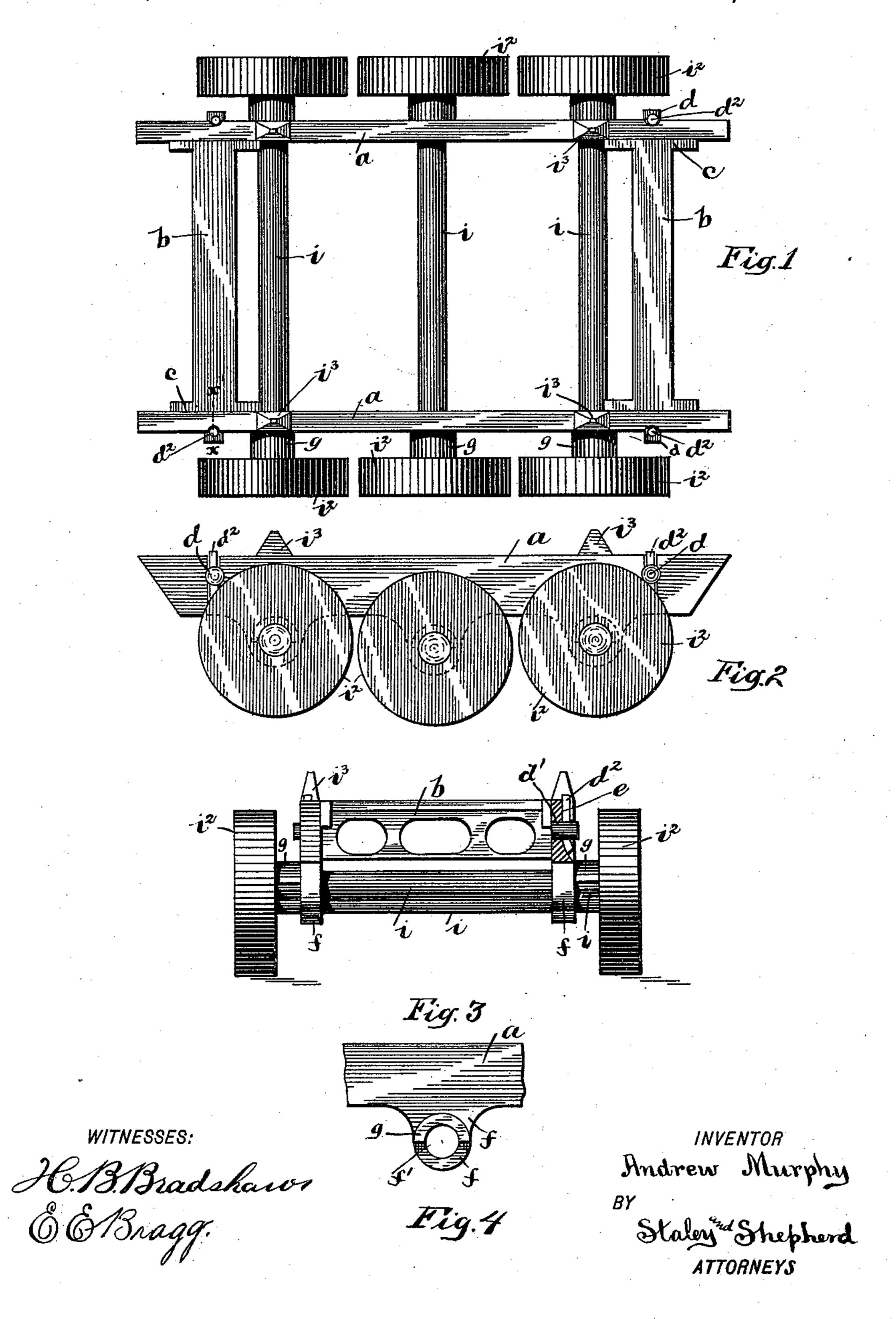
## A. MURPHY. TRUCK.

No. 490,716.

Patented Jan. 31, 1893.



## United States Patent Office.

ANDREW MURPHY, OF COLUMBUS, OHIO.

## TRUCK.

SPECIFICATION forming part of Letters Patent No. 490,716, dated January 31, 1893.

Application filed May 9, 1892. Serial No. 432,367. (No model.)

To all whom it may concern:

Be it known that I, Andrew Murphy, a citizen of the United States, residing at Columbus, in the county of Franklin and State 5 of Ohio, have invented a certain new and useful Improvement in Trucks, of which the following is a specification.

