

No. 715,085.

Patented Dec. 2, 1902.

G. I. KING.
CENTER BEARING.

(Application filed Jan. 2, 1902.)

(No Model.)

Fig. 1.

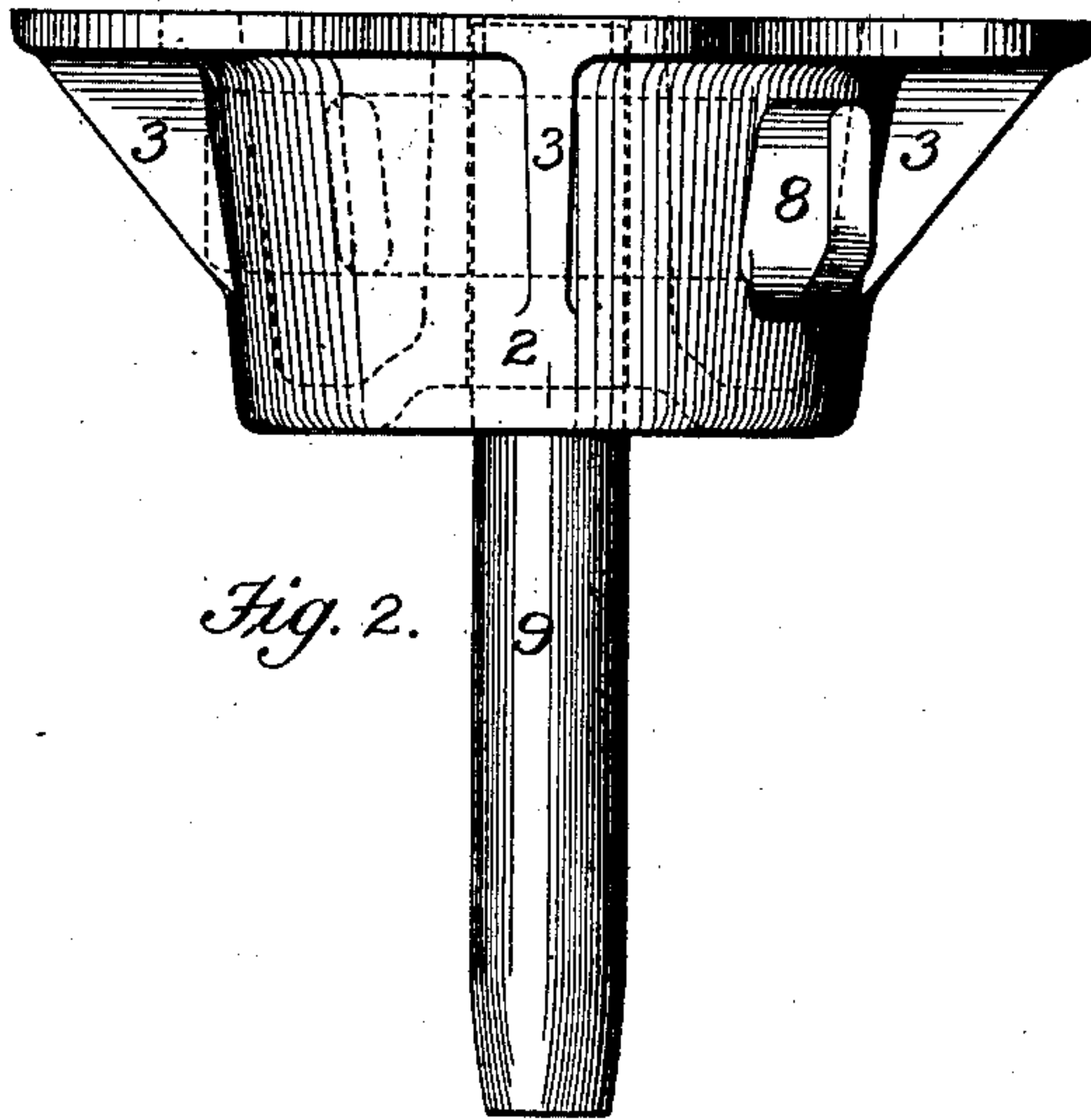
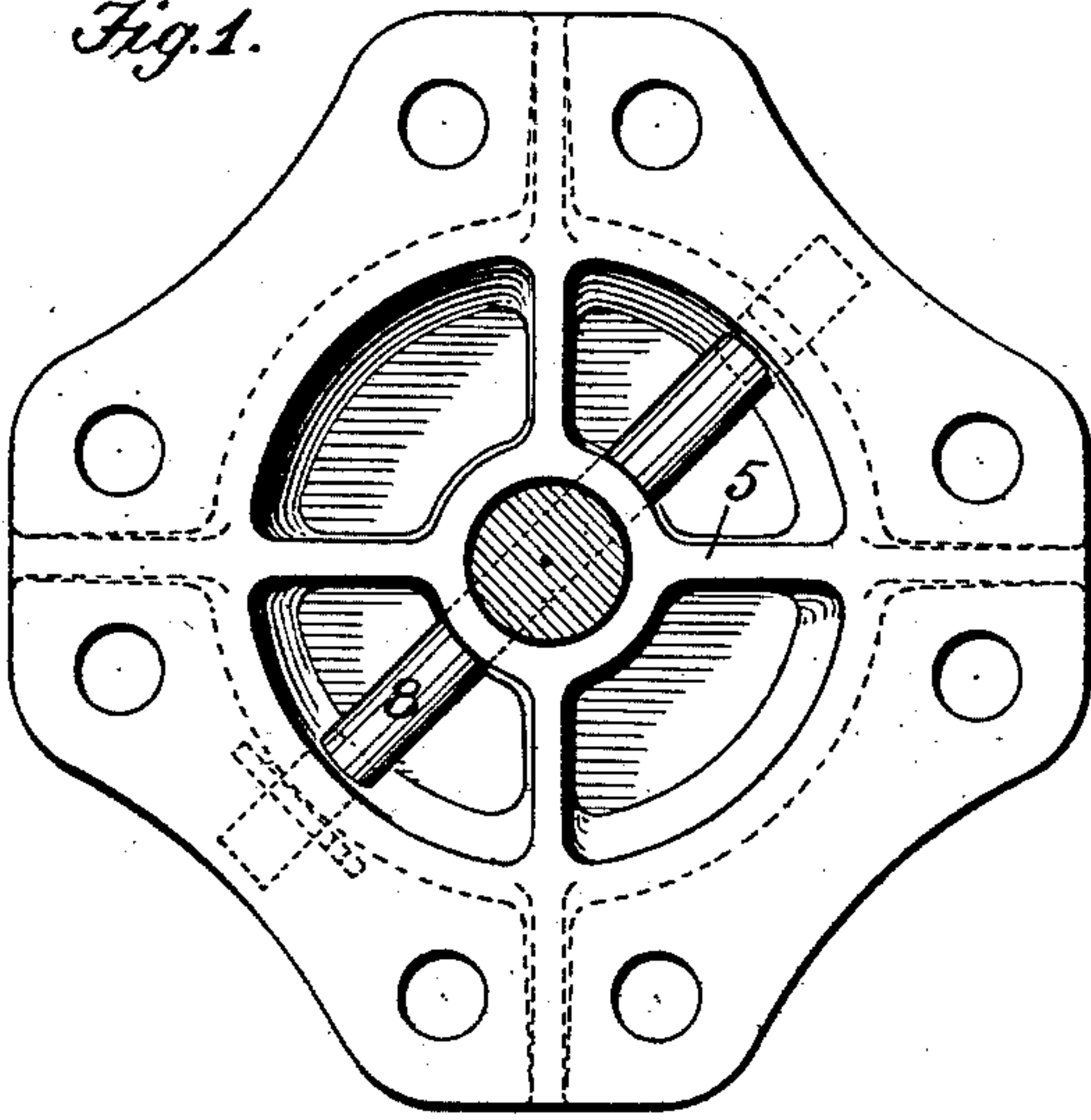


