A. F. PITKIN.

HAND TRUCK.

APPLICATION FILED FEB. 10, 1913.

1,103,429. Patented July 14, 1914.

Fig. 1

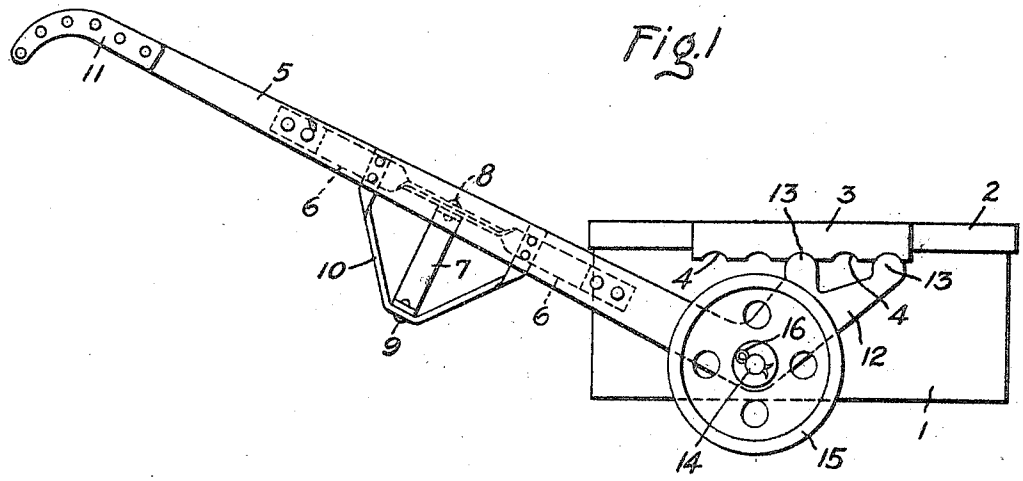


Fig. 2

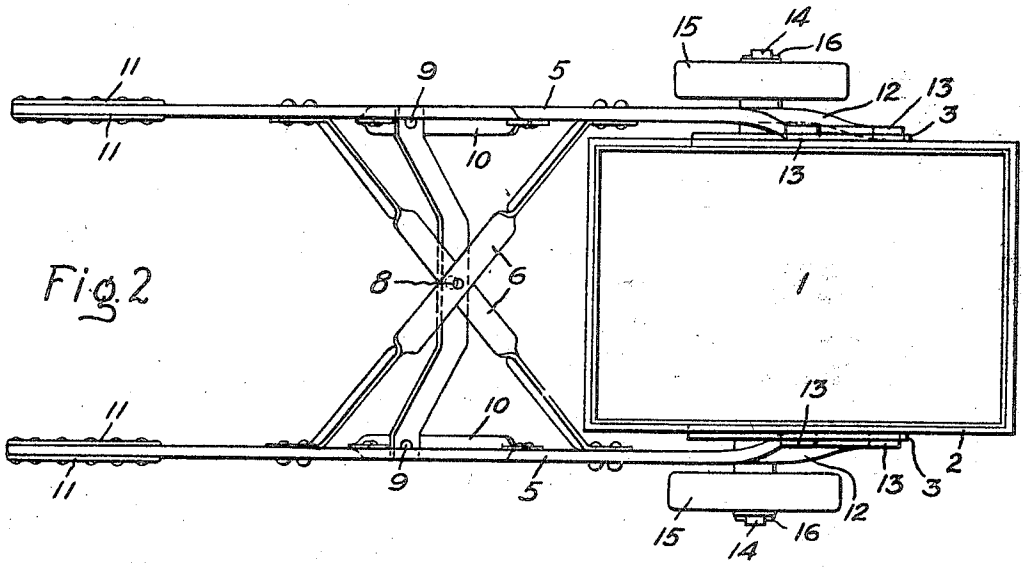
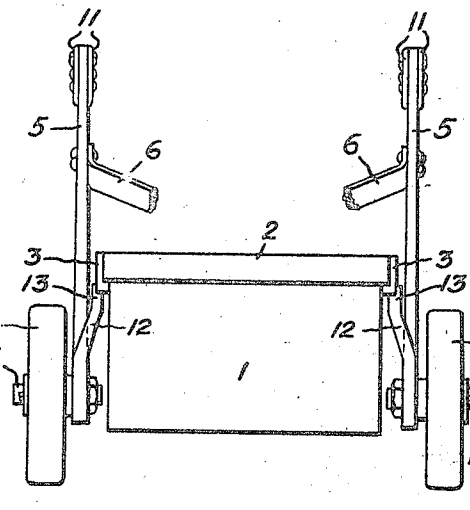


Fig. 3



Witnesses:
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UNITED STATES PATENT OFFICE.

