(No Model.)

W. SANDERS & J. B. RAFFERTY.

HAND TRUCK.

No. 391,560. Patented Oct. 23, 1888.

Fig. 1.

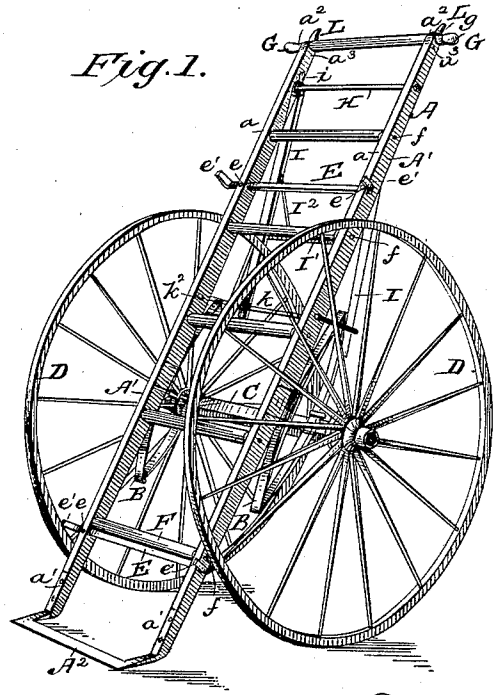
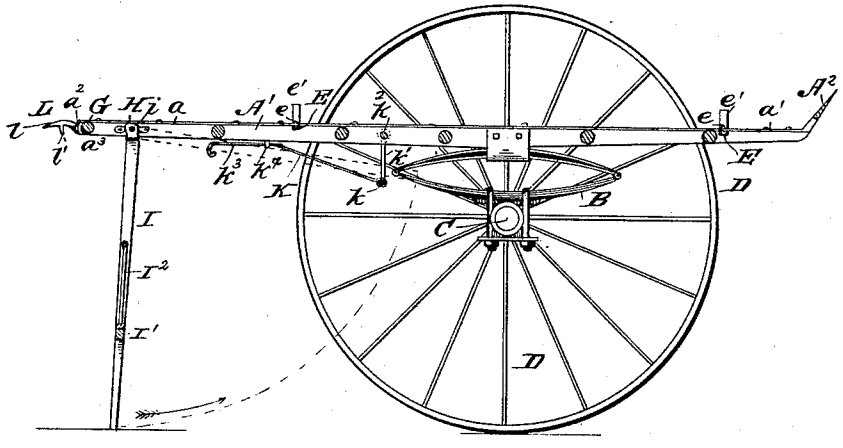


Fig. 2.



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UNITED STATES PATENT OFFICE.

WILTSHIRE SANDERS AND JOHN BENJAMIN RAFFERTY, OF RENO, NEVADA.

HAND-TRUCK.

SPECIFICATION forming part of Letters Patent No. 391,560, dated October 23, 1888.

Application filed August 16, 1887. Renewed May 19, 1888. Serial No. 274,374. (No model.)

To all whom it may concern:

Be it known that we, WILTSHIRE SANDERS and JOHN BENJAMIN RAFFERTY, of Reno, in the county of Washoe and State of Nevada, have invented a new and useful Improvement in Hand Trucks or Carriages, of which the following is a specification.

Our invention is especially designed for handling large boxes and caskets for undertakers' work and for handling baggage.

The object of our invention is to provide a light, strong, and simple form of hand-carriage, which may be easily handled and will embrace in its structure certain devices which add to its utility and effectiveness.

The improvement consists in certain combinations of parts and details of construction, hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view, and Fig. 2 is a vertical section, of our improvement.

The frame A of the carriage is mounted upon springs B, secured transversely to an axle, C, the ends of which are journaled to receive wheels D, of sufficient diameter to reach from the middle part nearly to the end of the frame.

