2 Sheets—Sheet 1.

B. BURR.

WAGON BODY IRONS.

No. 187,452. Patented Feb. 20, 1877.

FIG. 3.

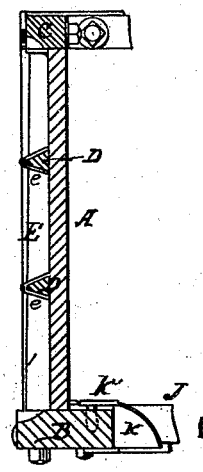


FIG. 1.

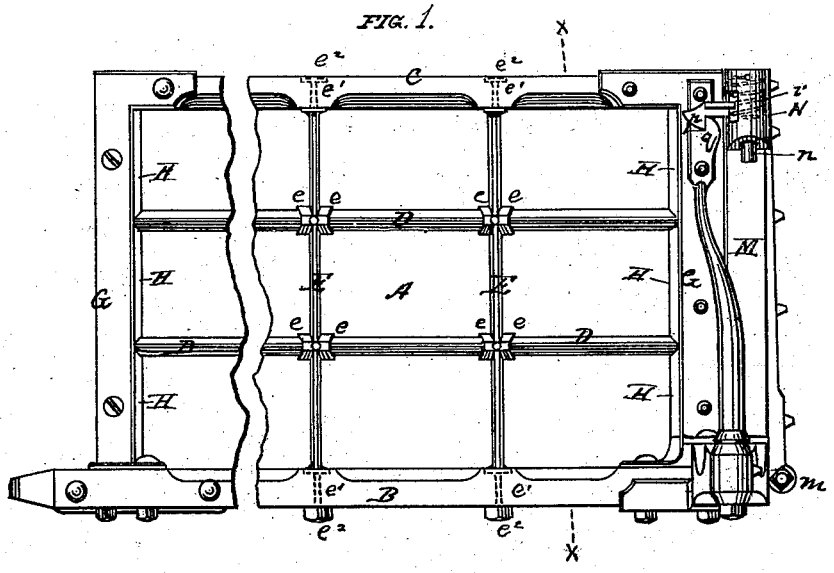


FIG. 2.

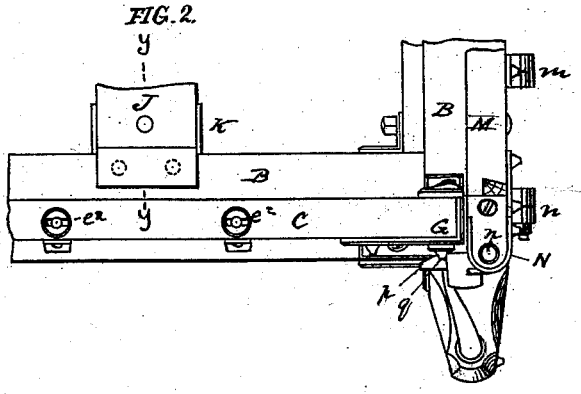
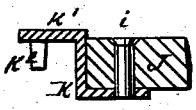


FIG. 4.



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2 Sheets—Sheet 2.

B. BURR.

WAGON BODY IRONS.

No. 187,452. Patented Feb. 20, 1877.

FIG. 5.

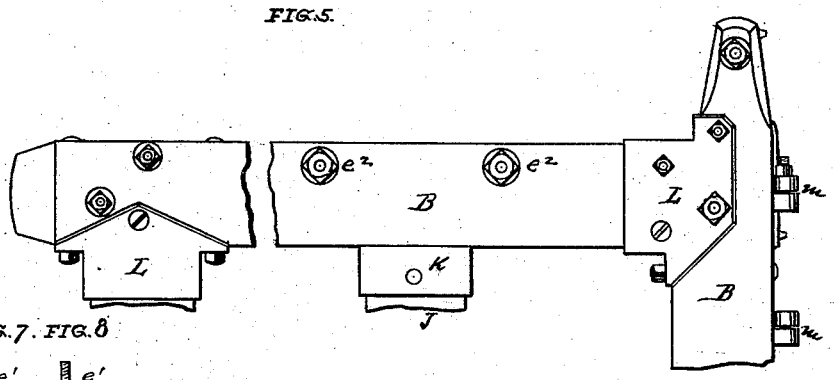


FIG. 6. FIG. 7. FIG. 8

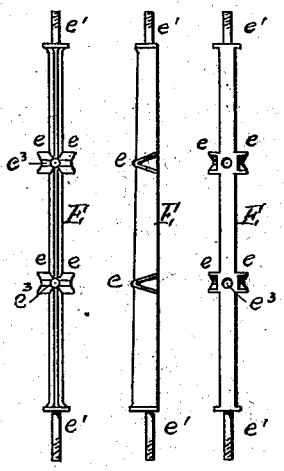
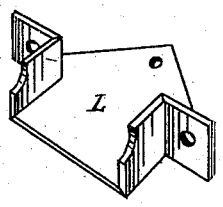


FIG. 9.



Witnesses
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UNITED STATES PATENT OFFICE.