Fig. 2.

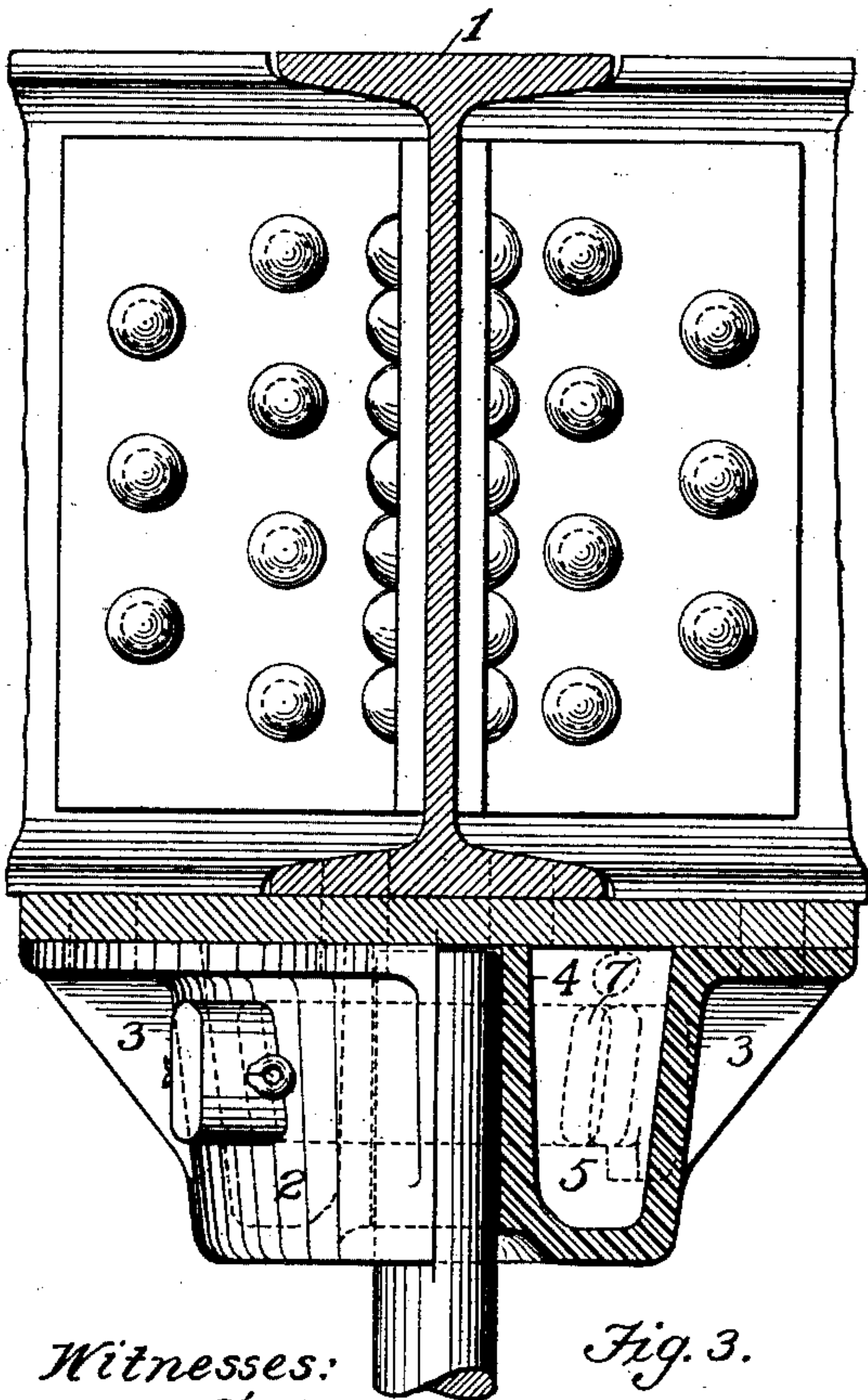


Fig. 3.



Fig. 5.

