(No Model.)

H. H. HEWITT.

SIDE FRAME FOR CAR TRUCKS.

No. 571,523. Patented Nov. 17, 1896.

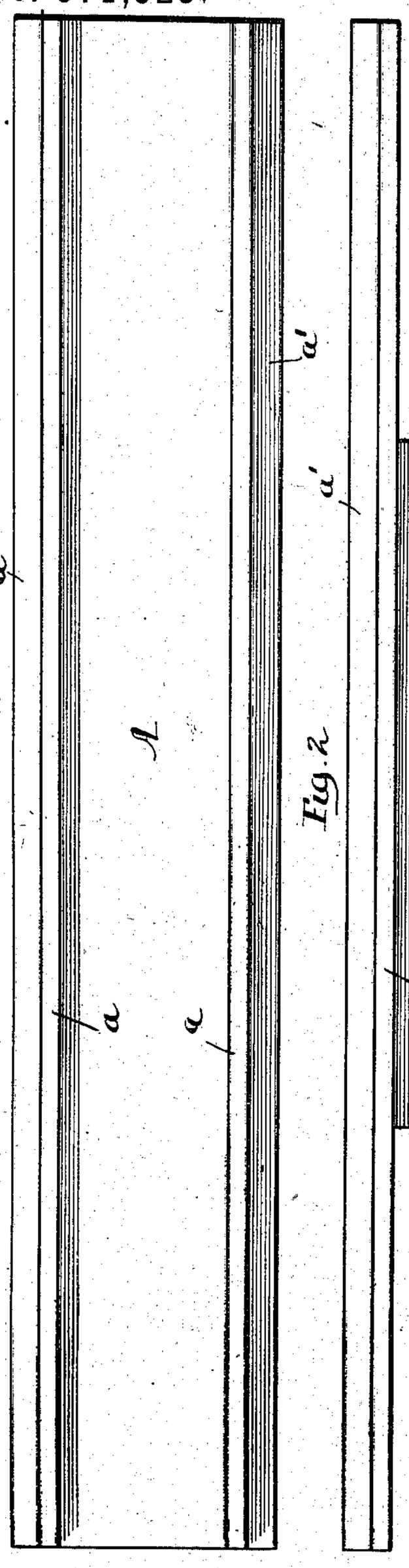

Fig. 1.

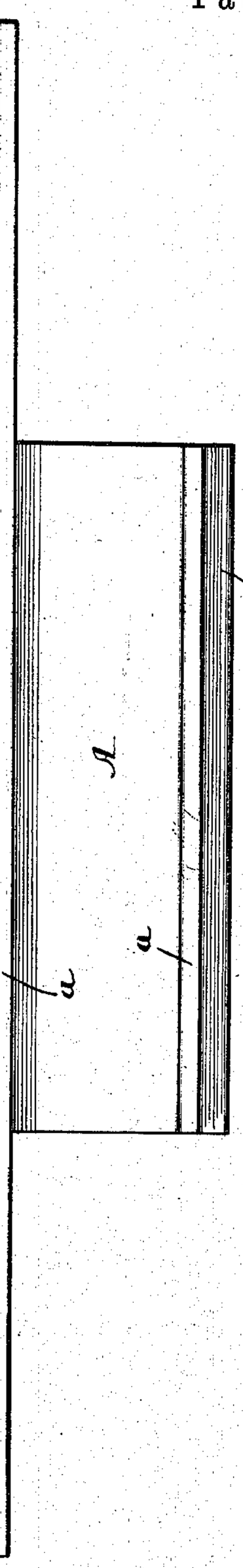

Fig. 2.

