No. 626,253. Patented June 6, 1899.

H. VISSERING & L. A. HOERR.

DRAFT RIGGING.

(Application filed Feb. 9, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

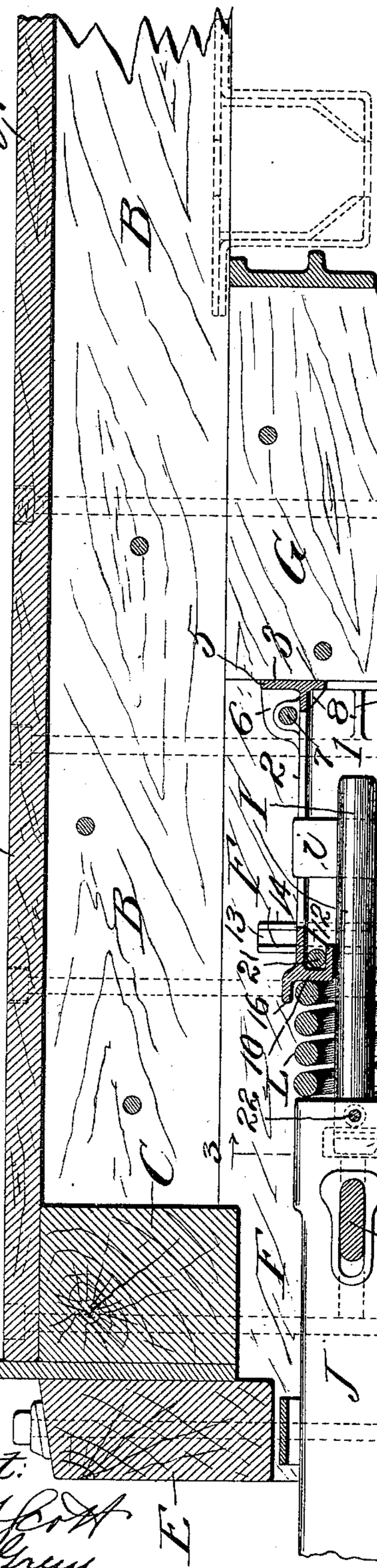
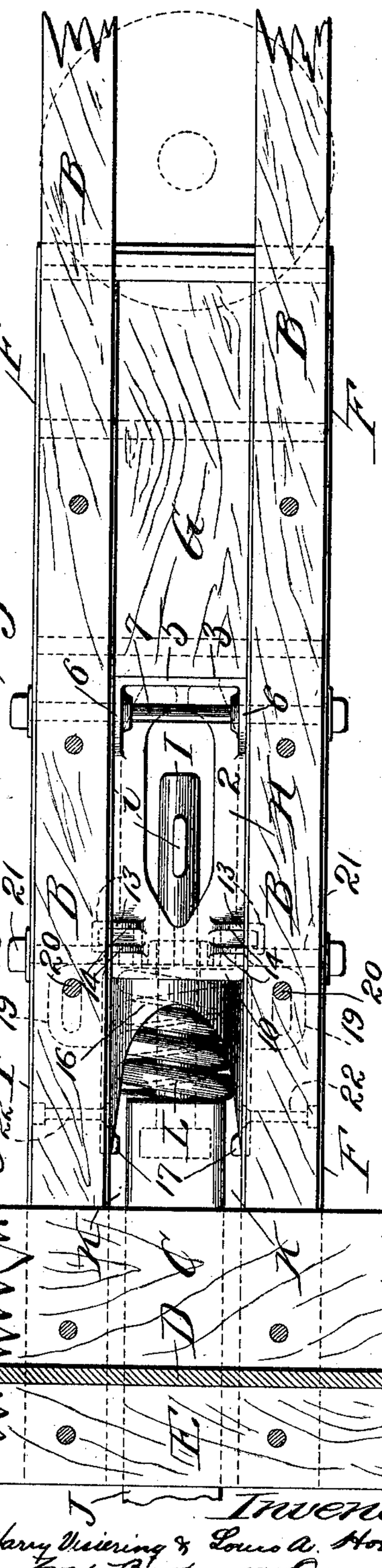


Fig. 2.



Attest:
J. M. Foster
A. D. Storey.

Inventors
Harry Vissering & Louis A. Hoerr
By Bakewell & Cornwall
Attys

No. 626,253. Patented June 6, 1899.

H. VISSERING & L. A. HOERR.

DRAFT RIGGING.

