2 Sheets--Sheet 1.

B. BURR.

Wagon Bodies.

No. 142,989. Patented September 23, 1873.

Fig. 1.

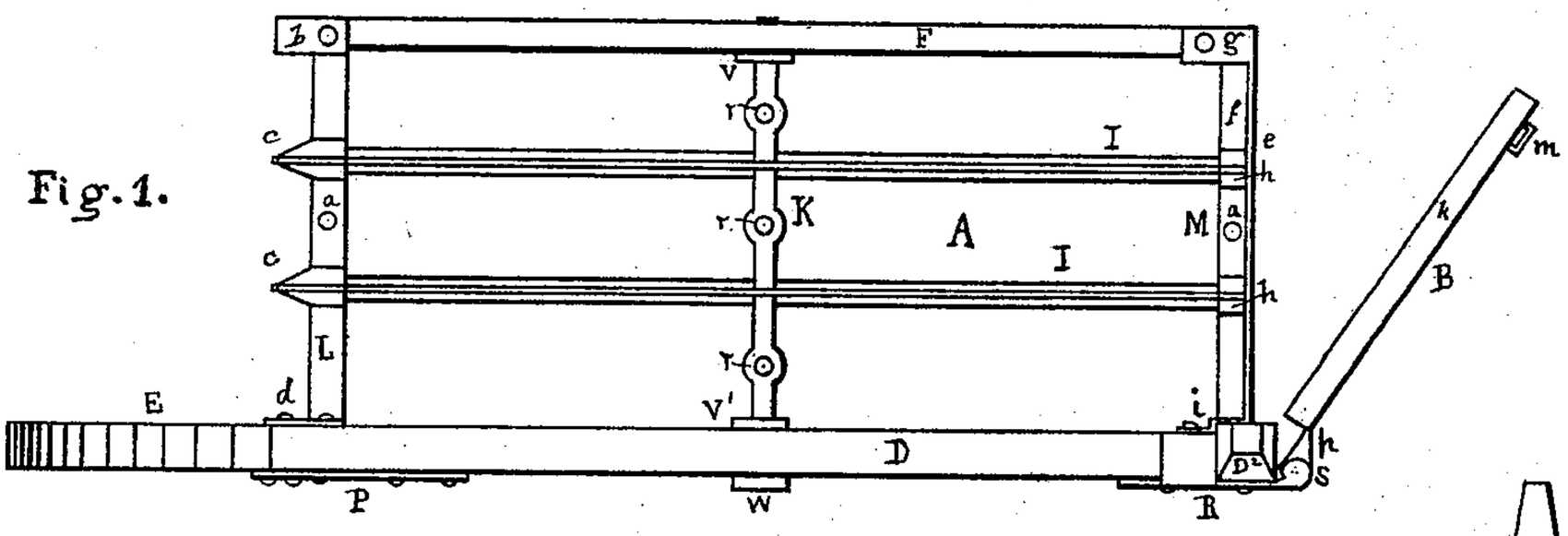


Fig. 2.