My invention relates to the improvement of trucks of that class which are particularly 10 adapted for the conveyance of boxes, packages, &c., and which are ordinarily employed in wholesale houses, railway stations, &c.

The objects of my invention are to provide a superior truck of this class wherein is com-15 bined a strong, durable and reliable frame; to form integral with the side pieces of said frame the shaft bearing boxes; to construct said truck in a simple and inexpensive form and to produce other improvements which 20 will be more specifically pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which,

Figure 1 is a plan view of my improved 25 truck. Fig. 2 is a side elevation of the same. Fig. 3 is an end view thereof, showing one of the side frame pieces broken away to the point indicated by the dotted line x x in Fig. 1 and Fig. 4 is a detail view of a portion of | 30 one of the side pieces in side elevation.

Similar letters refer to similar parts through-

out the several views.

The main frame-work of my improved truck consists as shown in the drawings, of two par-35 allel metallic side pieces a which are connected near their outer ends in the manner hereinafter described, by metallic cross-pieces b. Each of the cross-pieces b is formed with a shoulder or head c near each end, said 40 shoulders abutting against the inner sides of the side pieces a. From the center of each of these abutting ends of the metallic crosspieces b extends a pin d which passes through a pin-hole d' in the side piece a, and projects 45 slightly beyond the outer face of said side piece.

The ends or shouldered portions of the cross-pieces b may be riveted or otherwise rigidly connected with the side pieces a, but 50 I may produce a rigid connection of said parts

cally through pin holes formed in the outer ends of the pin extensions d. In the latter means of connection, I provide the outer sides of the side pieces a with grooves e, which ex- 55 tend downward from the upper side of the side piece and intersect the outer ends of the pin holes d'. Beneath the latter said grooves are beveled or inclined outward to the outer surface of the side piece. These grooves e 60 are adapted to receive or partially receive the key-pins  $d^2$ , the latter terminating in the curved or outwardly inclined lower portions of said grooves. As is usual in this class of trucks, I preferably employ three wheels on 65 each side thereof. For the purpose of journaling the shafts of these wheels and providing proper bearings therefor, I form with each of the side pieces a three downwardly extending ears or lugs f arranged at equi-distant 70 points. In each of these lugs f is formed a suitable shaft opening f' and projecting outwardly from the ear f about the upper half of the opening f' is a hood g, the inner side of which is flush with the inner side of said 75 opening f'.

i represents the wheel carrying shafts of my improved truck, the wheel carrying portions of which are journaled in the openings f' of the ears f. On the outer ends of these 80 shafts i are mounted in any desirable manner, the ground wheels  $i^2$ . In forming the ears f, the central one of each side thereof is preferably somewhat the longest and its journal bearing f' is arranged slightly below the 85 plane of the remaining ears of the corresponding side, thus admitting of a truck being tipped toward either end, or as is usual in the direction toward which it is moving.

Formed integral with the upper sides of the 90 side pieces a, at desirable points, are upwardly projecting spurs or studs i<sup>3</sup> which are adapted to engage by indentation or otherwise, with the bottom of the box or article to be moved and at the same time form a sup- 95 port for the load.

From the construction of my improved truck, it will be seen that the outer portions of the shafts i will not only be afforded bearings within the ears f, but that the hood g will 100 serve to broaden the bearing for the upper by employing key pins  $d^2$  which pass verti- l side of the shaft, or for that side toward

which the pressure of the shaft is greatest. In this manner, the ears f and the bearing hood g formed therewith, provide neat and reliable forms of boxings, which, owing to their integral formation cannot separate or become loosened from the frame. It will also be observed that the construction of my improved truck frame is, although of a simple and inexpensive form, such as to provide an exceedingly strong and rigid truck which will withstand great weight and strain and possess good wearing qualities.

I am aware that trucks of this class have been formed wherein a combination of wood and metal has been employed, but the truck herein described, is, as will readily be seen of

such improved construction as to admit of its formation wholly from metal.

Having now fully described my invention, what I claim and desire to secure by Letters 20 Patent is,

In a truck, the combination of the metallic side-pieces a, ears f formed therewith, shaft bearing openings f' in said ears, projecting hoods g above said openings, cross-pieces b 25 connecting said side pieces as described, and wheel carrying shafts i journaled in said ears, substantially as and for the purpose specified.

ANDREW MURPHY.

In presence of— THOS. S. GATES, C. C. SHEPHERD.