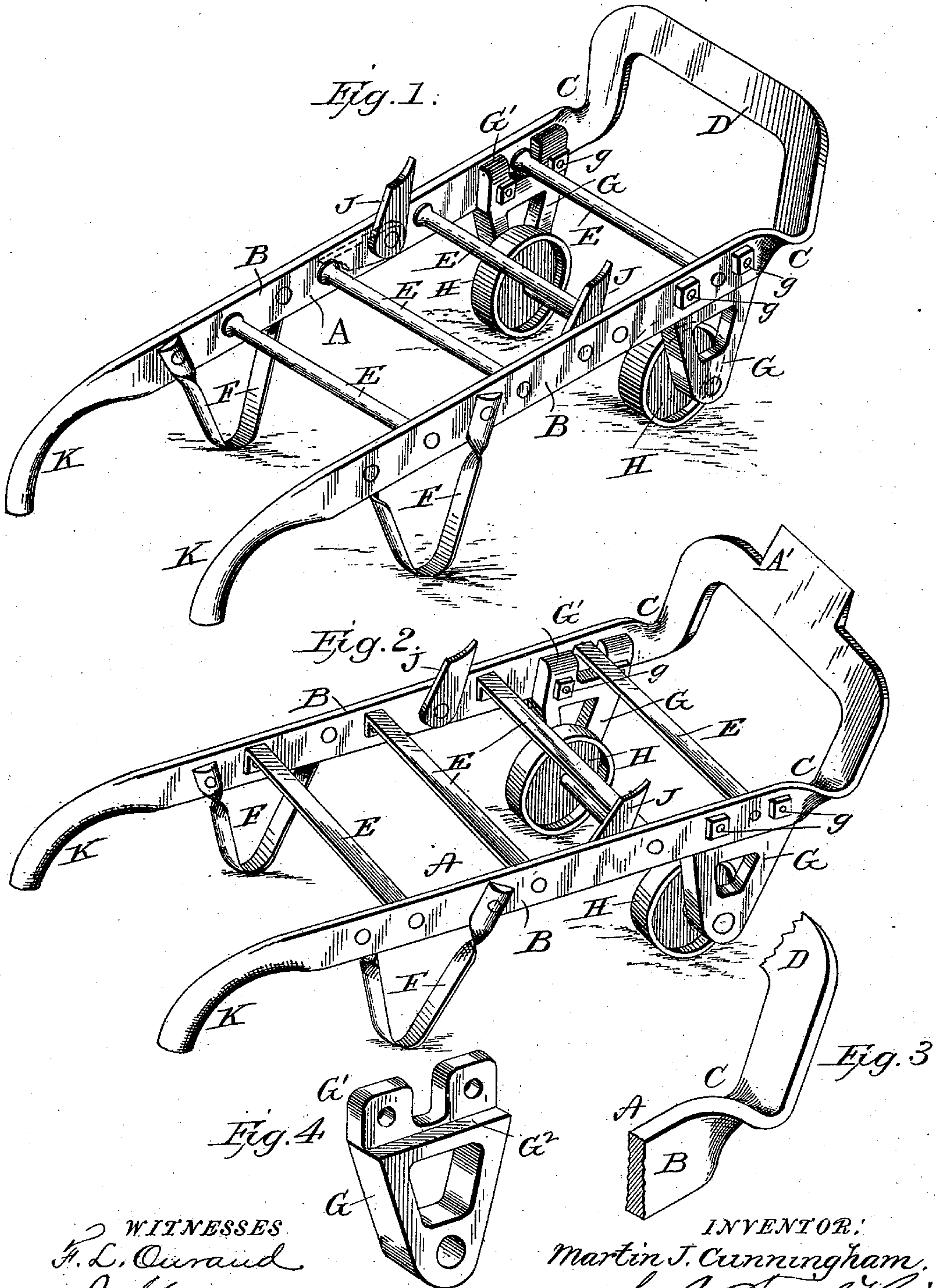


(No Model.)

M. J. CUNNINGHAM.  
WAREHOUSE TRUCK.

No. 572,411.

Patented Dec. 1, 1896.



WITNESSES  
H. L. Ostrand  
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his Attorney.



# UNITED STATES PATENT OFFICE.

MARTIN J. CUNNINGHAM, OF SPRINGFIELD, MISSOURI, ASSIGNOR OF ONE-HALF TO EDWARD J. RUSCHITZKA, OF SAME PLACE.

## WAREHOUSE-TRUCK.

SPECIFICATION forming part of Letters Patent No. 572,411, dated December 1, 1896.

Application filed February 18, 1895. Serial No. 538,854. (No model.)

*To all whom it may concern:*

Be it known that I, MARTIN J. CUNNINGHAM, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Warehouse-Trucks; and I 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.

My invention consists in a warehouse-truck formed entirely of metal, the most important feature of which consists in forming the entire frame proper, that is, the sides and end shoe, of a single bar or piece of metal of the requisite length, which is bent to form the parallel frame sides standing edgewise to the load resting upon them, and is given a quarter-twist at the front ends of the frame sides to bring the shoe into the proper position at practically right angles to said side pieces, as hereinafter fully described.

