

No. 817,789.

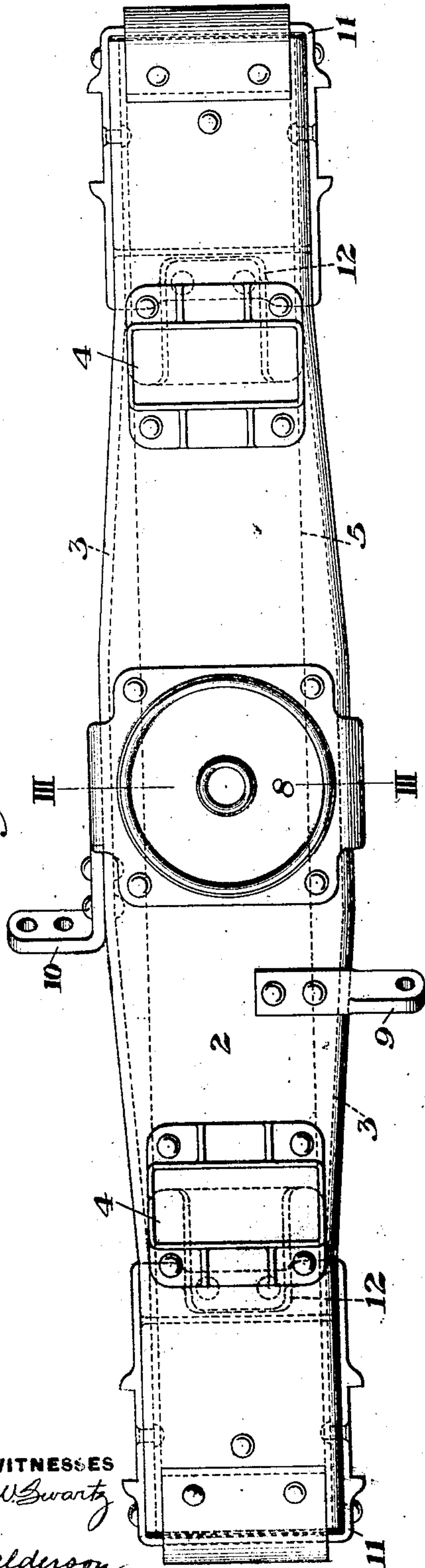
PATENTED APR. 17, 1906.

C. A. LINDSTRÖM.
TRUCK BOLSTER.

APPLICATION FILED DEC. 8, 1905.

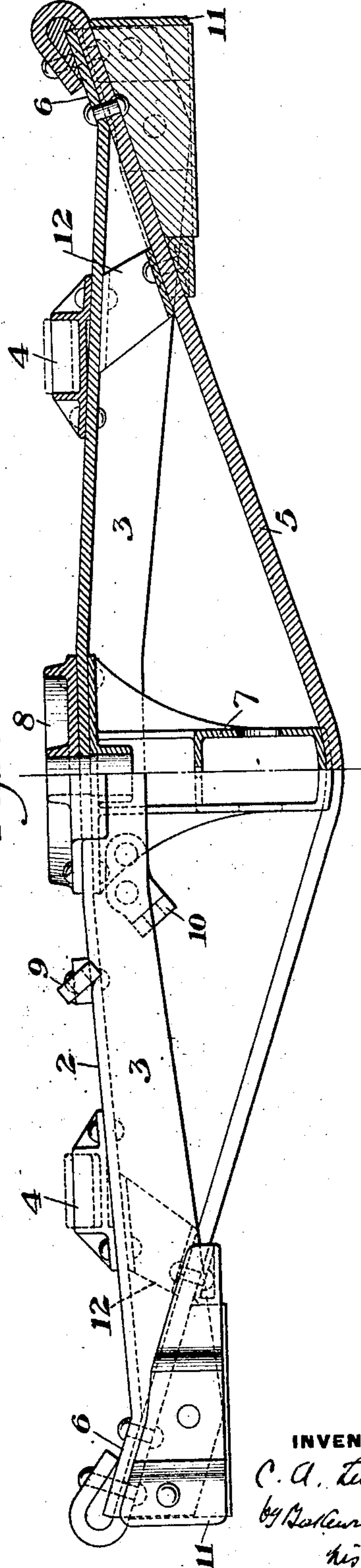
2 SHEETS—SHEET 1.

