No. 851,164. PATENTED APR. 23, 1907.

I. L. DAVENPORT.

HAND TRUCK.

APPLICATION FILED FEB. 27, 1906.

Fig. 1.

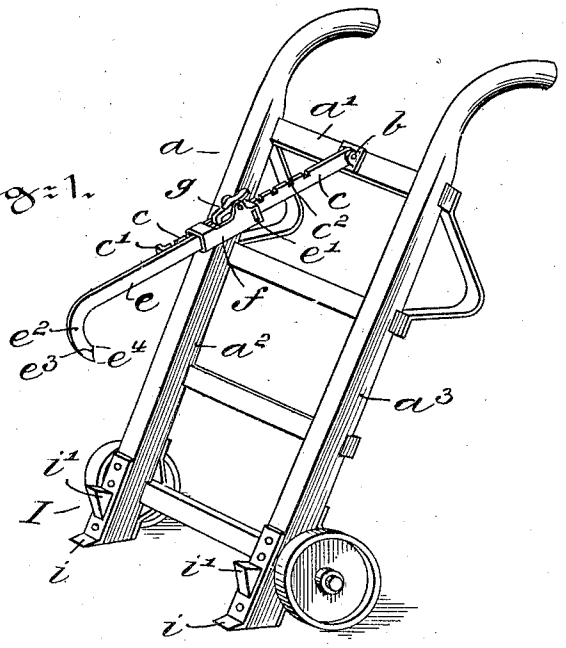


Fig. 2.

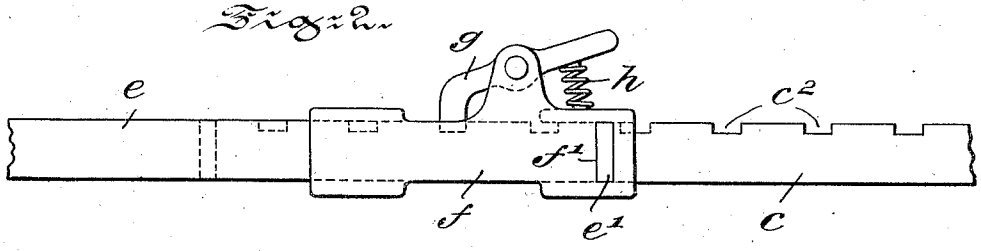


Fig. 3.

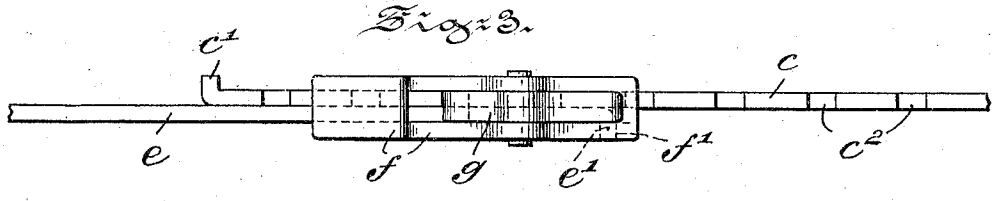
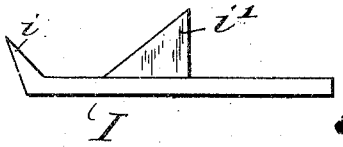


Fig. 4.



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UNITED STATES PATENT OFFICE.

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HAND-TRUCK.

No. 851,164. Specification of Letters Patent. Patented April 23, 1907.

Application filed February 27, 1906. Serial No. 303,226.

To all whom it may concern:

Be it known that I, ISAAC L. DAVENPORT, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Hand-Trucks, of which the following is a specification.

My invention has relation to a portable hand truck for conveying barrels, boxes or other similar articles from place to place; and in such connection it relates to the constructive arrangement of a spur device for engaging the article to be transported and in conjunction therewith, to an adjustable hook, for gripping the article in its carriage by the truck for effecting the transporting of the same.

The nature and scope of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which

Figure 1, is a perspective view of a hand truck, illustrating a double spur device and an adjustable hook employed in conjunction therewith, both embodying characteristic main features of my said invention. Figs. 2 and 3, are detail views, enlarged, illustrating respectively in side elevation and in top or plan view, portions of the adjustable hook and a sleeve in which one of the members of the hook is slidably arranged and a pawl carried by the sleeve for locking the slidable member of the hook to the sleeve; and Fig. 4, is a detail view enlarged, illustrating in side elevation the double spur device removed from the truck frame, showing the detailed angular relations of the spurs of the device with respect to each other.

Referring to the drawings, *a* represents a portable hand truck, to the upper cross-bar a^1, of which, by means of a bracket *b*, is pivotally secured the notched member *c*, of an adjustable sectional hook. The member *c*, of the hook, at its free end is provided with an integral projection c^1, which serves to limit the movement of a sleeve *f*, thereon. The sleeve *f*, forks the connecting link of the hook member *e*, to the member *c*, for which purpose the member *e*, is likewise surrounded by the sleeve. However, the sleeve *f*, does not slide on the member *e*, as the same is removably secured thereto by its bent portion e^1, engaging a slot f^1, arranged in the sleeve.

