

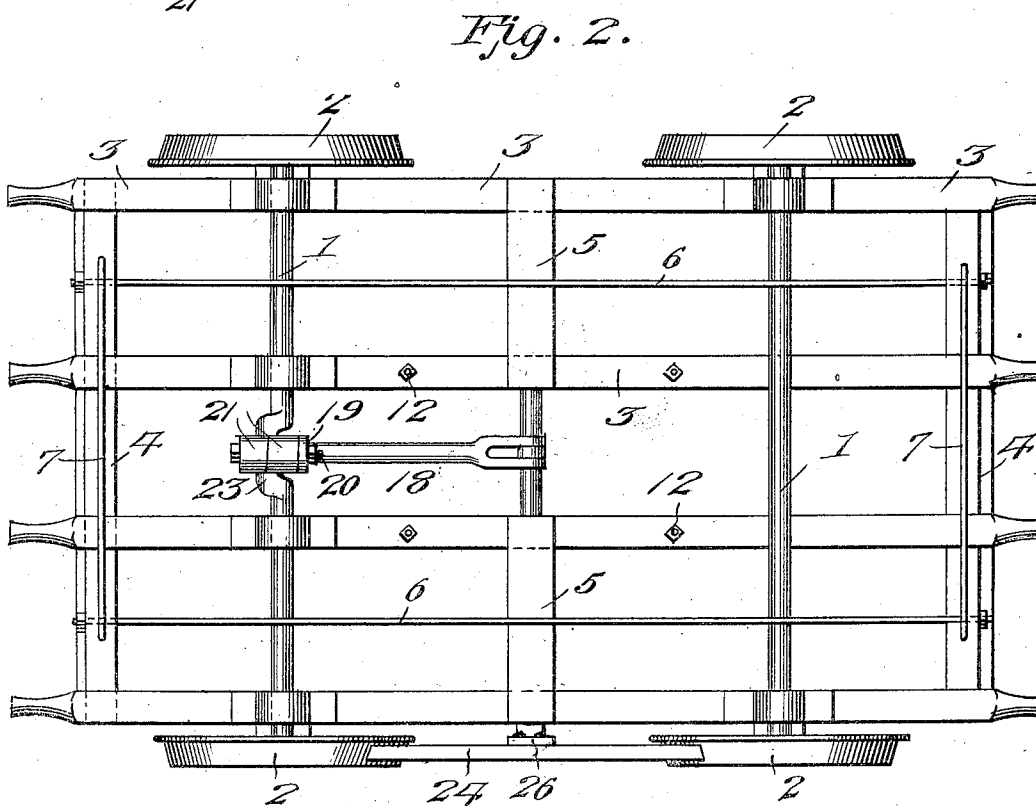
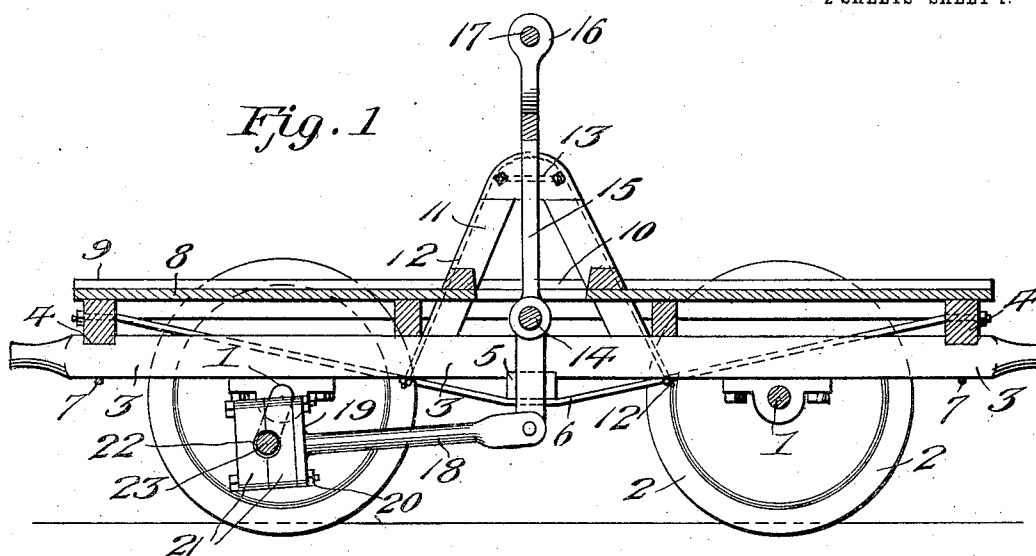
No. 835,965.

