J. H. BAKER.

SIDE FRAME FOR CAR TRUCKS.

APPLICATION FILED SEPT. 8, 1908.

919,677.

Patented Apr. 27, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

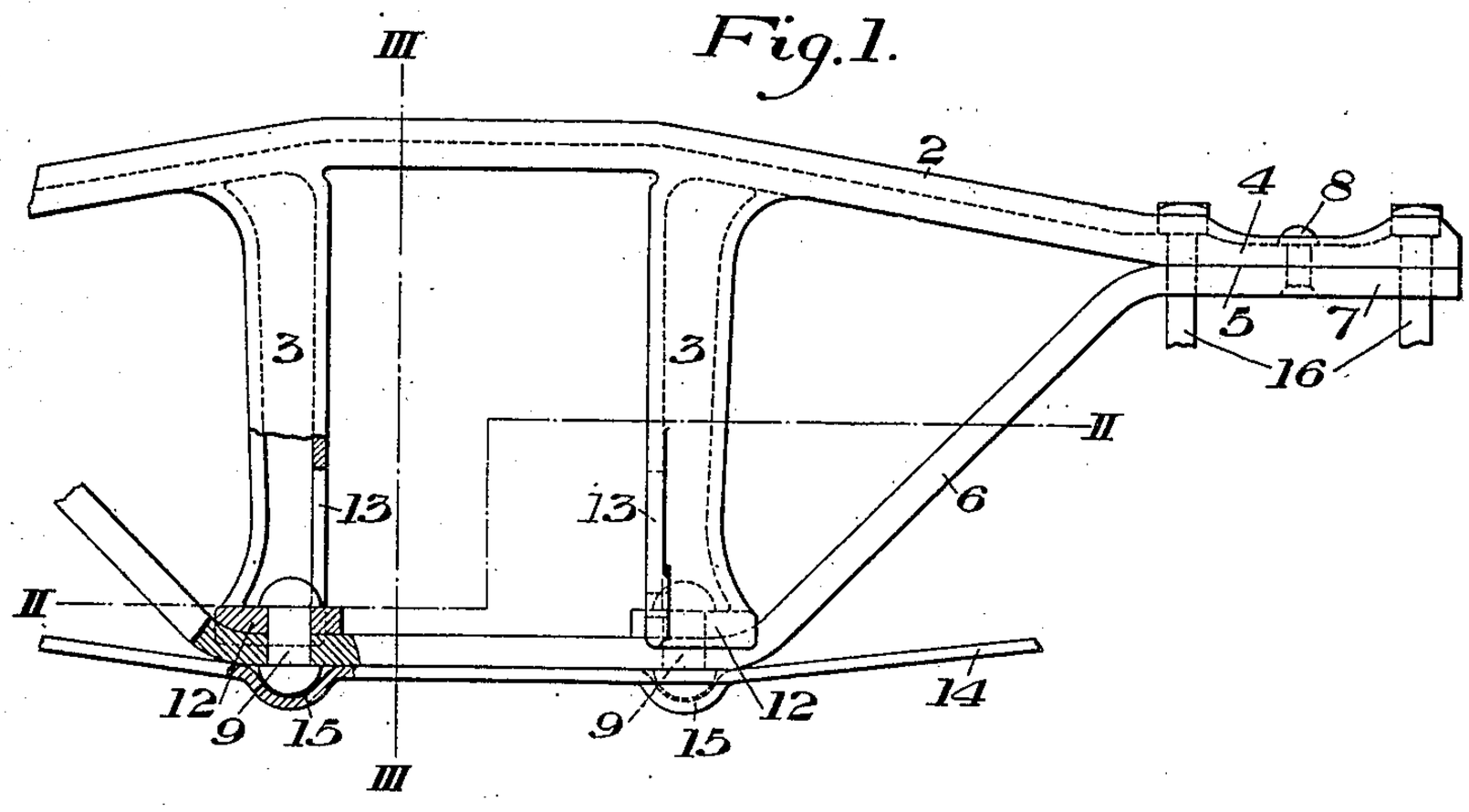


Fig. 2.

