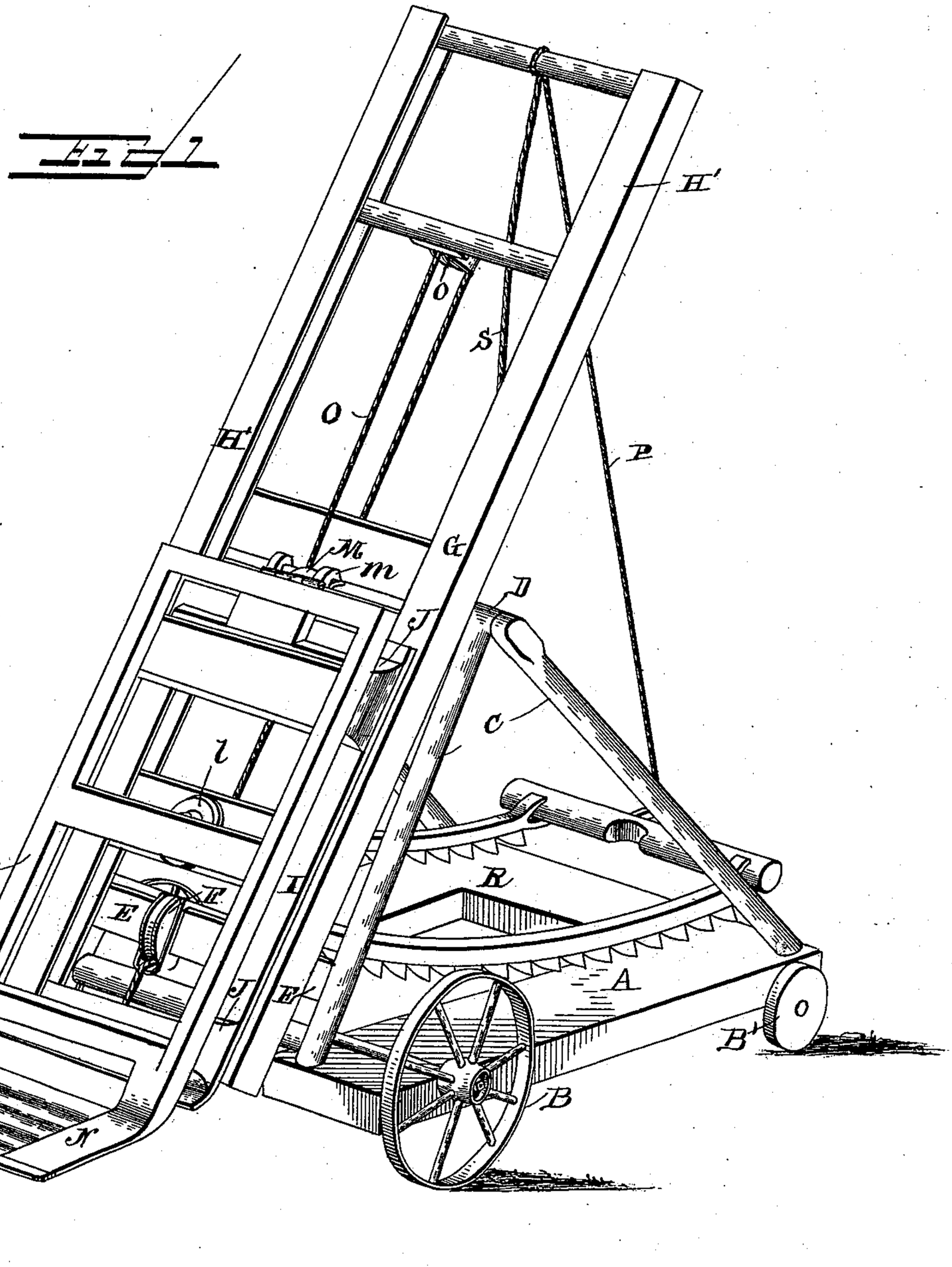
(No Model.) 2 Sheets—Sheet 1.