PATENTED NOV. 13, 1906.

G. E. LUNCEFORD.
HAND CAR.

APPLICATION FILED JULY 3, 1906.

2 SHEETS—SHEET 1.



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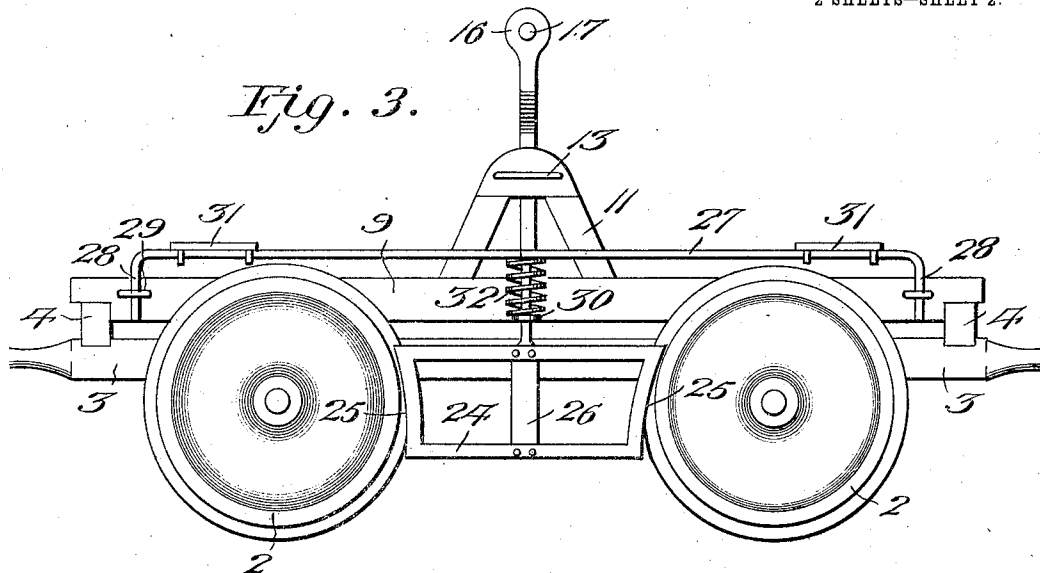
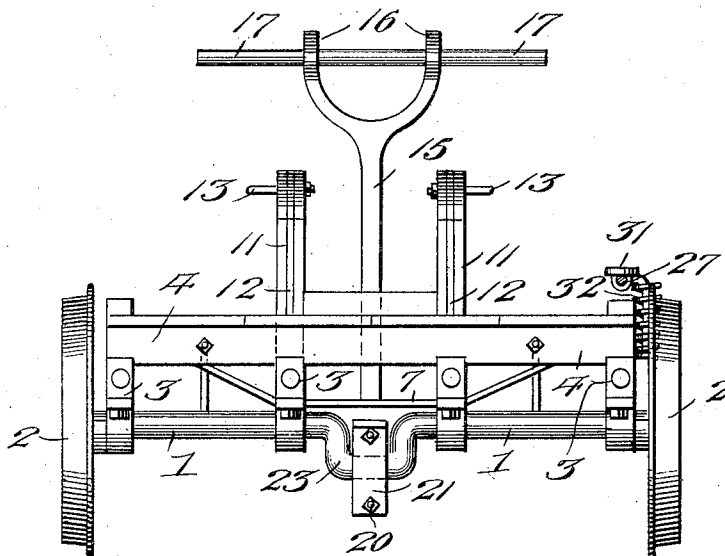


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE E. LUNCEFORD, OF KARLIN, MISSOURI.

HAND-CAR.

No. 835,965.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed July 3, 1906. Serial No. 324,673.

To all whom it may concern.

Be it known that I, GEORGE E. LUNCEFORD, a citizen of the United States, residing at Karlin, in the county of Polk and State of Missouri, have invented new and useful Improvements in Hand-Cars, of which the following is a specification.

This invention relates to hand-cars of the type employed on railroads for transporting workmen from place to place, and has for its objects to produce a comparatively simple, inexpensive device of this character which may be readily driven, one wherein a high rate of speed proportionate to the energy expended may be attained, and one in which the employment of an expensive or otherwise objectionable driving-gearing is dispensed with.

