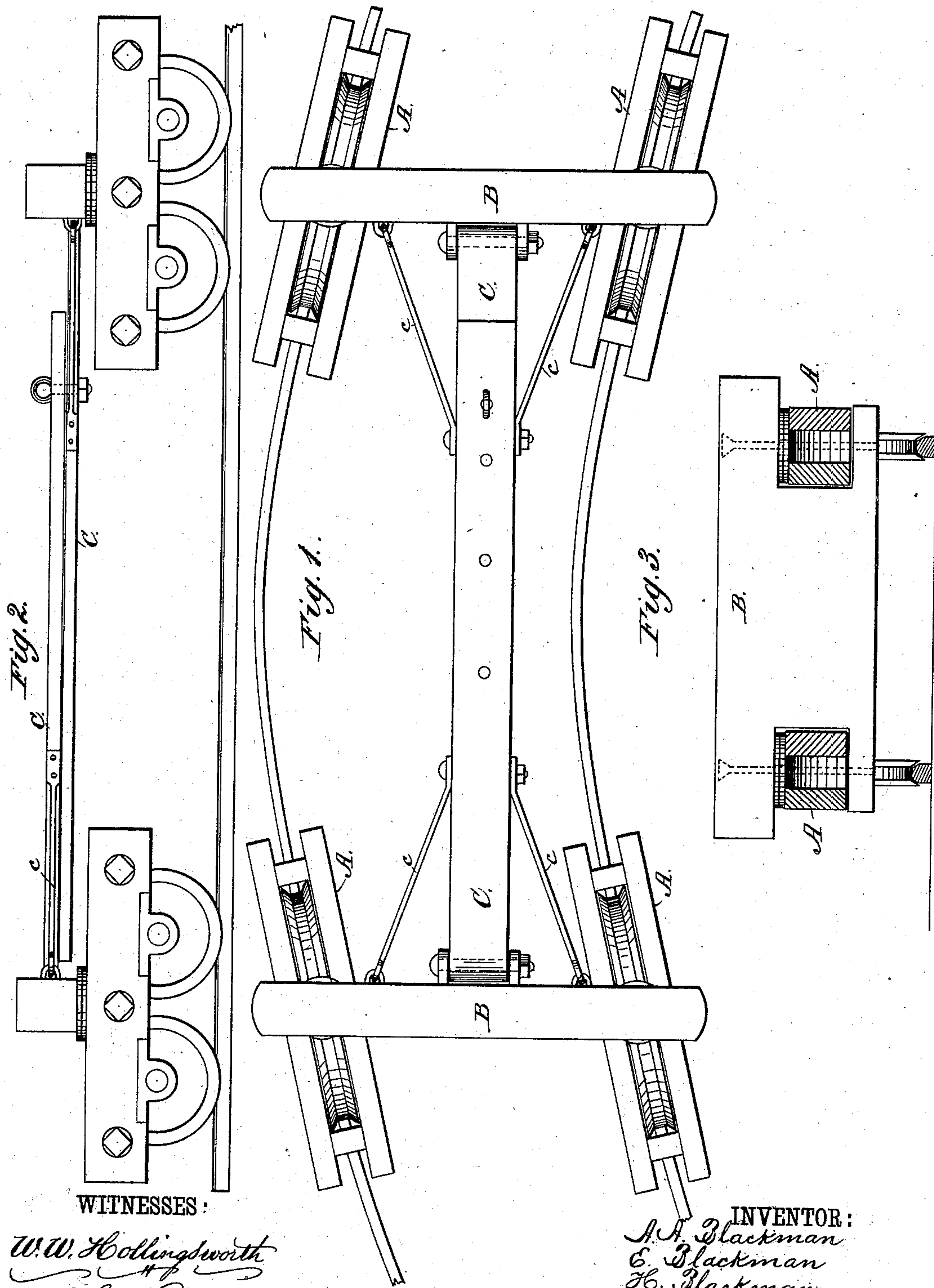
(No Model.)

A. A., E. & H. BLACKMAN.

CAR TRUCK.

No. 254,908.

Patented Mar. 14, 1882.