(Application filed Feb. 9, 1899.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 3.

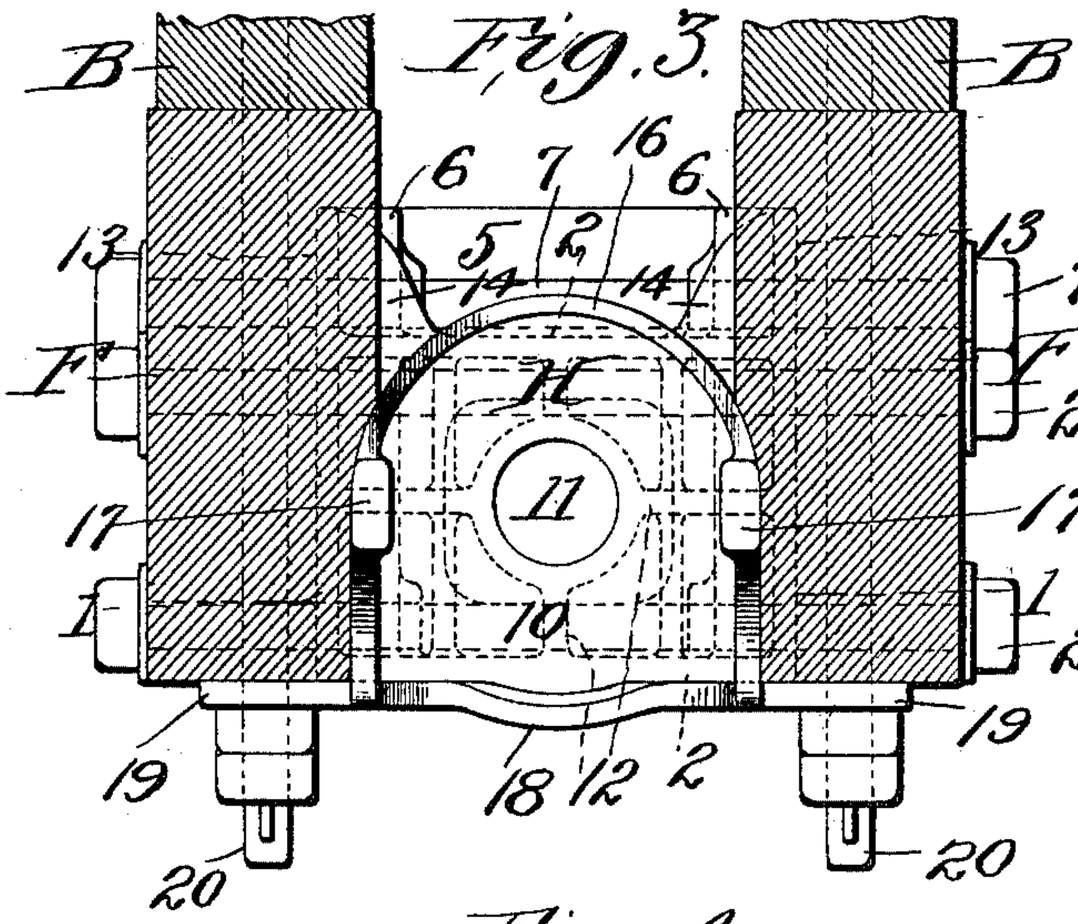


Fig. 4.