E. CARDARELLI.

HAND TRUCK.

No. 507,483. Patented Oct. 24, 1893.

Fig. 1.



Witnesses
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Inventor
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By his Attorneys,
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 2

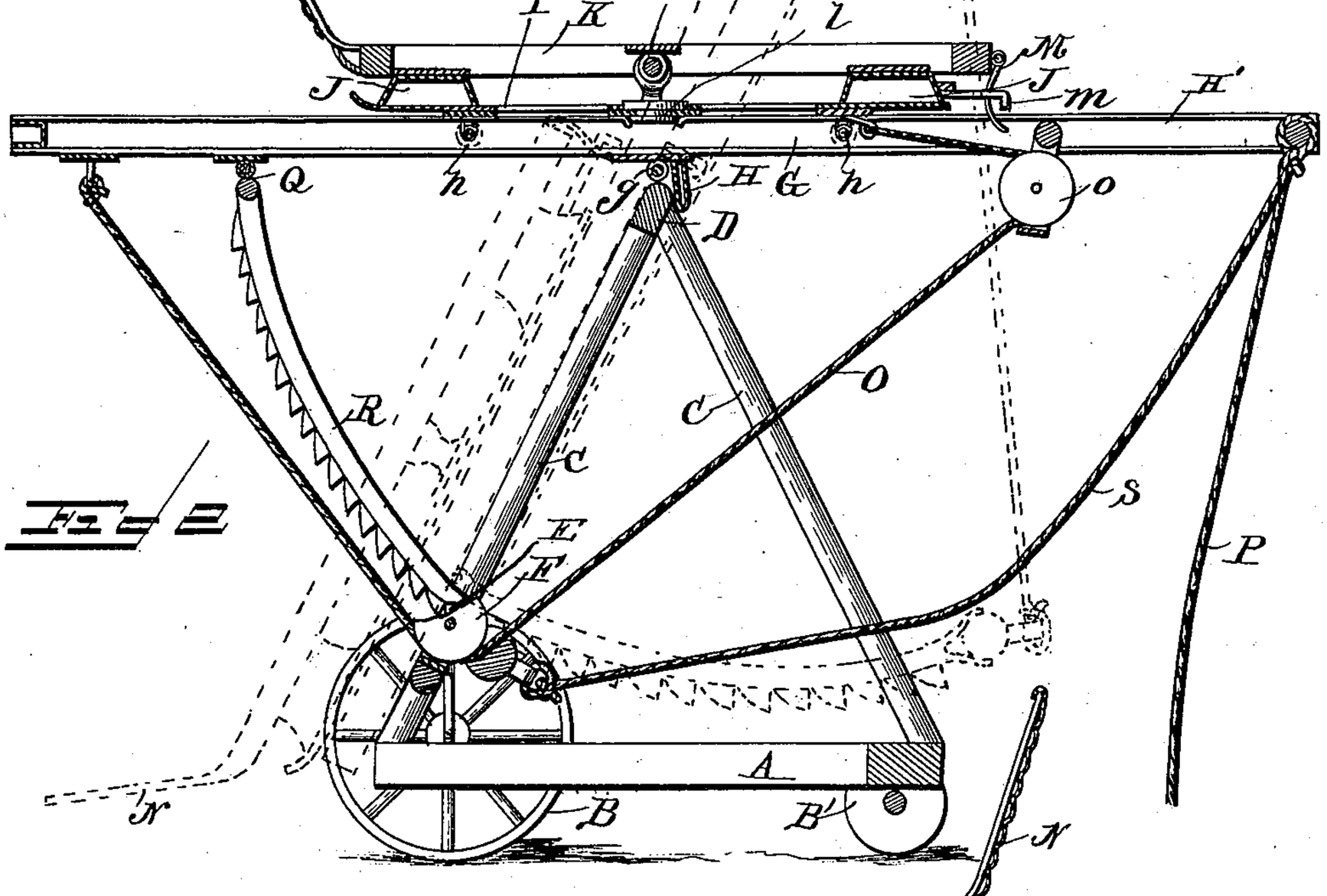
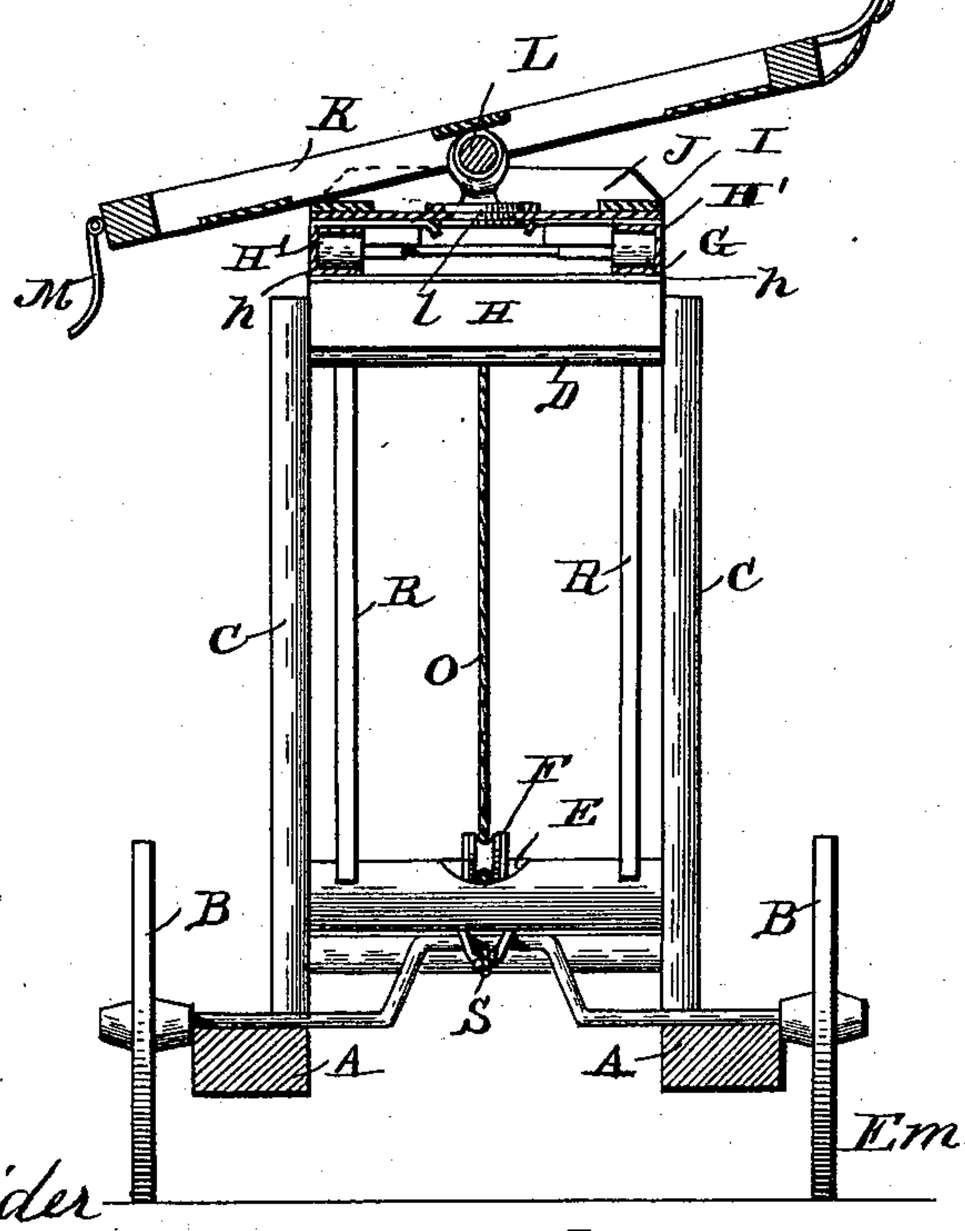


Fig. 3



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UNITED STATES PATENT OFFICE.