WITNESSES:

W. W. Hollingsworth
A. G. Syne.

INVENTOR:

A. A. Blackman
E. Blackman
H. Blackman

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALANSON A. BLACKMAN, ELHANAN BLACKMAN, AND HYRCANUS BLACKMAN, OF SNOHOMISH, WASHINGTON TERRITORY.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 254,908, dated March 14, 1882.

Application filed January 9, 1882. (No model.)

To all whom it may concern:

Be it known that we, ALANSON A. BLACKMAN, ELHANAN BLACKMAN, and HYRCANUS BLACKMAN, of Snohomish, in the county of Snohomish and Territory of Washington, have invented a new and useful Improvement in Railway-Car Trucks, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

This invention consists of a railway-car truck of novel construction, which is adapted for use upon rails without ties, or upon any temporary railway having sharp curves either from a vertical or horizontal plane, such as may be laid upon an uneven surface without grading.

In the accompanying drawings, Figure 1 is a plan view of our improved car-truck, showing its adaptation to a laterally-curved track. Fig. 2 is a side elevation of the same, and Fig. 3 is a cross-section through one of the bolsters.

Similar letters of reference indicate corresponding parts throughout the several views.

This invention has special relation to car-trucks for transporting saw-logs and other timbers to mills or shipping-points, in which case temporary railway-tracks are laid without grading.

Where a track is laid on uneven surface of ground it is of great importance that the car-truck shall be so constructed as to adapt itself automatically not only to sharp curves from a vertical plane, but also to undulations from a horizontal plane, to prevent straining of the frame-work and running-gear of the car-truck. To this end we employ a series of truck-frames, A, which are swiveled independently of each other to opposite sides of the running-gear by means of bolts passing through the ends of the bolsters B.

Each truck-frame is provided with two wheels arranged one in front of the other, and the wheels are constructed with a double flange adapted to overlap the rail on both sides, so that two rails shall thus be braced without the use of cross-ties. The tread of the wheels is made slightly broader than the rails, in order that the two wheels of each truck-frame shall

safely keep the track when turning a sharp curve.

The advantage of a truck-frame having two wheels over one having but a single wheel is obvious in a case where great strength is desired; but such truck-frames have heretofore been more or less rigidly connected together in pairs, and when so connected an undue amount of friction is caused between the wheels and rails for want of sufficient flexibility. Where a temporary track is used, composed frequently of wooden rails without ties, it is evident that a great degree of friction would necessitate constant repairing; but with the use of our independent two-wheeled truck-frames such flexibility of movement and action is secured that wooden rails are found to answer our purpose most satisfactorily.

Each of the bolsters B is provided with a reach, C, which is hinged thereto, so as to be adapted for vertical oscillation, and the reaches of two bolsters are made to overlap each other, so as to be secured together adjustably by means of a bolt passing through perforations in both. The reaches are braced on opposite sides by rods c, which are connected to the bolsters by flexible joints. With this construction the truck-frames are allowed to accommodate themselves to undulations in the track without disturbing the position of the load. It will be seen that this car-truck is adapted for use under exceptional conditions, where almost any other car-truck in use would be all but impracticable, owing to the fact that a smooth and perfect track is presupposed as a condition of its usefulness. While this car-truck is primarily designed for use upon rudely-constructed tracks for the purpose of transporting immense timbers out of forests and for similar uses, it is evident that it is no less adapted for ordinary railways, and in some respects it may be found to be better adapted for use upon ordinary railways than most trucks that are in use.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a car-truck, the combination, with a series of independent truck-frames and bolsters

to which the truck-frames are swiveled, of
reaches hinged to the bolsters, so as to allow
vertical oscillation to the bolsters and truck-
frames, substantially as shown and described,
5 whereby the car-truck shall be adapted to an
uneven or undulating track, as set forth.

2. The combination, in a car-truck, of four
independent truck-frames swiveled to the ends
of the bolsters in pairs, and provided each with
10 two double-flanged wheels arranged one in
front of the other, and a suitable gear for con-

necting the parts, substantially as shown and
described, whereby an uneven track composed
of two rails without ties may be employed, as
set forth.

ALANSON A. BLACKMAN.
ELHANAN BLACKMAN.
HYRCANUS BLACKMAN.

Witnesses:

WM. WHITFIELD,
GEORGE W. BOYCE.