

(No Model.)

J. H. OSBORNE.
COUPLING CLIP FOR WHIFFLETREES.

No. 539,292.

Patented May 14, 1895.

Fig. 1.

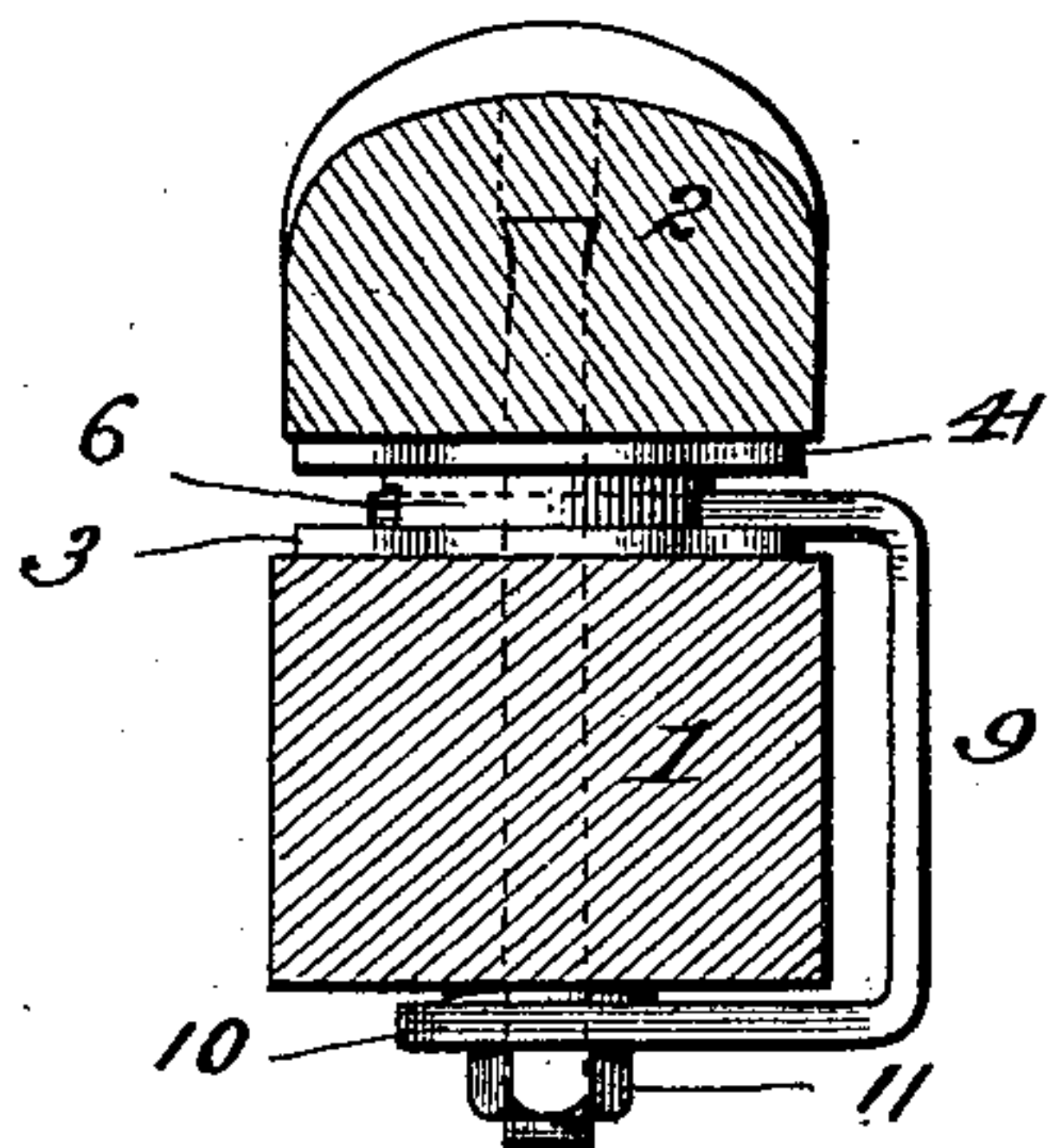


Fig. 2.