The invention comprises other novel features and will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a perspective view of my new and improved warehouse-truck. Fig. 2 is a similar view showing the shoe or blade formed with the central projection. Fig. 3 is a detail view of one of the twists at the front end of the truck. Fig. 4 is a detail view of one of the wheel-brackets.

Referring to the several parts by their letters of reference, the frame of my truck is formed of a single piece or bar of metal A, rectangular in cross-section, such as is known as "strap-iron" and can be bought on the open market in quantities of the requisite size without requiring special construction or forging. This metal bar is bent to form the parallel side pieces B B, standing in vertical planes to present their upper edges to the weight of the load resting upon the truck, thus obtaining great strength with a light frame, while at the front ends of the sides the bar is formed with the quarter-twist C C to bring it into a plane at right angles to the sides B, and is also given the usual upward bend to form the shoe D. It will be seen that

by giving the frame-bar this quarter-twist I am enabled to form the side pieces and shoe of an ordinary flat metal bar, thus effecting a great saving in construction and cost over a specially molded or forged frame.

Heretofore side bars of strap-iron have been turned up at their front ends to form hooks which were connected so as to produce a shoe, and metallic shoes standing at a right angle have also been attached to the side bars; but my construction is the only one of which I am aware wherein a strap-iron of uniform size throughout can be used to form both the side bars and the upturned shoe.

The truck may be formed with a perfectly plain shoe or with a projection A', rising centrally from the blade or shoe, as shown, and sharpened at its upper edge. This central projection of the shoe is designed for use when a truck is to be used for handling stoves in factories, as this projection A' being shorter than the shoe enters and catches under the concave edge or bottom of the stove, where a wide plain truck-shoe would reach across the sides of a stove-bottom without catching in the concave of the same, when the stove is liable to slip off, a difficulty which is entirely overcome by this central projection A'. However, if the projection A' is used it will be obviously necessary that the strap-iron be provided at its center on one side with a lateral offset which is to form this projection when the iron is bent into shape, as above described.

The side pieces of the frame are connected by the cross-bars E, which may be made either of round iron, as shown in Fig. 1, or of flat bars provided at their ends with angle-irons bolted to the side pieces, as shown in Fig. 2. The rear of the truck is provided with the metal feet F, while to its forward end are bolted the metal wheel-brackets G. Instead of the ordinary wheel-bracket bolted to the lower edge of the side pieces, as in the common wood trucks, where the brackets soon work loose, I form my brackets cast each in a single piece with the upper shoulder G<sup>2</sup>, upon which the lower edge of the face-pieces rest, and the upper projecting portions or ears G' fitting against the inner side of the side pieces astride a cross-bar, the bolts g running



through these spaced ears and the side pieces. It will thus be seen that by bolting the upper ends of the wheel-brackets to the inner faces of the frame sides, while the lower edges of the frame sides rest upon the shoulders of the brackets, the latter are not liable to work loose, as the side thrust from the wheels H, mounted on the axle I in the lower ends of the brackets, will come either upon the solid bracket-shoulders G<sup>2</sup> or press the upper ends of the brackets against the inner side of the frame, causing no strains on the bolts which hold the wheel-brackets in place.

To the inner faces of the side pieces B B are pivoted at one of their ends the lugs or stops J J, which may be either turned down out of the way and below the upper edges of the side bars, as shown in dotted lines in Fig. 1, with their free ends resting upon the cross-bar E next in rear, (for which purpose such ends are notched or shaped, as shown,) or they may be raised, as shown in full lines in the said view, their front edges then resting against the cross-bar E next in front, when they will operate to prevent anything, such as a barrel, from rolling off the truck, projecting upon each side of the same to form stops.

The rear ends of the frame-bar are formed into rounded handles K K.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As an improved article of manufacture, the herein-described warehouse-truck whose frame is formed of a single piece of strap-iron approximately of the same rectangular cross-section throughout, and bent into substantially parallel side pieces B standing in upright planes and having handles K at their rear ends, their front ends being given the

twists and upward bends C so as to form the transverse shoe D standing in an upright plane at right angles to the upright planes of the side pieces, a projection A' extending from the upper edge of said shoe, of less length than the shoe, and sharpened at its upper edge, cross-bars connecting the side pieces, and wheels beneath the whole, substantially as described.

2. As an improved article of manufacture, the herein-described warehouse-truck, the same consisting of side pieces of strap-iron standing on edge and having handles at one end and an integral shoe connecting them at the other end, cross-bars connecting said side pieces, and lugs pivoted at their lower ends to the inner faces of the side pieces between two cross-bars and adapted to have their front edges rest against one cross-bar when they are raised, their upper ends being notched and adapted to lie against the next adjacent cross-bar when they are depressed, their upper edges at this time standing beneath the upper edges of the side pieces; combined with wheel-brackets each comprising a casting G having a shoulder G<sup>2</sup> near its upper end adapted to rest beneath the lower edge of the side piece and two spaced ears G' rising above such shoulder and adapted to rest against the inner face of the side piece astride one cross-bar, bolts g through the side pieces and the ears, an axle connecting the lower ends of the brackets, and wheels on said axle, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MARTIN J. CUNNINGHAM.

Witnesses:

H. C. CROW,  
ELLIS PAXSON.