No. 819,736. PATENTED MAY 8, 1906.

S. M. CURWEN.

BODY BOLSTER.

APPLICATION FILED JULY 11, 1905.

Fig. 1.

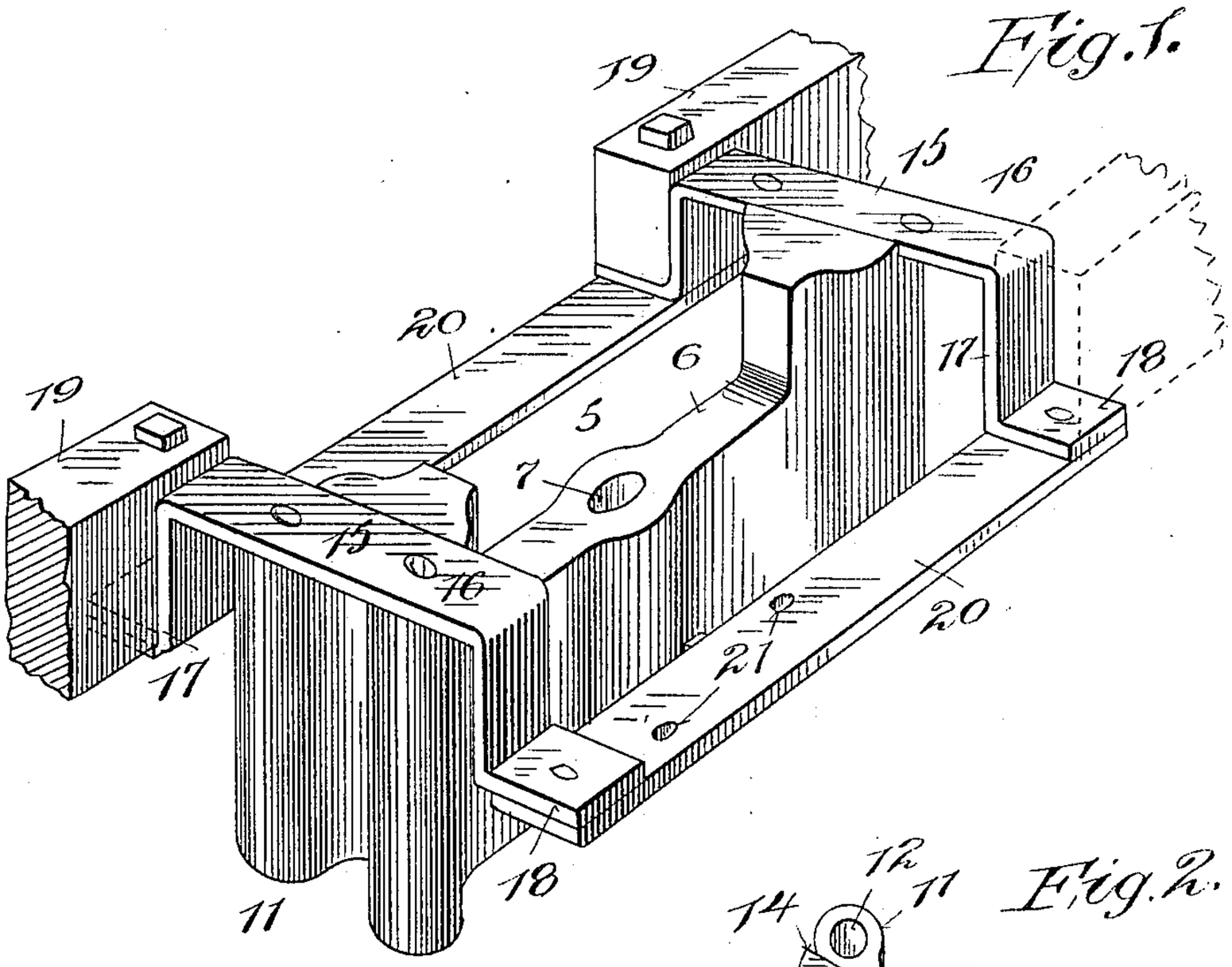


Fig. 2.

