(No Model.)

2 Sheets—Sheet 1.

J. H. KISTLER & J. E. BUCK.

WAREHOUSE TRUCK.

No. 344,661. Patented June 29, 1886.

Fig. 1.

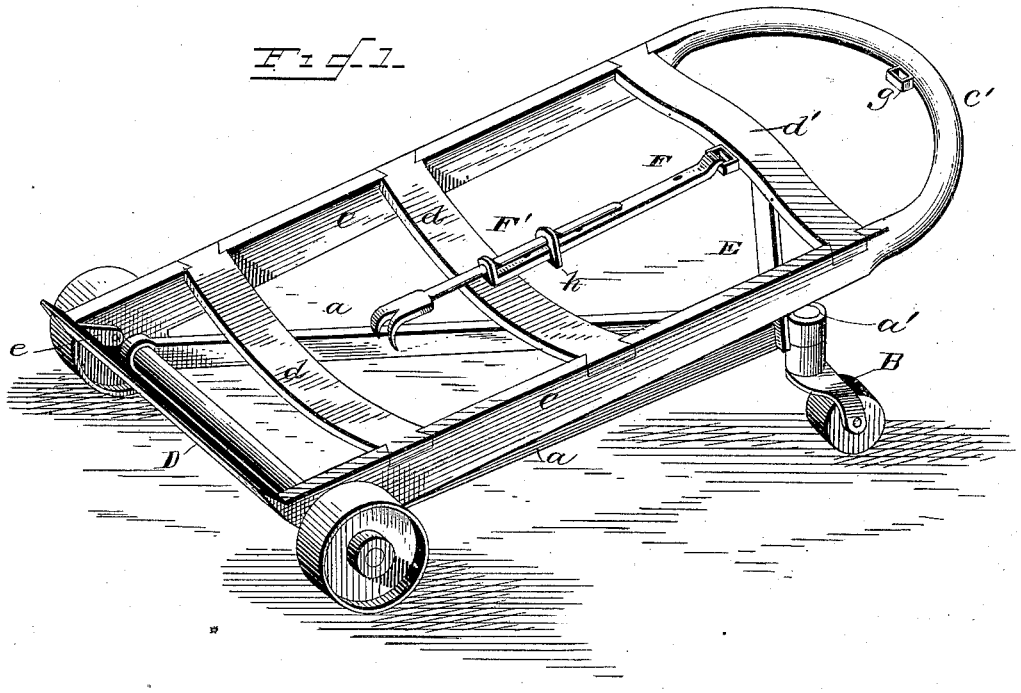
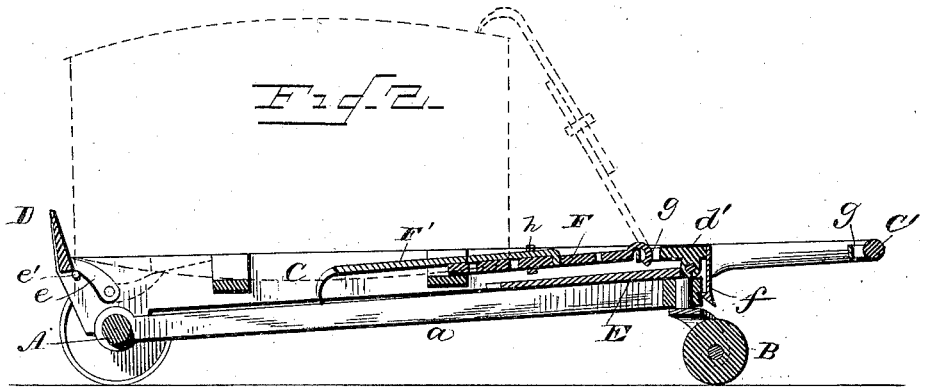


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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WAREHOUSE TRUCK.

No. 344,661. Patented June 29, 1886.

Fig. 3.

