2 Sheets--Sheet 1.

H. H. BALTZLY.

Hand-Truck.

No. 167,151. Patented Aug. 31, 1875.

Fig. 1.

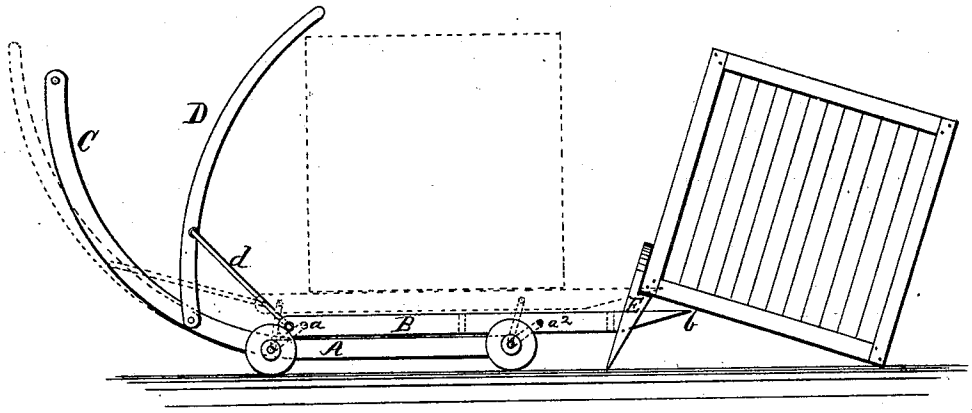
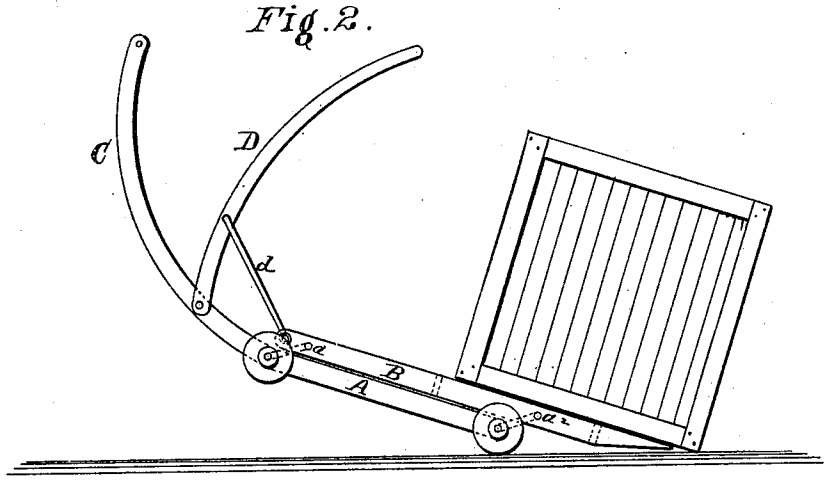


Fig. 2.



Witnesses.
Henry G. Ritter.
Andrew B. Warren.

Inventor
Henry H. Baltzly.
by James A. Mandeville
his attorney.

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2 Sheets--Sheet 2.

H. H. BALTZLY.

Hand-Truck.

No. 167,151. Patented Aug. 31, 1875.

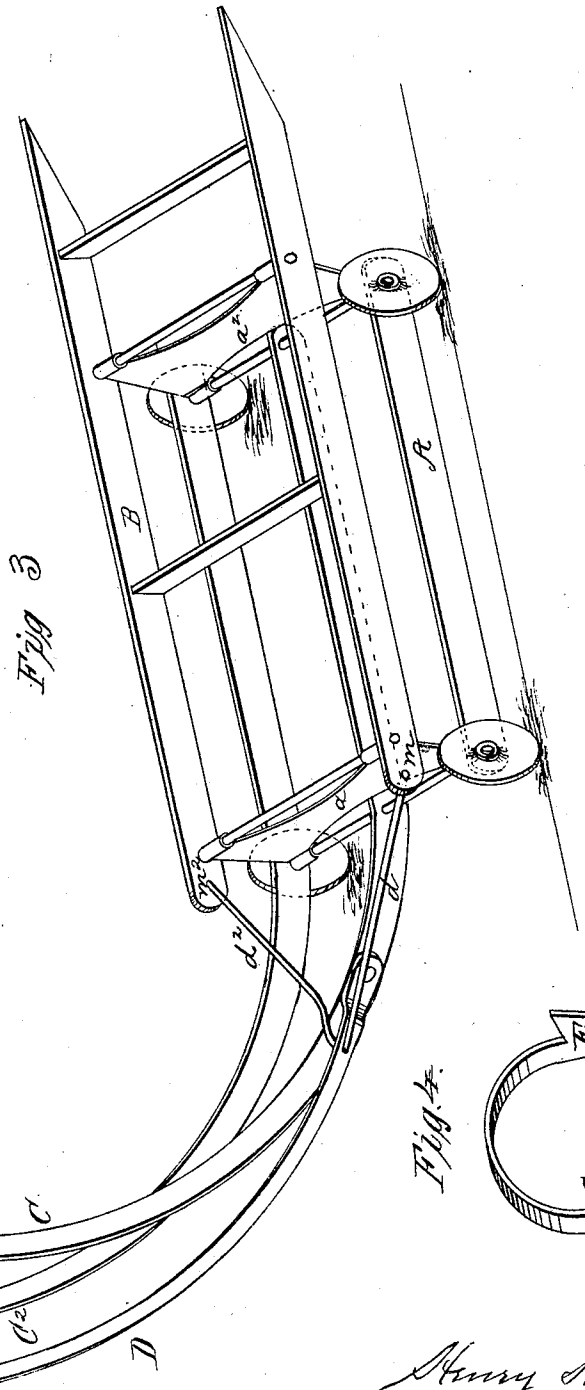

Fig 3

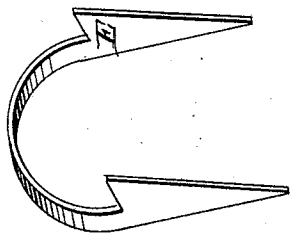

Fig 4.

