No. 795,261. PATENTED JULY 25, 1905.

J. McE. AMES.

CAR TRUCK BOLSTER.

APPLICATION FILED APR. 12, 1905.

Fig. 1.

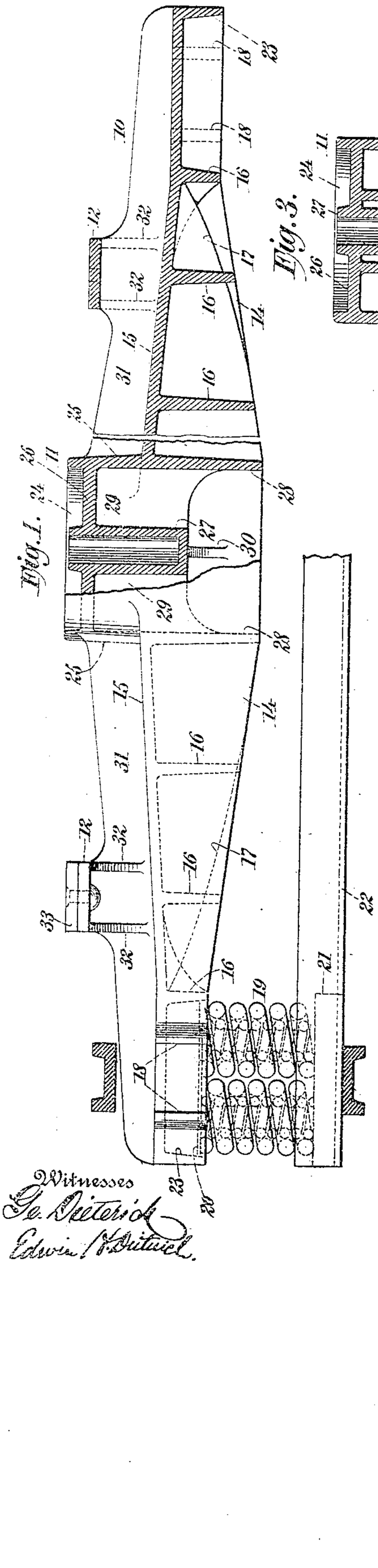


Fig. 3.

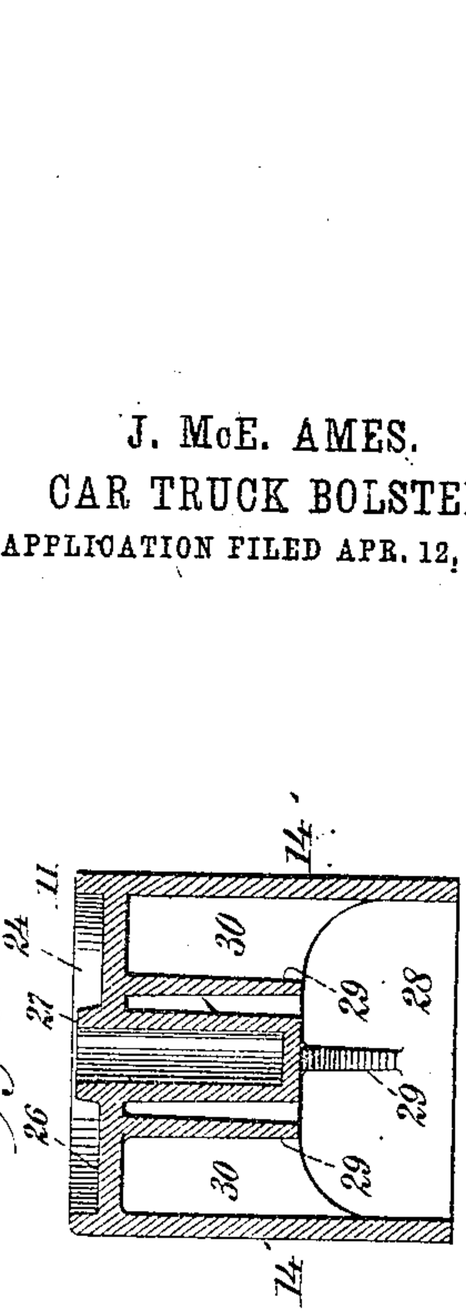


Fig. 4.