BRADLEY BURR, OF BATAVIA, ILLINOIS.

IMPROVEMENT IN WAGON-BODY IRONS.

Specification forming part of Letters Patent No. **187,452**, dated February 20, 1877; application filed October 3, 1876.

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 certain Improvements in Wagon-Bodies, of which the following is a specification:

This invention relates to certain improvements upon the wagon-body for which Letters Patent No. 142,989, were granted to me, dated September 23, 1873.

In the accompanying drawing, which forms a part of this specification, Figure 1 is a side view of my improved wagon-body. Fig. 2 is a plan view of a portion of the same. Fig. 3 is a section on line *x x* of Fig. 1. Fig. 4 is a section on line *y y* of Fig. 2. Fig. 5 is a bottom view of the parts shown in Fig. 2. Figs. 6, 7, 8 are respectively a front, a side, and a back view of one of the metal uprights or supports. Fig. 9 is a perspective of one of the joint-irons used in framing the bottom together.

Like letters of reference made use of in the accompanying drawing indicate the same part in all of the figures where used.

In the said drawing, B marks the side and end sills of the wagon-body. C is the top rail, and A the paneling-board, contained and filling the space between said sills and top rails. D D are the horizontal exterior ribs applied to the surface of the paneling, and E E are the upright supporting ribs or posts of metal, which serve to hold the ribs D in place, to strengthen the panel, and to connect and strengthen the sills and rails.

These uprights E, of which there may be any number desired, are made of metal, and I prefer to make them of malleable cast-iron. They are provided at suitable points in their length, to correspond with the required position of the horizontal ribs D, with double laterally-projecting sockets *e e*, made of the form given to the ribs D in cross-section, so that they may receive the ends of said ribs without any trimming or fitting. At the top and bottom bolt-extensions e^1 may be formed for securing, by suitable nuts e^2, the said uprights to sill and rail, as shown. At the crossing or intersection of the sockets and rib-holes e^3 are pierced to receive the rivets, by means of which the said rib is secured to the panel. At each corner of the body is fitted an angle-iron, G, covering the ends of the top rails and of the ribs D. The space under said angle-iron between the ribs D is filled by short pieces of wood H, fitted to place and suitably secured.

This method of construction dispenses with the necessity of framing the corners, and produces a metallic corner with a plain smooth exterior. The pieces H are very easy to make, being simply sawed to the required bevel at the ends, and slipped into place.

It will be seen that, owing to the fact that no portion of the ends of the ribs D are exposed to view, the work of applying them is very simple and easy, and that no very highly-skilled workmanship is required.

It will also be understood that the structure is rendered much stronger by reason of the socketed joints at the uprights E than where said rib is mitered at this joint or sawed out to overlie or underlie the upright.

J represents one of the cross-beams broken off near one of its ends. Any number of these beams required may be used. The drawing only shows one. To the ends of these beams are secured metal sockets K, inclosing the bottom and two sides of the beam and its end, the rivet or bolt *i* serving to hold said socket in place. A lap-piece or flange, K^1, projecting from the upper edge of the socket, rests on the sill B, and is locked thereto by the pins K^2, cast preferably with the socket, which pins set into holes bored in the sill. The beams are thus securely held by an attachment, which is readily applied, and requires no fitting or mortising, and held in such manner that when the flooring is subsequently applied they cannot become loose.

The corner-sockets L are made of a similar form, except that they are applied the other side up, and are secured entirely by bolts and screws or rivets instead of having the pins K^2. These latter sockets unite the sills firmly together.

M is the hinged end gate, constructed to open by turning downward on the hinge *m*. To the upper outer corner of this gate is affixed the latch, consisting of the barrel N, inclosing a vertical sliding shaft, *n*, from which projects through a slot in the barrel a catch, *p*, furnished with a suitable thumb-piece. This

catch sits down over a detent, *q*, on the side of the wagon-body, and is held home by a spiral spring, *r*, inclosed in the barrel, and shown in dotted lines. This form of latch and spring is peculiarly suited to this place on account of the small amount of room it occupies, which enables me readily to apply it to the iron-shod structure which bears it, and to which it would be exceedingly difficult to affix the common spring contrivance usually made use of in this relation.

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

1. The metallic upright rib E, made with lateral intersecting sockets *e e*, pierced at the intersections to receive rivets, and fitted at top and bottom to be secured to the sill and rail, substantially as specified.

2. The metallic upright rib E, made with lateral intersecting sockets *e e*, formed to receive the ends of the horrizontal ribbing, substantially as specified.

3. The combination, with the panel forming the sides or ends of a wagon-body, of the metallic upright rib or ribs E, made with lateral intersecting sockets *e e*, the horizontal ribs D, the corner-plates or angle-irons G, and the short filling-blocks H, substantially as specified.

4. The socket, provided with a lip to rest upon the sill, and fitted with pins to project into cavities in said sill, substantially as shown and described, for securing the cross-beams to the sills.

BRADLEY BURR.

Witnesses:
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J. M. WISER.