A further object of the invention is to provide a simple and efficient form of brake which may be conveniently manipulated for controlling the speed of the car and to generally improve and simplify the construction of the body of the car, having in mind the requisite strength and durability.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a vertical section taken centrally and longitudinally through a car embodying the invention. Fig. 2 is a bottom plan view of the car. Fig. 3 is a side elevation of the same. Fig. 4 is an end view of the car.

Referring to the drawings, it will be seen that the body of the car, which is equipped with rotary axles 1, having transporting wheels 2 fixed thereon, comprises a series of longitudinal beams or timbers 3, transverse end beams or timbers 4, and intermediate brace-beams 5, disposed at the longitudinal center of the car and to bear beneath the timbers 3, there being terminally engaged with the end beams 4 longitudinal truss-rods 6, which engage between their ends beneath the bracing-beams 5, while arranged at the ends of the car are transversely-extending truss-rods 7, terminally engaged with the timbers 4 and extended beneath the lower faces of the intermediate longitudinal timbers 3. The framework of the car has erected thereon a flooring or platform 8, having at its longitudinal edges side beams or sills 9 and provided at the center of the car with an opening 10, there being erected at opposite

sides of said opening a pair of vertical frames 11, braced by tie-rods 12 and equipped with straps or loops 13 for the reception of the various tools to be used along the road.

Journaled in suitable bearings on the frame and centrally between the opening 10 is a rock-shaft 14, on which is fixed a walking-beam 15, extended upward through the opening 10 and terminating at its upper end in a U-shaped head 16, in which is fixed a handle-bar 17, there being pivoted to the lower end of the member 15 a connecting-rod 18, having at its outer end a cross-head 19, to which is detachably secured, by means of bolts 20, a pair of cooperating bearing-blocks 21, having their meeting faces grooved to form a bearing-opening 22, in which is journaled a crank portion or arm 23, formed on one of the axles 1.

Arranged between the pair of wheels 2 at one side of the car is a brake head or shoe 24, having its ends curved to form braking-surfaces, which act on the respective wheels, said shoe being attached to and for movement therewith, a vertically-depending member or bar 26, in turn affixed at its upper end to and carried by a vertically-movable presser member or plate 27, which extends throughout substantially the entire length of the car and terminates at its ends in depending guide portions or stems 28, movably arranged in bearings 29, fixed to the adjacent side beam 9, to which there is also attached a guide-bracket 30, in which the upper portion of the bar 26 is arranged for movement. Coiled around the upper portion of bar 26 and bearing at its ends between the bracket 30 and presser-plate 27, which latter is provided adjacent its ends with foot-plates 31, is a normally-expanded spring 32, adapted for maintaining the brake-shoe and its attendant parts normally in raised condition and against the action of which the shoe is moved to braking position.

In practice when the walking member or beam 15 is rocked back and forth on its pivot 14 motion will be imparted, through the medium of the connecting-rod 18, to the axle 1 for driving the car, it being noted that inasmuch as there is a direct connection between the walking-beam and crank portion 23 of the axle a comparatively high rate of speed commensurate with the energy expended may be attained and, further, that under this arrangement the employment of driving-gearing, with which cars of this type

are generally equipped and which for various reasons proves unsatisfactory in use, is dispensed with. During travel of the car its speed may be readily controlled through the medium of the brake 24, which may be readily moved to active position by a downward pressure on the member 27, in manipulating which the attendant's foot may be placed on one of the foot-plates 31, as will be readily understood. It is to be particularly noted that owing to the provision of the pair of blocks 21, which are detachably bolted to the cross-head 19, the connecting-rod 18 may be conveniently disconnected from the crank-axle when desired, and, further, that the blocks when worn may be readily replaced by new ones.

Having thus described my invention, what I claim is—

1. A car having a rotary axle provided with a crank portion and equipped with

transporting-wheels, a rocking beam journaled on the car and a connecting-rod pivoted to the beam at a point below its fulcrum and connected with the crank portion of the axle.

2. A car having a rotary axle provided with a crank portion and equipped with transporting-wheels, a rocking beam journaled on the car, a connecting-rod pivoted to the beam at a point below the fulcrum of the latter and having a cross-head, and a pair of bearing-blocks detachably connected with the cross-head and having their meeting faces recessed to form an opening for the crank portion of the axle.

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

GEORGE E. LUNCEFORD.

Witnesses:

FRANK SMAY,
CHARLES M. LANE.