Fig. 1.



WITNESSES
Warren W. Swartz
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Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 4.

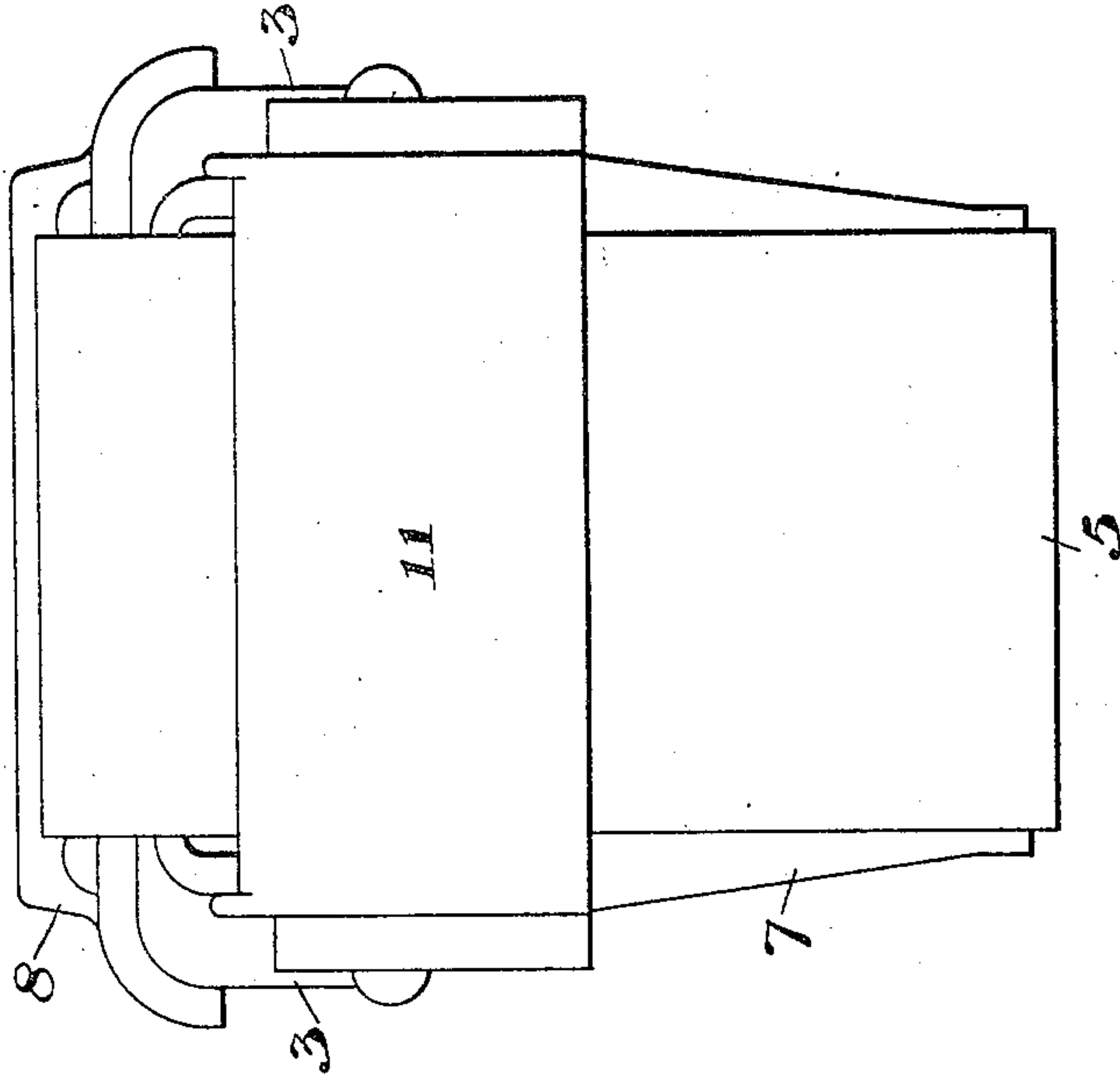
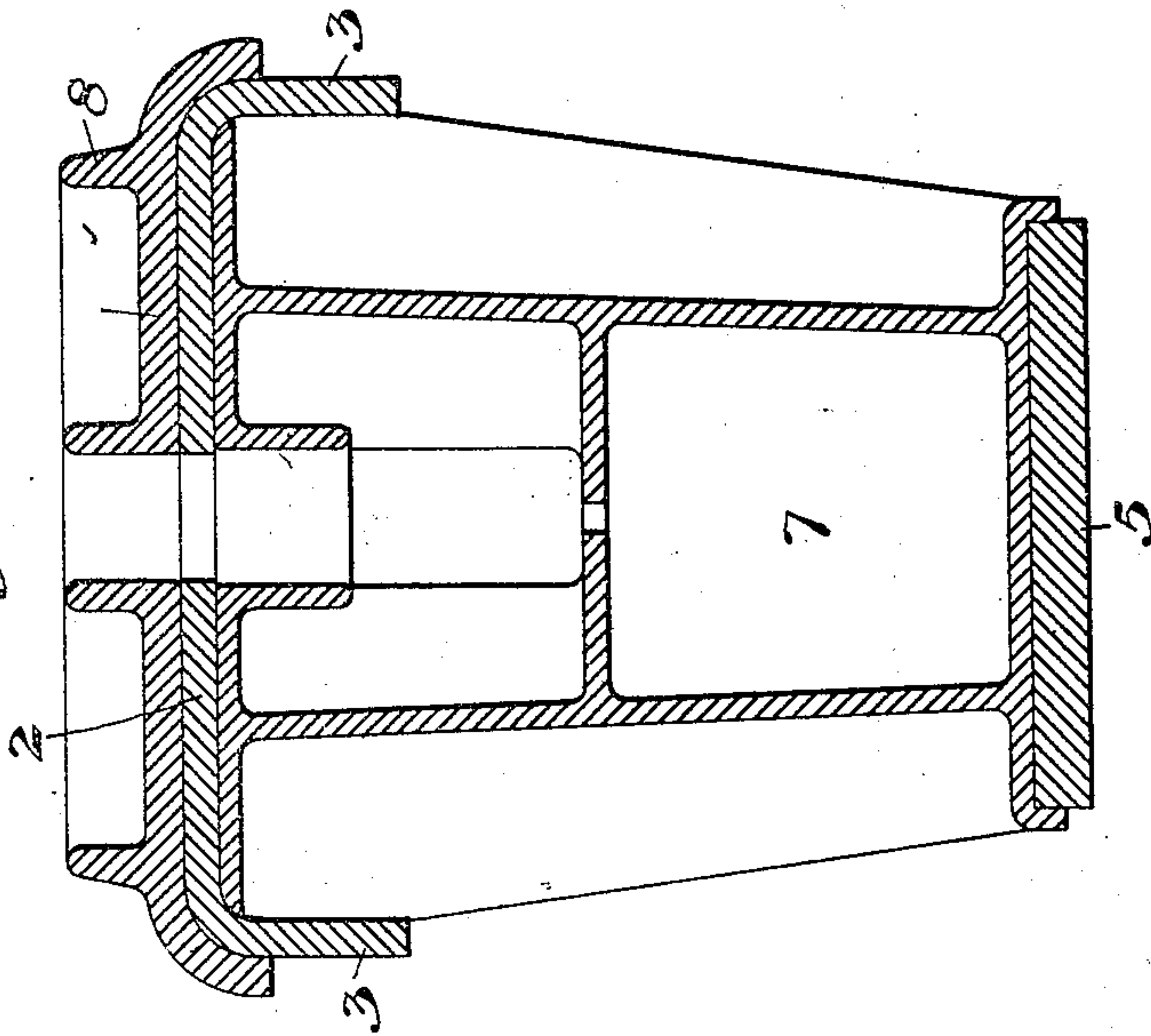


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES A. LINDSTRÖM, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO
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TRUCK-BOLSTER.

No. 817,789.

Specification of Letters Patent.

