No. 867,754. PATENTED OCT. 8, 1907.

J. E. RANDALL.

COMBINATION TRUCK AND STEP LADDER.

APPLICATION FILED OCT. 29, 1906.

2 SHEETS—SHEET 1.

FIG. 5.

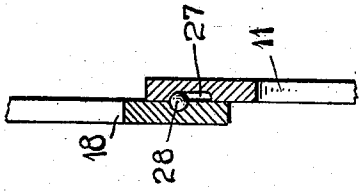
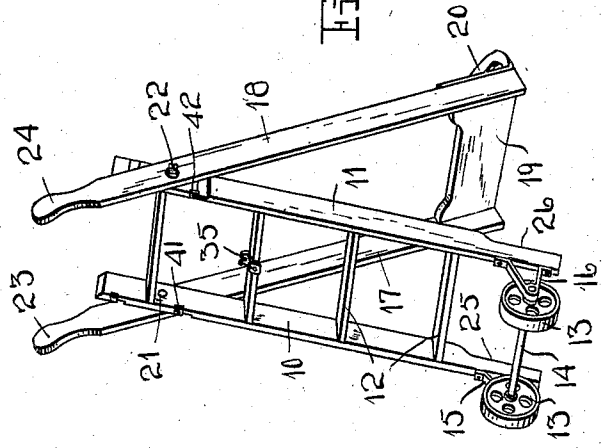


FIG. 2.



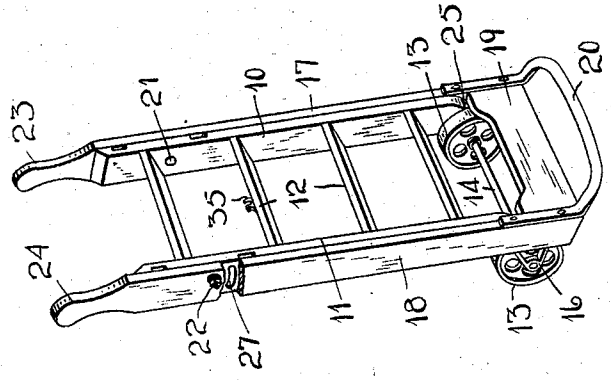


FIG. 1.

Witnesses
L. B. James
C. H. Griebauer.

Inventor
Jos. E. Randall
by H. B. Williamson & Co
Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

No. 867,754. PATENTED OCT. 8, 1907.

J. E. RANDALL.

COMBINATION TRUCK AND STEP LADDER.

APPLICATION FILED OCT. 20, 1906.

2 SHEETS—SHEET 2.

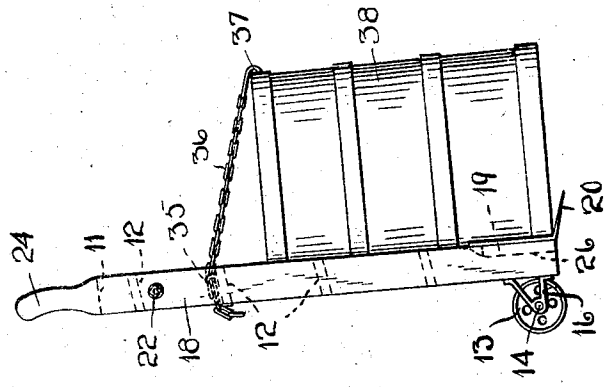


FIG. 4.

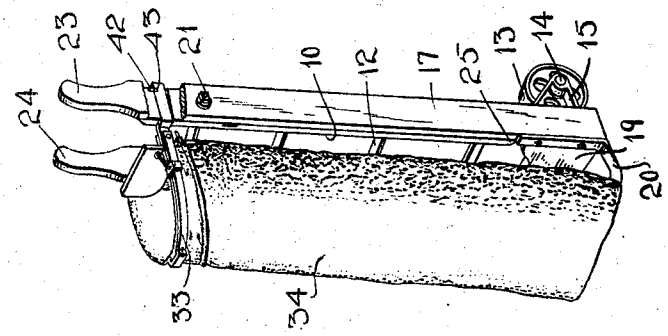


FIG. 5.

Witnesses
L. B. James
C. W. Griesbauer

Inventor
Jos. E. Randall
by H. B. Williamson & Co
Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH E. RANDALL, OF SANDPOINT, IDAHO.

COMBINATION TRUCK AND STEP-LADDER.

No. 867,754. Specification of Letters Patent. Patented Oct. 8, 1907.

