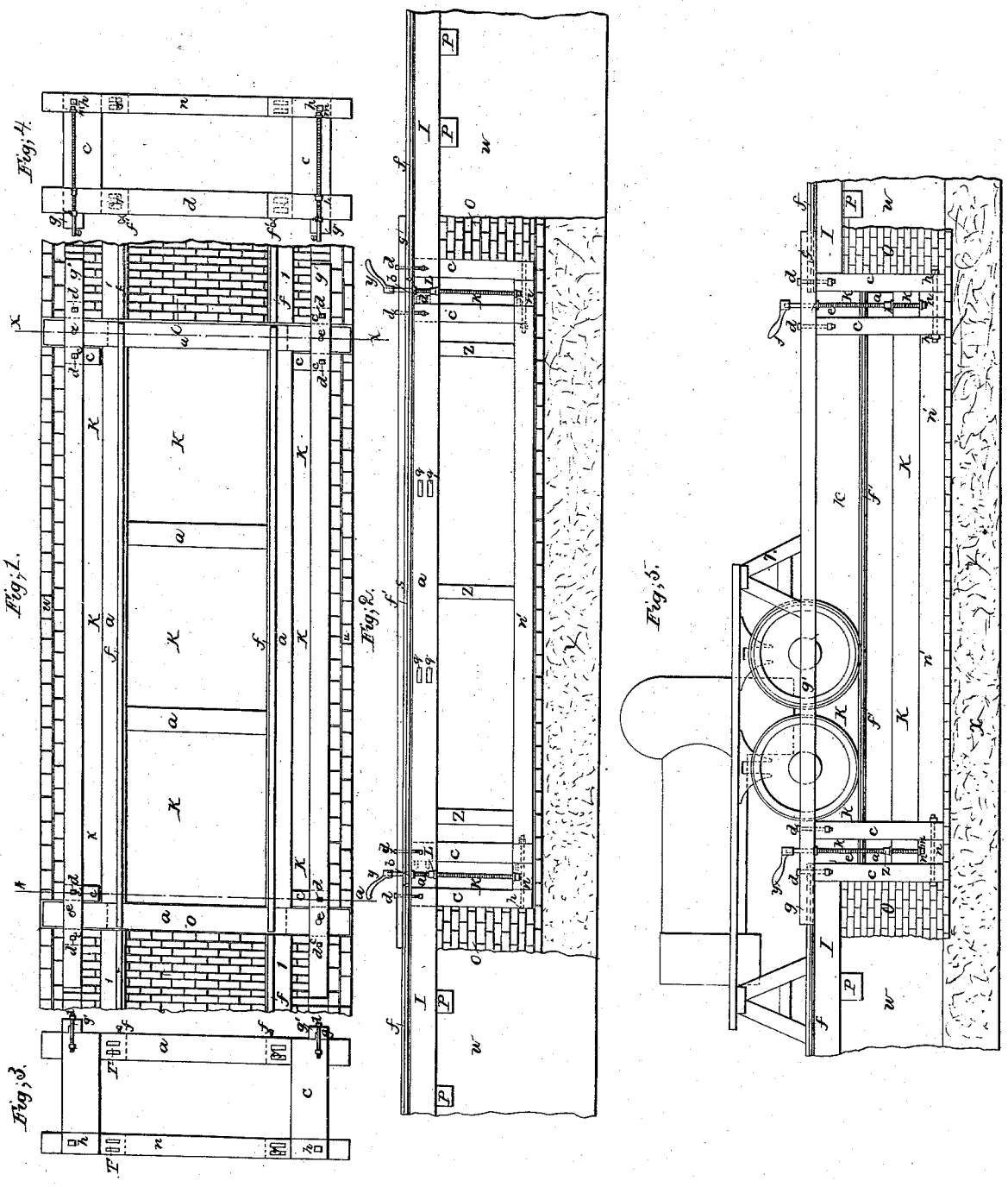
T. D. Simpson.

Railroad Track Platform.

