

(No Model.)

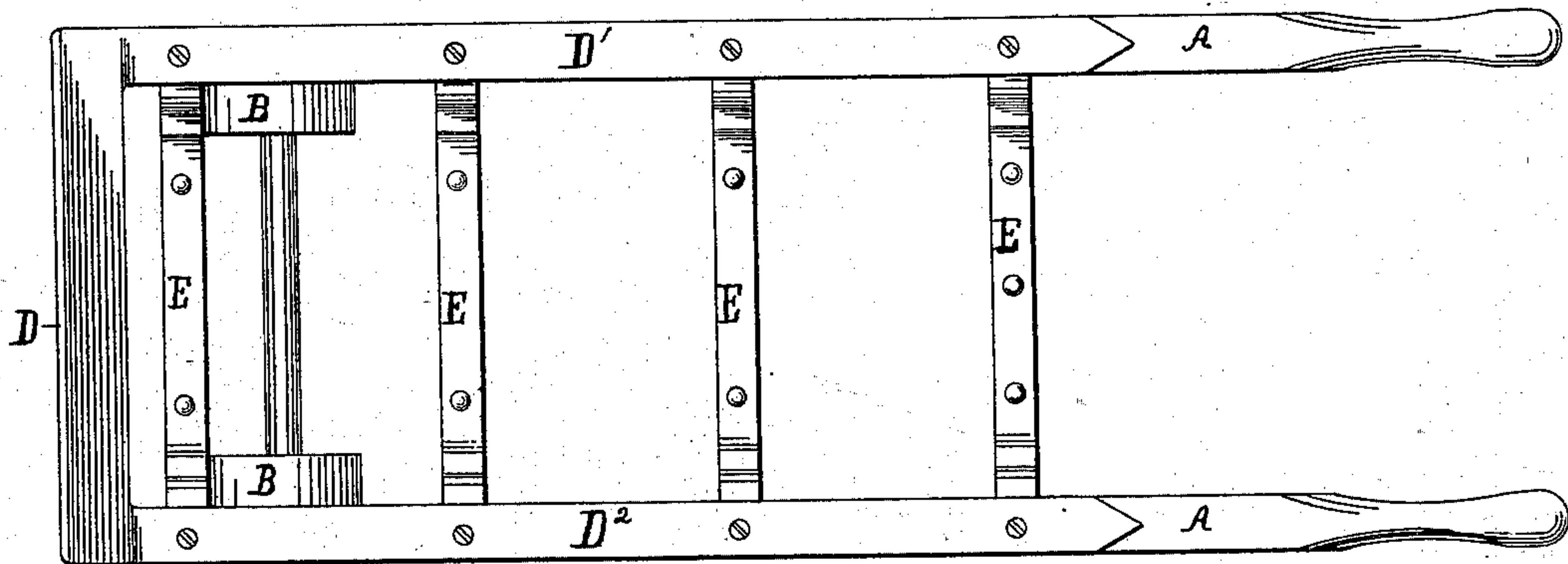
N. J. WATERMAN.

HAND TRUCK.

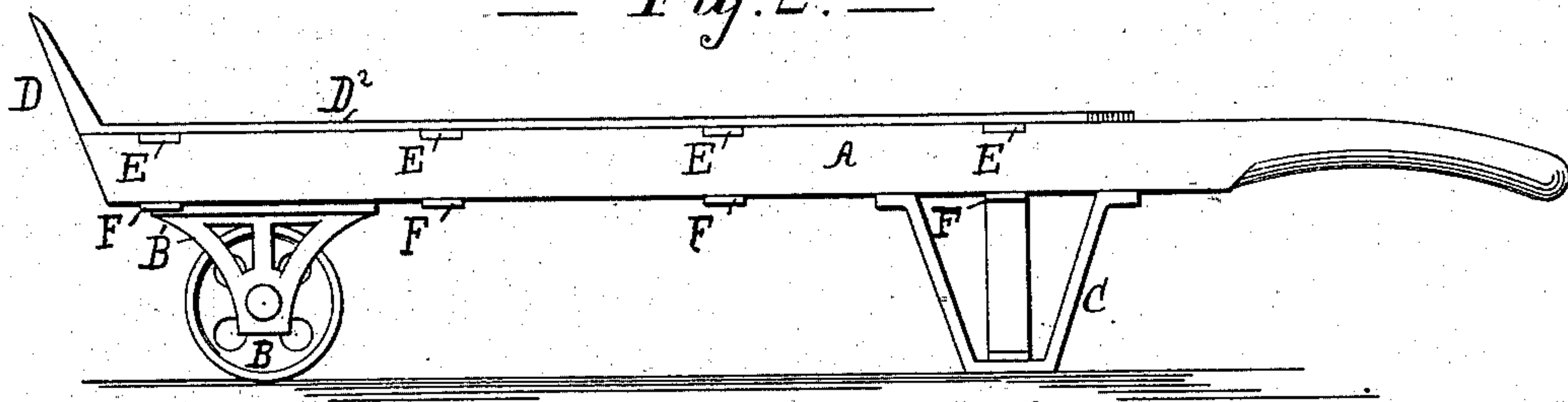
No. 282,136.

