

E. ANDREWS.
Devices for Securing Corners of Wagon Bodies and Seats.
 No. 141,306. Patented July 29, 1873.

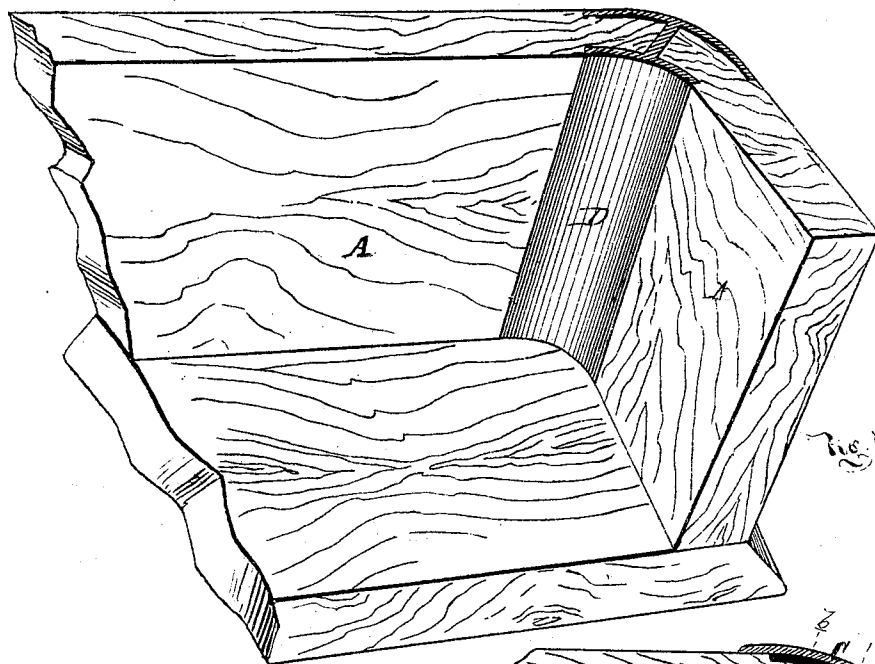


Fig. 1

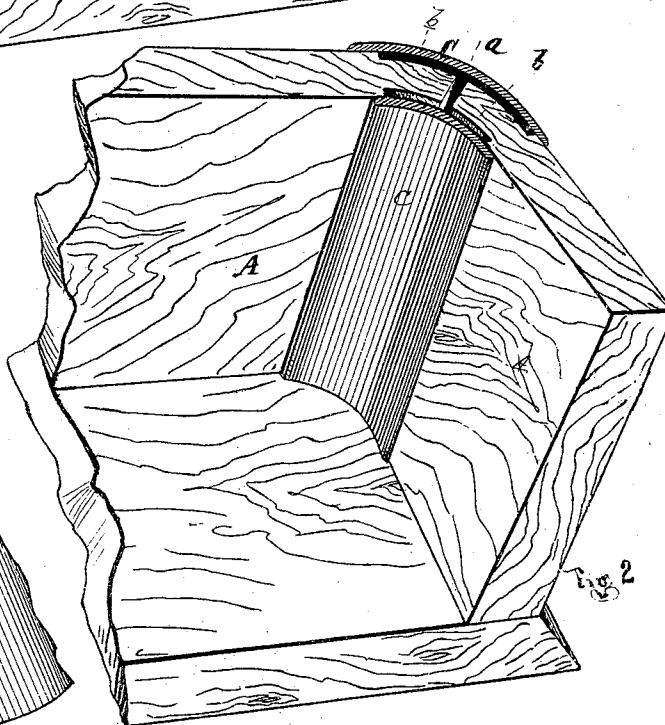


Fig. 2

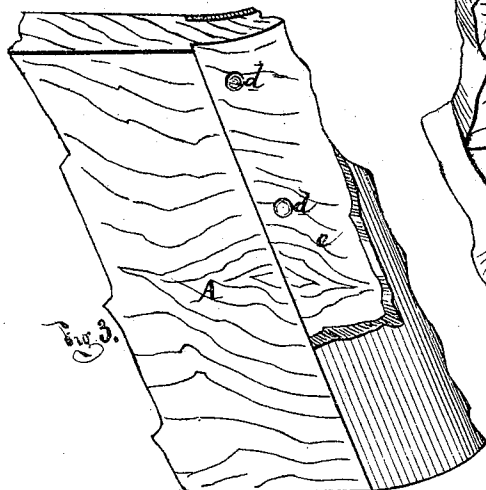


Fig. 3

ATTEST
 Martha Stewart
 Frederick E. Ebert

INVENTOR
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 per Atty
 Thos. S. Sprague

UNITED STATES PATENT OFFICE.

ERWIN ANDREWS, OF BRYAN, OHIO, ASSIGNOR TO EDWARD L. BRADLEY
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IMPROVEMENT IN DEVICES FOR SECURING CORNERS OF WAGON BODIES AND SEATS.

Specification forming part of Letters Patent No. **141,306**, dated July 29, 1873; application filed
November 28, 1870.

To all whom it may concern:

Be it known that I, ERWIN ANDREWS, of Bryan, in the county of Williams and State of Ohio, have invented a new and useful Improvement in Method of Fastening the Corners or Joints of Wagons; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon and being a part of this specification.

My invention consists in securing the corners of wagon-bodies and seats together by casting soft-metal corner-pieces thereon, as hereinafter more fully explained.

Figure 1 is a perspective view of one corner of a seat having my corner-piece applied thereto; Fig. 2, a perspective view of the same previous to the application of the corner-piece, but with the temporary plates in position to form the mold therefor; and Fig. 3, a perspective view of the end of one of the side pieces with a fragment of the corner-piece thereon.

In constructing a seat or body on my plan, I provide the ends of the side pieces A with tenons *e*, having holes *d* made transversely through them, as shown in Fig. 3, and then secure the side pieces in position so as to leave a small space between the tenons, on their adjacent ends, as shown in Fig. 2. I then provide two plates, C, of suitable size and form, and apply them, one against the in-

side, and the other around the outside of the corner, as shown in Fig. 2, so that they lap over on the ends of the side pieces A and inclose a space, *b*, surrounding the tenons. Into the space *b* I pour molten lead, zinc, or other soft metal, so as to surround and inclose the tenons and fill the holes *d* therein; and then, as soon as the metal becomes hard, I remove the plates C. The soft metal thus applied forms a strong, solid corner-piece, which holds the side pieces firmly and securely together. The corner-piece thus cast upon the wood is exceedingly cheap and strong, fits with perfect tightness and accuracy, and presents a very neat and finished appearance. It is obvious that the form of the tenons may be varied, that the corner-piece may be of a curved or an angular form, and that the plates C may be of any suitable material, the essential point being the casting of the metal upon the wood.

Having thus described my invention, what I claim is—

The corner-pieces for carriage seats or bodies, consisting of soft metal cast upon the adjoining ends of the pieces that form the seat or body, the ends being suitably recessed upon their outer faces, and having holes through which the metal can flow, whereby the parts are firmly united, all as set forth.

ERWIN ANDREWS.

Witnesses:

THOS. S. SPRAGUE,
MARTHA STEWART.