

No. 734,638.

PATENTED JULY 28, 1903.

C. VANDERBILT.
TRUCK BOLSTER.

APPLICATION FILED JULY 26, 1902.

NO MODEL.

Fig. 1.

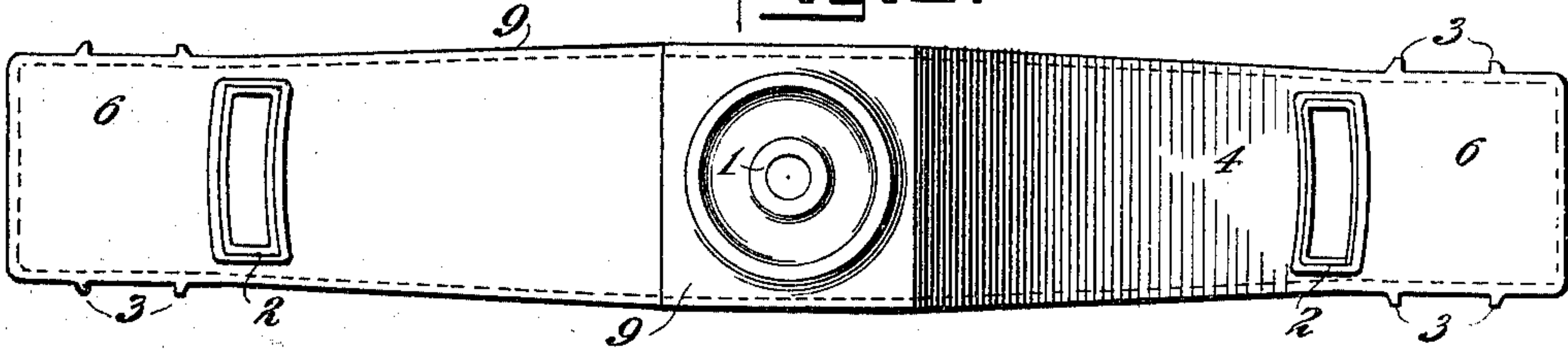


Fig. 2.

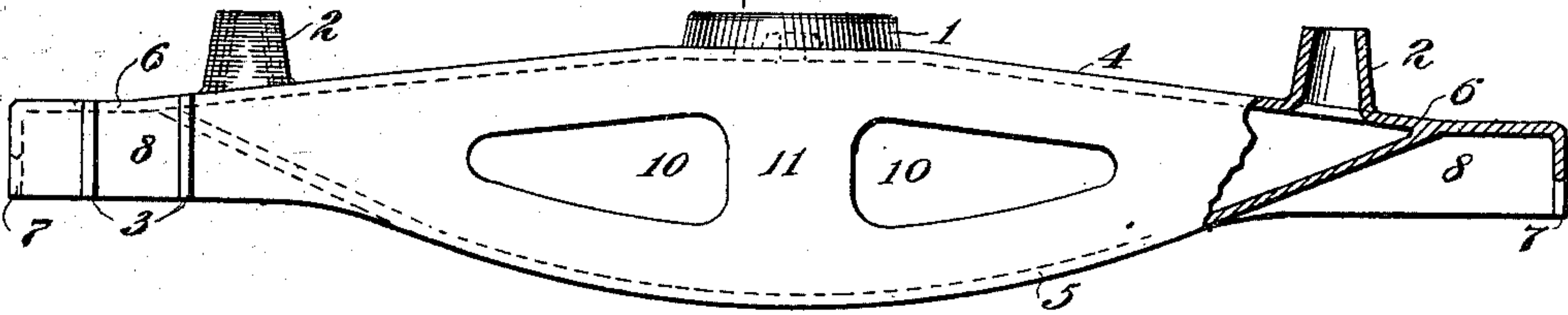


Fig. 4.