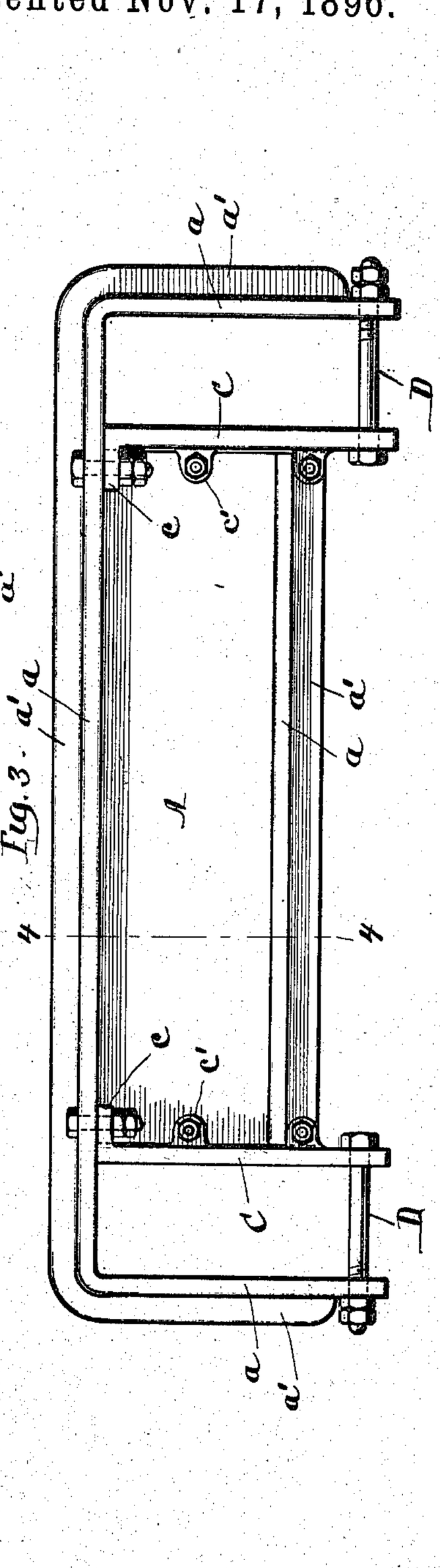

Fig. 3.

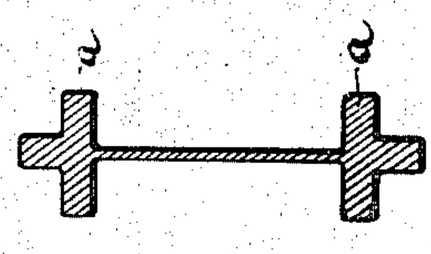

Fig. 4.

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UNITED STATES PATENT OFFICE.

HERBERT H. HEWITT, OF BUFFALO, NEW YORK.

SIDE FRAME FOR CAR-TRUCKS.

SPECIFICATION forming part of Letters Patent No. 571,523, dated November 17, 1896.

Application filed September 3, 1896. Serial No. 604,813. (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 and State of New York, have invented certain new and useful Improvements in Side Frames for Car-Trucks, of which I do declare the following to be a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

In an application for Letters Patent filed by me of even date herewith I have set forth and claimed an improved method of manufacturing the metallic side frames for car-trucks from flanged plate girders or beams by rolling a plate girder or beam with central web and with top and bottom flanges and thereafter bending the flanged ends of the beam to form the necessary spaces to receive the axle-boxes, springs, &c., and in such application I have also described and claimed one form of side frame made in accordance with such improved method. The side frame comprising the subject-matter of my present invention is also formed by rolling a flanged plate girder or beam and thereafter bending the flanged ends of the beam; but in the present invention the plate girder or beam that comprises the side frame has its flanged ends projecting beyond the body of the web at the top of the girder or beam only, and these flanged ends of the girder or beam are extended outwardly and bent downwardly, so as to form spaces open at their bottoms, wherein the axle-boxes, springs, &c., will be retained.

This invention consists in the metallic side frame for car-trucks hereinafter described, illustrated in the accompanying drawings, and defined in the claims at the end of the specification.