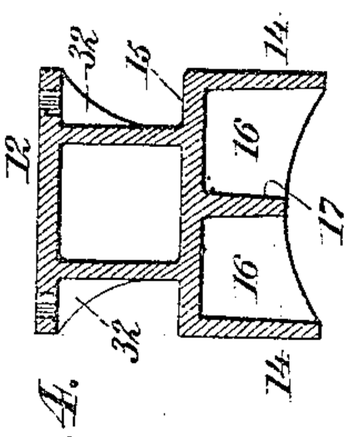
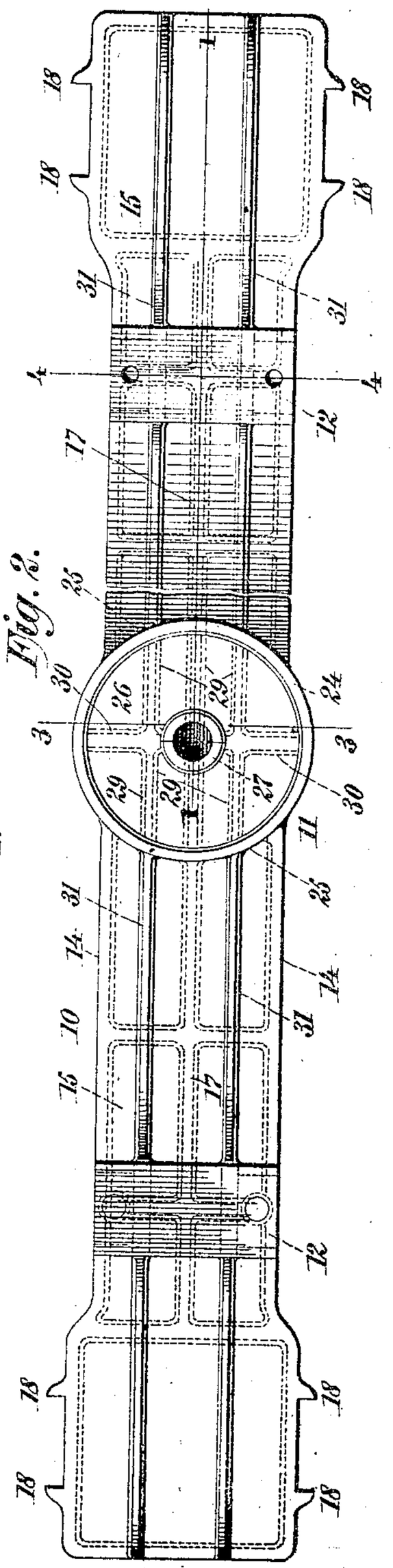


Fig. 2.



Witnesses
Ge. Dieterich
Edwin P. Dieterich.

Inventor
John McE. Ames
By his Attorney Chas. C. Gill

UNITED STATES PATENT OFFICE.

JOHN McE. AMES, OF NEW BRIGHTON, NEW YORK, ASSIGNOR TO BENJAMIN A. HEGEMAN, JR., OF NORTH PLAINFIELD, NEW JERSEY.

CAR-TRUCK BOLSTER.

No. 795,261. Specification of Letters Patent. Patented July 25, 1905.

Application filed April 12, 1905. Serial No. 255,093.

To all whom it may concern:

Be it known that I, JOHN McE. AMES, a citizen of the United States, and a resident of New Brighton, in the county of Richmond and State of New York, have invented certain new and useful Improvements in Car-Truck Bolsters, of which the following is a specification.

The invention relates to improvements in car-truck bolsters; and it consists in the novel features and combinations of parts hereinafter described, and particularly pointed out in the claims.

The object of the invention is to produce an integral cast bolster of novel formation and which shall be efficient and convenient of use and have its parts so disposed as to secure the maximum of strength with the minimum weight and enable the casting of the bolster with the least possible labor, difficulty, and expense.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly broken away and partly in section, of a car-truck bolster constructed in accordance with and embodying the invention, about one longitudinal half of the bolster being shown in central vertical section on the dotted line 1 1 of Fig. 2. Fig. 2 is a top view of same. Fig. 3 is a vertical transverse section of same on the dotted line 3 3 of Fig. 2, and Fig. 4 is a vertical transverse section of same on the dotted line 4 4 of Fig. 2.

In the drawings, 10 designates the bolster as a whole, and said bolster will preferably be in one integral hollow casting and equipped with the center bearing 11 and transverse plates 12 for appropriate side bearings or rub-irons.

The bolster 10 is substantially uniform in width, horizontally considered, from end to end, and in depth gradually lessens from its center toward its end portions, the upper and lower outlines of the bolster converging from the center toward the ends thereof.

The body of the bolster comprises the vertical sides 14 and top wall 15, said body being open throughout the greater portion of its extent at its lower side or bottom, and said sides 14 and top 15 being connected by a series of transverse webs 16 and central longitudinal webs 17.

