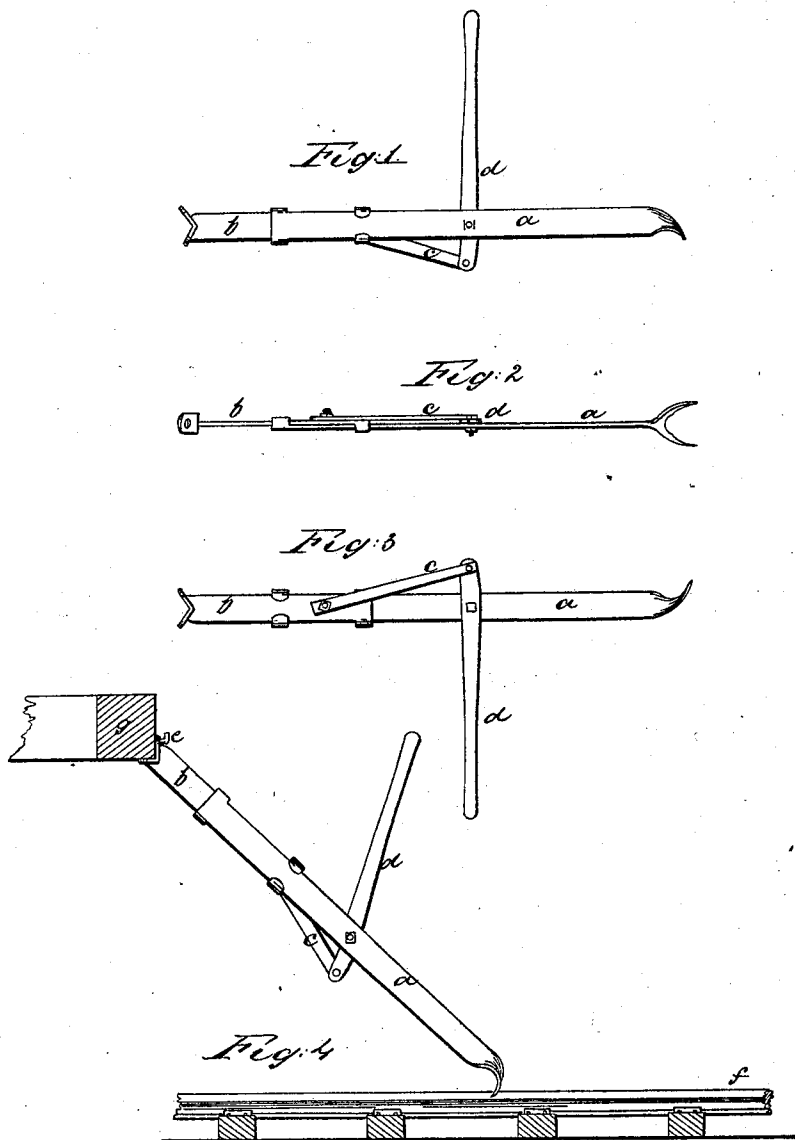


E. J. Durant,
Lifting Jack,
No 24,202, Patented May 31, 1859.



Witnesses
Abraham Pisher
Colbie C. Benton

Inventor
Edward J. Durant

UNITED STATES PATENT OFFICE.

EDWARD J. DURANT, OF LEBANON, NEW HAMPSHIRE.

HAND-LEVER.

Specification of Letters Patent No. 24,202, dated May 31, 1859.

To all whom it may concern:

Be it known that I, EDWARD J. DURANT, of Lebanon, in the county of Grafton and State of New Hampshire, have invented an Improved Compound-Leverage Car-Mover, which is especially designed to aid in the removal of cars from place to place in and about railway stations; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My improved compound-leverage car-mover is composed of a forked shaft *a*, a sliding head-piece *b*, an intermediate lever *c*, and a hand lever *d*, or the substantial equivalents of said parts, united to each other in the manner represented in the accompanying drawings, or in any other manner by which the same effect may be produced in substantially the same manner as that which I shall now proceed to describe.

The respective parts of my improved car-mover may be made of any suitable material, and the head-piece *b*, may be combined with the forked shaft *a*, by any means which will allow the former to slide freely upon the latter. The hand-lever *d*, is pivoted to the shaft *a*, and the short end of said lever is connected to the sliding head-piece *b*, by means of the intermediate lever *c*, or by any other means which will enable the said lever to exert the requisite degree of force upon the said head-piece.

The manner of operating my improved car-mover is clearly represented by Fig. 4, the said car-mover being represented in an inclined position, the forked lower end of its shaft *a*, resting upon one of the rails *f*, (of a track), the flanged outer end of the sliding-head piece *b*, bearing against the after

beam (*g*), of a car-body, and the hand-lever *d*, being in the most convenient position to be operated by a person walking between the rails of a track or along the outer sides of the same. It will therefore be perceived that the force which one man can exert upon the lever *d*, of the said car-mover, will be amply sufficient to start a car and to move it to any desired position within or near a railway station. The head of the car-mover being attached to the after end of a car-body by means of the hook *e*, or by any other suitable device, and the lower end of the shaft *a*, being of such a forked shape that will follow a rail and glide freely over the same in a forward direction, at the same time that it cannot be pushed in a backward direction along said rail, it will be perceived that the said car-mover, when it is once attached to a car-body, will keep itself in the proper position to be operated by a person either walking between the rails of a track or along the outer sides of said rails.

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

Combining the forked-shaft *a*, with the sliding head-piece *b*, the intermediate lever *c*, and the hand-lever *d*, in such a manner as to form a compound-leverage car-mover that can be operated substantially as herein set forth.

The above specification of my improved handler for facilitating the moving of cars from place to place in and about railway stations, signed and witnessed this 28th day of March 1859.

EDWARD J. DURANT.

Witnesses:

ABRAHAM PUSHER,
A. H. CRASSIE.