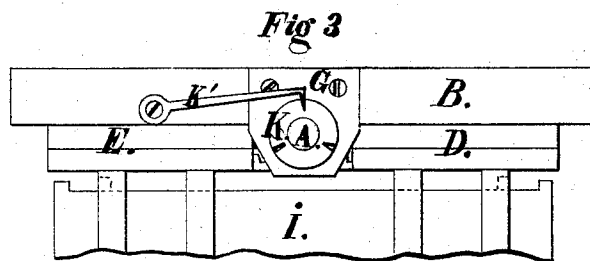
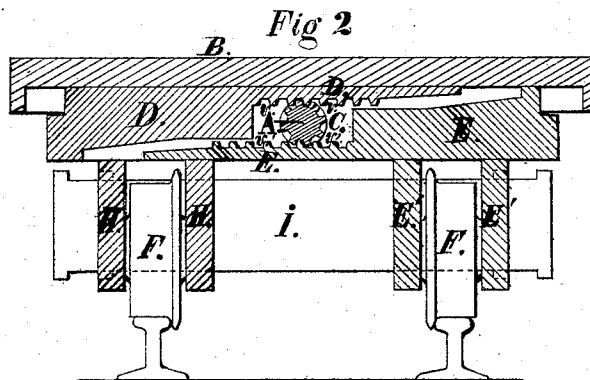
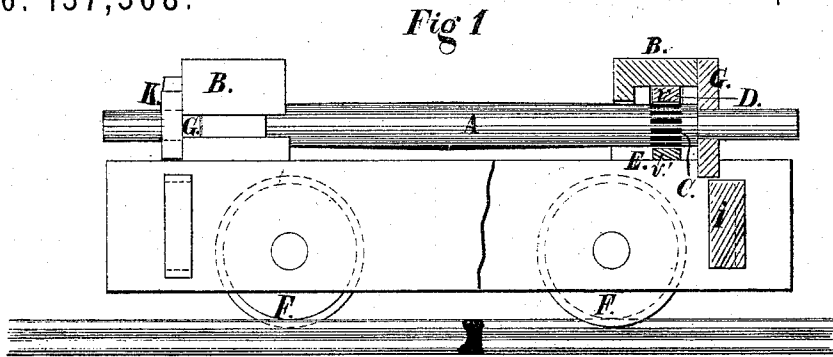


J. McCAULEY.

Changeable Gage Railway Trucks.

No. 137,308.

Patented April 1, 1873.



Witnesses:

Stanley Williams
Wm. M. Ford, Jr.

Inventor:

James McCauley
By A. M. Stout Attorney.

UNITED STATES PATENT OFFICE.

JAMES McCAULEY, OF ELKTON, MARYLAND.

IMPROVEMENT IN CHANGEABLE-GAGE RAILWAY-TRUCKS.

Specification forming part of Letters Patent No. **137,308**, dated April 1, 1873; application filed January 24, 1873.

To all whom it may concern:

Be it known that I, JAMES McCAULEY, of Elkton, county of Cecil, and State of Maryland, have invented certain Improvements in Railroad Car-Trucks and Railways, of which the following is a specification:

I will here premise generally that, by means of the mechanism employed by me, the truck of a rail-car may be contracted or expanded laterally so as to be adapted to run upon either wide or narrow gage railways, and may therefore start upon a railway of one gage and may, at will, be changed so as to run upon a wider or narrower gage railway, at pleasure, without being lifted or removed from the rails.

The object of my invention is to avoid the necessity of unloading from one car and re-loading into another, as often as the gage or gages of the road or roads may change in the transit of wood, coal, stone, or other freight from the forest, mine, or quarry, or other depot, to market or other place of delivery.

The first part of my invention relates to such construction and arrangement of the parts composing the truck as will admit of such lateral contraction and expansion with cheapness and convenience, as will be hereafter more fully described. The second part of my invention relates to the combination of a central shaft extending the entire length of the truck and exactly midway between the wheels thereof, and having its bearings in the cross-pieces which support the car proper, and having a pinion upon each end thereof, with two rack-bars for each pinion, one above and the other below the same, in such a manner that by revolving the center shaft to the right or left the truck is laterally contracted or expanded, as will be hereinafter more fully described.

In the accompanying drawing, Figure 1 represents a side view of a truck embracing my invention, with a cross central-section of one of the cross-pieces B, so made in order to display a clear view of the interior parts of the mechanism employed. Fig. 2 represents a cross-section of the same made as indicated

by the broken line *a b*, Fig. 1. Fig. 3 represents a rear end view of the same. Fig. 4 represents a plan view of my adjustable truck; Fig. 5, a side view of the movable rail and platform; and Fig. 6 a longitudinal vertical section of the same.

The wheels F F are boxed and journaled in the frame-pieces H H and E' E', and these frame-pieces are attached to the sliding blocks D and E, to which are attached the rack-bars *v v* and the frame-pieces H H and E' E', sliding back and forth laterally on the guide-bars I I and the blocks D and E; and their rails are confined and guided by the grooves or ways provided for them in the cross-pieces B B; and by turning the center shaft A to the left the teeth of the pinion C will drive the blocks D and E in opposite directions, and both outwardly with the same speed, while the central shaft A will always maintain its position under the center of the car and equidistant from the wheels on each side, and the blocks carry with them the wheels, of course.

The central shaft may be revolved by any suitable means, by hand or otherwise. Such means are no part of my invention.

The framing and boxing for the wheels on either side of the truck may be firmly held apart by cross-bars or by a ratchet or dog, as shown in Fig. 3; but this is no part of my present invention. In order to diminish friction the top sides of the blocks D and E may be provided with rollers, if found to be expedient.

Claims.

What I claim as my invention is—

1. The combination of frame-pieces H H and E' E', guide-bars I I, and blocks D E D E, constructed substantially as and for the purpose described.

2. The combination of the center shaft A provided with the pinions C C, the blocks D D E E having the rack-bars *v v v v*, substantially as shown and described, for the purpose set forth.

JAMES McCAULEY.

Witnesses:

F. HUCKEL,
ALEX. M. STOUT, Jr.