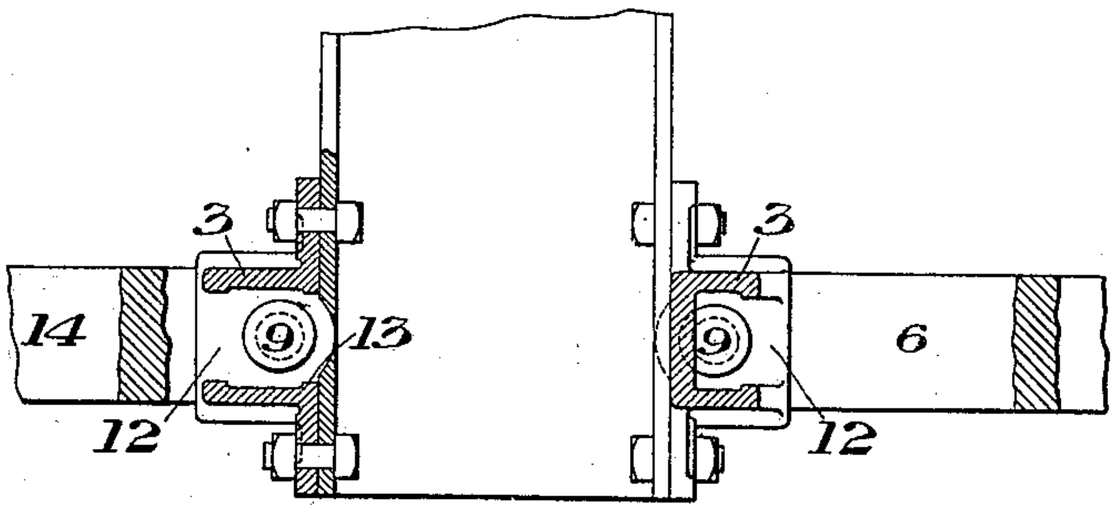
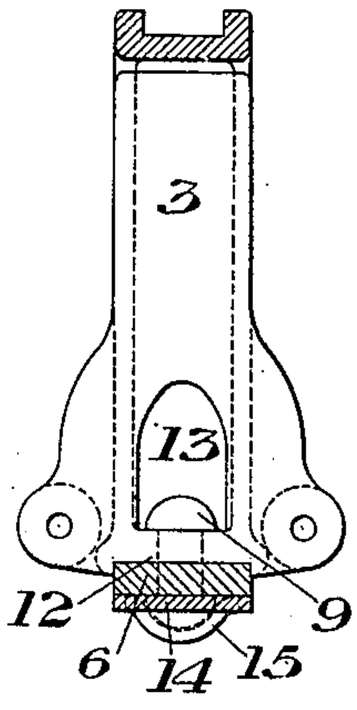


Fig. 3.



WITNESSES

W. W. Swartz

R. A. Balderson.

INVENTOR

Jas. H. Baker,

by Bakewell, Byrnes & Parmelee,

his Attys

J. H. BAKER.

SIDE FRAME FOR CAR TRUCKS.

APPLICATION FILED SEPT. 8, 1908.

919,677.

Patented Apr. 27, 1909.

2 SHEETS—SHEET 2.

Fig. 4.

