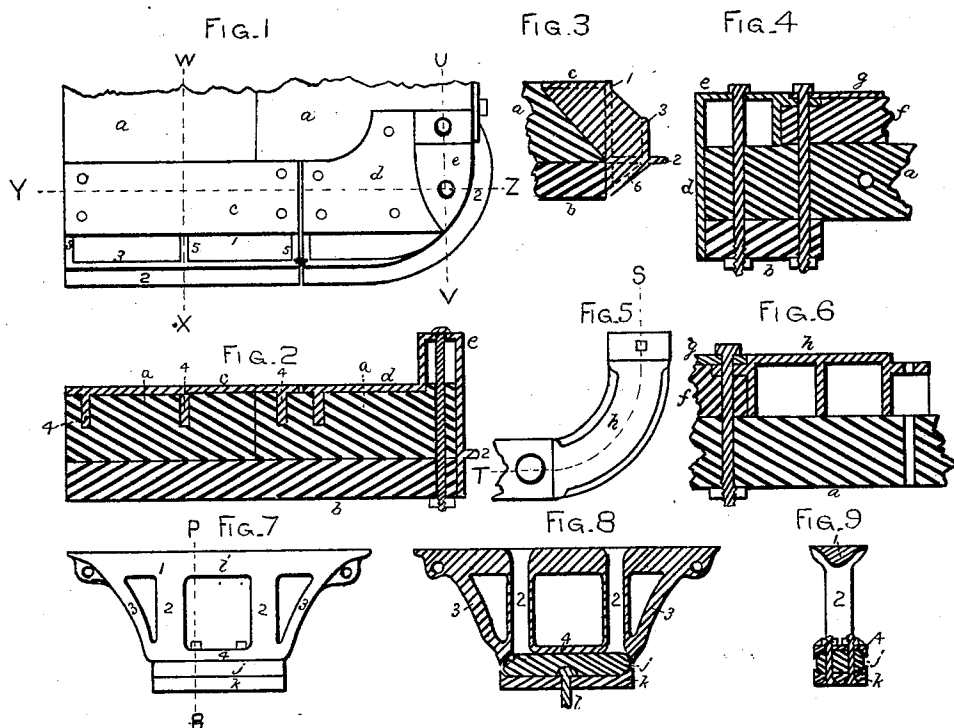


T. W. PORTER.
Wagons.

No. 143,030.

Patented September 23, 1873.



WITNESSES.

Franklin B. Colburn
Herbert T. Whitman

INVENTOR.

T. W. Porter

UNITED STATES PATENT OFFICE.

THOMAS W. PORTER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WAGONS.

Specification forming part of Letters Patent No. **143,030**, dated September 23, 1873; application filed June 30, 1873.

To all whom it may concern:

Be it known that I, THOMAS W. PORTER, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in "Caravans," of which the following is a specification:

This invention relates to the class of vehicles used principally in cities for the purpose of transporting heavy merchandise from one section of the town to another; and the invention consists in a metallic angle-plate for the protection of the rear end of the body, embracing the top and ends of the floor-plank and the stay-bar; and also serving the purpose of a skid-rod when loading freight. It also consists in metallic shields for the rear corners of the body, which protect the top, edges, and ends of the floor-plank, and the end and edge of the stay-bar, and receive the ends of the side curb-rails and the cap-plate. It also consists in a front-corner elbow, which is formed cellular, with cavities and recesses to receive the front and side bars of the curb, and the cap-plates which protect the same. It also consists in a cast metal rocker, by which the body is attached to the forward wheels.

Figure 1 is a top or plan view of one-half of the rear end of a caravan, having the angle-plate and corner-iron attached. Fig. 2 is a vertical section taken on line Y Z, Fig. 1. Fig. 3 is a vertical section taken on line W X, Fig. 1. Fig. 4 is a vertical section taken on line U V, Fig. 1. Fig. 5 is a top or plan view of the front-corner elbow. Fig. 6 is a vertical section taken on line S T, Fig. 5. Fig. 7 is a front elevation of the rocker. Fig. 8 is a longitudinal vertical section of the rocker. Fig. 9 is a vertical transverse section taken on line P R, Fig. 7.

In the drawings, *a a* represent the bottom or bed plank, and *b* is the stay-bar, which is placed transversely to the bed-plank. *c* is one section or length of the angle-plate, which consists of four angles or members, as shown by dotted lines in Fig. 3, the top plate or angle being marked *e*, a vertical angle marked 1 descending and covering the ends of the bed-plank and edge of the stay-bar, a horizontal angle marked 2 projecting from 1 and terminating in a shielding rib, while angle 3 rises vertically from this and serves as the bearing upon which the skids are hooked. A series of stays or ribs, marked 4, unite and

combine the strength of angles *c* and 1, while similar ribs, marked 5, unite angles 1 and 3, while ribs or angle 6 unite and strengthen angles 1 and 2. *b* is the corner-iron, which, where it meets the angle-iron, is formed with the configuration of cross-section, shown in Fig. 3. The part *e* is raised to correspond to the height of curb *f* and metallic cap-plate *g*, while bolts passing down through, and held by screw-nuts beneath the stay-bar, unite all the parts firmly together. In Figs. 5 and 6, *h* is the elbow, which is formed with sides and top, in the same manner as *e* in Fig. 2, and with cross ties or bars, as shown in Fig. 6. This elbow receives the curb *f* and plate *g*, as shown, and serves as the continuation or connection of the side and end curb, making a rounded corner which is cheap and durable. In Figs. 7, 8, and 9, *i* is the metallic rocker. *j* is a bar of wood interposed between the rocker and rocker-plate *k*. The rocker is formed with a part or bar, marked 1, upon which the body bears. It has also a bar or part, marked 4, resting upon wood *j*, while the two hollow pillars 2 2, and the braces 3 3, extend from part 1 to part 4. In Fig. 8, *l* shows the arrangement of the king-bolt; and in Figs. 8 and 9 the bolts uniting the rocker, the wood, and the rocker-plate together, are shown; and in these last-named figures can also be seen a recess, formed, respectively, in the top face of the rocker-plate and the bottom of part 4 of the rocker. By this form of construction, the wood *j* is enveloped at its edge and held from splitting or abrasion.

I claim as my invention—

1. The angle-plate *c*, formed to envelop the ends of the bed-plank, and with the skid-rest 3, substantially as described and shown.
2. The corner shield *b*, formed with the raised curb-socket *e*, and to receive the curb-plate, all substantially as described and shown.
3. The elbow *h*, formed cellular, and with sockets for curb *f* and seats for plate *g*, substantially as described and shown.
4. The metallic rocker *i*, formed with the plate 1, supports 2 3, and base-plate 4, substantially as described and shown.

THOMAS W. PORTER.

Witnesses:

MARY R. LANE,
EBEN HUTCHINSON.