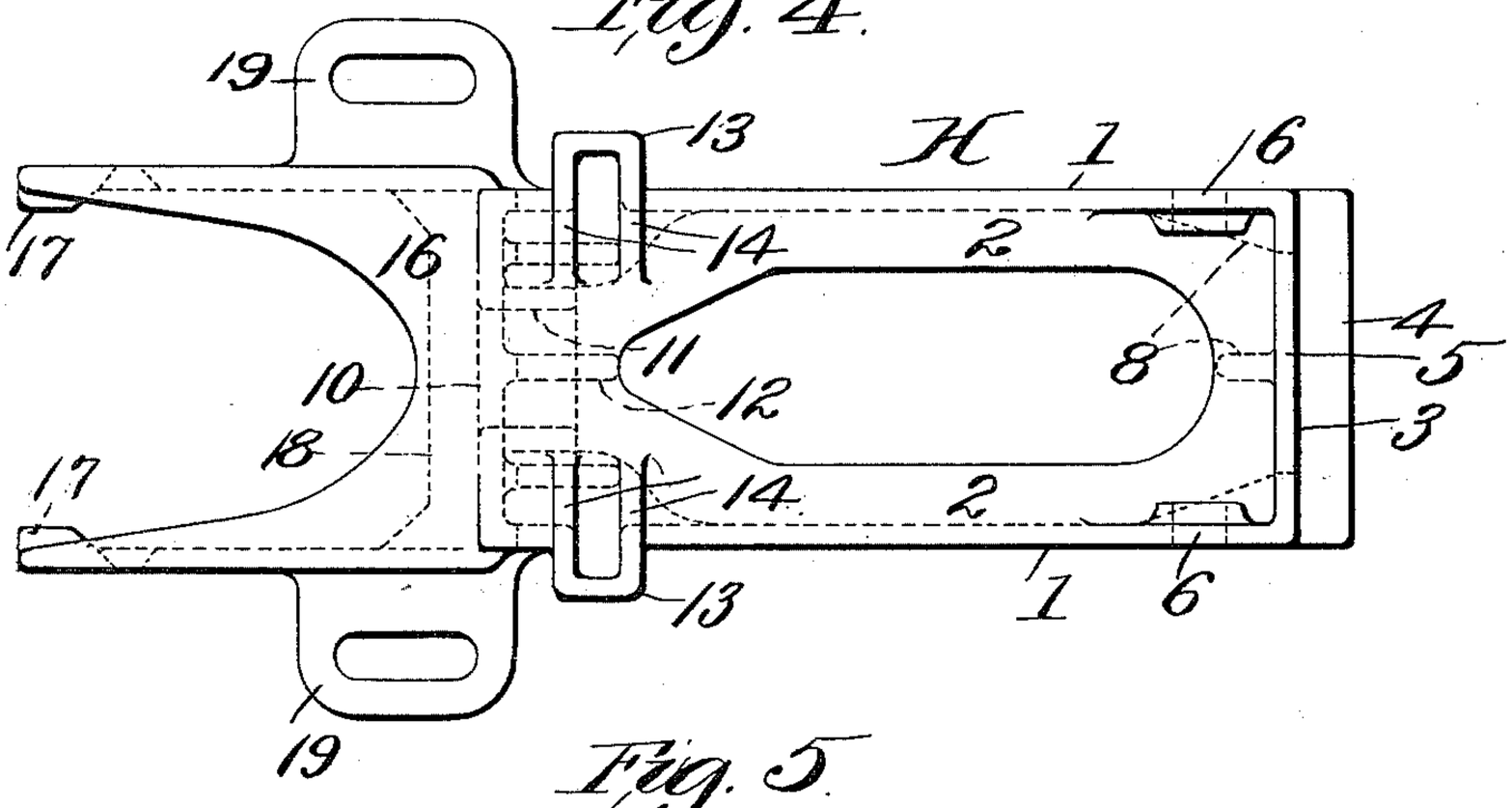
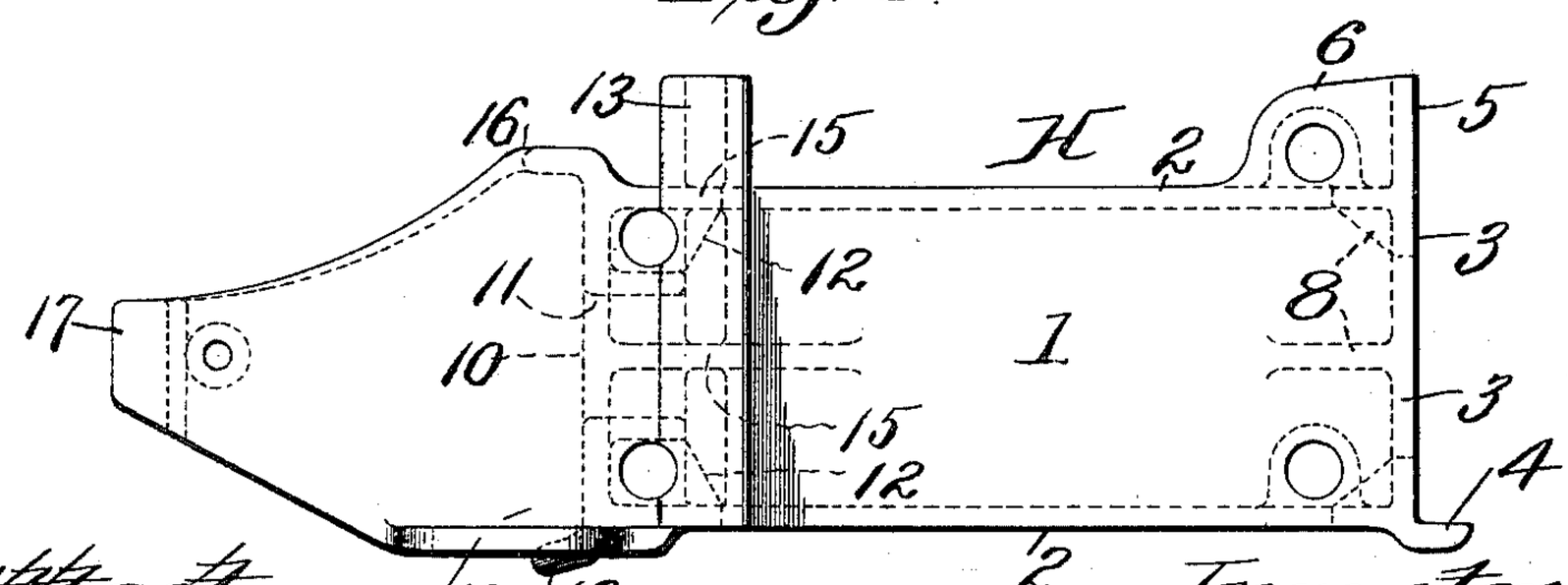


