MANUALLY MANEUVERABLE BAGGAGE TRUCK

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1. The present invention relates to article handling, generally speaking, and has more particular reference to baggage-type trucks, usual hand-pushed, which are employed by porters, stevedores, warehouse workmen and the like, for transporting loads of one type or another in a generally well-known push-pull and carting fashion.

More specifically, the invention has to do with follower-type load ejecting means of the lever operated type and which assists in dislodging the stack of cartons, boxes, and so on, in the manner to allow the usual load supporting plate to be withdrawn and separated from the load. It will be evident from the preceding general survey of the art under consideration that load dislodging and ejecting levers on hand-trucks are not new. It is therefore an object of the instant invention to structurally, functionally and otherwise improve upon known lever-type load ejecting devices and to do so through the medium of a structurally distinct, practical and economical construction which will aptly serve the respective requirements of manufacturers and users alike.

A significant object of the invention is to provide a truck of the type stated which is generally hand controlled and otherwise manually handled, the same being provided with a load ejecting device, one which permits "spotting" of the load close to a wall with the load in stack form, this being accomplished by action of a novel ejector which is brought into play during the unloading step and which results in forcing the usual supporting plate at the bottom of the truck away from the stack or load in a highly advantageous and acceptable manner.

Another object of the invention, considered in terms of generalities, is to improve upon and reduce the number of parts entering into the combination, thereby not only increasing the efficiency of the structure as a whole, but also rendering the same less costly to manufacture and to otherwise simplify factors of assembling and sale.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying sheet of drawings.

In the accompanying sheet of drawings wherein like numerals are employed to designate like parts throughout the views:

Figure 1 is what may be identified as a front elevation of the hand-truck with the improved facilities embodied therein.

Figure 2 is a side elevation of the same, that is a view observing Figure 1 in a direction from left to right.

Figure 3 is a view which is on an enlarged scale and is in section and elevation and of a fragmentary nature to bring out certain of the details of construction.

By way of introduction to the detailed description it may be said that the invention, briefly, is characterized by a handle-equipped frame having an axle supported transporting wheels at its lower rollable and maneuverable end and also having a wedge-shaped load supporting and withdrawable plate at said lower end, a load ejecting device embodying a lever pivotally mounted for operation on said frame and having roller-equipped follower means movable toward and from said plate.

The over-all structural means appears best in Figure 1 wherein it will be seen that the framework of the hand-truck is denoted, generally speaking, by the numeral 4. This is preferably made up of tubular or rod members of great strength but of comparatively light weight form. Said frame is characterized by spaced parallel longitudinal side members 6—6 having their upper ends curved as at 8 and providing suitable push-pull handles. There is a horizontal cross-member providing a brace 10 and this is situated between and fastened to the longitudinal frame members 6—6. There is a similar intermediate cross-piece 12 and this functions as assembling and supporting shaft. The usual flat bottom foot or loading and transporting plate 14 is at the bottom and, which is usually the situation, bridges the space between the side members and extends therefrom with its tapering toe portion 16 engageable with the floor or other surface 16 and its heel portion 20 spaced above the floor when the truck is in load discharging position in the manner shown in Figure 2. The wheels, as usual, are denoted at 22 and are freely rotateable on an axle 24 supported in bearings provided therefor in hanger flanges 26 carried by the trailing sides of the longitudinal frame members 6—6. Actually insofar as the detail description has gone an ordinary baggage truck has been described and the invention is in combination therewith and also has to do with the device as an attachment or entity by itself. The device, sometimes called broadly an ejector and follower is denoted by the numeral 28 and comprises a lever which takes the form of a rod 30. This is provided at its upper end with a suitable handle-bar 32. It is provided at the lower end with a T-head or alternatively, a cross-head.
The latter is at right angles to the lever or rod 30 and is denoted by the numeral 34 and being centrally connected to the lever it has projecting end portions of 36-36 which may be best described as journals in that they serve to accommodate the applicable and removable metal sleeves 38-38 which constitute anti-friction rollers. These are held in place by assembling and retaining nuts 40-40 on the screw threaded end portions of said journals. The intermediate portions of the lever have tubular lateral projections which constitute axially aligned bearings 42-42 and these are rotatably mounted on the shaft 12. This provides the hinging and swinging connection for the lever between the side members of the frame. By thus properly hinging the lever it is obvious that operating the handle means at the top serves to swing the lever toward and from the frame as shown in dotted lines in Figure 2. This also allows the ejecting and follower means at the lower end to come into play and to function in an obvious manner to dislodge the load A so that it can be shoved off the plate or, vice versa, held while the plate is withdrawn and the truck rolls in a direction away from the stack or load. The clearance of the heel portion 20 prevents friction and binding at the withdrawal step of the plate 14.

The device broadly comprises a handle-equipped lever with means whereby it is swingably and hingedly mounted between the frame members with the lower end of the lever sweeping toward and from the load supporting and transporting plate 14 with anti-friction follower rollers to assist in the easy operation of the lever.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Having described the invention, what is claimed as new is:

1. A manually maneuverable baggage truck comprising, in combination, a frame embodying a pair of coplanar spaced parallel side members having handles at their upper ends, upper and lower transverse braces interconnecting said side members, said lower brace member constituting a shaft, supporting and transporting wheels mounted for operation on the lower end portion of said frame, a load supporting plate joined to said lower end portion and projecting laterally therefrom, a lever substantially commensurate in length with the length of said frame and pivotally mounted intermediate its upper and lower ends on said lower brace member, means carried by said lever whereby the latter is situated and held for operation centrally between said side members, the lower end of said lever terminating in close proximity to said plate and having a pair of axially aligned freely rotatable rollers attached thereto, the over-all reach of said rollers, combinedly considered, being approximately equal to the length of said plate, and handle means on the upper end of said lever in close proximity to the above mentioned handles.

2. A manually maneuverable baggage truck for use by porters, stevedores, warehouse employees and the like, comprising a frame embodying spaced parallel longitudinal side members having complementary brace means, supporting wheels for the lower end portion of said frame, a lateral load handling and supporting plate carried by the lower end portions of said side members, an ejeotor-type lever having handle means at its top, said lever being situated midway between and parallel to the side members, the intermediate portion of said lever having laterally extending members hingedly supported from said frame, the lower end of said lever extending to and terminating in close proximity with said load supporting and handling plate, said lower end terminating in a coplanar cross-head and said cross-head providing axially aligned journals projecting from opposite sides of said lever, and anti-friction rollers removably mounted on said journals.

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