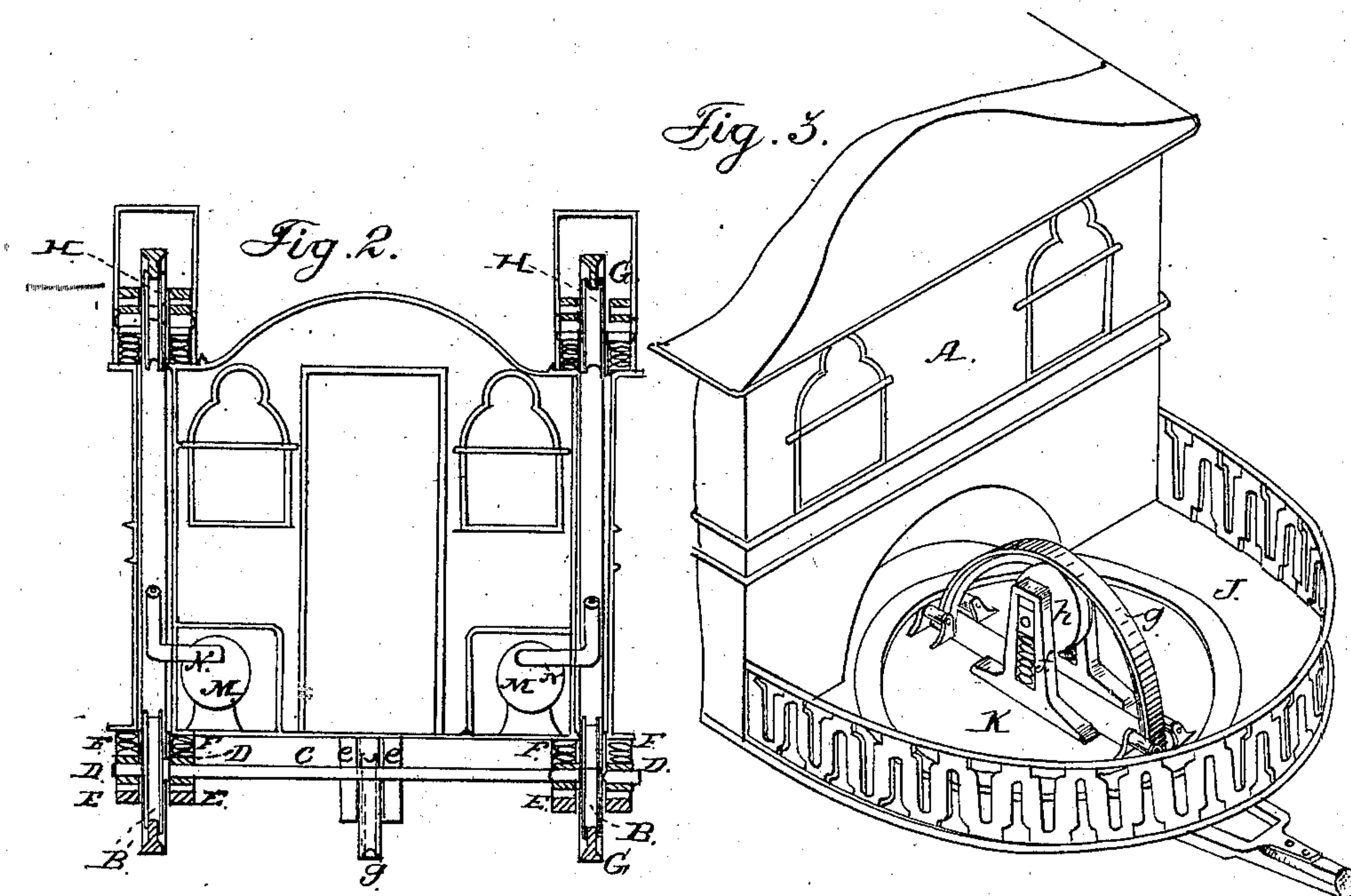


Traction-Wheel.

Patented May 14, 1861



INVENTORS:

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UNITED STATES PATENT OFFICE.

D. F. GOODHUE AND E. H. CAREY, OF CINCINNATI, OHIO.

WHEEL-CARRIAGE.

Specification of Letters Patent No. 32,285, dated May 14, 1861.

To all whom it may concern:

Be it known that we, DANIEL F. GOODHUE and EDWARD H. CAREY, both of Cincinnati, Hamilton county, Ohio, have invented a new and useful Method of Constructing Wheel-Carriages; and do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation thereof, reference being had to the annexed drawings, making part of this specification.

This invention relates principally to a peculiar arrangement of running gear for enabling a carriage to travel easily along common roads and over obstacles therein.

Figure 1 is a side view. Fig. 2 is a cross section. Fig. 3 is a perspective view of the front platform.

The body A, of the car consists of an inner and an outer shell which may be of sheet iron well braced together or of wood; and it is chiefly supported on a pair of doubly flanged car wheels or rollers B, which wheels are both fastened to a common axle C, which revolves in boxes D confined by vertical jaws or pedestals E, springs F being interposed between the boxes and the carriage body in manner usual in railroad cars. The wheels B rest upon stout circular rings G which we call portable tracks. Yielding flanged rollers H, H', H'', within the concavity of the ring, serve, in conjunction with the rollers, B, beforementioned to preserve the relative positions of the rings and the car body, while they permit a limited oscillation of the latter up and down or forward and backward in the plane of the ring.

The above described arrangement of running gear is placed somewhat in rear of center of gravity of the car so as to support most of its weight.

From the forward end of the car body there projects a platform J having a "fifth wheel" K provided with a single set of running gear *b c d e f g h*, similar to those already described for supporting the main body.

L is a wheel intended to support the rear end of the vehicle in case the body should be temporarily tipped backward.

A furnace M, is placed near the front on each side, and communicates by flues N under seat or floor, with a corner chimney O,

which is carried up between the inner and outer shells of the car body.

It will be perceived that in striking against an obstacle in the road, the body, in obedience to its large acquired momentum, and in consequence of its yielding bearings, will tend to run along and up the track or rings and thus to be eased over the obstruction instead of striking dead against it and having to be lifted bodily, as with an ordinary wheel carriage. The rings thus perform for the main body of the vehicle the service of a bridge which enables said vehicle to cross slight elevations and depressions in the surface of the ground without jolting or detention. It will also be seen that the absence of spokes to the rings G permits the introduction of several unobstructed windows P within the circumference of the ring.

The rings G may be of wrought or cast iron or partly of these materials and wood and should be of sufficient substance to maintain their proper form during use.

The rollers B H H' H'' within the concavities of the rings and adapted to yield radially within said rings as represented, we regard as essential to the successful operation of this class of vehicle.

The fifth wheel K may be adapted to be elevated or depressed by screws or otherwise so as to preserve the level of the body in ascending or descending grades.

This vehicle is adapted for either rail or common roads and may be drawn by steam or animal power.

We are aware that small wheels or rollers have been before arranged within spokeless rings in a variety of ways, but we claim as new and of our invention herein,

The combination herein shown and described of the spokeless rings G, grooved supporting wheels B, axle C, grooved guide rollers H, H', H'', and springs F, the whole being constructed and arranged and operating in the manner and for the purposes set forth.

In testimony of which invention, we hereunto set our hands.

D. F. GOODHUE.
E. H. CAREY.

Witnesses:

GEO. H. KNIGHT,
FRANCIS MILLWARD.