(No Model.)

S. ARCUS.

HAND CAR.

No. 355,962. Patented Jan. 11, 1887.

FIG. 1.

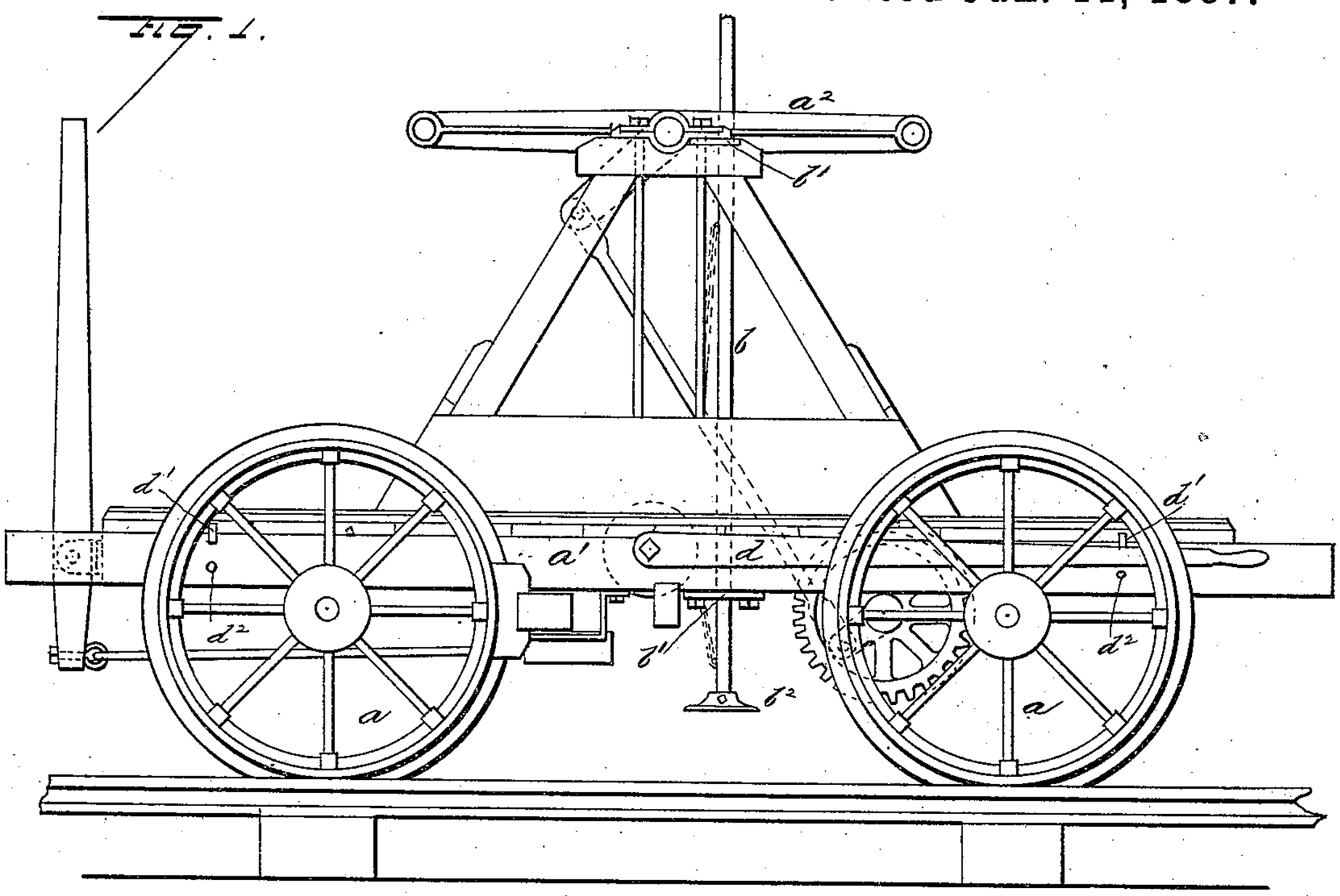


FIG. 2.

