(No Model.)

N. WEIS.

DRAFT DEVICE FOR CARS.

No. 490,935. Patented Jan. 31, 1893.

Fig. 1.

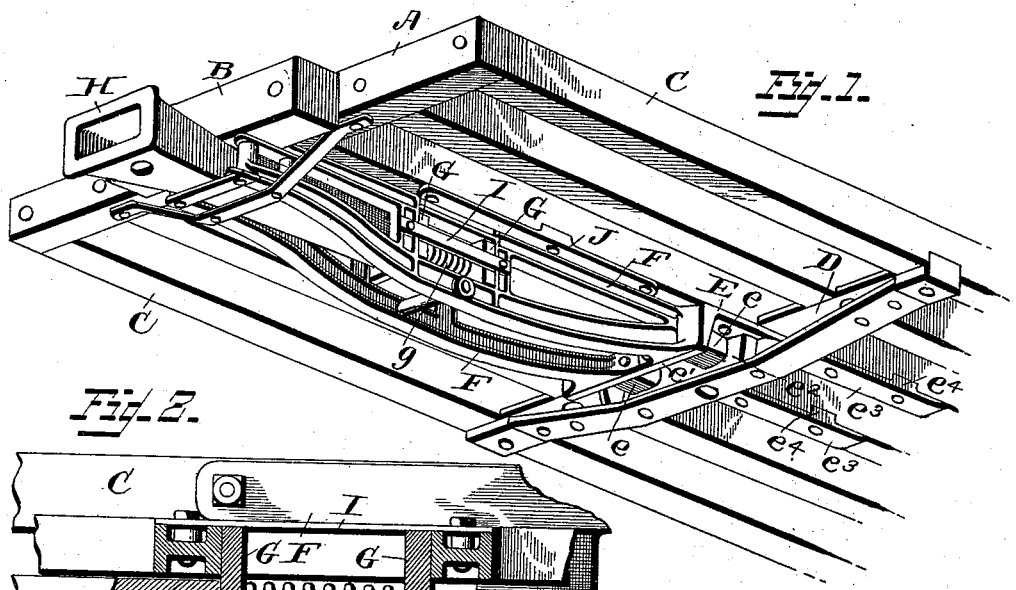


Fig. 2.

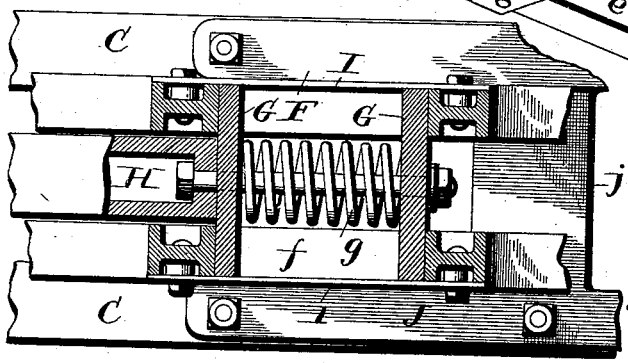


Fig. 3.

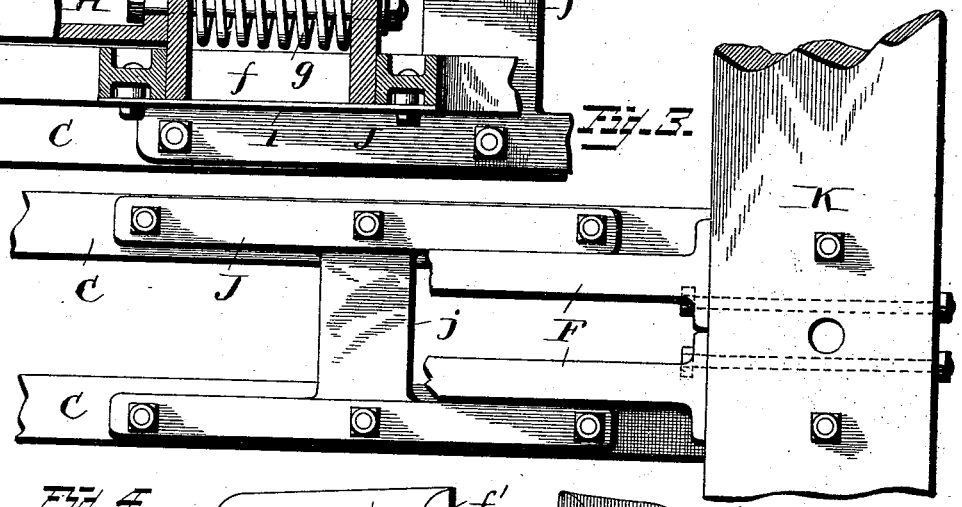
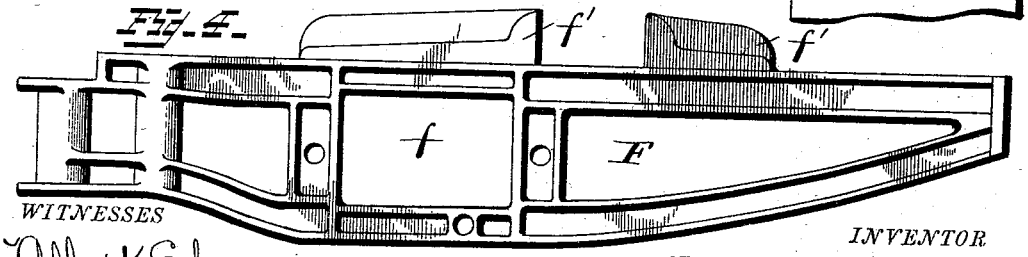


Fig. 4.