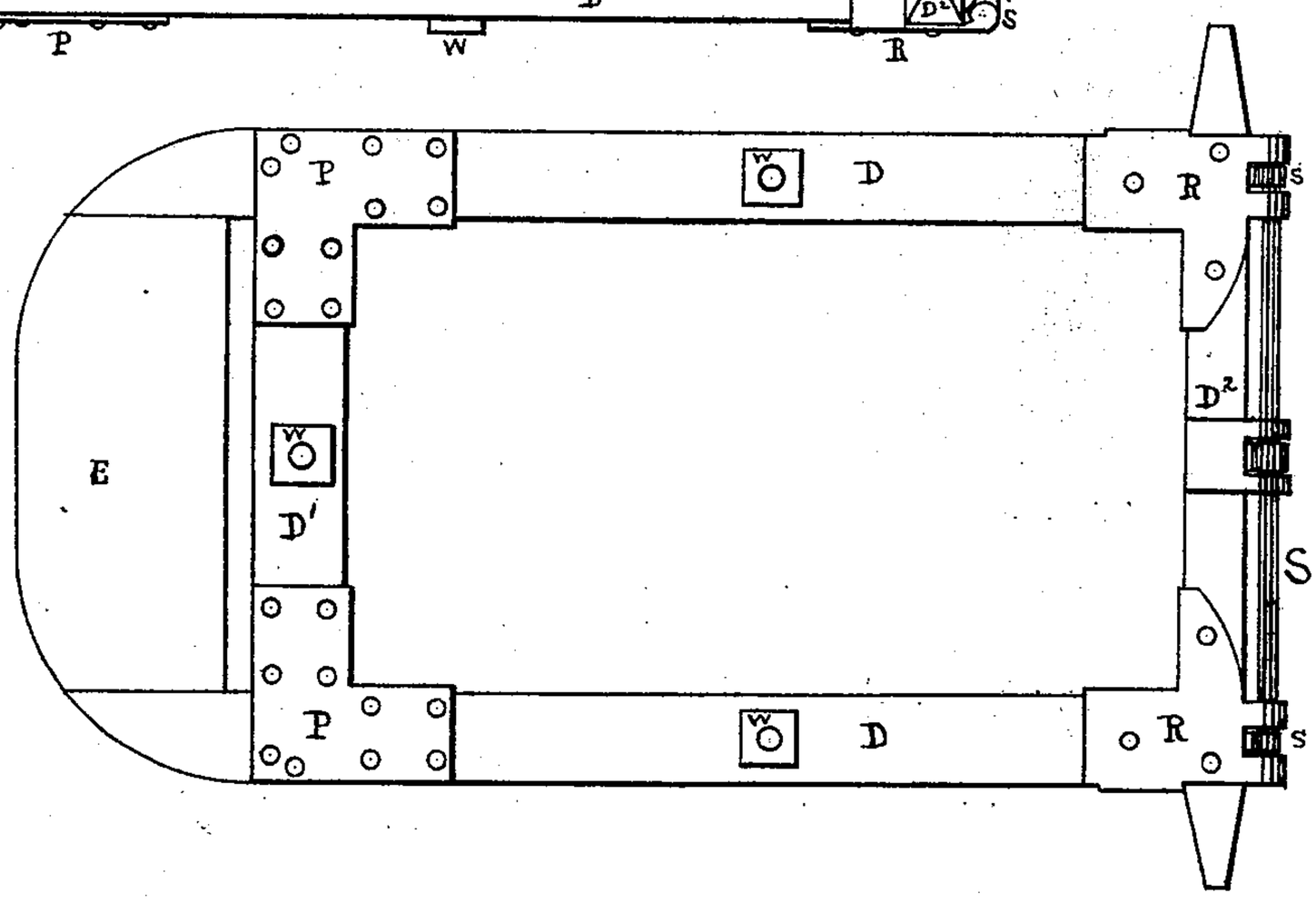


Fig. 3.

