(No Model.)

E. W. M. HUGHES.

BOLSTER BEAM.

No. 423,476. Patented Mar. 18, 1890.

Fig. 1.

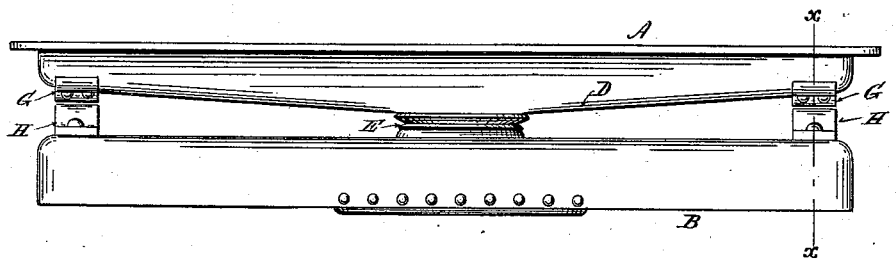


Fig. 2.

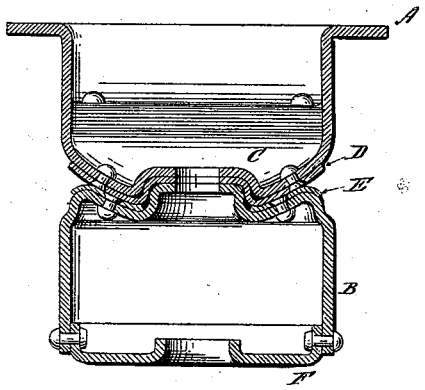
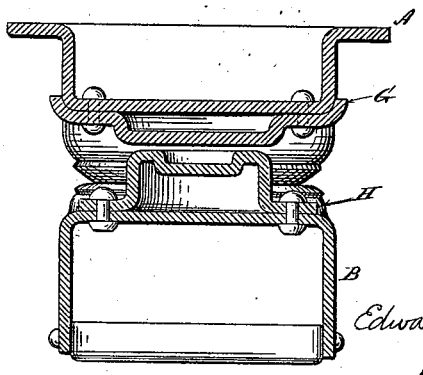


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD WILLIAM MACKENZIE-HUGHES, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE FOX SOLID PRESSED STEEL COMPANY, OF SAME PLACE.

BOLSTER-BEAM.

SPECIFICATION forming part of Letters Patent No. 423,476, dated March 18, 1890.

Application filed March 26, 1889. Serial No. 304,851. (No model.)

To all whom it may concern:

Be it known that I, EDWARD WILLIAM MACKENZIE-HUGHES, of Chicago, Cook county, Illinois, have invented a new and useful Improvement in Bolster-Beams, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

This invention relates to a combined bolster-beam and center plate and transom and center plate, and will be readily understood from the accompanying drawings, in which—

Figure 1 represents an elevation of my invention in position; Fig. 2, a transverse central section through the same, and Fig. 3, a section through Fig. 1 on the line *x x*.

In my drawings, A represents the bolster, and B the transom. These are made of pressed steel of the general shape indicated. The bolster A in the process of pressing is shaped so as to have a center plate C, with an opening therethrough, formed of the body of the metal itself, and the transom B has a similar re-entering part fitting the center plate of the part A, pressed in the operation of making the same. Openings for the passage of the king-bolt are provided through these parts. In addition pressed-steel wearing-plates D E are provided, attached to the parts A and B and taking up any wear at those points. The transom B may be strengthened at the bottom by transverse plate F, if desired, and bearing parts G H, likewise of pressed steel, may be attached to the ends of the transom and beam, as shown. These parts are all made by preference of pressed steel of the shape shown, and the parts D, E, G, and H are made to fit the shapes of the parts A and B, as indicated.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A pressed-steel bolster having a central dish-shaped projection integral therewith, substantially as described.

2. A pressed-steel transom having an upper hollow space, and a central circular wearing-plate formed integral therewith and pressed into the steel in the process of manufacture, substantially as described.

3. The combination of a bolster-beam and transom, each being hollow and having center plates pressed therein in process of manufacture, substantially as described.

4. The combination of the beam A, wearing-piece D, transom B, and wearing-piece E, all of pressed steel and fitted to each other in process of manufacture, substantially as described.

5. The combination of the bolster A and transom B, each having re-entering projections pressed therein in process of manufacture, and the parts G and H, engaging with each other, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

E. W. M. HUGHES.

Witnesses:
W. S. HARTWELL,
WM. VOSS.