Fig. 5.



Attest:
Wm. A. Fort.
A. D. Gray.

Inventors:
Harry Vissering
Louis A. Hoerr
by Bakewell & Cornwall
Atty's.

UNITED STATES PATENT OFFICE.

HARRY VISSERING AND LOUIS A. HOERR, OF ST. LOUIS, MISSOURI.

DRAFT-RIGGING.

SPECIFICATION forming part of Letters Patent No. 626,253, dated June 6, 1899.

Application filed February 9, 1899. Serial No. 705,115. (No model.)

To all whom it may concern:

Be it known that we, HARRY VISSERING and LOUIS A. HOERR, citizens of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Draft-Rigging, 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 longitudinal sectional view through a portion of a car-framing, showing our improved draft-rigging in position thereon. Fig. 2 is a top plan view of the same, the flooring being removed to more clearly show the rigging underneath. Fig. 3 is a cross-sectional view through the draft-timbers on line 3 3 of Fig. 1, showing the casting in end elevation. Fig. 4 is a top plan view of the casting detached, and Fig. 5 is a side elevational view of the casting detached.

This invention relates to a new and useful improvement in draft-rigging especially designed for freight-cars, although it is obvious that the application of our invention to this particular type of cars is not necessarily restricted thereto, as there are other cars to which it can be applied.

In the drawings, A indicates the car-floor, B the draft-sills, C the end sill, D the end wall, E the dead-wood, F the draft-timbers, and G the filler-block between the draft-timbers, all of which parts are of well-known construction.

H indicates the casting as an entirety, comprising parallel side walls 1 and top and bottom walls 2, which are preferably provided with openings through which access may be had to the key *i* in the tail-bolt I, arranged, as usual, in the shank J of the coupling.

3 indicates the end wall of the casting, beyond which extends a rearward projection 4 from the bottom wall to engage and assist in supporting the filler-block in position. This end wall is extended upwardly beyond the top wall of the casting, as at 5, while the side walls are provided at their rear ends with ears 6 above the top wall of the casting, which ears are formed with hollow bosses for the reception of a through-bolt 7, passing through the draft-timbers and said bosses. By extending the rear wall of the casting upwardly above the top wall thereof an increased bearing-surface is provided for the filler-block, so as to distribute the strain of shocks and jars over a greater area on the end of said filler-block, which end wall is further strengthened by interior strengthening ribs or webs 8, while its upward extension is reinforced by the ears 6, as before referred to. The side walls near the rear end of the casting are provided with bossed openings, through which pass a through-bolt 9, corresponding in purpose and function to the bolt 7.

10 indicates the front wall of the casting, which is the forward limit of the box-like structure, which front wall is provided with an opening 11 for the reception of the tail-bolt of the coupler, said opening being flanged around on the inside of the casting, said flange being strengthened by ribs or webs 12, as shown more clearly in Fig. 3.