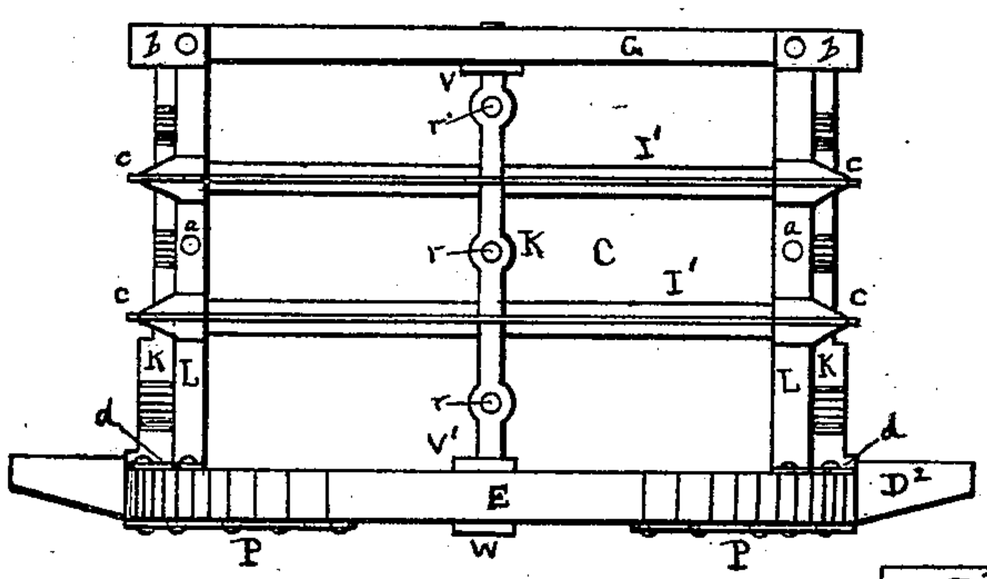
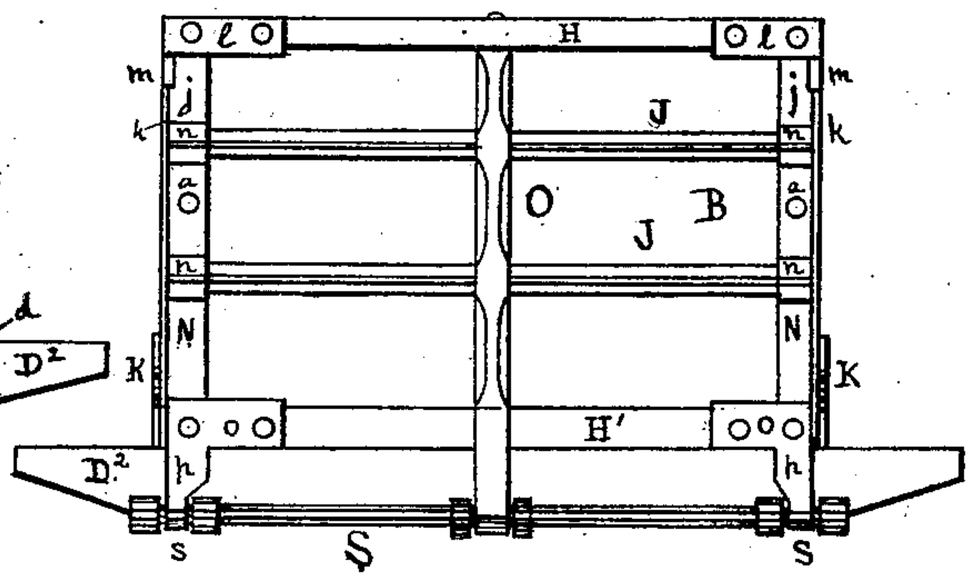


Fig. 4.



WITNESSES.

E. A. Hill

C. W. Bond

INVENTOR.

Bradley Burr

2 Sheets--Sheet 2.

B. BURR.

Wagon Bodies.

No. 142,989. Patented September 23, 1873.

Fig.5.

Fig.6.

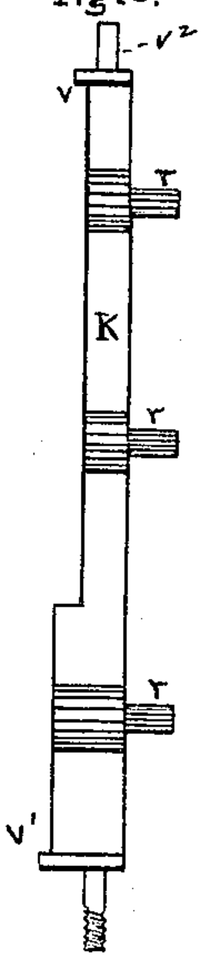


Fig.7.

Fig.8.