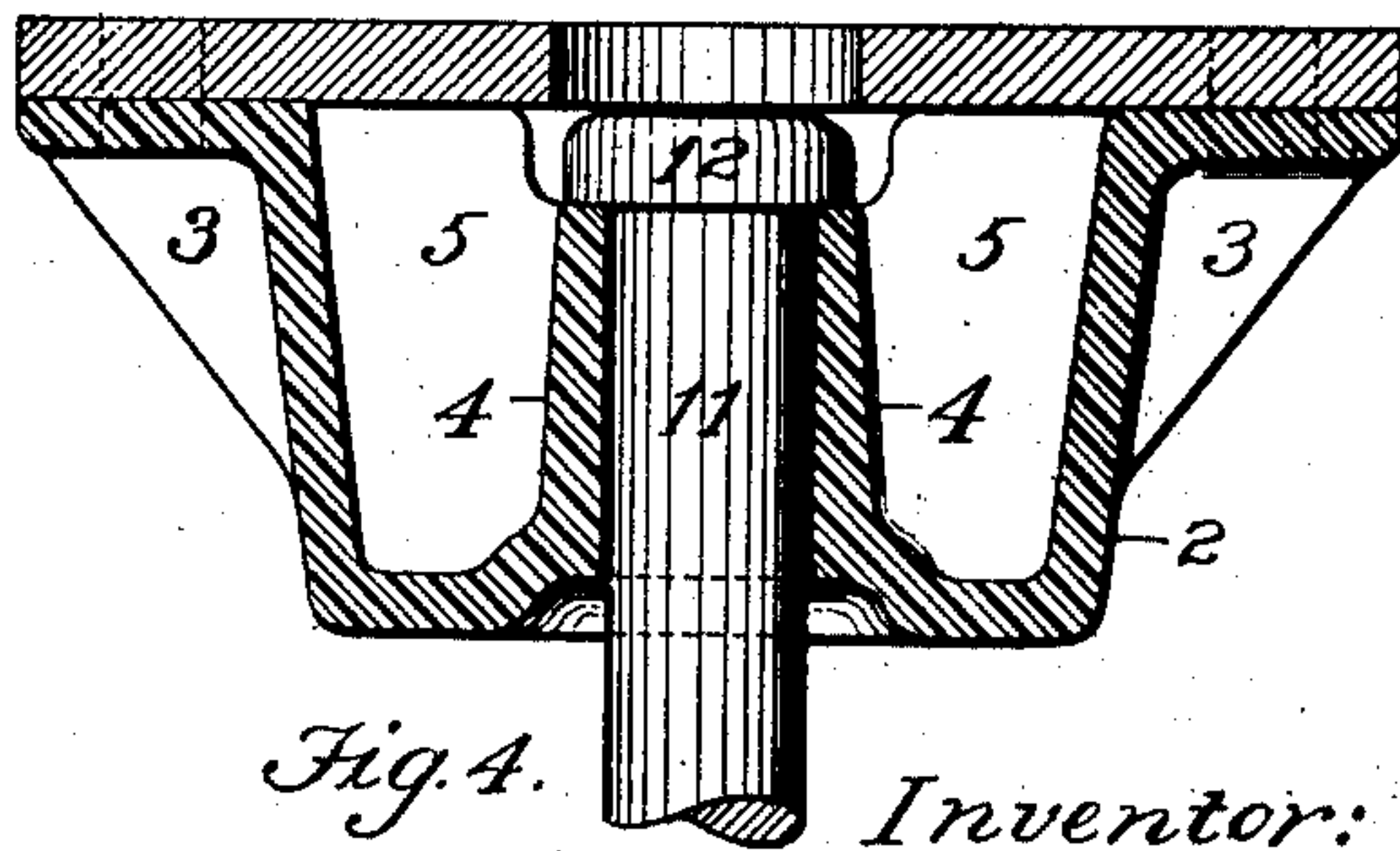


Fig. 4.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE I. KING, OF MIDDLETOWN, PENNSYLVANIA, ASSIGNOR TO
AMERICAN CAR & FOUNDRY COMPANY, OF ST. LOUIS, MISSOURI,
A CORPORATION OF NEW JERSEY.

CENTER-BEARING.

SPECIFICATION forming part of Letters Patent No. 715,085, dated December 2, 1902.

Application filed January 2, 1902. Serial No. 88,161. (No model.)

To all whom it may concern:

Be it known that I, GEORGE I. KING, a citizen of the United States, residing at Middletown, Pennsylvania, have invented a certain new and useful Improvement in Center-Bearings, 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 top plan view of my improved center-bearing. Fig. 2 is an elevational view of the same. Fig. 3 is an elevational view, partly in section, with a bolster in position. Fig. 4 is a vertical sectional view of a modified form of center-bearing, and Fig. 5 is a detail view of the king-pin.

This invention relates to a new and useful improvement in center-bearings for railroad-cars, the object being to construct a bearing of the character described for use particularly in connection with the body bolster or transom of the car and to locate the head of the king-pin below the plane of the upper face of the bearing, whereby the bearing can be attached to and used in connection with continuous body-bolsters (which extend from side to side of the car) without necessitating the removal of any portion of the bolster to accommodate the king-pin.

This invention consists in the construction, arrangement, and combination of the several parts, all as will hereinafter be described and afterward pointed out in the claims.

In the drawings, 1 indicates the body-bolster, which is here shown as being I-shaped in section, to which bolster my improved center-bearing is attached. This center-bearing is preferably made in the form of a malleable or steel casting and is provided with an outwardly-extending attaching-flange at its upper portion, through which pass the securing bolts or rivets.

2 indicates the walls of the center-bearing, which are reinforced and strengthened by externally-arranged webs 3.

4 indicates a hollow boss axially arranged with respect to the center-bearing, said boss affording a seat for the king-pin. This boss

is strengthened by webs 5, which are practically in radial alinement with the webs 3. The walls 2 and 4 are formed with alined openings 7, through which is designed to pass a locking-key 8, said key also passing through an opening in the king-pin and supporting the same in position.