EMILIO CARDARELLI, OF SUMTER, SOUTH CAROLINA.

HAND-TRUCK.

SPECIFICATION forming part of Letters Patent No. 507,483, dated October 24, 1893.

Application filed April 1, 1893. Serial No. 468,381. (No model.)

To all whom it may concern:

Be it known that I, EMILIO CARDARELLI, a citizen of the United States, residing at Sumter, in the county of Sumter and State of South Carolina, have invented a new and useful Hand-Truck, of which the following is a specification.

This invention relates to hand trucks; and it has for its object to provide certain improvements in devices or machines of this character to provide for the convenient transfer of goods and heavy objects from point to point for loading and unloading and other purposes.

To this end the main and primary object of the invention is to provide certain improvements, on a similar machine described and claimed by me in my previous application filed November 30, 1892, and bearing Serial No. 453,676, whereby such machine will be rendered more available for practical use.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a hand truck constructed in accordance with this invention, being shown in its lowered position for receiving an object. Fig. 2 is a vertical longitudinal sectional view of the same showing the machine in position for carrying a lifted object from point to point. Fig. 3 is a central vertical transverse sectional view showing the turning and tilting table in its turned-tilted position, for discharging goods.

Referring to the accompanying drawings, A represents the truck frame mounted on the wheels and rollers B and B′, respectively, to provide for the convenient moving of the truck from place to place, and arising from opposite sides of the truck frame A, are the opposite standards C, connected at the upper end by the transverse top bar D, while two of said standards at the front of the truck frame and near their lower ends are connected by the transverse catch bar E, the function of which will presently appear, and at the center of which is arranged the lower guide pulley F. Pivoted centrally to the top of the connected standards C, is the tilting lifting frame G. The tilting lifting frame G, is pivoted at a point centrally between its ends at *g*, so that it will extend equally to opposite sides of its point of pivot, and a sufficient leverage can be secured for easily lifting objects, and said frame is provided at its center with the transverse stop bar H, which serves to check the upward lift of the frame after reaching its horizontal position.

The tilting lifting frame G, is provided with the opposite parallel open side guides H′, which accommodate the supporting rollers *h*, of the sliding platform I. The sliding platform I, is adapted to slide on the tilting lifting frame from the dropping end thereof to its center, and beyond the same if necessary, and is provided with the raised ends J, which serve to support firmly in position on the platform the turning and tilting lifting table K. The lifting table K, is rectangular in shape and is pivoted centrally at its bottom side on the pivot L, to the top of the turning pin or swivel *l*, mounted centrally in the sliding platform I, so that the said lifting table can be turned off of the end pieces J, to a transverse position at right angles to the sliding platform and allowed to drop to a tilted position between the raised end pieces J, so as to facilitate the unloading of objects from said table.

The lifting table K, is held locked in position on top of and in line with the sliding platform by means of the pivoted latch M, attached to one end of the same and adapted to engage the keeper *m*, at the corresponding end of the sliding platform, and the other end of the rectangular lifting table K, is provided with the angularly disposed off-standing end board N, which, when the lifting end of the lifting frame is lowered, is designed to be approximately in a line with the floor or ground on which the object rests, so that the said lifting table or board can be easily shoved under the object, and the same can be readily placed thereon.