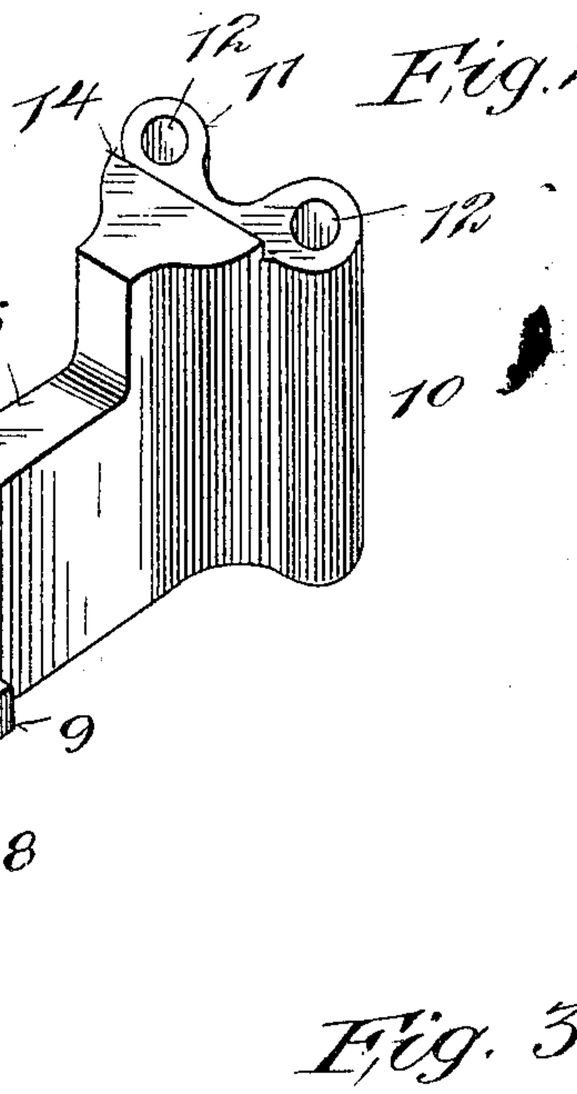
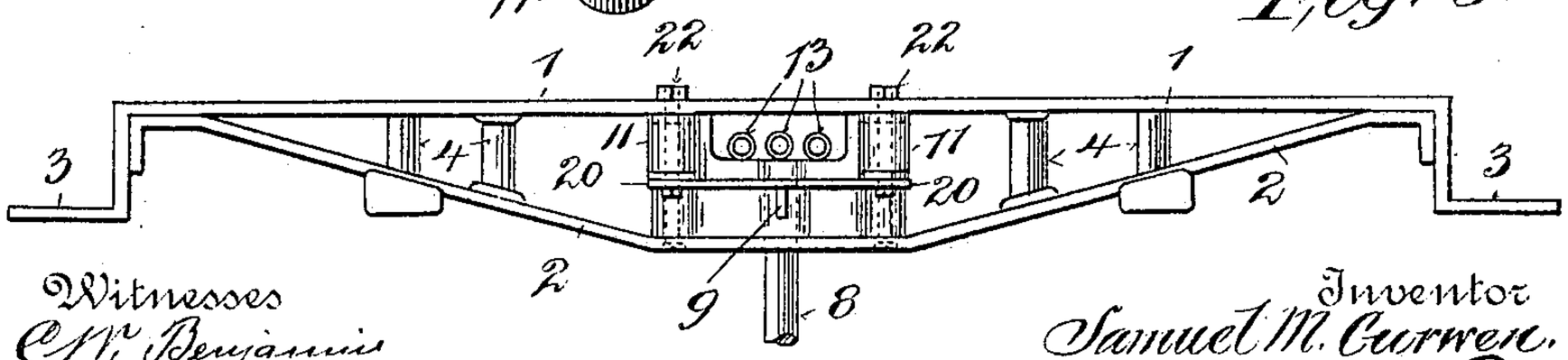


Fig. 3.



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BODY-BOLSTER.

No. 819,736. Specification of Letters Patent. Patented May 8, 1906.

Application filed July 11, 1905. Serial No. 269,189.

To all whom it may concern:

Be it known that I, SAMUEL M. CURWEN, a citizen of the United States, and a resident of the city of Haverford, county of Montgomery, State of Pennsylvania, have invented certain new and useful Improvements in Body-Bolsters for Railway-Cars, of which the following is a specification.

My invention relates to body-bolsters for railway-cars and the novel features which are formed in and about the central strut.

