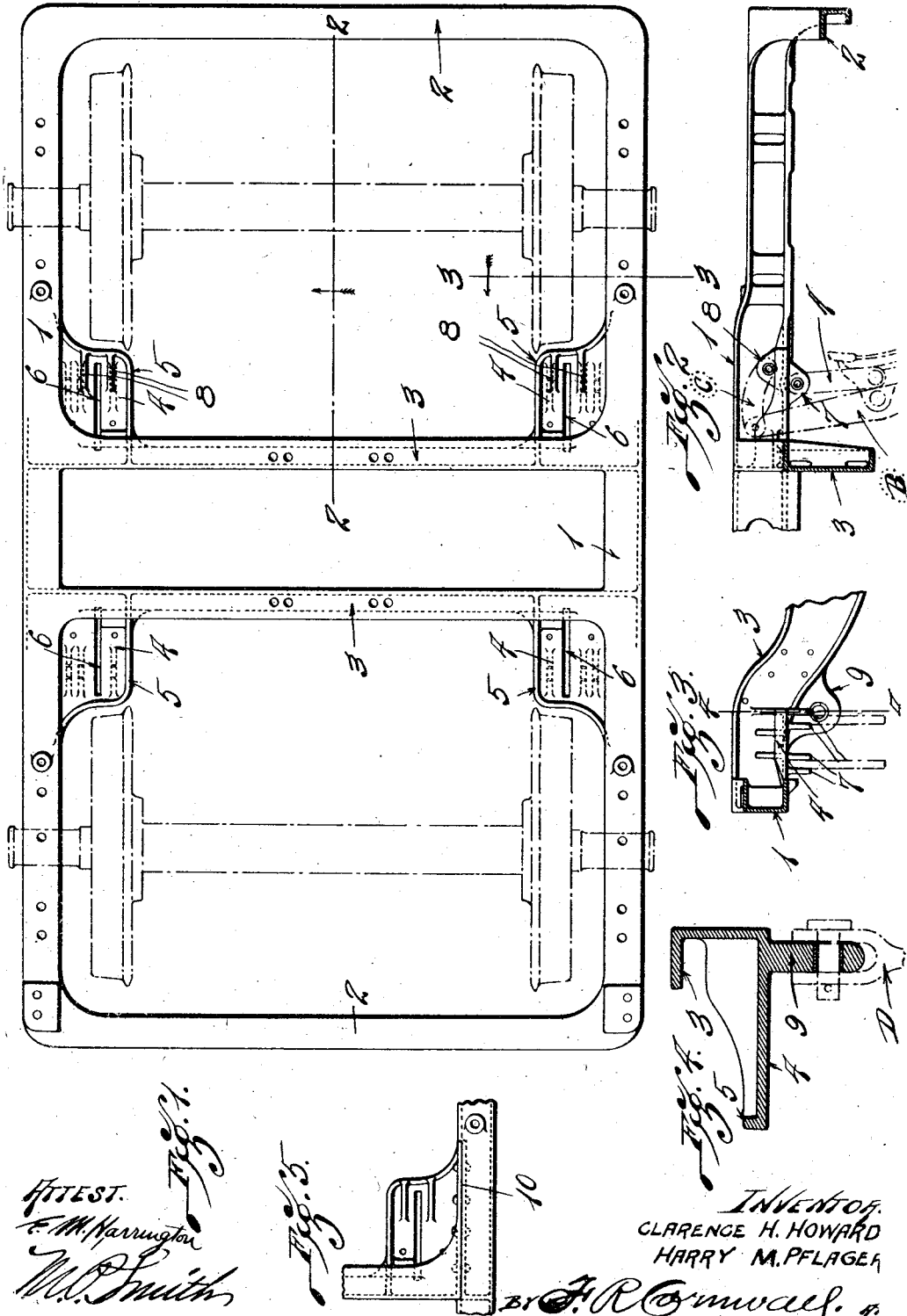


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CAR TRUCK FRAME.
APPLICATION FILED DEC. 13, 1911.

1,052,922.

Patented Feb. 11, 1913.



WITNESSES.

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UNITED STATES PATENT OFFICE.

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TO DOUBLE BODY BOLSTER COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF
NEW JERSEY.

CAR-TRUCK FRAME.

1,052,922.

Specification of Letters Patent.

Patented Feb. 11, 1913.

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To all whom it may concern:

Be it known that we, CLARENCE H. HOWARD and HARRY M. PFLAGER, citizens of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Car-Truck Frames, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a truck frame of our improved construction. Fig. 2 is a section taken on the line 2—2 of Fig. 1. Fig. 3 is a detail section taken on the line 3—3 of Fig. 1. Fig. 4 is an enlarged cross-section taken on the line 4—4 of Fig. 3. Fig. 5 is a detail plan view of a modified construction wherein the transoms are formed separate from the side rails or wheel pieces of the frame.

Our invention relates generally to that type of car truck frames which are cast or formed in a single piece, and the objects of our invention are to construct a strong, rigid and durable truck frame in one piece, to form gusset plates between the end portions of the lower flanges of the transoms and the side rails or wheel pieces and to form on said gussets, brackets which serve as bearings for parts of the brake rigging.

To the above purpose our invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described and claimed.