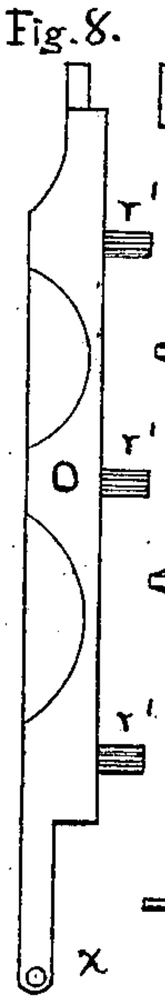


Fig.9.

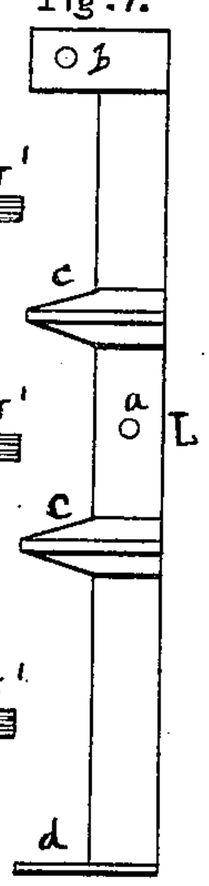


Fig.10.

Fig.11.

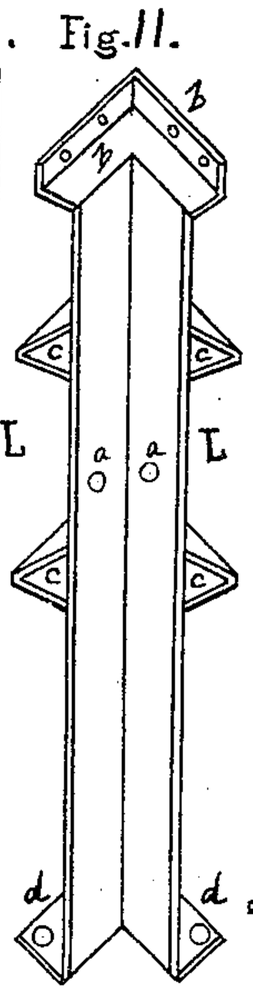


Fig.12.

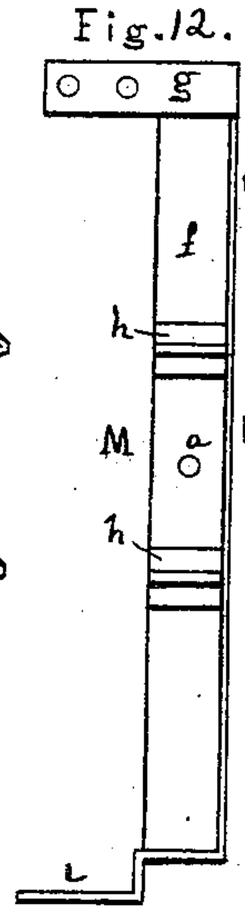


Fig.13.

Fig.14.

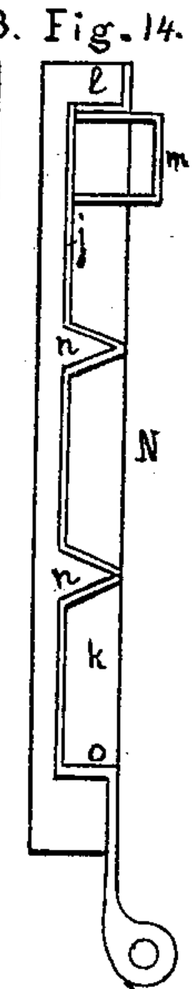


Fig.15.

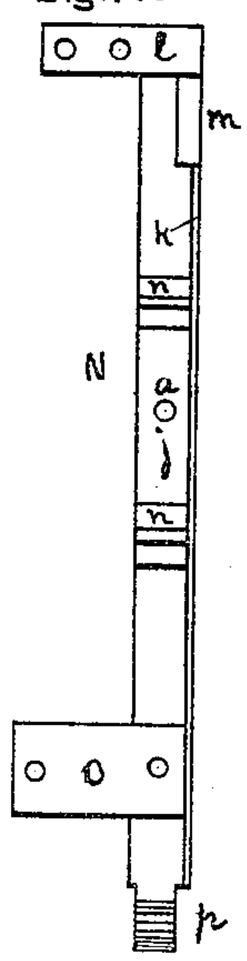


Fig.16.