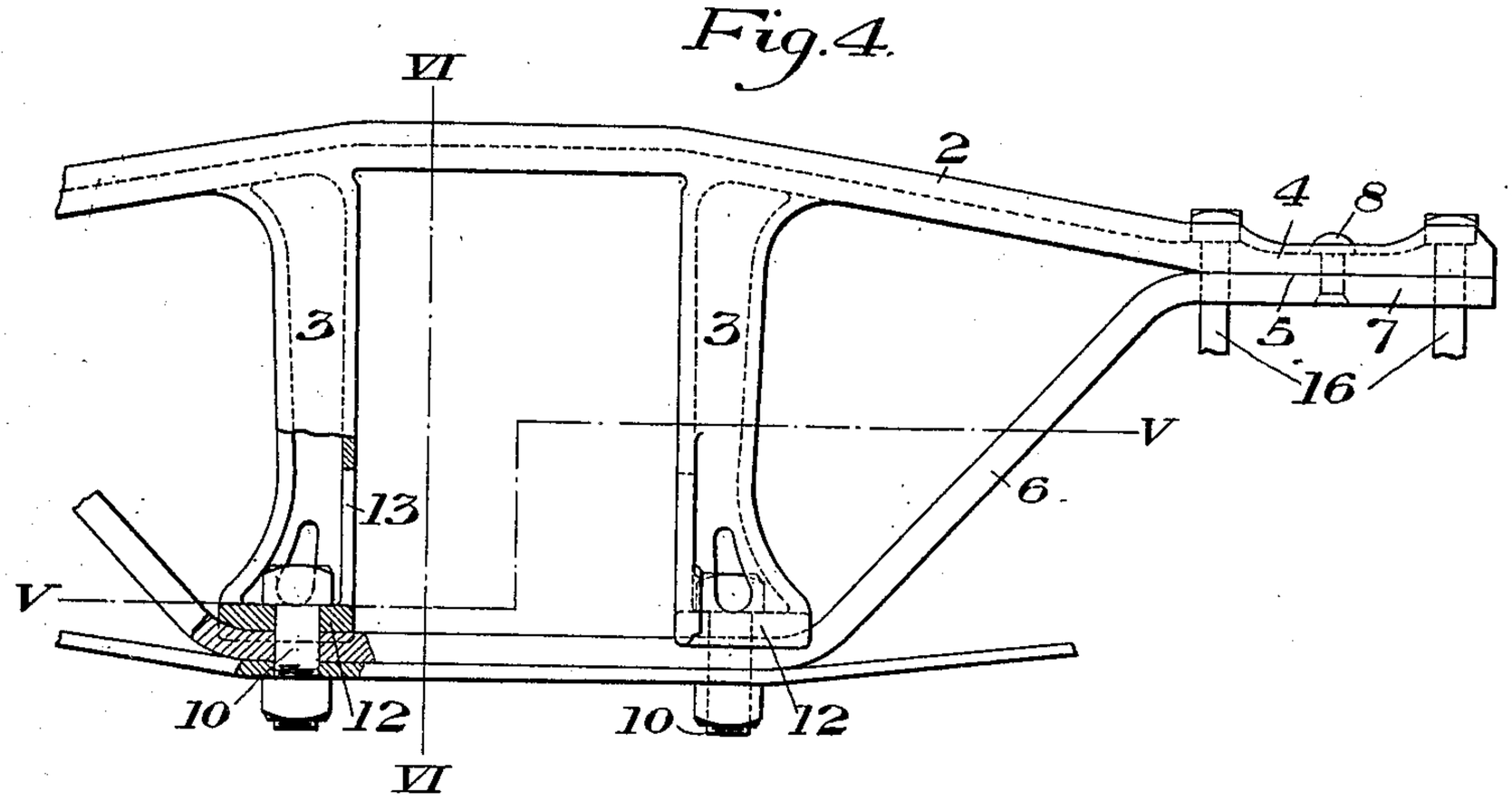


Fig. 5.