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DRAFT DEVICE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 490,935, dated January 31, 1893.

Application filed October 8, 1892. Serial No. 448,251. (No model.)

To all whom it may concern:

Be it known that I, NICK WEIS, a citizen of the United States, residing at Paducah, in the county of McCracken and State of Kentucky, have invented certain new and useful Improvements in Draft Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a draft device which is especially designed for freight cars, which may be applied to passenger or other forms of cars which are designed to be coupled together.

The purpose of the present invention is to provide a draft device to support and form means of attachment of the draw bar to wood butter rocker or iron transom bar cars, and which will admit of said draft device freeing itself from the draft sills of a car (should the latter overturn) without serious injury to said draft sills and without causing further trouble and disaster to the cars in the train following that which has been overturned.

The improvement consists of the novel features and the peculiar construction and combination of the parts which will be hereinafter more fully described and claimed and which are shown in the annexed drawings, in which;

Figure 1 is a bottom perspective view of the invention showing its application. Fig. 2 is a detail plan section of the draft device, showing the connections between the same and the draw bars. Fig. 3 is a detail view showing the application of the invention to a car provided with a wooden butter rocker. Fig. 4 is a side elevation of one of the iron draft beams.

It will be understood that each end of a car will be similarly equipped and that for simplicity of illustration only one end of a car is shown.

In the drawings A represents the end sill, B the bumper block and C the longitudinal sills for supporting the car, all of ordinary construction and arrangement. The iron transom D parallel with the end sill A and located at a proper distance therefrom, is let into the longitudinal sills C and is properly secured to the same. The lower portion of this transom is a truss brace which has its ends abutted against shoulders provided at the ends of the upper portion of said transom. The truss brace portion of the transom is bolted to the upper portion and is properly spaced therefrom by intervening blocks through which the bolts pass.

The transom plate E is composed of parallel portions *e* which are connected at their ends by the cross pieces e' and e^2, respectively, and the parallel portions e^3 which extend in the rear of the cross pieces e^2 and which are bolted to the intermediate sills C. These rear portions e^3 have lugs e^4 which are adapted to enter mortises or recesses in the sills C to relieve the fastening bolts of part of the strain incident of the draft. The cross piece e^2 is adapted to enter the space between the upper and lower portions of the transom iron D and is secured in place by the same bolts which pass through the transom iron and the sills C.

The draft beams F, two being provided, are similarly constructed and placed parallel with each other, and with the intermediate sills C to which they are suitably secured. The rear ends of the draft beam are flanged and are secured to the transom plate E by bolts which pass through said flanged ends of the beams and through openings in the parallel portions *e* of said transom plate. These draft beams F bear against the under side of the intermediate sills C and are suitably connected together by cross pieces and are open to decrease their weight and curve on their under side from a point intermediate of their ends to the front and the rear. Openings *f* are provided in the draft beams to receive the transverse plates G through which the shank or draft bar of the draw bar H passes and between which the springs *g* mounted on said shank is confined. Obviously, when the draw bar is pressed in the forward plate G will move inward and compress the spring *g*, the rear plate G remaining stationary, and when the draw bar H moves outward under the strain the rear plate G will move forward and cause a compression of said spring *g*, the forward plate remaining stationary. These plates G are held in place in the openings *f* by means of bars I which are secured at their ends to the draw beams on each side of the openings

f. The draw bar H is adapted to work freely between the front portions of the draft beams F.

An H-shaped iron J is secured to the intermediate sills C and its cross piece j is let into recesses in said sills and is adapted to come between lugs f' which project vertically from the top side of the draft beams F. These lugs f' extending on each side of the cross piece j receive the strain and relieve the fastenings which attach the draft device to the sills of the car of all strain. In the event of accident which would result in the overturning of the car the fastenings which support and attach the draft device to the sills of the car would give way and permit the draft device to become detached without causing serious injury to the car or the sills thereof.

Fig. 3 shows a construction in which the transom plate E is replaced by a wooden butter rocker K of ordinary construction, the draft device being attached in precisely the same manner as herein set forth.

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

1. In a car the combination of the H-shape iron J secured to the longitudinal sill, the draft beams attached to the car and having lugs to embrace the edges of the cross bar of said H-shape iron J, and the draw bar carried and supported by said draft beam, substantially as and for the purpose set forth.

2. In a car the combination of parallel draft beams having their rear ends flanged to receive fastening bolts, and having lugs f' to engage with a cross piece which is secured to a longitudinal sills, and having openings f, transverse plates arranged to work in said openings, a draw bar having the rear portion extended through said plates, and a spring mounted on the rear portion of the draw bar and located between said plates, substantially as set forth.

3. In a car the combination of parallel draft beams adapted to support the draw bar, and having their rear end flanged, a transom plate having parallel portions e which are connected by cross pieces e' and e^2, and having rear parallel portions e^3 which are provided with lugs e^4 to enter recesses in the sills of the car, and fastening bolts passing through the flanged ends of the draft beams and the portions e, e' and e^2 of the transom plate, substantially as specified.

4. In a car the combination of parallel draft beams a transom plate having the cross piece e^2, and the rear portion e^3 which are secured to the sills of the car, and a transom iron composed of an upper portion and a lower truss brace portion between which said cross piece e^2 is located and secured, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

NICK WEIS.

Witnesses:
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