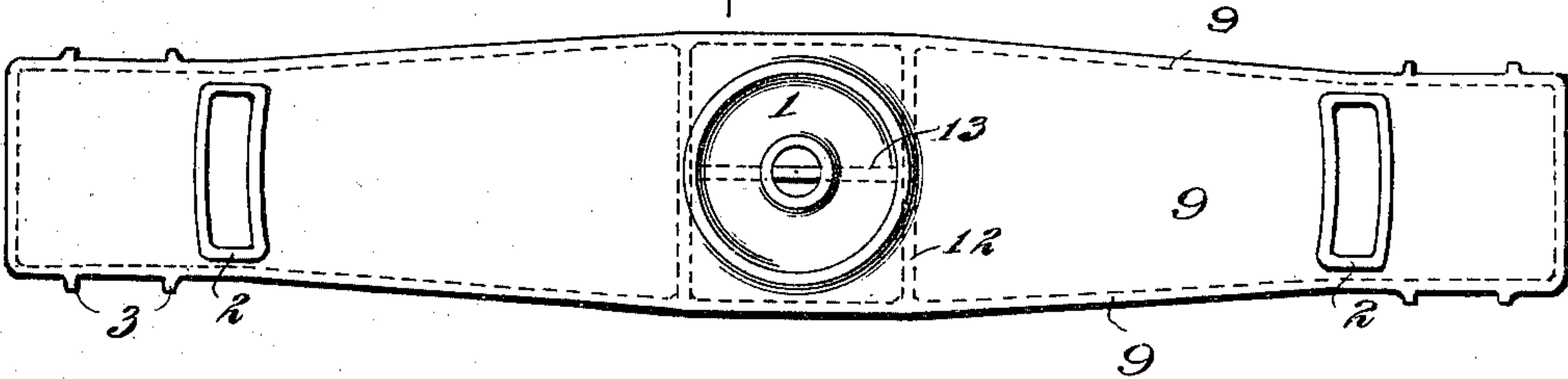


Fig. 5.