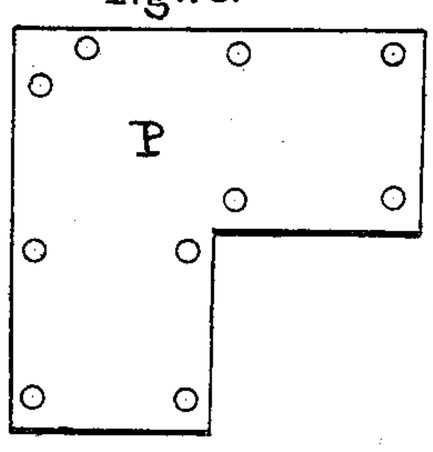


Fig 17.

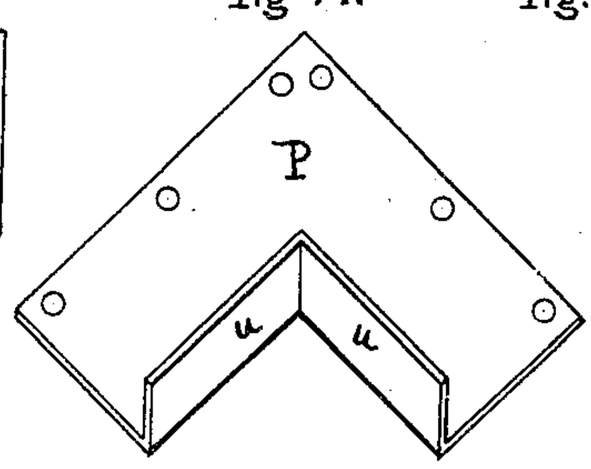


Fig.18.

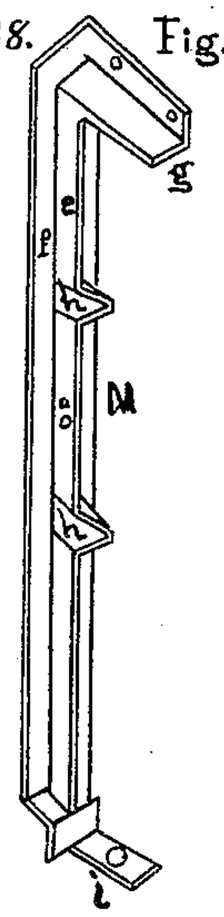


Fig.19.

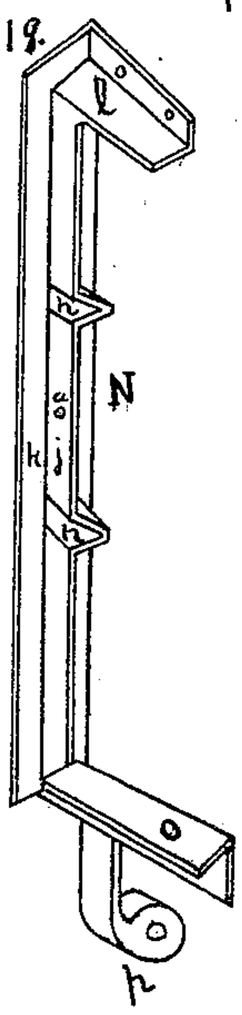


Fig.20.