On the vertical sides of each end portion of the bolster are formed usual vertical ribs 18 for contact with the usual columns of car-trucks to limit the lateral thrust of the bolster and to guide the bolster in its vertical movement when said bolster is supported at its ends upon the usual springs 19. In the lower portion of each end of the bolster is formed a commodious rectangular recess to receive a wooden block 20, which affords a bearing for the upper ends of the springs 19, whose lower ends may be supported upon a similar block 21, located upon a channel or sand-plank 22. The recesses for the wooden blocks 20 are formed below the top 15 and between the sides 14, end webs 16 and vertical bolster ends 23, as shown in Fig. 1, and the ends of the bolster about said recesses are somewhat wider than the other portions thereof, as represented in Fig. 2.

At the central portion of the bolster is a novel box-like formation upon whose upper surfaces is the circular vertical flange 24, defining the center bearing, and which box-like structure extends upwardly above the general top 15 of the bolster and exteriorly comprises the sides 14 and vertical walls 25, extending upwardly from the top 15 to complete the circular outline of said box and support the flange 24 and top wall 26. At the center of the circle defined by the flange 24 is provided the integral sleeve 27 for the usual king-bolt, this sleeve projecting slightly above and materially below the top wall 26, and the lower end of said sleeve terminating at a point intermediate the bottom and top of the body of the bolster, as shown in Fig. 1. Within the box-like structure at the center of the bolster are the substantially semicircular transverse webs 28, which connect the sides 14 and top 15 and are directly below the exposed end walls 25 of said structure, and within said structure the walls 25 and webs 28 are connected with each other and with the sleeve 27 and top 26 by a series of longitudinal webs 29 and transverse webs 30, as shown in Fig. 2, whereby the said structure is rendered strong and durable and the sleeve 27 becomes firmly sustained.

From the end walls 25 of the center bearing structure vertical parallel flanges 31 extend to the ends of the bolster, said flanges 31 being integral with the top 15 and at points intermediate the center bearing and ends of the bolster extending upwardly above their general outline and supporting the transverse

plates 12 to receive suitable side bearings, said plates 12 being integral with both of said flanges 31 and extending laterally beyond the same and supported at their end portions by webs 32, which are integral with said plates and said flanges. The ends of the plates 12 are suitably apertured to receive the rivets or bolts for securing an appropriate bearing-plate 33.

Between the sides 14 of the bolster I provide at each side of the center structure a longitudinal web 17, above referred to, which extends from the outer end web 16 to the web 28 of the center bearing structure, and these webs 17 are integral with the top 15 and webs 16, as represented by the dotted lines in Fig. 2, and are in line with the central webs 29 of the center bearing structure.

The body of the bolster is preferably entirely open at its lower side for convenience in casting.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, the integral hollow cast bolster comprising the body having the sides and top and at its center a box-like structure for a center bearing, said structure extending above the body of the bolster, and the longitudinal flanges extending from the upper portion of said box to the end portions of the bolster and affording seats for side bearings; substantially as set forth.

2. As a new article of manufacture, the integral hollow cast bolster comprising the body having the sides and top and at its center a box-like structure for a center bearing, said structure extending above the body of the bolster, and the said body being open at its lower side and containing the series of transverse webs and longitudinal web, and the top of said body having the longitudinal flanges extending from said box to the end portions of the bolster; substantially as set forth.

3. As a new article of manufacture, the integral hollow cast bolster comprising the body having the sides and top and at its center a box-like structure for a center bearing, said structure extending above the body of the bolster, and the longitudinal flanges extending from the upper portion of said box to the end portions of the bolster and affording seats for side bearings, said box structure comprising the sides, top, end walls extending to the bottom of the bolster, central sleeve and longitudinal and transverse webs connecting said parts; substantially as set forth.

4. As a new article of manufacture, the integral hollow cast bolster comprising the body having the sides and top and at its center a box-like structure for a center bearing, said structure extending above the body of the bolster, and the longitudinal flanges extending from the upper portion of said box to the end portions of the bolster and having integral therewith the transverse plates for side bearings; substantially as set forth.

5. As a new article of manufacture, the integral hollow cast bolster comprising the body having the sides and top and at its center a box-like structure for a center bearing, said structure extending above the body of the bolster, and the longitudinal flanges extending from the upper portion of said box to the end portions of the bolster and having integral therewith the transverse plates for side bearings, said plates being extended beyond said flanges and supported at their ends by webs integral therewith and with said flanges; substantially as set forth.

Signed at New York city, in the county of New York and State of New York, this 10th day of April, A. D. 1905.

JOHN McE. AMES.

Witnesses:

B. A. HEGEMAN, Jr.,

CHARLES C. GILL.