H. RUST.

DRAW BAR FOR CARS.

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DRAW-BAR FOR CARS.

SPECIFICATION forming part of Letters Patent No. 287,966, dated November 6, 1883. Application filed March 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, HALBERT RUST, of Jeffersonville, in the county of Clarke and State of Indiana, have invented a new and Im-5 proved Draw-Bar for Railroad-Cars, of which the following is a full, clear, and exact description.

This invention pertains to an improvement in draw-bars for cars; and it consists of the 10 combination and arrangement of parts, substantially as hereinafter fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, 15 in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of a railroad-car body and trucks having my improved draw-bar applied thereto. Figs. 2 and 3 are 20 respectively side elevation and plan view, showing the center plate of the car-body built up of separate plates. Figs. 4 and 5 are plan views, showing modified forms of the drawbar and top center plate. Fig. 6 is a plan 25 view of the ordinary form of center plate tapped to receive the screw-threaded ends of the draw-bar A and bolts D, to which latter the draw-heads are attached. Figs. 7 and 8 show modified forms of the ends of the draw-30 bar.

Referring to Fig. 1, A represents the drawbar, which is made by using a bar of iron or steel of sufficient length to reach from one top center plate, B, to the other, to which plates 35 the ends of the draw-bar are attached by means of screw-threads formed on the ends of the bar entering screw-taps formed in the center plates. In the construction shown in Fig. 1 the draw-heads C C are attached to the 40 opposite sides of the center plates by means of the headed screw-bolts DD, that screw into suitable screw-taps made in the center plates, as shown in Figs. 1 and 6.

Instead of attaching the draw-bar to the 45 center plates by means of screws and screwtaps, as just described, the bar may be forged, near its ends, to form the eye a, Figs. 5, 7, and 8, for the passage of the king-bolt E, and at its ends with the offsets or shoulders b b, Figs. 50 4 and 8, for holding the straps c c, Figs. 4, 5, and 8, to which the draw-heads are attached; or, instead of this, pieces shaped to receive the said draw-head straps may be weld-

ed to the ends of the draw-bar, and eyes for the passage of the king-bolts, being formed in them before or after welding; or they may have a recess formed in them, as shown at e, Fig. 5, in which an enlargement of the ends of the draw-bar may fit; or the center plates may be built up, using the upper plate, f, and bottom plate, f', having its face of any desired shape to form the face of the plate, the draw-rod A. forming a middle piece, and all secured together by rivets i, as shown in Figs. 2 and 3, thus forming combined draw-bars and center plates, to which the draw-heads, may be at-

tached by any suitable means.

When the center plates are formed with the recess e or passage d, in which the ends of the draw-bar fit, instead of forming the drawbar with the offsets b b, it might be formed with the screw-shank g, as shown in Figs. 5, 7, and 8, and the plates held upon it by the nuts h; or the shank might be made plain, as shown in Fig. 7, and formed with the opening i. through which a key might be passed for holding the draw-head plates, as will be understood from said Fig. 7; and, instead of attaching the ends of the draw-bar A and the drawheads C to the center plate, B, they might be attached, by any suitable means, to the kingbolts E and involve the spirit of my invention.

Constructed in this manner, in moving a train of cars it will be seen that the whole strain of the locomotive will come upon the draw-bar, thus relieving the frame or body of the cars of all pulling-strain, which it must take when the draw-heads are attached to the timbers of the car in the usual way, which frequently results in the parting and rapid destruction of the car.

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

In a draw-bar for cars, the combination, with the draw-heads C, the strap c, bolts gh, and center plates, B, having recesses e, of the draw-bar A, having enlargements at its ends to fit into the recesses e of the center plates, B, substantially as and for the purpose set forth.

HALBERT RUST.

Witnesses: JOHN L. HILLS, JOHN FELLERS.