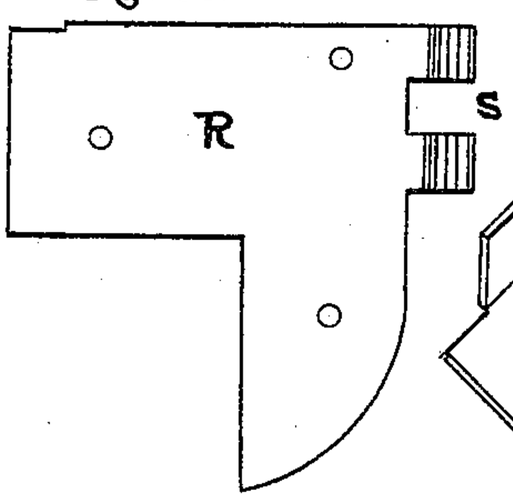
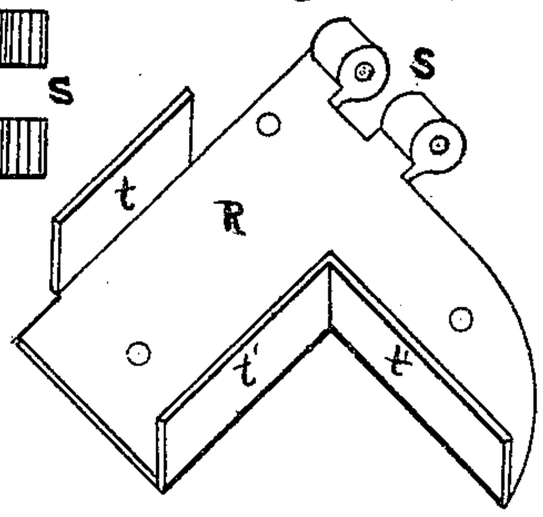


Fig.21.



Witnesses:

E. A. Hurst.

C. W. Bond.

Inventor:

Bradley Burr

UNITED STATES PATENT OFFICE.

BRADLEY BURR, OF BATAVIA, ILLINOIS.

IMPROVEMENT IN WAGON-BODIES.

Specification forming part of Letters Patent No. **142,989,** dated September 23, 1873; application filed January 27, 1873.

To all whom it may concern:

Be it known that I, BRADLEY BURR, of Batavia, in the county of Kane and State of Illinois, have invented a certain new and Improved Wagon-Body, of which the following is a full description, reference being had to the accompanying drawings, consisting of two sheets, in which—

Figure 1 is a side elevation; Fig. 2, a bottom view; Fig. 3, a front elevation; Fig. 4, a rear elevation. Figs. 5 and 6 represent supports used on the side and front. Figs. 7 and 8 represent the central support used on the tail-board. Figs. 9, 10, and 11 represent corner supports for the front end of the box. Figs. 12, 13, and 18 represent supports used at the rear end of the side pieces of the box. Figs. 14, 15, and 19 represent supports used upon the ends of the tail-board. Figs. 16 and 17 represent irons used for holding the frame together at the front end; and Figs. 20 and 21 represent irons used for holding the frame together at the rear end.

The figures from 5 to 21, inclusive, are enlarged.

My invention is chiefly designed to be used in manufacturing bodies for express and other light wagons of similar construction; and its object is to make a wagon-body without mortises and tenons, which can be made much cheaper than an ordinary wagon-body, and be at the same time equally strong.

The several parts represented by the figures from 5 to 21, inclusive, may be most conveniently made of malleable iron.

In the drawings, D D D^1 D^2, Fig. 2, represent four wooden pieces, which, when properly secured together, form the frame of the wagon-body. These parts of the frame are held together at the front by the irons P, and at the rear end by the irons R. The irons P are provided with flanges *u* on the inside, (see Fig. 17,) which flanges fit snugly against the insides of the pieces D D^1. The irons R are provided with flanges *t t′* both on the out and inside, (see Fig. 21,) which flanges also fit closely against the pieces D D^2. These pieces R are so made as to furnish one part of the hinges S of the tail-board. The forms of the pieces P and R are shown in Figs. 16, 17, 20, and 21. A represents the side boards of a wagon-body; C, the front end; I I′, slats of wood; and F and G the top rails. The side boards A and front end piece C are held together by means of the irons L, represented in Figs. 9, 10, and 11, so formed as to cover the corner, and provided with a flange, *d*, at the bottom, by means of which they are secured to the frame, and also so constructed as to receive and hold the ends of the slats I I′ and top rails F G. *c* represents the part which receives and holds the ends of the slats, and *b* the portion which receives and holds the front ends of the top rails.

