

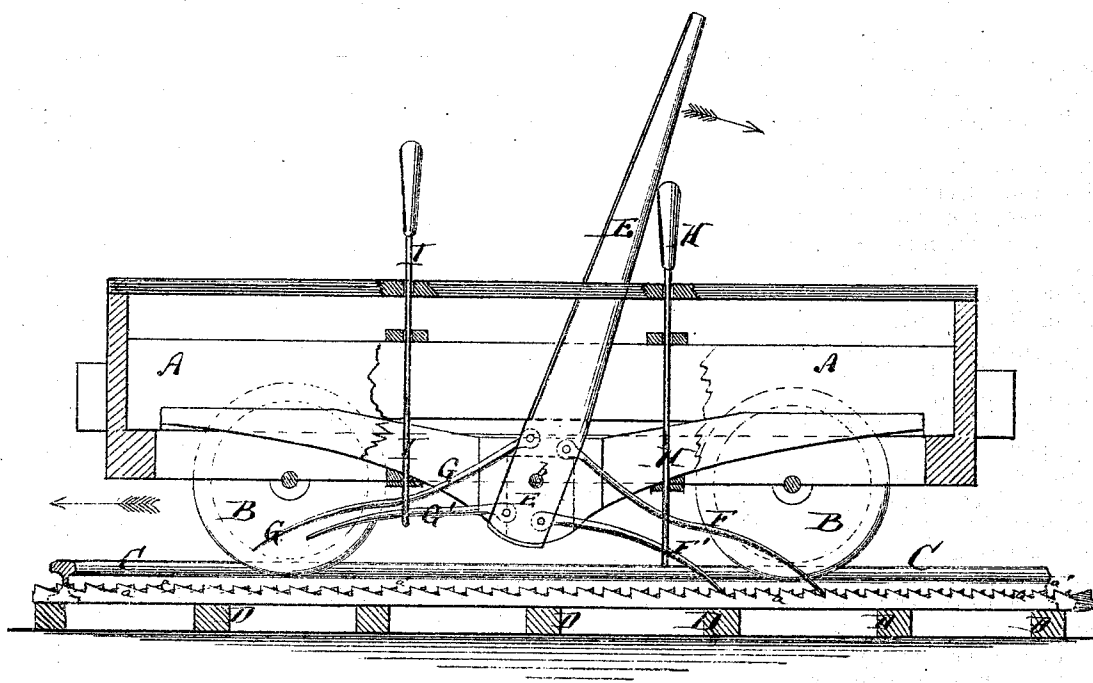
(122.)

J. COLLINS.

Improvement in Hand Cars.

No. 122,814.

Patented Jan. 16, 1872.



Witnesses:

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# UNITED STATES PATENT OFFICE.

JAIRUS COLLINS, OF FAIRVIEW, OHIO, ASSIGNOR TO HIMSELF AND JOHN D. SALTSGAVES, OF SAME PLACE.

## IMPROVEMENT IN HAND-CARS.

Specification forming part of Letters Patent No. 122,814, dated January 16, 1872.

Specification describing a new and Improved Hand-Car, invented by JAIRUS COLLINS, of Fairview, in the county of Guernsey and State of Ohio.

The drawing represents a longitudinal vertical section of my improved hand-car.

This invention relates to a new arrangement of hand-car, which is propelled in either direction by the exertion of the persons occupying it. The invention consists in combining an operating-lever with a double pair of pawls, which engage in a ratchet-rail secured to the ground parallel to the track, as hereinafter more fully described.

A in the drawing represents the body of the car supported on wheels B B in suitable manner, the wheels being adapted to run on a track, C. Between the rails C are placed upon the sleepers D a pair of ratchet-bars, *aa'*, with teeth projecting in opposite directions, as indicated in the drawing. E is a lever, pivoted by a pin, *b*, to the car near the middle of the same. It is connected with two pairs of pawls, F F' and G G', which would by their own weight rest with their ends on the ratchet-bars *a a'*, respectively—that is to say, the pawls F F', which project from one side of the lever, are above the bar *a*, while the pawls G G', project-

ing from the opposite side of said lever, rest on the bar *a'*. The pawls F and G are attached to the lever above the bars F' G', below the pivot *b*, as shown. H and I are two vertical rods fitted through the car, and provided with loops at their lower ends that embrace the pawls F F' and G G', respectively.

The rods H and I can be set up or down at will. When one of them is raised the pawls connected with it will be raised from the track and be thrown out of gear. Thus either one set of pawls can be used and acted on by the lever E to propel the car in the desired direction.

The propulsion is effected by the alternate contact of the ends of the pawls with the ratchet-teeth of the bars on the track.

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

The combination of the lever E and pawls F F' G G' with the rods H and I, to operate on a double ratchet-track, *a a'*, substantially as specified.

JAIRUS COLLINS.

Witnesses:

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(121)