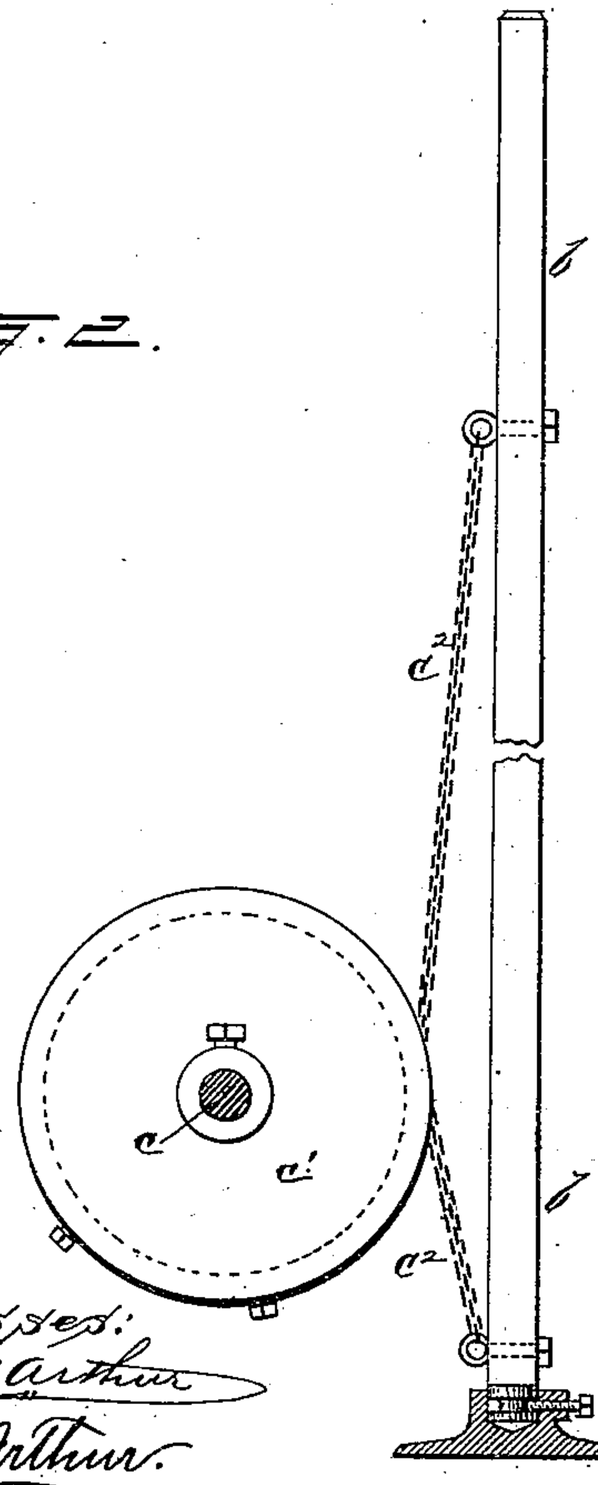
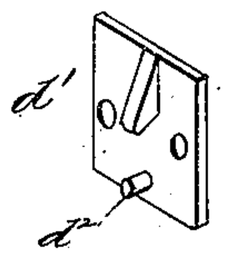


FIG. 3.



Witnesses:
H. C. McArthur
H. S. McArthur.

Inventor:
Sinclair Arcus
per
H. Harrison
Attorney.

UNITED STATES PATENT OFFICE.

SINCLAIR ARCUS, OF CHICAGO, ILLINOIS.

HAND-CAR.

SPECIFICATION forming part of Letters Patent No. 355,962, dated January 11, 1887.

Application filed August 3, 1886. Serial No. 209,904. (No model.)

To all whom it may concern:

Be it known that I, SINCLAIR ARCUS, a subject of the Queen of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hand-Cars, of which the following is a specification, to wit:

This invention relates to an improvement in hand-cars; and it consists in certain peculiarities of the construction and arrangement of the same, substantially as will be hereinafter more fully set forth and claimed.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 represents a hand-car provided with my improvements; Fig. 2, an enlarged detail view of my attachment, and Fig. 3 a view of the lever-catch.

a represents the wheels of my car, *a'* the main frame, and a^2 the operating-lever, all of which are constructed and operated in any of the usual and well-known ways and of any suitable size, and do not need a more detailed description in this connection.

Cars of this kind, when used by "section hands" and for similar purposes, have to be frequently lifted on and off the track, and this is usually done by lifting one end and swinging the car around at right angles and then pushing it off beside the track. This is, however, a laborious operation, as the car is quite heavy, and is often loaded with tools, &c. To lighten this labor and enable the car to be more easily handled is the object I have in view.

At or near the center of the car I provide a standard, *b*, arranged to slide vertically in suitable guides, *b'*, on the main frame, and provided on its lower end with a shoe, b^2, which is swiveled or arranged to turn freely, as in Fig. 2. Upon a shaft, *c*, arranged transversely of the car-body, I place a small wheel or pulley, *c'*, which is preferably double-grooved, and which is connected by two chains, c^2, with the sliding standard *b* above and below, as clearly shown in the drawings. Upon one or both ends of the shaft *c*, I place a lever, *d*, which lies close alongside the car-body, and is retained in position by a beveled catch, *d'*, upon either end of the body, as in Fig. 1.

When the car is in use upon the track, the lever is in the position seen in the drawings, and the sliding standard and its shoe are elevated above the ground and held in that position, as seen. When the car is to be removed from the track, the lever is turned up, and the consequent movement of the grooved pulley lowers the standard and its shoe till the latter is resting upon the ground. The lever is then pulled down upon the opposite end of the car, and the further forcing down of the standard lifts the car off the track and supports it wholly upon the standard, which is so nearly in the center as to be easily balanced, while the car is turned upon the swiveled shoe, till it is in a proper position for pushing off the track, when it is lowered till the wheels rest upon the ground, and pushed forward till out of the way of passing trains.

It will be at once understood that this device is readily applied to any hand-car, and that it is readily lifted and swung around, no matter whether it is loaded or light, and in either position the lever is held in place by the catch *d'*, and a small stop, d^2, prevents its being pressed down too far.

I do not desire to confine myself to the exact construction herein shown and described, as it may be altered somewhat without departing from the spirit of my invention. Thus the standard may be made square or round, or any other mechanical means may be substituted for the lever to lift the car, and I will vary these features as may be demanded by experience.

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

1. The combination, with a hand-car, of a standard sliding vertically in the main frame of the car and a pulley connected to this standard by chains for lifting and lowering it, substantially as and for the purpose set forth.

2. The combination, with a hand-car provided with suitable guides, *b'*, of the standard *b*, provided with the shoe b^2, the grooved pulley *c'*, connected with the standard by chains c^2, and the shaft *c* and lever *d*, all constructed and arranged to operate substantially as and for the purpose set forth.

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

SINCLAIR ARCUS.

Witnesses:

W. C. MCARTHUR,

W. S. MCARTHUR.