Patented April 17, 1906.

Application filed December 8, 1905. Serial No. 290,983.

To all whom it may concern:

Be it known that I, CHARLES A. LINDSTRÖM, of Allegheny, Allegheny county, Pennsylvania, have invented a new and useful
5 Truck-Bolster, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a truck-bolster
10 embodying my invention. Fig. 2 is a view of the same partly in side elevation and partly in vertical section. Fig. 3 is a cross-section on the line III III of Fig. 1, and Fig. 4 is an end view.

15 My invention relates to truck-bolsters of the built-up type, and is designed to provide an improved construction of the compression member of the bolster wherein the material is distributed in accordance with the stresses
20 which come upon such member. The compression member of a truck-bolster is not only a beam supported on the spring-seats at the ends and loaded at the center over the center-plate, but it is also a beam supported
25 at the two ends by the truck-columns and loaded at the center at its edges, the latter load being due to and received upon the stopping of the car. These conditions require
30 that the bolster should be strongest at the center, not only vertically, but also transversely, or in the direction of the length of the car. This object I attain by the peculiar construction of the compression member now to be described.

35 In the drawings, 2 designates the compression member of a bolster, which is formed from a flat sheet of steel compressed into the shape of a channel having depending flanges 3 and so formed that at the middle portion
40 the flanges are relatively shallow and the web portion relatively wide, while at the end portions the flanges are deeper and the web narrower. Thus by reference to the drawings it will be seen that the web portion commences
45 to widen at each end at about the point where the side bearings 4 are secured thereto and gradually increases in width to the center, with a corresponding decrease in the depth of the flanges 3.

50 5 designates the usual plate tension member, whose end portions are riveted to the upwardly-bent portions 6 of the compression member.

7 is the center-plate support or strut; 8, the

center plate or bearing; 9, the usual attachment for the dead-lever guide-anchor of the
55 brake-rigging, and 10 the attachment for the live-lever guide of such rigging.

11 11 are the usual end castings, and 12 represents the side-bearing supports or braces. 60

The advantages of my invention result from the construction of the compression member of the bolster from pressed steel in such a manner that this member has its greatest strength transversely at its central portion and greatest depth vertically at its ends, with its end portions bent upwardly to receive the tension member. This last-named
65 feature, as will be seen, affords a secure connection between the compression and tension
70 members and of such character as to be particularly adapted to receive the thrust and strains to which these parts are subjected. So long as these features of my invention are retained various changes may be made in
75 the details of construction and arrangement without departing from the spirit and scope of my invention. A further advantage of my method of constructing the compression
80 member from pressed steel is that the features of the varying depths and widths of the web and flanges, together with the upwardly-bent end portions, can all be obtained by one operation, thus giving advantages of construction as well as of strength, whereas when
85 the compression members are rolled the distribution of material in this manner cannot be obtained and separate operations are necessary to form the different parts of the compression member. 90

What I claim is—

1. In a truck-bolster, a pressed-steel compression member of channel form, having at its central portion a relatively wide web and relatively shallow flanges, and at its end portions deeper flanges and a narrower web portion; said end portions being bent upwardly to receive a tension member substantially as described. 95

2. In a truck-bolster, a compression member of pressed steel of channel form, having its web portion of increased width at the center and having upwardly-bent end portions; substantially as described. 100

3. In a truck-bolster, a pressed-steel compression member having its web portion of increasing width from both ends toward its center, and flange portions of decreasing 105

depth from the ends toward the center the end portions of the web being bent upwardly; substantially as described.

4. In a truck-bolster, a pressed-steel compression member of channel form, formed from a single plate or sheet and having at its central portion a relatively wide web and relatively shallow flanges, and at its end portions a relatively narrow web and deeper flanges said end portions being bent upwardly; substantially as described.

5. A truck-bolster having a pressed-steel

compression member of channel form, wider at its center than at its ends, and having its flange portions of increasing depth toward the ends which are bent upwardly, and a tension member connected thereto; substantially as described.

In testimony whereof I have hereunto set my hand.

CHARLES A. LINDSTRÖM.

Witnesses:

K. L. ROBINSON,
H. B. FISHER.