ARTHUR F. PITKIN, OF SCHENECTADY, NEW YORK.

HAND-TRUCK.

1,103,429. Specification of Letters Patent. Patented July 14, 1914.

Application filed February 10, 1913. Serial No. 747,417.

To all whom it may concern:

Be it known that I, ARTHUR F. PITKIN, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Hand-Trucks, of which the following is a specification.

The present invention relates to hand-trucks and more especially to receptacles and trucks for containing and transporting masses of small metal articles from place to place in a manufacturing establishment.

One of the most uncertain and variable items of expense in practically all factories is the cost of porterage or transference of small parts about the plant in their ordinary evolution from rough castings or forgings to finished articles. In order to overcome or reduce in a practical manner this general expense, I have produced a receptacle designed to contain a substantial quantity of articles and a hand-truck whereby such receptacles may be directly picked up, conveyed and discharged without special skill or great effort on the part of the laborer.

For a more complete understanding of my invention, reference may be had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of my improved hand-truck and receptacle; Fig. 2 is a plan view thereof; and Fig. 3 is a right-hand end elevation with parts broken away.

The receptacle is in the form of an oblong box 1 of iron or other rigid material, with a flat stiffening rib 2 about the upper edge and flat grip-plates 3, notched or ribbed at their lower edges 4, secured centrally of the longer sides thereof.

The truck consists of two flat side levers 5 centrally connected by diagonal cross-stays 6 and stiffened by a brace 7 connected by a rivet 8 to the stays 6 at their point of crossing and having its outer ends bent downwardly and riveted at 9 to the feet of V-shaped legs 10 riveted to the respective levers 5. All these parts are preferably of iron.

The rear ends of the levers 5 are reduced in width and curved downwardly and provided on opposite sides with rounded strips 11 of wood or metal held in place by through rivets to afford comfortable hand-holds or grips. The lower ends 12 of the levers 5 are bent up at an angle and each is provided at its end with a pair of spaced knobs 13, to be referred to later. Each lever 5 is provided at or near its angle with an outwardly projecting stub shaft 14 on which is journaled a wheel 15 held by suitable means such as a cotter pin 16. The truck is constructed with the space between the levers 5 somewhat greater than the total width of the receptacle to afford clearance and the outer ends of the bent up portions 12 bent inwardly somewhat as indicated in Fig. 3 so that they will have a space between them greater than the lower portion of the receptacle and less than the total.

It will be observed that the lower portion of the truck is entirely unobstructed between the levers 5 and accordingly may be caused to approach the receptacle by either forward or backward movement. Upon lowering the handles when the ends 12 are about midway of the receptacle, the inner knobs 13 will first engage recesses in the ribbed grip-plates 3 and by the turning of the levers 5 about their fulcrums, the stub shafts 14, the receptacle will be raised at the end nearest the truckman, and as the handles are forced farther down the outer knobs 13 engage the grip-plates 3 and cause the receptacle to tilt therewith until the handles are lowered to about the inclination shown in Fig. 1 when the receptacle is positively supported in elevated position ready to be moved about. The grip-plates 3 are provided with a number of ribs or notches so that in case a receptacle be not uniformly loaded the truck may be adjusted forward or back so that the center of gravity of the receptacle and contents shall fall between the front and rear knobs 13.

I do not desire to restrict myself to the particular form or arrangement of parts herein shown and described, since it is apparent they may be changed and modified without departing from my invention.

What I claim as new and desire to secure by Letters Patent of the United States, is,—

1. The combination of a receptacle provided with grip-members having series of notches therein, and a truck having bifurcated arms coöperating with a pair of notches in each of said grip-members to elevate and positively position said receptacle.

2. The combination of a receptacle provided on opposite sides near its upper edge with grip-members having series of notches in the lower surface thereof, and a hand-truck comprising two angular levers having

splayed out ends coöperating with pairs of notches in said grip-members to elevate and positively position said receptacle upon forcing the free ends of said levers downwardly.

3. The combination of a receptacle provided on opposite sides near its upper edge with notched surfaces, and a hand-truck comprising two angular side levers each having a bifurcated lower end forming two arms of unequal length to coöperate with said notched surfaces to elevate and steady said receptacle upon lowering the long arms of said levers.

In witness whereof, I have hereunto set my hand this fifth day of February, 1913.

ARTHUR F. PITKIN.

Witnesses:

HELEN ORFORD,

BENJAMIN B. HULL.