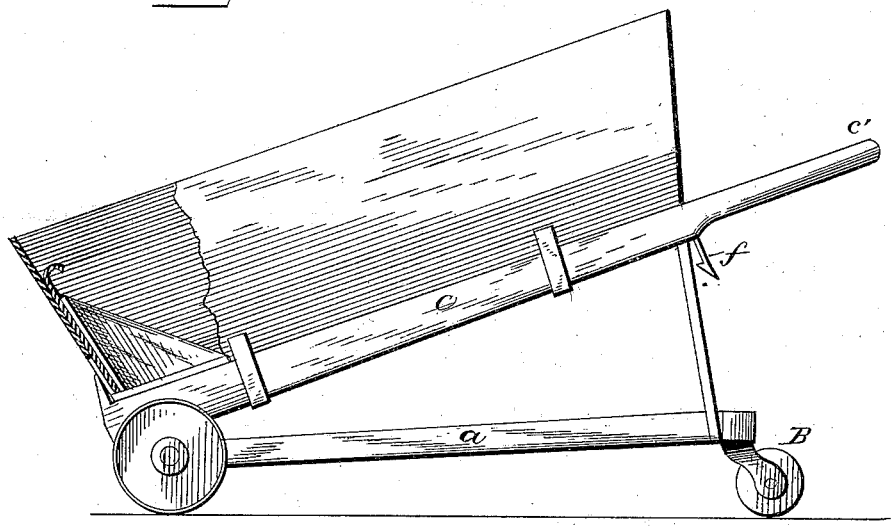
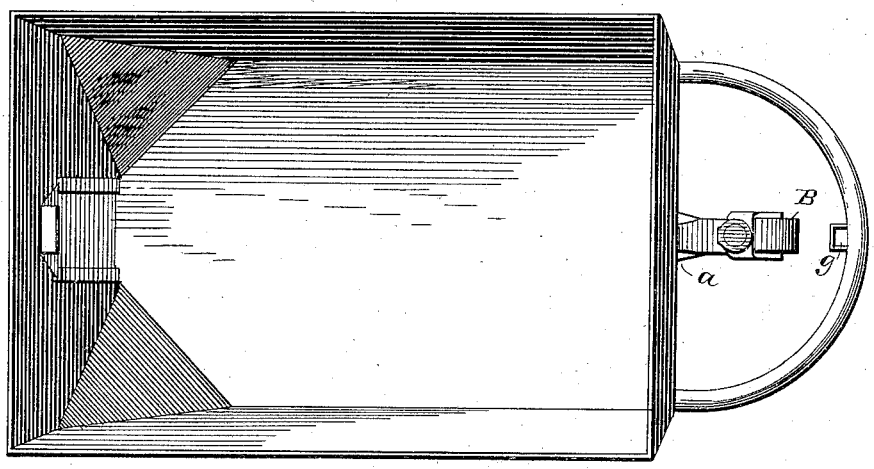


Fig. 4.



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JOHN H. KISTLER AND JAMES E. BUCK, OF NORTH LANSING, MICHIGAN.

WAREHOUSE-TRUCK.

SPECIFICATION forming part of Letters Patent No. 344,661, dated June 29, 1886.

Application filed March 13, 1886. Serial No. 195,147. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. KISTLER and JAMES E. BUCK, citizens of the United States of America, residing at North Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful Improvements in Warehouse-Trucks; and we do hereby 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to certain new and useful improvements in trucks for warehouse use; and it consists in the special construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate our invention, Figure 1 is a perspective view of a truck constructed in accordance with our invention, one of the frames being elevated so as to provide an inclined carrying-surface. Fig. 2 is a longitudinal sectional view showing the parts folded upon each other. Fig. 3 is a side view of the parts raised, showing a pan or receptacle mounted thereon; and Fig. 4 is a plan view of the same.