Application filed October 29, 1906. Serial No. 341,105.

To all whom it may concern:

Be it known that I, JOSEPH E. RANDALL, a citizen of the United States, residing at Sandpoint, in the county of Kootenai and State of Idaho, have invented certain new and useful Improvements in a Combination Truck and Step-Ladder; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to combined hand trucks and step ladders, and with which a bag holding device and a barrel or box supporting attachment is associated, and the invention consists in certain novel features of construction as herein shown and described and specifically pointed out in the claims.

In the drawings illustrative of the embodiment of the invention, is shown the preferred form of illustrating the operation.

In the drawings, Figure 1 is a perspective view of the improved device arranged as a hand truck; Fig. 2 is a perspective view of the improved device arranged as a step ladder; Fig. 3 represents the improved device with a bag holding attachment applied thereto; and Fig. 4 is a side view of the improved device with the barrel holding attachment applied thereto; Fig. 5 represents a detail section of the ball bearing stop.

The improved device comprises in general, two rectangular frames, one of the frames provided with spaced transverse steps and with bearing wheels at one end, and the other frame consisting of spaced side members with a box or barrel engaging member extending laterally from one end and swinging at the other end from the frame having steps and truck wheels. By this arrangement, when the two frames are disposed with their side members in parallelism, as shown in Fig. 1, a complete and efficient hand truck is produced, and when the frame members are separated at their ends, a complete and efficient step ladder is produced, as shown in Fig. 2. More specifically, the first mentioned frame consists of spaced side members 10—11 connected at suitable intervals by transverse steps 12, and with bearing wheels 13 journaled upon a shaft 14 which is connected by brackets 15—16 to the side members 10—11 at one end of the same. The other frame above mentioned consists of side members 17—18 connected at one end by a transverse member 19 and provided with a laterally extending "lip" member 20 of the usual form employed in hand trucks, and adapted to project beneath the barrel or other object.

The side members 17—18 are pivoted at 21—22 to the side members 10—11 near their upper ends, the side members 17—18 being extended at their free ends into handles 23—24. The side members 17—18 are designed to bear upon the outer faces of the side members 10—11 when the device is arranged as a truck, as shown in Fig. 1, the side members 10—11 being cut away as at 25—26 to receive the transverse member 19, and thus provide for the complete parallelism of the side members of the two frames when arranged as a truck.

When the device is required as a step ladder the two frame members are separated, and disposed in annular relations, as shown in Fig. 2.

The side members 10 and 11 are provided with cavities or recesses, as 27, which extend transversely and are arranged near the pivots 21 and 22, while the wheel carrying members 17 and 18 are provided with balls, as 28, disposed in sockets in said members and operating in the recesses, as 27, in the members 10 and 11 to form stops for limiting the movement of the members 17 and 18 relatively to the members 10 and 11 when the device is arranged as a step ladder to prevent separation of the frame members to too great an extent. The frame members 10 and 11 are provided with guard plates 41 and 42 to be engaged by notches, as 43 in the ends of the band 33, hereinafter described.

Attached to the upper end of the frame members 17—18 is a U-shaped member 33 provided with suitable means for supporting a bag represented at 34, the lower end of the bag resting upon the member 20 as shown in Fig. 3.

One of the steps 12 will be provided with a hook 35 adapted to be engaged by one of the links of the chain 36, the chain having a terminal hook 37 adapted to bear over a barrel or other object 38 when resting upon the member 20, and thus lock the barrel or other object to the device when arranged as a truck, as shown in Fig. 4.

By adjusting the chain upon the hook 35 the device may be readily adapted to any size of barrel or other object, as will be obvious.

It will thus be obvious that a very simply constructed and convenient device is produced which may be inexpensively manufactured, and will be found very convenient for grocers and other merchants, and in warehouses and similar localities.

Having thus described my invention, what I claim as new is:—

1. The combination of two frames pivotally connected at one end, one of said frames being provided with a recess extending transversely thereof and the other frame having a socket with a ball disposed therein, said ball

projecting into said recess to limit the movement of said frames relatively to each other when in open position.

2. In a device of the class described, two frames swingingly connected at one end, to fold one within the other, the inner frame being provided with spaced transverse steps and with bearing wheels at the free end thereof and the other of said frames being provided with a laterally projecting bearing member at its free end, one of said frames being provided with transverse recesses and the other of said frames having stops extending into said recesses, to limit the movement of said frames when in open position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH E. RANDALL.

Witnesses:
C. G. HIRASES,
I. WEIL.