The frame A is formed of longitudinal side rails A′ bound upon their upper side with iron straps *a* and with the ends *a′* of a shoe-plate, A^2, secured at an angle with the rails to pass easily beneath the edge of a box to be loaded upon the carriage. The side rails A′ are connected at their ends to cross-braces E, having their ends held between the straps *a* and the rails A′ and secured thereto by bolts or rivets *e*, passing through said braces, straps, and rails. The extremities *e′* of the braces E are turned up to form side guards for holding the box or casket centrally upon the frame and prevent it from rubbing against the wheels of the carriage.

The frame A supports the journal-pins *f* of rollers F, held laterally thereon, over which the box or casket may be easily rolled in placing it upon or removing it from the carriage, and the end roller forms a handle, G, which turns freely between the bowed portion a^2 of the straps *a* and the end a^3 of the rails A′. The ends *g* of the handle-roller G project from the frame, and may be easily held for tilting and moving the carriage. A rod, H, extends across the rear end of the frame to brace it, and also to support legs I, having plate-hinges *i*, through which said rod H passes. The legs I are braced at their lower ends by cross-bars I′ and rods I^2, and are held up alongside of and beneath the rails A′, when not in use, by a supporting-bar, K, extending across and beneath the frame. The supporting-bar K has bent ends K′, pivoted at K^2 to the side rails I′ of the frame, and is operated by a pull-rod, K^3, supported and guided by loops K^4, upon the under side of the rails A′, to slide thereon and be operated from the rear of the carriage to bring the supporting-bar beneath the ends of the legs I, or to push it out of the way when the legs are required to be dropped to support the carriage in a horizontal position.

Steady-hooks L, having a blade, *l*, and a pin, *l′*, are used to engage with the projections or sills of a door or beneath the boards of a platform and hold the rear end of the carriage-frame securely while the box or casket is placed upon or removed from the carriage.

The proportions of the wheels with the frame and springs are such that the forward end of a frame long enough to support a casket will project but slightly beyond the rim of the wheels, and when the frame is dropped at its forward end until the shoe-plate rests upon the floor to receive the box or casket, as shown in Fig. 1, the frame will be in nearly an upright position, and the box may be tipped but slightly to fall upon the frame of the carriage and be supported thereby. The springs beneath the frame relieve the box of sudden jar when the box falls upon it and raise the frame sufficiently above the axle to allow a frame of the required length to be placed upon moderately sized or proportioned wheels.

When the casket or box is to be loaded upon or unloaded from a railway car or platform, the rear end of the carriage is brought around close to the side of the car, and then pushed from its forward end of the carriage until the ends of the rails A′ and the hooks L thereon overlie or engage with the sill or sheathing of the doorway or floor of the platform, and securely hold the carriage until the box is loaded or unloaded by passing it over the rollers supported upon the carriage-frame.

We claim as our invention and desire to secure by Letters Patent—

1. In a hand-carriage, the combination, with

the wheels, of a rectangular frame located intermediately thereon, having a shoe-plate, A^2, at its forward end and safety-hooks L at the rear end thereof, substantially as described.

2. In a hand-carriage, the combination, with the wheels, of a frame located intermediately thereon having roller G, with projecting handles *g*, supported to turn freely in bearings at the rear end thereof, substantially as described.

3. In a hand-carriage, the combination, with the wheels, of the legs hinged to the rear end thereof, a swinging bar, K, pivoted to the frame to swing beneath the ends of the legs, and a rod, K^3, sliding or guiding in loops secured to the side bars of said frame for operating the bar K to support or release the legs, substantially as described.

4. In a hand-carriage, the combination, with the wheels, of a frame carrying rollers F and cross-braces E, bolted to the rails, having upturned ends to hold the load centrally upon the frame, substantially as described.

5. In a hand-carriage, the combination, with the wheels, of a rectangular frame, A, shoe-plates A^2, secured to the forward end thereof, and a safety-hook, L, and swinging legs I, supported at the rear end thereof, substantially as described.

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