Patented July 31, 1883.

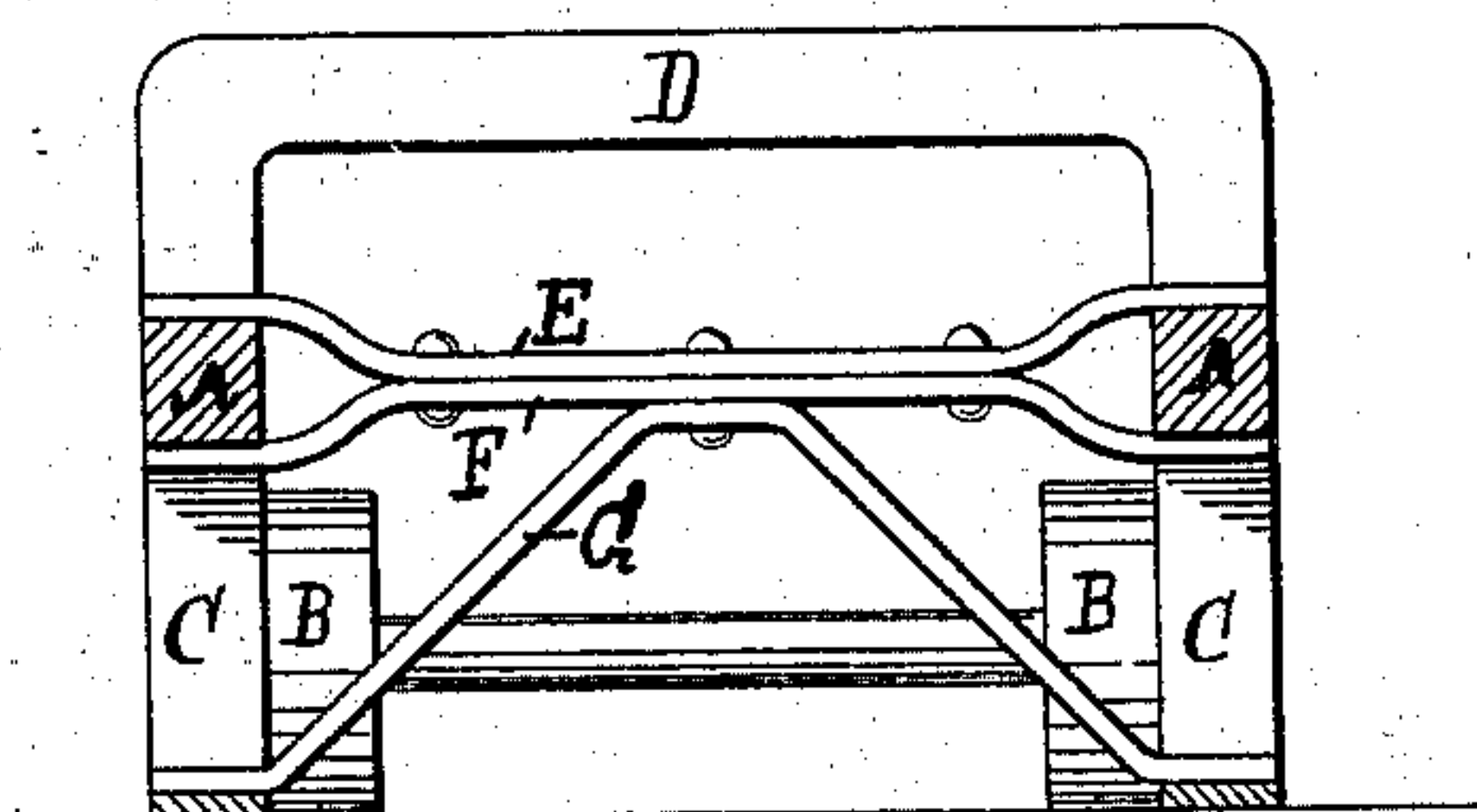
— Fig. 1. —



— Fig. 2. —



— Fig. 3. —



WITNESSES  
N. S. Wright.  
A. C. Inglis.

INVENTOR  
Noble J. Waterman,  
By *W. W. Leggett*  
Attorney



# UNITED STATES PATENT OFFICE.

NOBLE J. WATERMAN, OF DETROIT, MICHIGAN.

## HAND-TRUCK.

SPECIFICATION forming part of Letters Patent No. 282,136, dated July 31, 1883.

Application filed November 24, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, NOBLE J. WATERMAN, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Hand-Trucks; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in the combination of devices and appliances hereinafter specified, and more particularly pointed out in the claim.

In the drawings, Figure 1 is a plan view of a hand-truck embodying my invention. Fig. 2 is a side elevation. Fig. 3 is a cross-section.

My invention relates to hand-trucks, and more particularly to the form and construction of the cross-pieces or braces.

I am aware that hand-trucks have been made with cross-pieces of iron, but bent in the form of a downward curve from side to side. These, however, are designed for special purposes, such as the handling of hogs, barrels, &c., but are not adapted to general warehouse purposes, such as the handling of bags and ordinary warehouse-packages.

It is the object of my invention to so shape the braces that they will possess the same function of not permitting the package to escape at the side of the truck, and yet form a flat bearing-surface across the truck, and to this end I make the cross-pieces to curve from the upper edge downward at an easy incline from the edge of the truck, and thence extend out squarely across to the opposite side, so as to procure at once the advantages of the drop, and at the same time the advantages of a flat truck and an easy incline, at the edges of which a package may be slid in removing it from the truck.

My invention consists, further, in providing one or more of the cross-pieces with a similar but reversed brace on the under side, riveted or otherwise fastened to the upper cross-piece.