Figure 1 is a view in side elevation of a plate girder or beam from which my improved side frame will be formed. Fig. 2 is a view similar to Fig. 1, but showing the end portions of the web cut away. Fig. 3 is a view in side elevation of the side frame ready to receive the axle-boxes, springs, &c. Fig. 4 is a view in vertical cross-section on line 4 4 of Fig. 3.

A designates the web of the plate girder or beam, the top and botom of which are shown as provided with lateral flanges *a* and with vertical reinforce-ribs *a'*, located outside of said lateral flanges, said flanges and ribs being considerably thicker than the web of the beam. After the plate girder or beam has been rolled preferably to the shape shown in Fig. 1 the end portions of the web A, below the flanged upper edge, will be completely cut away, as seen in Fig. 2. After the plate girder or beam has been brought to the shape shown in Fig. 2 the projecting flanged ends will be bent downwardly at substantially right angles to the length of the beam, as shown in Fig. 3, thereby forming the open bottom spaces to receive the pedestal-jaws C, the axle-boxes, coil-springs, &c. Preferably the pedestal-jaws C will be formed with the flanges *c* at their upper ends, whereby they will be bolted to the lateral flanges *a* above the web A, and the pedestal-jaws C are formed also with flanges *c'*, that embrace the ends of the web A and are bolted or riveted thereto. Through the lower ends of the pedestal-jaws C and through the lower downwardly bent ends of the flanges *a* pass the pedestal-bolts D in the usual manner.

From the foregoing description it will be seen that by my present invention I have produced a side frame for car-trucks that can be conveniently rolled, and in the process of rolling any desired degree of thickness may be given to the lateral flanges and vertical ribs irrespective of the thickness of the web of the girder or beam. By this means the metal whereof the side frame is composed can be disposed in most effective manner for resisting the strains and thrusts to which the frame is subjected, and by cutting away the web and lower flanges of the girder or beam adjacent its ends and by extending outward and bending downward the upper flanges and ribs, as shown, the necessary spaces for the reception of the axle-boxes can be cheaply and readily formed, these spaces being open at their bottoms for the removal of the axle-boxes, &c., when required. The flanges *a* and rib *a'* at the upper edge of the beam constitute the thrust member and can be made of any required thickness necessary to resist the strains to which the side frame will be subjected, and by cutting away the ends of the beam beneath this thrust member such member is brought more closely to the point of thrust.

I do not wish to be understood as claiming in this application the method of forming the side frame, as such method is clearly defined in the application filed by me of even date herewith, Serial No. 604,812. Nor do I wish to be understood as claiming in the present case any subject-matter set forth in said companion application.

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

1. A side frame for car-trucks formed from a single rolled-plate girder or beam having a thin web or body and having an under flanged edge, the upper portion of the plate girder or beam being cut away below said flanged edge and completely through the bottom, said flanged upper edge being bent down to form the outer pedestals, the space between the pedestal-jaws being open at the bottom for the withdrawal of the journal-boxes, substantially as described.

2. A side frame for car-trucks formed from a single rolled-plate girder or beam having a thin web or body and having at its top and bottom edges laterally-projecting flanges a and reinforce-ribs a' outside of said flanges, said lateral flanges and reinforce-ribs at the upper edges of the web being projected beyond said web and bent downwardly to form open-bottom spaces for the axle-boxes, &c., substantially as described.

HERBERT H. HEWITT.

Witnesses:
GEO. P. FISHER, JR.,
ALBERTA ADAMICK.

Corrections in Letters Patent No. 571,523.

It is hereby certified that in Letters Patent No. 571,523, granted November 17, 1896, upon the application of Herbert H. Hewitt, of Buffalo, New York, for an improvement in "Side Frames for Car-Trucks," errors appear in the printed specification requiring correction as follows: In line 14, page 2, the word "under" should read *upper*, and in line 15, same page, the word "upper" should read *under;* and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 22d day of December, A. D., 1896.

[SEAL.]

JNO. M. REYNOLDS,
Assistant Secretary of the Interior.

Countersigned:

JOHN S. SEYMOUR,
Commissioner of Patents.