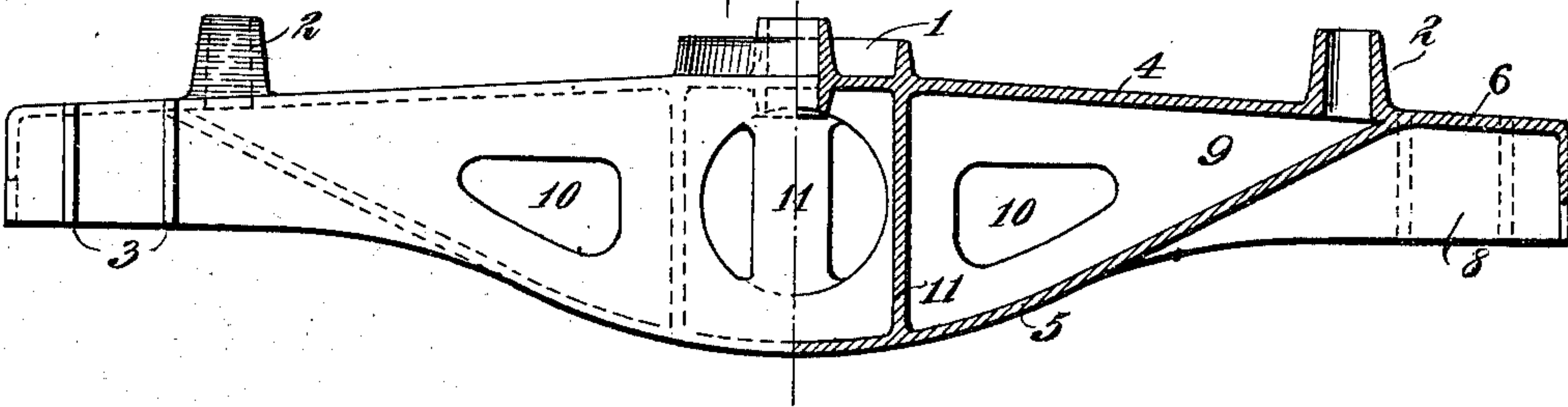
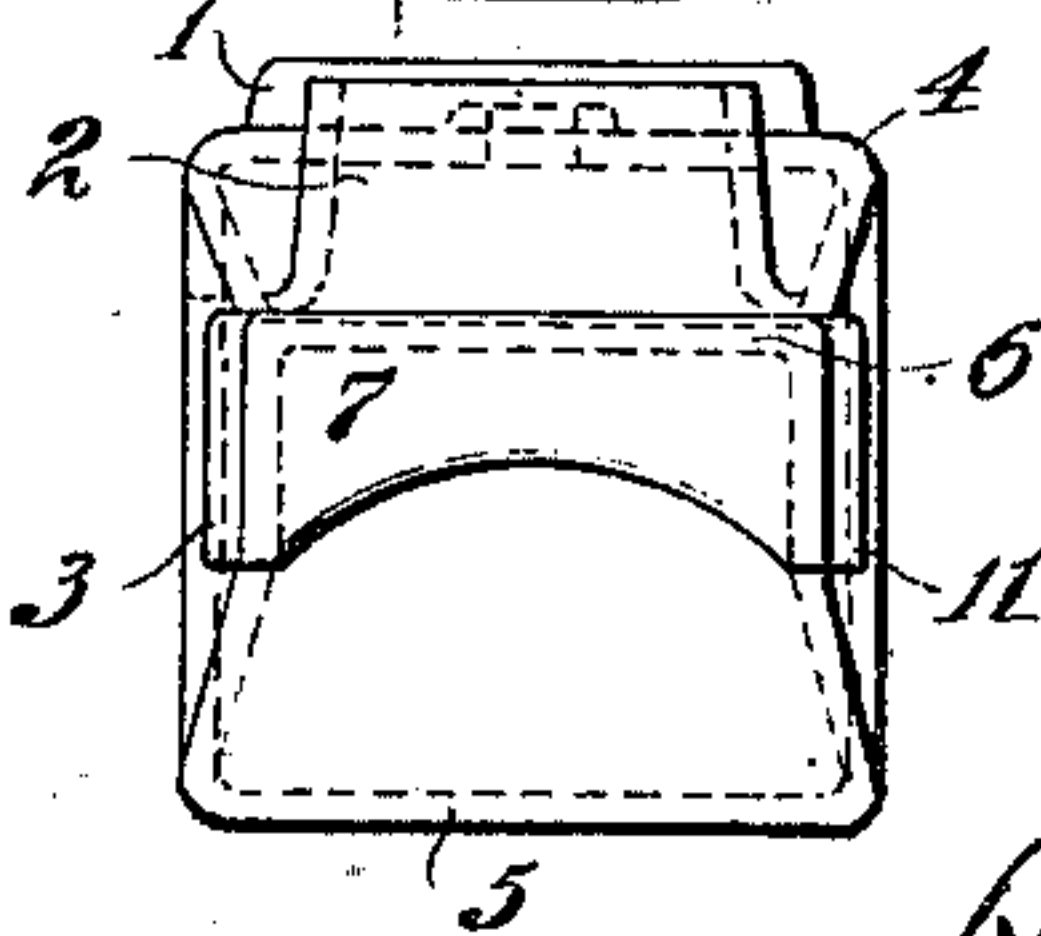


Fig. 3.



WITNESSES:

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CORNELIUS VANDERBILT, OF NEW YORK, N. Y.

TRUCK-BOLSTER.

SPECIFICATION forming part of Letters Patent No. 734,638, dated July 28, 1903.

Application filed July 26, 1902. Serial No. 117,073. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS VANDERBILT, a resident of the borough of Manhattan, city and State of New York, have invented certain new and useful Improvements in Truck-Bolsters, of which the following is a specification.

Certain features of the invention herein set forth and claimed are broadly claimed in my application, Serial No. 110,139, filed June 4, 1902.

The bolster is preferably to be cast in a single piece, steel being the metal best suited for the purpose. If desired, however, the bolster may be constructed of one or more pieces of rolled, pressed, or cast metal, and I do not limit my invention to a bolster constructed of a single piece of cast metal, but refer to the appended claims to point out and define my invention.

In the drawings which accompany this specification, Figure 1 is a plan view, Fig. 2 a side elevation, partly in section, and Fig. 3 an end elevation, of one form of truck-bolster embodying my invention. Figs. 4 and 5 show, respectively, a plan and a side elevation, the latter partly in section, of a modified or alternative form of truck-bolster.