13 indicates exterior locking-ribs, which extend upwardly above the top wall of the casting and fit in grooves in the draft-timbers to relieve the through-bolts of the longitudinal strain placed on the casting. These locking-ribs, as shown more clearly in Fig. 4, are hollowed out on their inner faces and reinforced or strengthened by ribs or webs 14, arranged above the top wall of the casting. The interior of the casting, opposite these locking-ribs, is reinforced and strengthened by ribs 15, as shown by dotted lines in Fig. 5 and full lines in Fig. 1.

Projecting upwardly and forwardly from the top wall of this box-shaped casting is a hood-like structure or housing 16, whose upper face is cut away, as shown in Fig. 4, while its forward ends terminate in enlarged knobs 17, arranged at diametrically opposite sides and preferably on a horizontal plane with relation to the axis of the casting. Projecting downwardly and forwardly of the bottom wall of this box-like casting is a projection 18, while lugs or ears 19 extend laterally from the lower edges of the rear portions of the side walls of the housing 16. These ears are formed with bolt-openings for the reception of sill-bolts 20, passing vertically through the

draft-timbers and sills and floor of the car. Through-bolts 21 also pass through the upper and lower portions of the front end of the box-like casting to tie the draft-sills and the casting in position at this point, while bolts 22, adjacent to the knobs 17, firmly hold the forwardly-projecting ends of the housing 16 against the draft-timbers. The function of knobs 17 is to afford a stop for the draw-bar key K, passing through the rear end of the coupler-shank, which draw-bar key is usually employed in the well-known American continuous draft-rigging.

L is the draft-spring, interposed between the rear end of the coupler-shank and to the front wall of the casting H, and M is the carrier-iron of usual construction. In assembling the rigging in which our improved casting is employed after all the timbers are in position the casting is introduced from the bottom and the cross through-bolts inserted and tightened, after which the vertical sill-bolts may likewise be tightened. The draw-bar key is passed through the coupler-shank, which is raised to a position in line with the casting, the draft-spring inserted in place, and the tail-bolt moved backwardly through spring L and front wall 10 of the casting to receive its key *i*, after which the carrier-iron is secured in position and the continuous draft-rods attached to the draw-bar key, when the rigging will be ready for use.

For repair purposes the accessibility of the various parts from under the car by the mere unscrewing of nuts and the removal of bolts is an advantage in car construction that is well recognized by the railroad officials and will be appreciated by those familiar with repair-work relating to draft-gears. The projection 18 serves to support the rear end of the draft-spring in position during the assemblage of the parts, and the hood acts as a wear-surface, protecting the draft-timbers against lateral play of the draft-spring, at the same time practically centering said draft-spring in its designed position. The knobs on the forward ends of the side walls of this hood receive the draw-bar key of the continuous-draft rigging when the same is moved inwardly, and the casting being solid throughout its length will distribute the strain of such shocks to the various cross through-bolts, filler-block, and exterior locking-ribs.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The herein-described casting for use in draft-rigging, the same consisting essentially of a box-casting, provided with a housing at its forward end for receiving the draft-spring, said housing terminating in knobs at the forward extremity of its side walls for receiving shocks from the draw-bar key of the coupler-shank; substantially as described.

2. The herein-described casting for use in draft-rigging, the same consisting essentially of a rectangular box-casting, from the forward end of which projects a housing open at top and bottom for receiving the draft-spring, said housing terminating in knobs at the forward extremity of its side walls for receiving shocks from the draw-bar key of the coupler-shank and slotted ears or lugs projecting laterally from the side walls of said housing for engagement with vertical sill-bolts; substantially as described.

3. The herein-described casting for use in draft-rigging, the same consisting essentially of a box-casting, provided with interior strengthening-webs, and exterior locking-ribs, said casting also having a rearwardly-extending projection for engagement with the filler-block; substantially as described.

4. The herein-described casting for use in draft-rigging, the same comprising a box-casting provided with interior strengthening-webs and exterior locking-ribs, which project above said box-casting at its forward end, the rear end of said box-casting being formed with a rearwardly-extending projection to engage the filler-block, and an upwardly-extending projection braced by suitable webs, which also form material for a cross through-bolt; substantially as described.

In testimony whereof we hereunto affix our signatures, in the presence of two witnesses, this 2d day of February, 1899.

HARRY VISSERING.
LOUIS A. HOERR.

Witnesses:
F. R. CORNWALL,
A. S. GRAY.