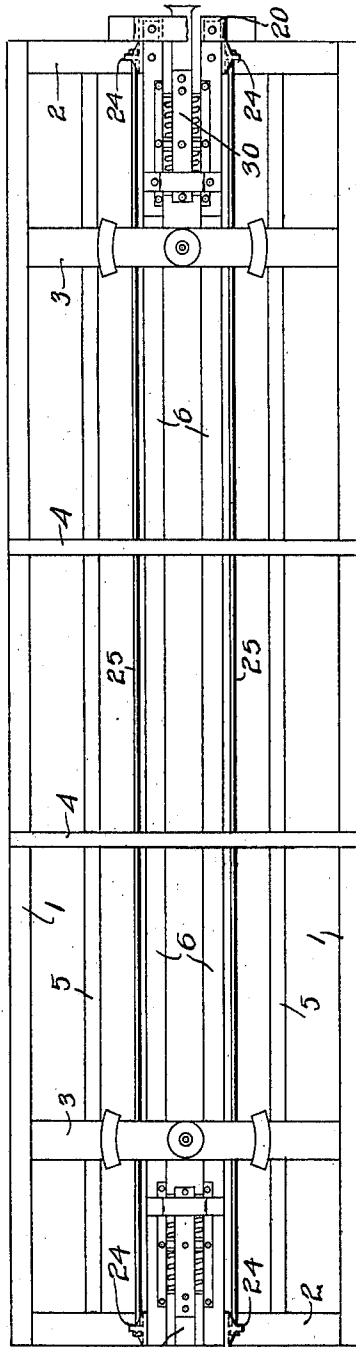


C. H. SEABROOK & W. R. DUFF.
DRAFT CONSTRUCTION FOR FRAME RAILWAY CARS.
APPLICATION FILED MAY 23, 1910.

990,013.

Patented Apr. 18, 1911.

Fig. 1.



Witnesses

C. H. Reinhardt.
L. A. Price.

Fig. 4.

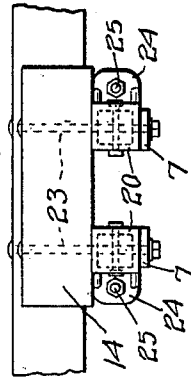


Fig. 2.

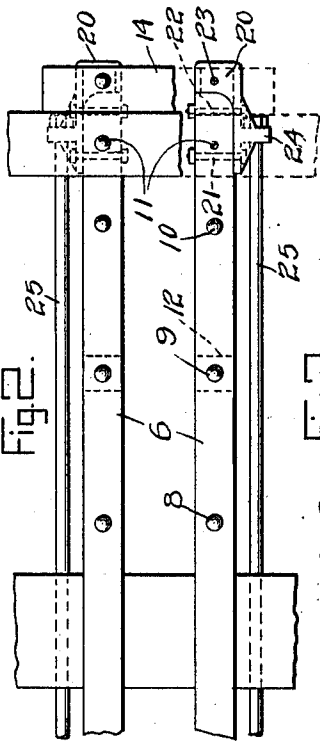
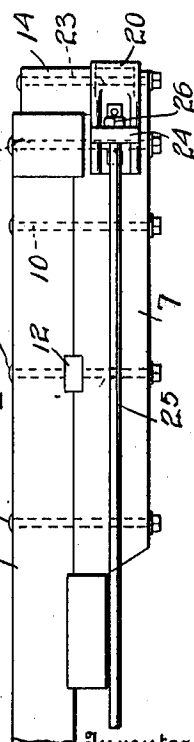


Fig. 3.



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DRAFT CONSTRUCTION FOR FRAME RAILWAY-CARS.

990,013.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed May 23, 1910. Serial No. 562,945.

To all whom it may concern:

Be it known that we, CHARLES HENRY SEABROOK and WILLIAM RANDOLPH DUFF, citizens of the United States, residing at Teague, in the county of Freestone and State of Texas, have invented certain new and useful Improvements in Draft Construction for Frame Railway-Cars, of which the following is a specification.

