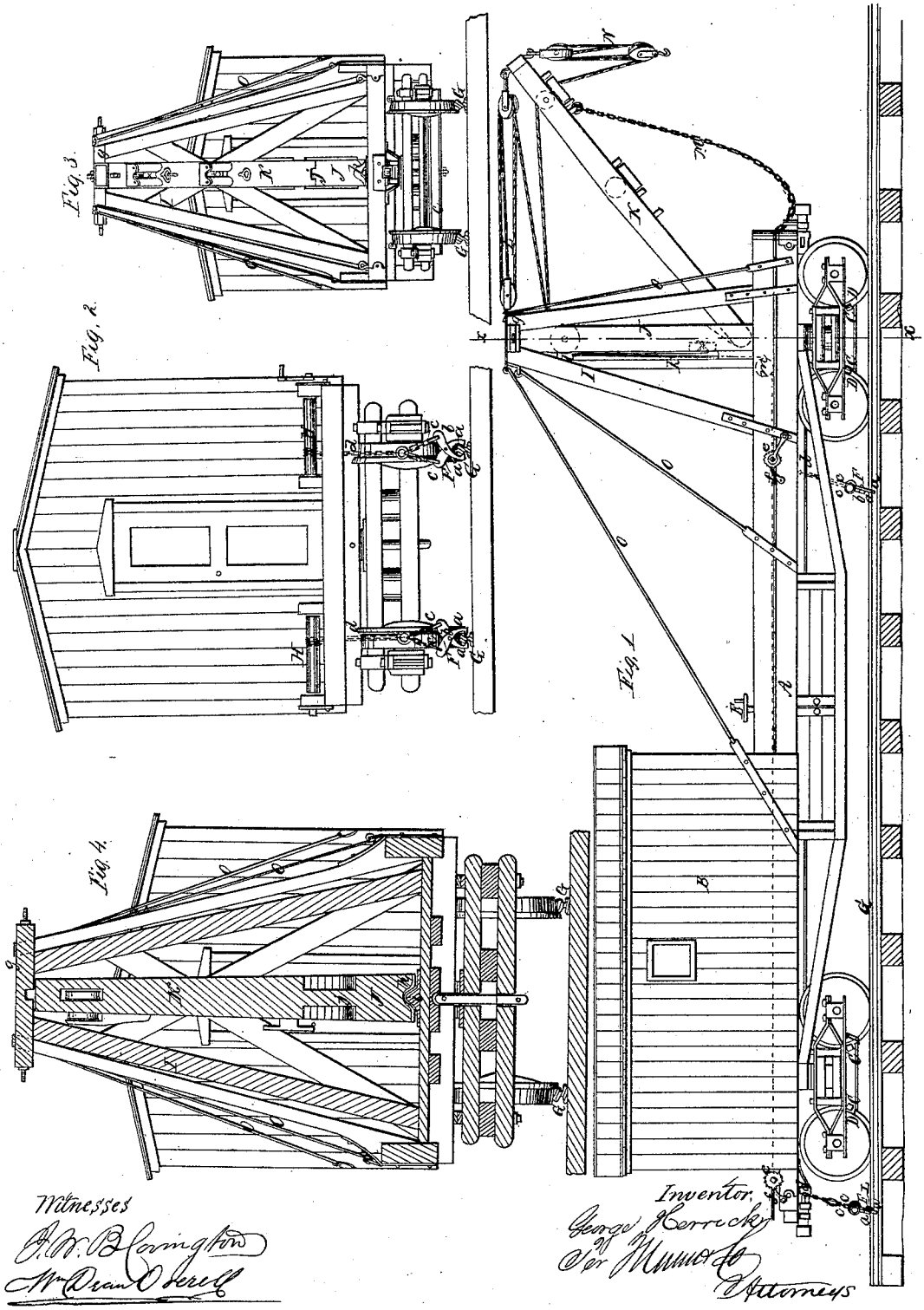
G. Herrick,

Derrick,

No. 57,323, Patented Aug. 21, 1866.




Witnesses
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AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

# UNITED STATES PATENT OFFICE.

GEORGE HERRICK, OF NASHVILLE, TENNESSEE.

## IMPROVED WRECKING-CAR.

Specification forming part of Letters Patent No. **57,323**, dated August 21, 1866.

*To all whom it may concern:*

Be it known that I, GEORGE HERRICK, of Nashville, in the county of Davidson and State of Tennessee, have invented a new and Improved Wrecking-Car for Railroads; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, Sheet No. 1, is a side view of my invention; Fig. 2, Sheet No. 2, a rear elevation of the same; Fig. 3, a front elevation of the same reduced; Fig. 4, a transverse vertical section of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate like parts.