To provide for the proper automatic sliding adjustment of the table and its sliding platform on the lifting frame, I employ the single adjustable adjusting cord or wire O. The adjusting cord or wire O, is secured adjustably to one end of the sliding platform I, and passes over a suitably arranged frame pulley *o*, which is attached to the lifting

frame G, near the lever end thereof. It then passes from the frame pulley *o*, under the lower guide pulley F, at the front lower end of the truck frame, and is attached at its other end to the dropping end of the lifting frame. Now it will be readily seen that when the dropping or lifting end of the lifting frame is lowered, the weight of the lifting table and its sliding platform, will be sufficient to carry the same to the ground or floor, in which position the table receives the article to be lifted and transported. By now grasping the lever cord or rope P, attached to the lever end of the lifting frame, the elevated end of such frame can be lowered so as to bring the frame up to any position, but preferably to a horizontal position, and as such lifting frame is being elevated, the dropping end of the lifting frame will draw up that end of the adjusting cord O, so that the cord or wire will cause the sliding platform to be slid back on the lifting frame directly over or beyond the center, so that the weight of the object which has been elevated will be disposed directly above the center of the truck, to relieve it of any uneven strain.

Hinged to the dropping end of the lifting frame at Q, is the weighted ratchet locking frame R, which is adapted to freely slide over and engage the transverse catch bar E, at one end of the truck frame, as fully set forth in my previous application before referred to, and attached to the weighted end of said ratchet locking frame is the lifting cord S, which provides for lifting the ratchet frame out of engagement with the catch bar in order to tilt the lifting frame to the ground.

From the foregoing it is thought that the construction, operation and many advantages of the herein described improvements will be readily apparent to those skilled in the art. After the object has been lifted onto the truck and carried to the point at which it may be desired to unload the same, such as into a car or a wagon, the latch at one end of the turning table is lifted out of engagement with its keeper, so that the said table can be turned into a position at direct right angles to the sliding platform and to the right or left of the same, and one end of the said table can be tilted or dropped between the raised end pieces in order to allow the object to roll off. After unloading, the lifting table can be easily turned back into position on the sliding platform and locked into its normal position ready again for use.

Changes in the form, proportion and the minor details of construction as embraced within the scope of the appended claims may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. In a hand truck, a tilting rectangular frame having opposite guide sides, a sliding platform arranged on said frame and having rollers moving in the guides, means for automatically adjusting said sliding platform, and a turning lifting table mounted on said sliding platform, substantially as set forth.

2. In a hand truck, the truck frame, a rectangular lifting frame pivoted on top of the truck frame, a platform mounted to slide on said lifting frame, a single adjusting cord attached at its extremities to the sliding platform and to one end of the lifting frame respectively, suitably arranged guide pulleys for said cord, and a turning lifting table mounted on the sliding platform, substantially as set forth.

3. In a hand truck, the truck platform, a rectangular tilting lifting frame pivoted on top of said platform, a platform mounted to slide on the lifting frame, a guide pulley arranged at one lower end of the truck frame, a corresponding guide pulley arranged on the lifting frame near one end, a single adjustable adjusting cord passing over said guide pulleys and attached at one end to one end of the sliding platform and at its other end to one end of the lifting frame, and a lifting table mounted on said sliding platform, substantially as set forth.

4. In a hand truck, the truck platform, a rectangular tilting lifting frame pivoted on top of said platform and having opposite side guides, means for locking said frame in an elevated position, an automatically sliding platform arranged on the lifting frame and having supporting rollers moving in said guides, and a combined turning and tilting lifting table mounted on the sliding platform, substantially as set forth.

5. In a hand truck, the combination of a tilting lifting frame, an automatically sliding platform mounted on said lifting frame and having raised end pieces, and a rectangular lifting table centrally pivoted and swiveled to said sliding platform and adapted to tilt between the raised end pieces, substantially as set forth.

6. In a hand truck, a tilting lifting frame, an automatically sliding platform mounted on said lifting frame, a turning and tilting lifting table swiveled and pivoted centrally to the sliding platform and provided with an offstanding end board, and a lock arranged at one end of the table, substantially as set forth.

7. The combination with a supporting frame and a platform mounted thereon; of a turning and side tilting table centrally swiveled and pivoted to said platform, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EMILIO CARDARELLI.

Witnesses:
J. H. SIGGERS,
H. G. PIERSON.