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UNITED STATES PATENT OFFICE.

HENRY H. BALTZLY, OF ASSUMPTION, ILLINOIS.

IMPROVEMENT IN HAND-TRUCKS.

Specification forming part of Letters Patent No. **167,151**, dated August 31, 1875; application filed April 17, 1875.

To all whom it may concern:

Be it known that I, HENRY H. BALTZLY, of Assumption, in the county of Christian, in the State of Illinois, have invented a new and useful Improvement in Hand-Trucks, of which the following specification, with its accompanying drawings, is a full, clear, and exact description.

The object of this invention is to enable large and heavy boxes, such as are common in the hardware and dry-goods business, too heavy to be lifted, except by two or more persons, to be easily loaded upon a hand-truck, and otherwise managed, by only one person. Another object of my invention is to enable a stove to be loaded on the truck, or unloaded, by only one person, without removing the stove-legs or handling it with the hands.

The principle of my invention is familiarly illustrated by reference to the improved platform-scale for weighing purposes, where a combination similar to this one is employed, in order to protect its knife-bearings from injury when a heavy weight is thrown upon the platform of the scale, which, by a lever and crank-arm, is raised up so as to rest upon the knife-bearings during the act of weighing, but is then let down, so that at all other times the platform lies flat upon the frame of the scale, and not upon its bearings.

My invention consists, first, in a platform for hand-trucks, upon which the load carried is elevated above the truck itself; second, in a platform that is beveled to a point at its front end from underneath, so that it may be more readily shoved under the bottom of a box to be loaded upon the truck; third, in the combination with a truck of a beveled platform, by means of an arm or arms pivoted to the platform, and also to the truck-axle, in such a manner that when the platform lies flat on the truck it projects a part of its length in front of the truck, and in operating this platform with an upright lever attached to one of the truck-handles, so that whenever the platform is raised it is at the same time drawn backward until the center of gravity of the load thereon falls within or behind the axle of the truck; and, fourth, in attaching one of the truck-handles to the center or near the center of the axle, instead of to the end of the axle, whereby the lever attached to that handle, so connected, will raise the platform vertically in a true line, and not twist the platform out of shape or position.

In the drawings, Figures 1 and 2, Sheet I, are both side elevations of my invention, the former showing the manner of loading a box, the dotted lines showing the box loaded, and Fig. 2, the box as partially unloaded; and Fig. 3, Sheet II, is an isometric view of my invention, showing the location of the truck-handles, and also the position of the lever used to raise and lower the platform. This figure also shows the arched prop employed in raising heavy boxes.

A is a hand-truck, and C C^2 its handles. B is the platform, the under side of which at its outer end *b* is beveled to a point, and *a* a^2 are the crank-arms for connecting the platform to the truck-axles. D is a lever for raising and lowering the platform, to which it is joined by the branched rod *d* d^2 attached at *m* m^2 to both sides of said platform. The lower end of the lever is pivoted to one of the handles C C^2, but the handle to which the lever is pivoted is fastened to the truck, Fig. 3, in the center of its axle. This arrangement of the handle in the center, instead of on the end of the axle, enables the lifting-power to be applied to the center of the platform, whereby it is raised in a true line vertically, and not twisted in shape or position, as might be the case if the lifting-power was applied only on one side of the platform, while it has all the convenience of being worked by the right hand. E is an arched prop, to hold up a box, formed high and wide enough to clear the truck when it is run under the prop.

The mode of operation is as follows: The rear end of the truck is raised by lifting the handles. This depresses the beveled end of the platform, so that the point of it may be inserted under the box to be loaded. The truck now becomes a lever of the first order, the wheels being the fulcrum, when by the concerted action of the truck as a lever, and pulling back the platform-lever, the platform is raised, and, at the same time, the truck is forced forward under the box, which is tilted, as in Fig. 1. The prop is then set under it to hold the box tilted; the truck is then changed

to gain a new leverage, when the same operation is repeated, which brings platform and box into the position shown by the dotted lines of Fig. 1. From the way the platform is joined to the truck it will be readily seen that whenever the platform is raised it is drawn backward at the same time toward the handles (in the arc of a circle) until its load, or the main part of it, rests within or behind the front axle of the truck.

My invention will prove very useful in a hardware-store for carrying stoves from one place to another. The largest stove can be quickly carried about by one person, without removing the stove-legs or touching the stove with the hands, simply by running the truck under the stove between its legs, and then raising the platform and stove with it, by pulling down the lever upon the handles.

I have shown a four-wheel truck, but it is obvious that my invention, without material alteration, may be applied to a two-wheel truck with equal utility for carrying light movables; therefore, not limiting my invention to a four-wheel truck,

I claim—

1. A vertically-adjustable platform for hand-trucks, which, when not in use, lies flat upon the truck, but is elevated in the act of loading or transporting a load, and depressed in unloading the same.

2. A platform for a hand-truck, beveled from underneath at its outer end, so as more readily to get hold of the load to be lifted.

3. The combination of the platform B with the truck A, crank-arms a a^2, and levers d d^2, substantially as shown and described.

4. The combination of the handle and lever with the axle, at the center of the axle, whereby the lever applies power to the center of the platform, for the purpose specified.

In witness whereof I hereunto subscribe my name in the presence of two subscribing witnesses this 10th day of April, 1875.

HENRY H. BALTZLY.

Witnesses:
C. C. LITTLE,
BYRON TRAVIS.