In carrying out my invention, A represents the side bars of the truck; B, the wheels; B', the brackets to which the wheels are secured. C represents the supports or legs of the truck. D is the upturned metallic toe-piece,

preferably constructed with extended face-plates D' and D<sup>2</sup>, secured upon the side bars. E represents any desired number of metallic cross-piece or braces, curved at their extremities, as shown, or slanted downward from the upper edges of the side bars, to which they are secured, thence extending, as above explained, squarely across to the opposite side, the construction being such that said braces are suitably dropped to receive a package, and at the same time afford a flat bearing-surface along the greater portion of their length, between the side pieces, while at the extremities of said braces corners are avoided which might otherwise obstruct the ready removal of a package from the truck. In Fig. 3 is shown a similar but reversed brace, F, secured at its extremities to the under side of the side pieces and to the middle of one of the upper cross-pieces in any suitable manner. I design to use one or more of these under cross-pieces, F. G is a supporting brace extending from the foot of the legs of the truck up under the lower brace and secured therewith.

It is evident that a hand-truck so constructed possesses the marked advantages above mentioned.

What I claim is—

A hand-truck combining in its structure the following characteristics—namely: a pair of side bars mounted at one end on wheels, and provided at the other end with supporting legs and handles; a series of upper metallic cross-pieces secured at their extremities to the upper edges of the side bars and at each side extending downward on an incline, and thence straight across, to constitute depressions between the downward inclinations for receiving bags and other articles; and similar under metallic cross-pieces, arranged reversely to the upper cross-pieces, with their straight portions united, the extremities of the under cross-pieces being secured to the bottom edges of the side bars, substantially as shown and described.

In testimony whereof I sign this specification in the presence of two witnesses.

NOBLE J. WATERMAN.

Witnesses:

N. S. WRIGHT,  
WILLIAM F. FORD.