In both of the forms of truck-bolster described in this application and shown in the accompanying drawings the bolster usually consists of a single casting preferably, though not necessarily, of cast-steel. The center bearing 1, side bearings 2 2, and column-guides 3 3 are all integral with the body of the bolster, which in the forms shown comprise top and bottom webs 4 and 5 and front and rear walls 9 9, thus forming a hollow beam. The upper and lower webs being continuous throughout the length and width of the bolster, impart great lateral or transverse stiffness to the bolster, and thus enable it to readily withstand any lateral strains or shocks. The center and side bearings are integral with and form a part of the top web, and the column-guides are integral with the front and rear walls. The top and bottom webs taper, their widths diminishing from the center to the ends. It will be observed also that in both forms of bolster the depth, as well as the width, of the bolster diminishes

from its center toward its ends. By this construction a bolster is produced of minimum weight, since a large amount of metal is dispensed with, thereby lessening the initial cost, while at the same time a strong bolster is produced, since there is the greatest amount of metal at the center of the bolster, which is the portion of the bolster at which the greatest strains occur.

In order to make the bolsters considerably lighter and to provide for the removal of the core used in casting, I provide the front and rear walls 9 9 with the apertures 10 10. These apertures are preferably placed at one side of the center, the metal of the walls being continuous at their centers, thus giving the bolster greatest strength at its center, where the stresses are greatest, the parts performing the functions of struts between the upper web 4 and the lower web 5.

In both forms of truck-bolster herein illustrated the top web 4 and the bottom web 5 unite at both ends to form the webs 6 6.

It will be observed that the point of junction of the webs 4 and 5 is beyond the side bearing 2—that is to say, at that portion of the bolster upon which the side bearings are located the top and bottom webs are separated from each other. This feature gives the bolster much greater strength to resist the stresses transmitted by the side bearings than would be the case if the side bearings were located above or beyond the place of union of the webs 4 and 5, where there is but a single web. The ends 7 7 of the webs 6 6 are turned down, as shown, for the purpose of forming recesses or pockets 8 8, within which the ends of the springs upon which the bolster rests are held against displacement. The front and rear walls 9 9 are joined at the top and bottom to the upper and lower webs 4 and 5, as shown, and preferably extend the entire length of the bolster, joining the parts 7 and forming front and rear walls for the recesses 8.

The central portion of the bolster may be, and preferably is, strengthened by the vertical partitions 12 and 13, (shown in Figs. 4 and 5;) but these may be omitted, if desired. In case they are used, however, it will be evident that those portions of the side

walls 9 9 which are between the upper and lower webs 4 and 5, as illustrated in the drawings, may be dispensed with, if desired.

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

1. A truck-bolster, comprising top and bottom webs, which are widest at their centers and taper toward their ends, said webs being united at their ends, and separated at their intermediate portions, transverse braces between said intermediate portions, and a longitudinal brace uniting said transverse braces, substantially as described.

2. A truck-bolster having top and bottom webs gradually converging until they unite at their ends, said ends being turned downward, transverse braces between the webs intermediate their united ends, and a longitudinal brace uniting said transverse braces, substantially as described.

3. A truck-bolster, comprising top, bottom, front and rear walls, and side bearings, said top and bottom walls being united at their ends beyond said side bearings, substantially as described.

4. A truck-bolster, comprising top, bottom, front and rear walls and side bearings, said top and bottom walls being united at their ends beyond said side bearings, and said ends

being turned downward, substantially as described.

5. A truck-bolster, comprising side bearings with spaced walls, and top and bottom webs separated at their centers and gradually converging toward their ends until they unite, said ends being united beyond said side bearings, substantially as described.

6. A truck-bolster, comprising side bearings with spaced walls, and top and bottom webs separated at their centers, and gradually converging toward their ends until they unite, said ends being united beyond said side bearings, and the ends of the united portions being turned downward, substantially as described.

7. A truck-bolster having top, bottom, front and rear walls and side bearings, said top and bottom walls being united at their ends beyond said side bearings to form horizontal webs, the ends of said webs being turned downward, the said front and rear walls extending from one of said downturned ends to the other downturned end, substantially as described.

In witness whereof I have hereunto signed my name this 21st day of July, 1902.

CORNELIUS VANDERBILT.

In presence of—

LOUIS A. SHEPARD,
WILLIAM W. CLOUSER.