In the drawings we have illustrated the frame of a four wheel truck and this frame comprises the side or wheel pieces 1, end rails 2 and transoms 3, all of which parts are preferably cast integral. The transoms 3 are preferably channel-shape in cross-section and formed integral with the bottom flanges of said transoms at the ends thereof and with the adjacent portions of the bottom flanges of the wheel pieces 1, are horizontally disposed gusset plates 4 which are practically continuous of the bottom flanges of said wheel pieces and transoms and formed integral with the edges of these gusset plates are vertically disposed strengthening flanges 5. Formed in the gusset plates 4 are slots 6 which occupy positions parallel with the wheel pieces 1 and said slots are adapted to receive the upper portions of ver-

tically disposed brake-levers B forming a part of the brake-rigging. Formed integral with the underside of each gusset plate and on both sides of the slot therein are pairs of depending lugs or brackets which are perforated so as to receive horizontally disposed pins from which the brake-head hangers A are suspended. Formed integral with the top sides of the gusset plates of one of the transoms and on opposite sides of the slot 6 therein, are upwardly projecting lugs or brackets 8 which are perforated so as to receive the pins forming the fulcrums for the dead-levers C of the brake-rigging. Formed integral with the undersides of the end portions of the transoms 3 and depending therefrom, are lugs or brackets 9 from which are suspended the swing-hangers D which support the spring-plank.

It will be noted in our improved construction that the gusset plates in addition to providing a strong, rigid construction between the ends of the transoms and the side pieces of the truck frame, provide means for supporting and connecting parts of the brake-gearing such as the brake-head hangers and the dead-levers and the slots formed in said gusset plates, form guides for the upper portions of the brake-levers which connect the dead levers with the brake-heads.

In Fig. 5 we have shown a modified construction wherein the transoms and gusset plates are formed integral and separate from the truck frame and where such construction is employed, the inner faces of the side or wheel pieces of the truck frame are recessed as designated by 10, Fig. 5, in order to receive the end portions of the transoms and the parts are united by means of rivets or like fastening devices.

A car truck frame of our improved construction is comparatively simple, can be easily and cheaply manufactured and the bearings and supports for certain parts of the brake-rigging are conveniently located on gusset plates located at the ends of the transoms and which gusset plates are continuations of the bottom flanges of the transoms and wheel pieces and therefore serve as strengthening members between said transoms and the side or wheel pieces.

It will be readily understood that minor changes in the size, form and construction of the various parts of our improved truck frame can be readily made and substituted

for those herein shown and described without departing from the spirit of our invention, the scope of which is set forth in the appended claims.

5 We claim:—

1. In a car truck frame a transom having an integral gusset plate in which is formed a slot adapted to receive and form a bearing for a brake-lever and brake lever lugs on
10 said gusset plate.

2. The combination with a one piece cast metal truck frame comprising wheel pieces, end rails and transoms, of plates arranged between the end portions of the transoms and the adjacent portions of the wheel pieces
15 of said frame, brake lever lugs integral with said plates, pairs of brake hanger lugs integral with said plates, and each of which plates is provided with a slot adapted to receive and form a bearing for a brake lever.
20

3. In a car truck frame a transom having an integral gusset plate in which is formed a slot adapted to receive and form a bearing for a lever of the brake-rigging, brake-hanger lugs and brake-lever fulcrum lugs
25 integral with said gusset plate.

4. In a car truck frame the combination with a transom, of gusset plates integral with the ends thereof, swing hanger lugs
30 integral with and depending from the end portions of said transoms and brake-hanger lugs and brake-lever fulcrum lugs integral with the gusset plates.

5. In a car truck frame a transom, swing hanger lugs integral therewith, gusset plates
35 integral with the ends of said transom in which gusset plates are formed slots adapted to receive and form bearings for brake-rigging levers and brake-hanger lugs and brake-lever fulcrum lugs integral with the
40 gusset plates.

6. In a car truck frame the combination with wheel pieces, of transoms integral therewith, gusset plates integral with said
45 transoms and wheel pieces and which gusset plates are provided with slots adapted to receive and form bearings for brake-rigging levers.

7. In a car truck frame the combination
50 with wheel pieces, of transoms integral with said wheel pieces, slotted gusset plates integral with said transoms and wheel pieces and brake-hanger lugs and brake-lever fulcrum lugs integral with said slotted gusset
55 plates.

8. In a car truck frame the combination with wheel pieces, of transoms integral with said wheel pieces, slotted gusset plates integral with said transoms and wheel pieces, brake-hanger lugs integral with said slotted
60 gusset plates and swing-hanger brackets integral with and depending from said transoms.

9. In a car truck frame the combination with wheel pieces and transoms, of gusset
65 plates between the end portions of the transoms and said wheel pieces, which gusset plates are slotted to receive brake levers and brake-hanger lugs and brake-lever fulcrum lugs integral with said gusset plates.
70

10. In a car truck frame a transom having a bottom flange, gusset plates integral with
75 said bottom flange at the ends of the transom which gusset plates are continuations of said bottom flange and are slotted to form bearings for brake levers.

11. In a car truck a transom having a bottom flange, gusset plates at the ends of
80 said transom, which gusset plates are continuations of the bottom flange and are provided with slots adapted to receive brake levers and brake hanger lugs and brake lever fulcrum lugs on the gusset plates.

12. In a car truck frame the combination with wheel pieces, of a transom integral
85 with said wheel pieces, which transom is provided with a bottom flange and gusset plates between the ends of the transom and the wheel pieces, which gusset plates are continuations of the bottom flange of the
90 transom and are provided with bearings for brake levers and brake hangers.

13. In a car truck frame, a transom having a gusset plate cast integral therewith,
95 said gusset plate having integral brake hanger and brake lever fulcrum lugs.

14. In a car truck frame, a transom which is substantially channel-shaped in cross section, gusset plates integral with the end
100 portions of the bottom flange of said transom, and brake lever fulcrum lugs and brake hanger lugs integral with said gusset plates.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses, this 2nd day of December, 1911.

CLARENCE H. HOWARD.

H. M. PFLAGER.

Witnesses:

C. T. WESTLAKE,

HAL C. BELLVILLE.