Figs. 12, 13, and 18 represent the irons which are used at the rear ends of the sides of the body. They are so formed that one part, *e*, affords protection to the ends of the side pieces, while the part *f* is provided with recesses, *h*, to receive the rear ends of the slats I, and another one, *g*, at the top to receive the rear ends of the top rails F. They are also provided with flanges, *i*, at the bottom, by means of which the irons are secured to the frame. The sides and front are strengthened by means of the iron supports K, (see Figs. 5 and 6,) the lower end of which may pass through the frame and be secured by a nut, *w*, and the upper end may pass through the top rail and there be riveted. They are provided with ledges at the top and bottom, the bottom one, *v′*, resting on the frame, and the top one, *v*, furnishing a support for the top rails. Rivets r^2 may be used to secure the irons to the body. Other braces to support the side boards should be used, which last braces are secured as usual.

Fig. 4 represents the tail-board, consisting of the board B, slats J, and top and bottom rails H H′, all held together, protected, and strengthened by the irons *n*, represented in Figs. 14, 15, and 19, which irons are so formed that one part, *k*, forms a cover for the ends of the board; and the other part *j* is provided with a flange, *o*, at the bottom to secure the iron to the bottom rail H′, and also with recesses or openings *l* and *n* for the top rail H and slats J similar to those already described. The stirrup *m*, for holding the strap which secures the tail-board in position, is also formed upon this piece N. These irons are also provided with a part, *p*, which forms the other part of the hinge of the tail-board.

To increase the strength of the tail-board,

an iron, O, is used, which iron is somewhat similar to the irons K, except that the lower end is extended down, and provided with a hole through which the rod S passes, thus forming a third hinge for the tail-board.

The irons L, M, N, P, and R are secured, at their proper places, by means of suitable bolts and screws, and rivets may also be used for securing the irons L M N to the sides, front, and tail-board. The bolt or bolts which pass through the flanges *d* and *i* of the irons L and M also hold the corner irons P and R in place. An additional flange may be provided at the bottom of the iron N to rest upon the piece D^2 of the frame. The slots I, I′, and J may be made of one piece, and when so made they are recessed to pass over the center supports K and O. When no tail-board is used the rear end of the box is secured together by irons similar to those at the front. The irons add but little to the weight and greatly to the strength of the body. The extra labor now required to give a finished appearance to the joints at the corners will be dispensed with by making the body, &c., in accordance with my invention, as the irons will cover any inaccuracies in the fitting.

It is evident that the frame of the wagon-body might be mortised and tenoned together as usual, while the side and end pieces could be supported, held in place, protected, and secured to the frame by means of irons L M N, as before described, which construction would still embody a part of my invention, corner posts of wood being dispensed with. It is not absolutely necessary that the irons L M N should have recesses to receive the ends of the slats, though that construction is the best. The slats might be riveted in place.

What I claim as new is as follows:

1. A wagon body or box, constructed of frame-work, when the several parts are connected together without mortise or tenon, substantially as specified.

2. The angle irons or brackets L, when provided with projections *b*, *c*, and *d*, substantially as and for the purposes specified.

3. The flat brackets M, when provided with the projections *g*, *h*, and *i*, substantially as set forth.

4. The bar N, when provided with the hinge projection *p*, substantially as described.

5. The bar K, when provided with the pins or projections *r*, substantially as specified.

6. The bar O, when provided with the pins *r* and hinge projection *x*, substantially as specified.

7. The combination, in a wagon-body, of the bars N, provided with hinged projections *p*, with the brackets R and rod S, substantially as described.

BRADLEY BURR.

Witnesses:
E. A. WEST,
O. W. BOND.