No. 4,213. Patented Sept. 30, 1845.



Inventor;
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UNITED STATES PATENT OFFICE.

THOS. D. SIMPSON, OF NORWICH, CONNECTICUT.

MODE OF REMOVING TRUCK-WHEELS.

Specification of Letters Patent No. 4,213, dated September 30, 1845.

To all whom it may concern:

Be it known that I, THOMAS D. SIMPSON, of Norwich, in the county of New London and State of Connecticut, have invented a new and useful Apparatus or Machine for Taking Out the Driving and Truck Wheels from Locomotives and Cars, and that the following is a full, clear, and exact description of the principle or character thereof which distinguishes it from all other things before known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of the apparatus applied to a railroad; Fig. 2, a longitudinal vertical section; Fig. 3, a transverse vertical section, taken at the line (A *a*) of Fig. 1; Fig. 4, another transverse section taken at the line (X X) of the same figure, and Fig. 5, a longitudinal vertical section of the apparatus with a locomotive on it.

The same letters indicate like parts in all the sections.

The nature of my invention and what distinguishes it from all other things before known consists, in the employement of a vertically sliding platform, provided with jack screws or other means of moving it up and down, and with rails for the reception of the driving and truck wheels of locomotives and other railroad cars, when combined with the permanent rails of a sectional or other railway, and trestle to receive and sustain the frames of locomotives and other cars, for the purpose of removing the driving and truck wheels of locomotives and other cars, by letting them down instead of lifting the cars, &c. by means of jack screws as heretofore practised.

In the accompanying drawings (*a*) represents the platform which is a quadrangular frame, the end pieces (*a'*) of which project beyond the sides, and are there provided with nuts, in which work four vertical screws (*e*, *e*, *e*, *e*,) the lower ends of which turn in metal boxes (*m*) let into cross timbers (*n*, *n*) properly set in the bottom of a pit (*k*) into which the whole platform moves up and down, while journals at their upper ends work in metal boxes (*b*), properly secured to longitudinal timbers (*g*, *g*) that extend over the projecting ends of the platform. These screws are operated by wrenches, and by this means the platform can be elevated or depressed at pleasure.

The pit (*k*) can either be cut out of the solid earth and properly walled around, or walls (*o*, *w*) built up from the surface of the earth and a proper embankment made around it. The upper longitudinal timbers (*g*, *g*) are connected with the base cross timbers (*n*, *n*) and base longitudinal timbers (*n' n'*) by means of vertical timbers (*c*, *c*), and the whole properly secured together by means of screw bolts (*d*, *d*) and (*h*, *h*). And the sides of the platform are properly braced and kept parallel by cross pieces of timber (*q*, *q*). The rails (*f*, *f*) of the sectional or other railway are secured to string pieces (I, I) in the usual manner of making railroads, and on the platform there are corresponding rails (*f' f'*).

When it is desired to remove the driving or truck wheels of locomotives and other railroad cars, the locomotive or car is moved so as to bring the wheels to be removed (say the drivers) onto the platform (*a*) while those not intended to be removed are retained on the permanent rails, a trestle (7) is then so placed as to rest on the longitudinal timbers (*g*, *g*) in such manner as to support the end of the carriage or car frame as represented in Fig. 5, and then by turning the screws *e*, the platform (*a*) with the wheels resting thereon, is let down until the axles have passed below the pedestals of the car, which will then admit of the removal of the wheels. By reversing this operation it will be obvious that the wheels can be replaced, and that all this can be effected without the necessity of lifting the car or locomotive frame.

For the screws (*e*), levers, wedges or other known means of raising heavy bodies may be substituted.

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

The method of removing and putting in the driving and truck wheels of locomotive and other railroad carriages by the employment of a vertically moving platform for letting down and raising up the wheels in combination with the permanent railway and trestle or other support for the locomotive or car frame, substantially as herein described.

THOS. D. SIMPSON.

Witnesses:
WILLIAM M. RODES,
ROBERT GRUNHALGE.