A refers to the front axle of the truck, which is adjacent to its ends provided with shoulders from which project bearing-surfaces of a reduced diameter. Adjacent to the shoulder this axle is embraced on each side by the perforated ends of converging bars *a a*, which are connected to each other at their ends and formed into an eye having a vertical perforation, *a'*, through which passes the upturned end or bearing for the caster-wheel B. The bars *a a* and the caster-wheel, when taken in connection with the front axle, constitute what we term the "lower frame." The main or upper frame consists of side pieces, *c* and *c*, which are journaled to the axle adjacent to the bars *a a*, said side pieces extending from one side of the truck to the other, the rear portion being rounded, so as to form a handle, *c'*. The lower ends of the upper frame have outwardly-projecting pins attached thereto or formed integral therewith, as desired. The side pieces of the upper frame may be made of a single piece of bent wood, or of a single bar of metal, and said side pieces are connected to each other by two or more transverse pieces, *d d*, which may be bent slightly downwardly, and near the upper end adjacent to the handles the said pieces are connected by a straight cross piece *d'*.

D refers to a folding foot-piece, which is pivotally attached by means of the arms *e* to the inner sides of the side pieces, *c*, so they may be folded down upon a plane with the upper edge of said side pieces, or raised, as shown in Fig. 2. When raised, the arms of said foot-piece will abut against inwardly-projecting pins *e'*, attached to the side pieces. The axle A under the side pieces, *c*, is provided with ordinary truck-wheels. When it is desired to use the truck with the upper portion lowered, as shown in Fig. 2, the two frames are held in contact with each other by a spring-catch, *f*, which is attached to the cross-bar *d'*, its end engaging with a recess in the end of the socket, through which the pivot of the caster-wheel passes.

E refers to a supporting-bar which is pivotally attached to the under side of the transverse bar *d'*, and this bar has its lower end bifurcated, so as to embrace the end of the lower frame and support the upper frame in an inclined position, as shown in Figs. 1 and 3. When the frames are folded so as to lie adjacent to each other, this bar will lie horizontally immediately above the lower frame. The handle *c'* and the cross-bar *d'* are each provided with bails or loops *g*, with which may engage the bent end of a bar, F, which carries an adjustable hook or grapple bar, F', which passes through its upturned end, and is secured thereto by a sliding ring, *h*. The end of the bar F' is bent at right angles, so that it can lie within perforations in the bar F.

When it is desired to carry small packages on the truck—grain or other substances—a vessel, as shown in Figs. 3 and 4, can be mounted thereon.

The grapple or bars F F' is used for the purpose of tilting or throwing heavy objects upon the truck, and to do this the upper frame is brought to a nearly vertical position and the

plate D forced under one of the edges of the article, as a barrel or box. The grapple is then placed upon the upper edge, and when the frame is tilted downwardly it will carry with it the objects.

When the two frames are coupled to each other, as shown in Fig. 2, the truck may be used or wheeled upon the two front wheels, and in transporting heavy articles the upper frame may be elevated and the truck shoved from place to place, the rear end resting upon the caster-wheel.

The truck hereinbefore described is simple in construction, and the arrangement of the parts is such that it can be easily handled, and is not liable to get out of order.

We propose to furnish with the truck a removable platform which will have depending side pieces which will engage with the side pieces of the truck and hold the same in position above said side pieces in the same manner as the pan is held, as shown in Fig. 3.

We claim—

1. In a warehouse-truck, the combination of two frames pivotal y attached to an axle in the wheels, the lower frame carrying at its rear end a caster-wheel, a pivoted supporting-bar for holding the upper frame in an elevated position, and a device for locking the frames together when they are brought parallel to each other, substantially as set forth.

2. In a truck for warehouses, the combination of a lower frame consisting of converging bars provided at their rear ends with caster-wheels, an upper or main frame provided with a spring-catch, *f*, for holding said frames together, and a forward axle with wheels, substantially as shown, and for the purpose set forth.

3. In a truck for the purpose set forth, the lower frame pivotally attached to an axle having wheels mounted thereon, said frame being provided at its rear end with a caster-wheel, an upper frame pivotally attached to the same axle, and provided with a pivoted supporting-bar with a bifurcated end, and a depending spring-catch, *f*, substantially as shown, and for the purpose set forth.

4. The combination of a truck having loops *g g* and bar F, having one end bent so as to engage with said loops, and an adjustable hook-bar secured thereto, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN H. KISTLER.
JAMES. E. BUCK.

Witnesses:
O. A. CLARK,
JAMES W. TWAITS.