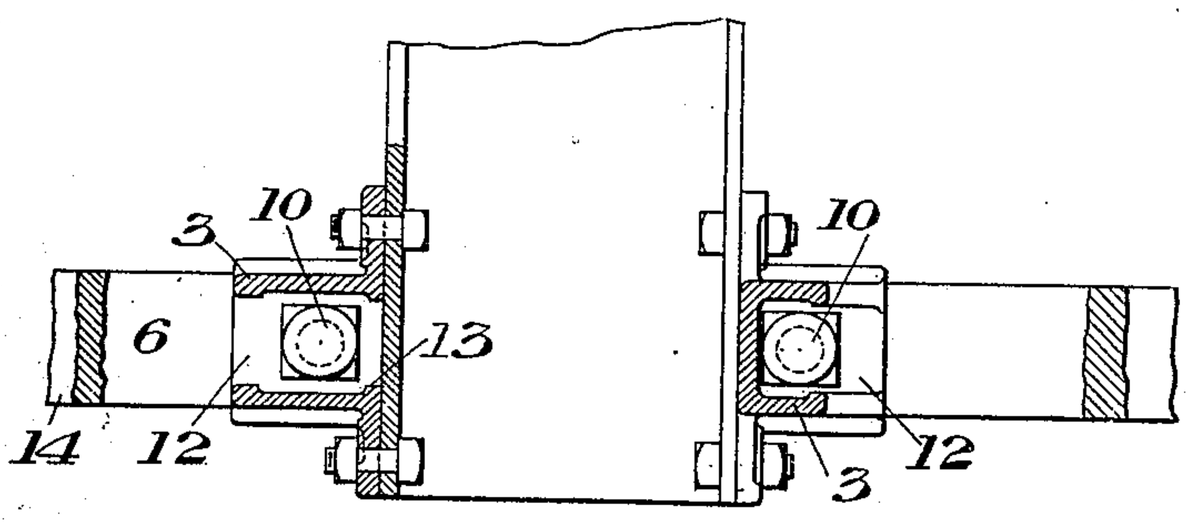
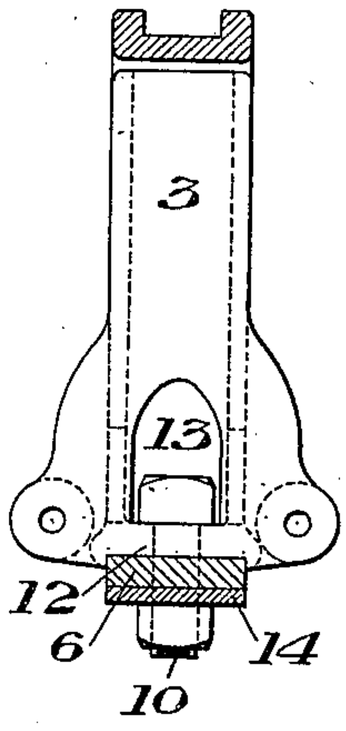


Fig. 6.



WITNESSES

W. W. Swartz

R. A. Balderson.

INVENTOR

Jas. H. Baker,

by Bakewell, Byrnes & Parmelee,

his Attys.

UNITED STATES PATENT OFFICE.

JAMES H. BAKER, OF PITTSBURG, PENNSYLVANIA.

SIDE FRAME FOR CAR-TRUCKS.

No. 919,677. Specification of Letters Patent. Patented April 27, 1909.

Application filed September 8, 1908. Serial No. 451,977.

To all whom it may concern:

Be it known that I, JAMES H. BAKER, of Pittsburg, Allegheny county, Pennsylvania, have invented a new and useful Improvement in Side Frames for Car-Trucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation partly in section; Fig. 2 is a horizontal section on the irregular line II—II of Fig. 1; Fig. 3 is a vertical cross section on the line III—III of Fig. 1; Fig. 4 is a side elevation similar to Fig. 1 showing a modification; Fig. 5 is a horizontal section on the irregular line V—V of Fig. 4; and Fig. 6 is a vertical cross section on the line VI—VI of Fig. 4.

My invention has relation to side frames for car trucks, and is designed to provide a simple and strong frame which can be readily and cheaply manufactured, the main or compression member of the frame including the columns being formed by a steel casting, and the tension member being separately formed of wrought or cast metal.