One of the principal features of my invention is to provide a central supporting-strut which will have an intermediate depressed portion to allow for the passage through the bolster of tubes for electrical wiring or other like parts which should pass through the bolster near the center of the car.

Further, my improvement resides in providing straps connected with the strut, which form hangers for the floor-sills, and other details which will appear more fully hereinafter.

In the drawings forming part of this specification, Figure 1 is a perspective view of the central strut, together with its associated parts and the floor-sills. Fig. 2 is a perspective view of the strut-support. Fig. 3 is an elevation of a bolster embodying my improvement.

In the construction of built-up bolsters it is customary to have a top bar 1 and a bottom tie-bar 2, with suitable depressed outer ends 3 to receive the side sills. Between the upper and lower bars are suitable filling-pieces 4, which serve to space the same. As a means of supporting the two at the center and for sustaining the greater part of the stress I provide a strut 5, which I preferably cast of one piece of material. The strut consists of an intermediate portion 6, which is provided in the center with an aperture 7 to receive a king-bolt 8, which is inserted from the under side and is held in place by the pin 9. At each end of the central portion 6 the strut enlarges into the end members 10, each of which consists of two vertical cylindrical portions 11, provided with vertical apertures 12, the purpose of which will appear hereinafter. As may be seen in the various views, the central portion 6 is depressed so as to lie considerably lower than the top of the end portions. This allows a space for the passing through of tubes, such as 13 in Fig. 3, and which may contain electrical wiring. The top surface of the strut is depressed at the points 14 to provide a proper recess for hangers 15, which rest on top of and are secured to the extensions of the strut. These hangers consist of the top plate 16, which is preferably of flat material, the depending side portions 17, and outwardly-extending ends 18. These hangers are disposed parallel with the longitudinal line of the car, so that the ends 18 form seats for the floor-sills 19, which are bolted to and carried by the hangers.

As a means of securing the hangers together more rigidly and to provide a suitable support for various other parts of the underframe of the car, I secure straps 20 to the under side of the ends 18 and to the floor-sills. These do not interfere with the tubes in any way and serve to stiffen the construction. Suitable apertures 21 may be provided in the cross-straps for securing various parts of the car-frame. When the parts are all assembled, as in Fig. 3, the strut, together with the hanger 15, forms a complete filler between the upper and lower bars of the truck-bolster, the bolts 22 passing through the several apertures 12 in the strut and hanger, thus binding the parts together. Whenever it is desired to remove the king-pin, it is only necessary to withdraw the pin 9 without in any way interfering with whatever is placed in the space in the depression of the strut.

Having described my invention, what I claim is—

1. A body-bolster for railway-cars, comprising upper and lower bars and a central intermediate strut having a centrally-depressed portion, a bearing formed therein for the reception of the king-bolt and a transverse keyway to secure said bolt therein, the opposite ends of said strut being recessed for the reception of hangers to be secured to the car-floor sills and having apertures for bolts to secure the strut, hangers and upper and lower bars together.

2. A car-bolster comprising upper and lower longitudinal members, having an intermediate strut, hangers secured to said strut and adapted to be secured to the car-floor sills.

3. A body-bolster for railway-cars, comprising upper and lower longitudinal members, having an intermediate strut separating the two longitudinal members; hangers

adapted to be secured to the floor-sills, and disposed longitudinally of the car over the said strut and secured to the latter.

4. A body-bolster for railway-cars, comprising upper and lower longitudinal members having an intermediate strut 5 which is provided with a central depressed portion, adapted to provide a space for the purposes set forth, and longitudinal hangers 15 secured upon the said strut and having outwardly-extending ends 18 adapted to be secured to the car-floor sills.

5. A body-bolster for railway-cars, comprising upper and lower longitudinal members, and an intermediate strut 5 having a depressed central portion, a king-bolt adapted to be inserted from the under side, and means for holding the same in position, hangers 15 resting on top of said strut and having outwardly and downwardly extending ends, adapted to be secured to the floor-sills of the car, said hangers being disposed longitudinally of the car and connecting-straps 20 secured to the hangers 18 and to the floor-sills.

6. A body-bolster comprising upper and lower longitudinal members, an intermediate strut, and hangers adapted to be secured to the floor-sills, said hangers, strut and bolster members all being bolted together.

Signed this 29th day of June, 1905.

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