In operation the center-bearing is bolted or riveted to the body-transom, and the king-pin 9, being provided with an opening in its upper end, as shown in Fig. 5, is introduced into the boss in the center-bearing and rotated until its opening 10 registers with the alined openings 7, when the cross-key referred to is introduced into position, said cross-key being held against displacement by the use of rings, which are sprung into position through openings in its ends, or cotter-pins, as is well understood.

In Fig. 4 I have shown a modified form in which the central boss terminates below the plane of the upper face of the bearing, whereby the king-pin (indicated at 11 and provided with the head 12) may be used. In this instance the center-bearing should be bolted in position, so that it can be readily detached. The king-pin in this form is introduced from above, and when the bearing is secured to the bolster the bolster prevents the pin from rising to any considerable extent.

In both forms of my invention it will be noted that the king-pin is held firmly in position in the center-bearing and that the body-bolster is not mutilated by being cut away to receive the upper end of the king-pin, that the king-pin may be readily and quickly removed and inserted in the construction shown in Figs. 1 and 2, while in Fig. 4 the center-bearing can be readily and quickly detached by unscrewing the nuts on the securing-bolts.

I am aware that many minor changes in the construction, arrangement, and combination of the several parts of my device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

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

1. A center-bearing for cars independent of and adapted to be secured to the under side of a body-bolster, said bearing having means engaging therewith and with a king-pin for
5 holding said king-pin in position; substantially as described.

2. A center-bearing for cars independent of and adapted to be secured to the under side of a body-bolster, said bearing consisting of
10 a body portion and an axial boss, a king-pin and means for engaging said boss and said pin for holding the pin in position; substantially as described.

3. A center-bearing for cars comprising a
15 body portion having an axial boss for receiving the upper end of the king-pin, radial webs between said body portion and axial boss, said king-pin terminating below the plane of the upper face of the center-bearing, and means
20 for locking said king-pin in position; substantially as described.

4. The combination with outer wall and a center-bearing provided with an axial boss, of strengthening-webs therefor, walls at the
25 outer ends of said webs, and a king-pin whose upper end terminates below the plane of the upper face of the center-bearing, and means passing through the outer wall and axial boss for securing said pin in position; substan-
30 tially as described.

5. The combination with a center-bearing adapted to be secured to the under side of a body-bolster, comprising a body portion and an axial boss, reinforcing-webs for said parts,
35 and alined openings for said body portion and boss, of a king-pin provided with an opening in its upper end designed to register with said alined openings, a cross-key passing through said openings and means for locking
40 said cross-key in position; substantially as described.

6. The combination with a body-bolster, of a center-bearing secured thereto and being provided with an outer wall, a central boss,
45 an opening in its lower face for the reception of the king-pin, a king-pin arranged in said opening, its upper end terminating below the body-bolster, and means for securing said king-pin to said center-bearing; substantially
50 as described.

7. The combination with a body-bolster, of a center-bearing secured thereto and provided with an opening in its lower face, a king-pin arranged in said opening, a key passing

through said center-bearing and said king- 55 pin for holding said king-pin in position, and means for preventing the displacement of said key; substantially as described.

8. The combination with a center-bearing comprising a body portion and axial boss pro- 60 vided with alined openings, perforated lateral flanges projecting from said body portion adapted for securing the bearing to the under side of a body-bolster, of a king-pin provided with an opening designed to register with said 65 alined openings, and a cross-key passing through said openings adapted to lock said king-pin in position; substantially as described.

9. The combination with a center-bearing 70 comprising a body portion and axial boss provided with alined openings, perforated lateral flanges projecting from said body portion adapted for securing the bearing to the under side of a body-bolster, of a king-pin provided 75 with an opening designed to register with said alined openings, and registering means for securing said king-pin within said center-bearing; substantially as described.

10. The combination with a center-bearing 80 comprising a casting formed independently of the body-bolster and adapted to be secured thereto, said casting having a body portion and axial boss provided with alined open- 85 ings, of reinforcing-webs between said parts, a king-pin provided with an opening designed to register with said alined openings, and a cross-key passing through said openings adapted to lock said king-pin in position; sub- 90 stantially as described.

11. The combination with a center-bearing comprising a casting formed independently of the body-bolster and adapted to be secured thereto, said casting having a body portion and axial boss provided with alined openings, 95 of a king-pin provided with an opening designed to register with said alined openings, a cross-key passing through said coincident openings, and means for securing said key in position; substantially as described. 100

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 19th day of December, 1901.

GEORGE I. KING.

Witnesses:

EMMA CAMPBELL KING,
LYDIA A. KING.