The precise nature of my invention will be best understood by reference to the accompanying drawings, which will now be described, it being premised, however, that various changes may be made in the details of construction by those skilled in the art without departing from my invention as defined in the appended claims.

Referring to these drawings, the numeral 2 designates the main or compression member of the side frame, which in accordance with my invention is, together with the bolster guides or columns 3, formed in an integral steel casting the end portions of said member being extended as shown at 4 and provided with under surfaces 5 forming seats to which are secured the end portions of the bent tension member 6, which is preferably of wrought metal. The end portions 7 of the tension member are secured to the portions 4 of the compression member by one or more rivets 8, and the central portion of the tension member is secured to the lower ends of the columns 3, either by the rivets 9, as shown in Figs. 2 and 3 or by the bolts 10, as shown in Fig. 4. The lower ends of the columns 3 are formed with the seats 12 to receive the tension member and prevent any lateral movement thereof, thus relieving the rivets 9 or bolts 10 of lateral shearing strains.

The columns are formed with the slots or openings 13, extending therethrough, and into which the bolts 9 or rivets 10 can be inserted.

14 designates the usual tie bar. Where rivets 9 are employed for securing the tension members to the columns, these tie bars are provided with the seats 15 for the rivet heads, and where the bolts 10 are employed, these bolts preferably extend through the tie bars.

16 designates the journal box bolts, which extend downwardly through the connected end portions of the tension and compression members of the frame. By the provision of the rivets 8, which are preferably seated before the holes for the journal box bolts are formed, the bolt holes in the tension and compression members for these bolts can be formed in accurate alinement so that there will be no initial lost motion on the bolts 16, and these bolts can be made to have practically a driving fit with the bolt holes.

The advantages of my invention will be apparent to those skilled in the art, since it provides a strong and rigid truck frame which can be readily and cheaply manufactured. The compression members and columns, in the form shown, can be readily cast in one integral piece, and the tension member made of a separate piece and readily secured thereto. This form gives all the flexibility of the well known standard wrought diamond side frame with less weight, and the advantage over it of being shipped and attached to the other parts of the truck as a unit.

I do not wish to limit my self to the precise form of the compression member shown, since this may be cast in any suitable form to give a maximum amount of metal, and the tension member may be secured thereto in various ways.

I claim:—

1. A side frame for car trucks, comprising a cast metal compression member having bolster guides or columns cast integral therewith, and a separate tension member secured at its ends to the compression member and at its central portion to the said guides or columns; substantially as described.

2. A side frame for car trucks, having a cast compression member formed at its end portions with seats and securing means for the end portions of a separate tension member, and having integral bolster guides or columns, said guides or columns having

means at their lower ends for seating and securing the tension member; substantially as described.

3. A side frame for car trucks, consisting of a cast compression member having integral bolster guides or columns, formed with seats at their lower ends for a tension member, and with slots or openings through which fastening means for the tension member can be inserted; substantially as described.

4. A side frame for car trucks, consisting of a compression member having straight end portions, integral bolster guides or columns, and a separate tension member having straight end portions fitted and secured to the straight end portions of the compression member, and a central portion secured to the guides or columns; substantially as described.

5. A side frame for car trucks, consisting of a cast compression member having integral bolster guides or columns, of a wrought metal tension member having its end portions rigidly secured to the end portions of the compression member by means independent of the journal box bolts, said tension member being also secured at its central portion to the bolster guides or columns; substantially as described.

6. A side frame for car trucks, having a compression member formed with integral bolster guides or columns, said bolster guides or columns having fastening seats at their lower ends, and slots giving access to said seats; substantially as described.

7. A side frame for car trucks, having a compression member formed with intergral guides or columns having fastening seats within their lower ends, a tension member, and fastening means securing the tension member to said guides or columns; substantially as described.

In testimony whereof, I have hereunto set my hand.

JAMES H. BAKER.

Witnesses:
GEO. B. BLEMING,
GEO. H. PARMELEE.