In order to adjustably connect the notched member *c*, to the sleeve *f*, the same is provided with a pawl *g*, held in engagement with the notches c^2, thereof, by a spring *h*. This spring *h*, bears with one end against the sleeve *f*, and with its other end against the pawl *g*, which is thus securely held in engagement with one of the notches c^2, until disengaged therefrom by hand. As long as the pawl *g*, of the sleeve *f*, is held in engagement with the member *c*, both members *c* and *e*, are securely connected with each other and cannot be moved in either direction, thus preventing accidental movement of one member with respect to the other, as takes place in hooks in which one member is provided with ratchet teeth to permit of the free sliding of a pawl in one direction over the same. As soon, however, as the pawl *g*, is brought out of engagement with one of the notches c^2, of the member *c*, the sleeve *f*, and member *e*, connected therewith may be freely moved on the member *c*, and locked in required position thereto, by releasing the pawl *g*, and in this manner, the length of the sectional hook is increased or decreased.

In order to securely engage articles to be moved by the truck *a*, the free end of the member *e*, is provided with a downwardly curved portion e^2, terminating in a curved portion e^3, having two gripping edges e^4, as shown in Fig. 1. When rectangular packages, for instance boxes or the like, are to be moved affording no other suitable point of engagement by the truck *a*, at the bottom, top or sides, the truck can be readily brought into engagement with such an article by shifting the outer spur of the device I, beneath the article. For this purpose the device is provided with spurs *i* and i^1, which are secured to the upper portions of the hand bars a^2 and a^3, of the truck *a*, and project at different angles to each other therefrom. In such instance the package or article will not rest flat against the hand-bars a^2 and a^3, of the truck *a*, but will be held by the sectional hook in engagement with the inner spurs i', thus preventing accidental displacement of

the package or article resting upon the outer spurs *i*, in passage of the hand truck *a*, over uneven surfaces. When, however, curved objects such as barrels or the like, are to be transported by the hand truck *a*, the inner spurs i^1, can be readily brought into engagement with the hoops and held in this position, by the sectional hook. Such curved packages or articles when the truck *a*, is placed against the same, prevents the outer spurs *i*, from being brought into engagement with the bottom thereof. The edges e^4, of the hook member *e*, afford a secure grip of the hook on packages having a smooth and unyielding surface, while when bales or other packages are to be transported having a fabric or other yielding covering the curved portion e^3, prevents the ready penetration of the hook into the cover of the package and thus ripping of the same.

Having thus described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A hand-truck provided with a double spur device connected with the side frames thereof the spurs whereof are at different angular positions with respect to each other, in combination with a sleeve, a sectional hook comprising two members, whereof one is pivotally connected with the truck and passes through said sleeve and whereof the other is removably connected with said sleeve and terminates therein, and a pawl carried by said sleeve and locking the pivotal member to said sleeve to prevent back and forth movement of the sleeve and member connected therewith on the pivotal member.

2. In a hand truck, a sleeve, a sectional hook, consisting of two members, whereof one having notches is pivotally connected with the truck and slides in said sleeve, and whereof the other is removably connected with said sleeve, a pawl pivotally connected with said sleeve, a spring carried by said sleeve for holding the pawl in engagement with one of the notches of said pivotal member, said pawl and the notches of said pivotal member arranged so as to prevent back and forth movement of the sleeve and member connected therewith on the pivotal member.

3. In a hand truck provided with a double spur device connected with the side frames of the truck, a sleeve, a sectional hook, consisting of two members, whereof one is pivotally connected with the truck and is adapted to slide in the sleeve, and whereof the other is connected with the sleeve and terminates in a downwardly curved end having a flat gripping surface and projecting gripping edges, said spurs arranged to permit of the engagement of packages either at their lowermost portion or at a point above the same and the gripping surface of said sleeve member arranged to hold the package in position on one of the spurs to prevent ripping of the cover thereof, by limiting penetration of the gripping edges of the same.

4. In a hand truck, spur devices connected with the upper portions of the truck, a sleeve, a sectional hook, consisting of two members, whereof one is provided with notches pivotally connected with the truck and passing through the sleeve, and whereof the other is removably connected with the sleeve and terminates in a downwardly curved end having a gripping surface and gripping edges, a pawl pivotally connected with the sleeve, a spring carried by said sleeve for holding said pawl in engagement with one of the notches of said pivotal member to prevent back and forth movement of said sleeve, said spurs adapted to permit of the engagement of an article either at the lowermost portion or at a point above the same and said gripping member adapted to hold the article in required position on either of said spurs and so as to prevent the entering of the edges of said gripping member thereinto.

In witness whereof, I have hereunto set my signature in the presence of two subscribing witnesses.

ISAAC L. DAVENPORT.

Witnesses:
J. WALTER DOUGLASS,
THOMAS M. SMITH.