(No Model.)

H. H. HEWITT.

METHOD OF MAKING SIDE FRAMES FOR CAR TRUCKS.

No. 571,525. Patented Nov. 17, 1896.

Fig. 1.

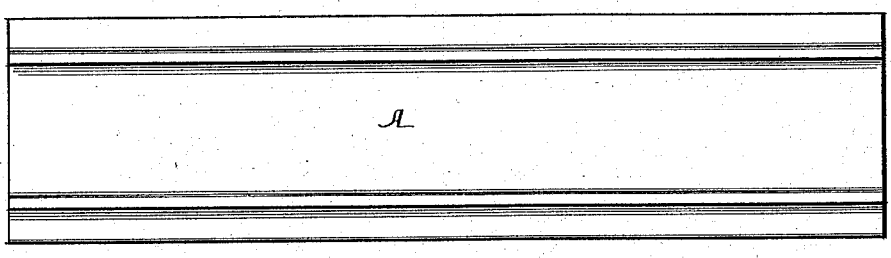


Fig. 2

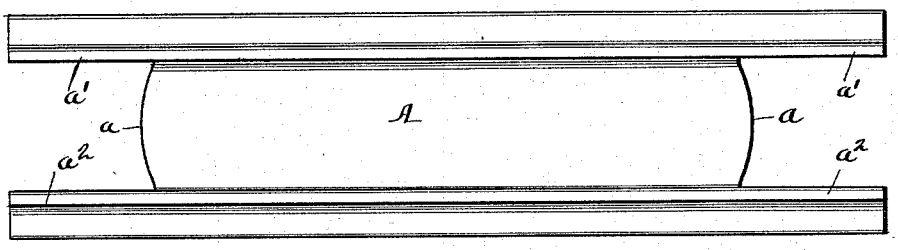


Fig. 3

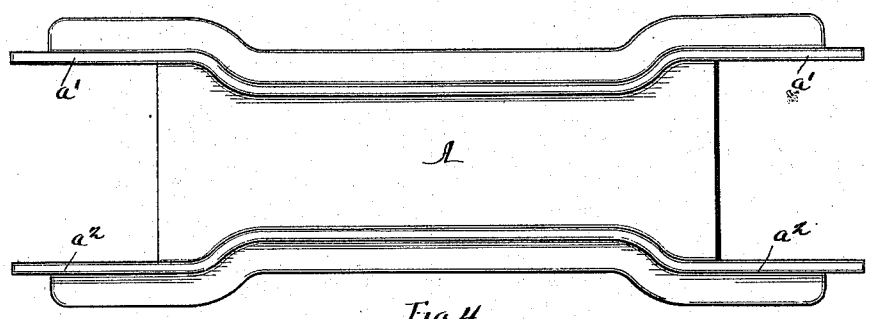
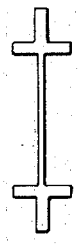


Fig. 4



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UNITED STATES PATENT OFFICE.

HERBERT H. HEWITT, OF BUFFALO, NEW YORK.

METHOD OF MAKING SIDE FRAMES FOR CAR-TRUCKS.

SPECIFICATION forming part of Letters Patent No. 571,525, dated November 17, 1896.

Application filed October 5, 1896. Serial No. 607,939. (No model.)

To all whom it may concern:

Be it known that I, HERBERT H. HEWITT, a citizen of the United States, and a resident of the city of Buffalo, in the county of Erie, in the State of New York, have invented certain new and useful Improvements in Methods of Making Side Frames for Car-Trucks, of which I do declare the following to be a full, clear, and exact description, sufficient to enable others skilled in the art to practice my invention.

The present invention has for its object to provide an improved method of making a side frame of the type set forth in an application for Letters Patent filed by me in the United States Patent Office September 3, 1896, Serial No. 604,812.

The side-frame to which my invention especially applies is rolled from a single plate girder or beam with its edges thickened, preferably by lateral flanges and reinforce-ribs, and the end portions of the end or body are thereafter cut away, leaving the thickened or flanged edges of the side frame projecting at its ends. The projecting end portions of the side frame are thereafter bent outwardly or expanded and at the same time the uncut end portions of the web or body are stretched so as to afford an integral connection between the inner portions of the bent thickened edges of the side frame. If the ends of the web or body are cut away upon a straight line between its thickened edges, then when the thickened or flanged edges of the end portions are bent outwardly and the uncut ends of the web or body between such bent portions are stretched the metal of the web or body at such points will by the stretching operation be reduced in thickness beyond the thickness of the remainder of the body or web of the side frame. In order to guard against any material reduction in the thickness of the uncut ends of the web or body during the stretching operation, I provide an excess of metal at such points, such excess of metal projecting beyond a straight line drawn between the thickened edges of the side frame at the ends of the web or body. By this means it will be seen that as the uncut ends of the web or body are stretched at the time the adjacent thickened edges or flanged portions are bent outward, the excess metal will compensate for the stretching of the uncut ends of the web or body, and consequently any material reduction in thickness of such portions of the web or body will be avoided.

Figure 1 is a view in side elevation of the rolled plate girder or beam before the end portions of the web or body have been cut away. Fig. 2 is a view in side elevation after the end portions of the web or body have been removed to form the spaces for the pedestals. Fig. 3 is a side view of the finished side frame. Fig. 4 is an end view of the beam shown in Fig. 1.

After the plate girder or beam has been rolled to the shape shown in Fig. 1 the end portions of the web or body A will be cut away, leaving the thickened or flanged portions of the web or body projecting, as at a' and a^2, at each end. By reference to Fig. 2 it will be seen that the end portions of the web or body A are cut away upon the curved lines a, so as to leave an excess of metal at such points. Hence as the projecting end portions a' a^2 of the side frame are bent outwardly, as shown in Fig. 3, the excess metal at the ends of the web or body A will wholly or in great part compensate for the stretching of the end portions of the web or body as the thickened portions of the side frame are thus bent outward. Consequently when the end portions of the web or body are stretched to the required extent they will be but little if any thinner than the unstretched portions of the web or body. In this way uniformity of strength is given to the side frame and all danger of materially weakening the end portions of the web or body, which points are subjected to great strain, is avoided.

I claim—

That improvement in the art of forming a metallic side frame for car-trucks that consists in rolling a plate girder or beam with thickened or flanged edges thereafter cutting away the end portions of the web or body of the girder or beam in such manner as to leave an excess of metal at the ends of the web of

said girder or beam, and thereafter expanding the thickened or flanged edges (one or both) of said girder or beam and stretching in vertical direction the uncut end portions of the web or body, whereby the ends of said body are made broader than its central portion and whereby the excess metal at the ends of the web or body will permit such parts being unduly reduced in thickness, substantially as set forth.

HERBERT H. HEWITT.

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