This invention relates to a new and improved wrecking-car for railroads; and it consists in a derrick, crane, and "crab," or tongs, constructed, arranged, and applied to a car in such a manner that extremely heavy bodies, such as locomotives and cars which may have run off the track, may be hoisted and replaced on the track or conveyed to the repair-shop, and all heavy hoisting necessary to be done on railroads performed with the greatest facility and with but a small number of men, the locomotive which conveys the wrecking-car to the place where it is to be operated furnishing the power to operate the windlass or hoisting apparatus.

A represents a car provided with the usual trucks or running-gear, and having a small house, B, at one end, in which the necessary tools or utensils may be carried.

C represents the shoe or brake-bars, which are suspended between the front and rear wheels of each truck and have shoes D at their ends. The brakes are operated or applied by means of a windlass, E.

F represents what I term a "crab," the same being constructed on the tongs principle, and designed to grasp the rails G, when necessary, in order to hold the car firmly on the track. Two or more pairs of these crabs or tongs may be used as occasion may require. They are composed of two jaws or arms, *a a*, which cross each other and are connected by a pivot, *b*, (see more particularly Fig. 2,) the upper ends of the jaws or arms *a a* being connected by chains *c c* to a main chain, *d*, which is attached to a windlass, H. By turning these windlasses and winding up the chains *d* the jaws or arms *a a* will firmly grasp the rails G G and hold the car A firmly on the track.

These crabs or tongs are only necessary when heavy boilers are to be raised. In ordinary cases the application of the brakes will be sufficient to hold the car. The windlasses H are provided at one end with a ratchet, *e*, into which pawls *f* catch to hold the windlasses and keep the chains *d* taut.

I represents a framing attached to the car A, and constructed in any suitable manner to be firm and durable.

J is the upright or mast of a derrick, the upper end of which has its bearing in the cap *g* of the framing, the lower end of the upright or mast being shod with metal or provided with a metal concave, *h*, to receive a metal cone, *i*, secured to the upper surface of the car A. The cone *i* should be constructed of chilled cast-iron, to enable it to resist wear and admit of the free turning of the upright or mast.

K is an arm or boom, which is connected by a joint, *j*, to the upright or mast, and is adjusted to a greater or less degree of inclination by a tackle, L, which is connected to the outer end of the arm or boom and to the upper end of the framing I, as shown clearly in Fig. 1.

M represents chains, which are attached at one end to the end of the car A and at the opposite end to the arm or boom K. These chains limit the lateral movement of the arm or boom, the latter, in connection with the upright or mast, constituting a derrick.

N represents a tackle, which is attached to the outer end of the arm or boom, or at different points thereon, as circumstances may require. The rope *k* of this tackle extends down over a pulley, *l*, in the upright or mast and underneath a pulley, *m*, on the car, and thence back to the rear of the same, where it is attached to the locomotive when articles are to be hoisted.

The framing I is well braced by rods O, in order to render it stiff and firm, and in those cases where heavy bodies at some distance from the track are to be raised the framing I

may be further braced by rods or chains attached to the ends of the cap *g*, eyes *n* being at the ends of the cap to receive said rods or chains.

The car A is propelled to the place where it is to be used by means of a locomotive at its rear, and the arm or boom K is adjusted to suit the locality from which the body is to be raised, the tackle N being adjusted farther in or out on the arm or boom as required, and the body secured to the lower end of tackle N by chains or otherwise. In case the body to be raised is heavy, and the brakes are not sufficient to keep the car properly or firmly on the track, the crabs F are applied to the rails, and if the article or body is some distance from the side of the track the extra guys or chains may be applied to the top of the framing I.

The rope *k* of the tackle N is attached to the locomotive, and the latter is backed and raises the body to which the tackle N is attached.

This invention may be operated by quite a small force of men, from eight to ten being sufficient, their work being simply to overhaul the rigging and make the hitches. The invention is now in practical operation and insures an admirable purpose, effecting a great saving in time and labor, as very heavy bodies may be elevated, it not being necessary, as hitherto, to detach the parts and elevate them separately.

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

1. The crabs F, in combination with the windlass H and crank A, applied with the track G, and operating in the manner and for the purpose herein represented and described.

2. The arrangement of the framing I, mast J, with its ends, as described, and boom K joined thereto, tackle L, tackle N, and the hoisting-rope *k*, in combination with the car A, constructed and operating in the manner and for the purpose herein specified.

The above specification of my invention signed by me this 10th day of January, 1866.

GEO. HERRICK.

Witnesses:

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