Much difficulty is experienced in the use of wooden frame freight cars on account of the breaking of the draft sills, and the splitting and spreading of the ends thereof, caused by the great strain and rough usage incident to the handling of the excessively long trains and heavy loads common in modern railroading.

The object of our said invention is to provide a construction and arrangement of draft attachments for wooden, or frame, railway cars, whereby these difficulties will be overcome, the breaking of draft sills, draft timbers, bolts, etc., will be avoided and, also, the ends of the draft timbers will be protected and reinforced to prevent them from splitting when pounded by contact with adjacent cars, during the operation of coupling, etc., all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is an underside plan view of the frame structure of the bottom of a wooden freight car, Fig. 2 a top or plan view of a section of the frame at one end, adjacent to the draft sills, Fig. 3 a side elevation of the same, and Fig. 4 a front elevation of the parts shown in Fig. 2.

The main features of the structure shown are substantially of the general form and arrangement common in this type of car construction, comprising the side sills 1, end cross timbers 2, bolsters 3, intermediate cross timbers 4, intermediate longitudinal timbers 5, draft sills 6 and draft timbers 7. These several parts are of suitable dimensions for the purpose and are framed and bolted together in the usual, or any approved manner.

The draft timbers 7 are secured on the underside of the draft sills 6 one at each end of each side by means of bolts 8, 9, 10 and 11 which pass through the same, a block, or key, 12 is preferably set into a mortise a part of which is cut in the sill and a part in the

draft timber, as best shown in Fig. 3 to inter-lock the timbers and take part of the strain from the bolts.

The outer end of each draft timber 7 is incased in a steel casting 20, which is of a form to receive and completely inclose said outer end. Said casting extends back on the outside face of said draft timber for a distance and is bolted thereto by means of transverse bolts 21 and 22. Vertical bolts 23 also extend through said castings and the ends of said timbers and also through a cross timber 14 connecting the outer ends of the draft timbers 7, outside of the end cross-timbers 2. Each of said castings 20 has an outwardly projecting wing 24 on its outer face securely braced and supported thereon by webs and ribs, as shown, and the casting 20 on the end of one draft timber is tied to the casting on the timber on the opposite end of each sill by rods 25, which extend from end to end of the car, through perforations in the wings 24, and are each formed with a head on one end and provided with a nut 26 on the other.

A coupler 30, of any approved form is secured between the draft timbers 7 in the usual, or any appropriate manner, and need not be particularly described herein. By this means the draft timbers on the opposite ends of the car are securely tied together through the castings 20 incasing their outer ends and the tie rods 25. The strain upon the draft sills 6 is thus largely taken by said rods 25 and the breaking of said sills, due to the great strain incident to the weight of very long trains, is prevented. The steel capped ends of the draft timbers also protect said ends against being split and spread by bumping against the adjacent cars during the process of coupling, or in starting and backing, as is common.

Having thus fully described our said invention, what we claim as new and desire to secure by Letters Patent, is:

A frame car structure having a bottom frame comprising draft sills extending from end to end of the car, end cross timbers, draft timbers secured on each end of said draft sills and extending beyond the end cross timbers of the car bottom frame, a cross timber connecting the ends of said draft timbers, a metal casting formed to incase the outer end of each of said draft timbers and mounted thereon each of said castings being formed with one side to extend back on the outside face of its draft timber and with an

outwardly projecting wing on its outside
face, transverse bolts extending through said
extension and the draft timber to secure it
thereto, other bolts extending vertically
5 through the cross timbers which connect the
outer ends of said draft timbers and also
through said castings and said draft tim-
bers, tie-rods extending from the metal cast-
ings on the outer end of one draft timber
10 to the metal casting on the outer end of the
draft timber at the opposite end of the car
and connected at each end to the outwardly
projecting wings of said respective castings,

and a coupling part mounted between said
draft timbers at each end of the structure, 15
substantially as set forth.

In witness whereof, we have hereunto set
our hands and seals at Teague, Texas, this
16th day of May, A. D. nineteen hundred
and ten.

CHARLES HENRY SEABROOK. [L. s.]

WILLIAM RANDOLPH DUFF. [L. s.]

Witnesses:

F. B. STOUGH,

T. J. FEELEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