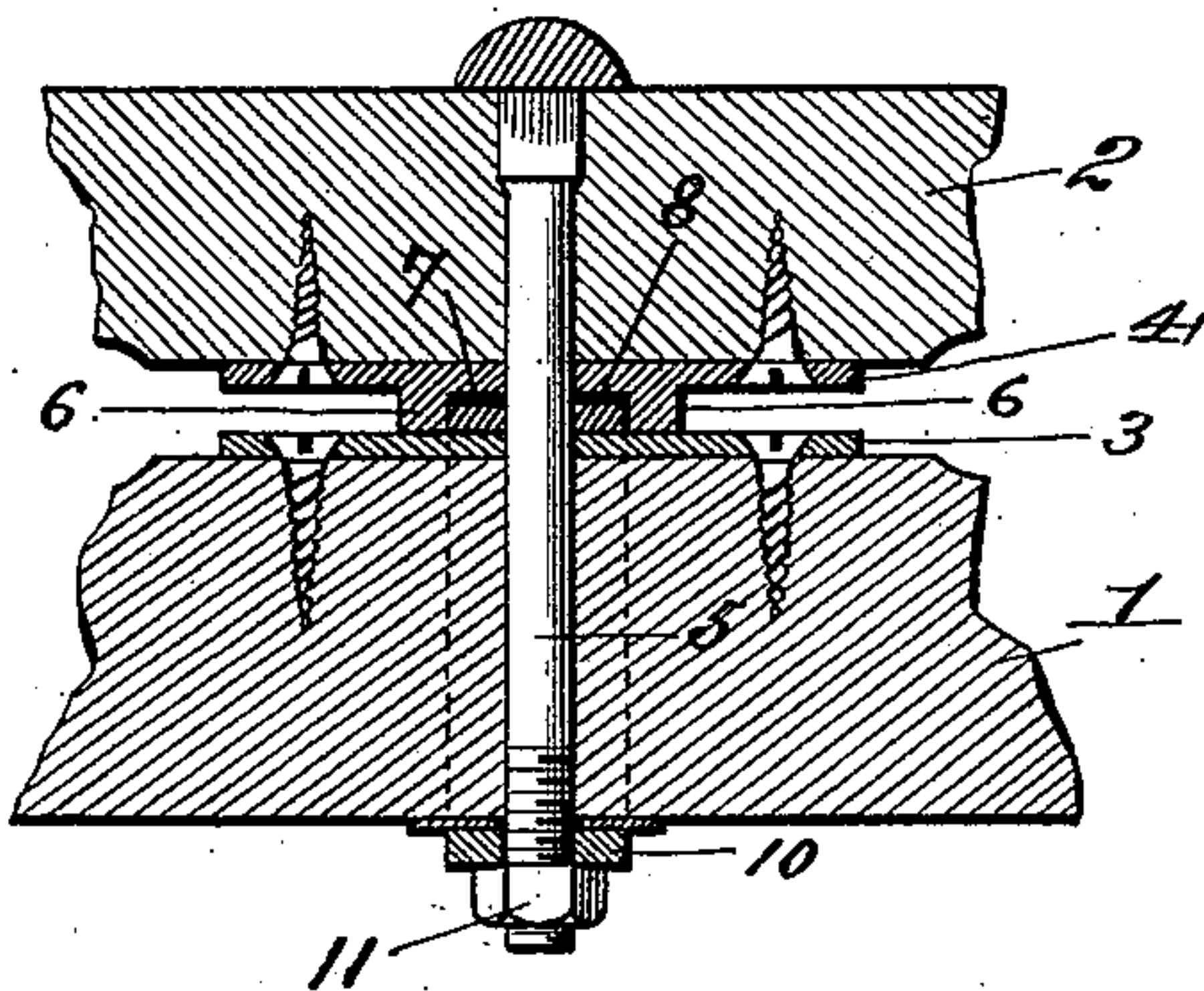


Fig. 3.

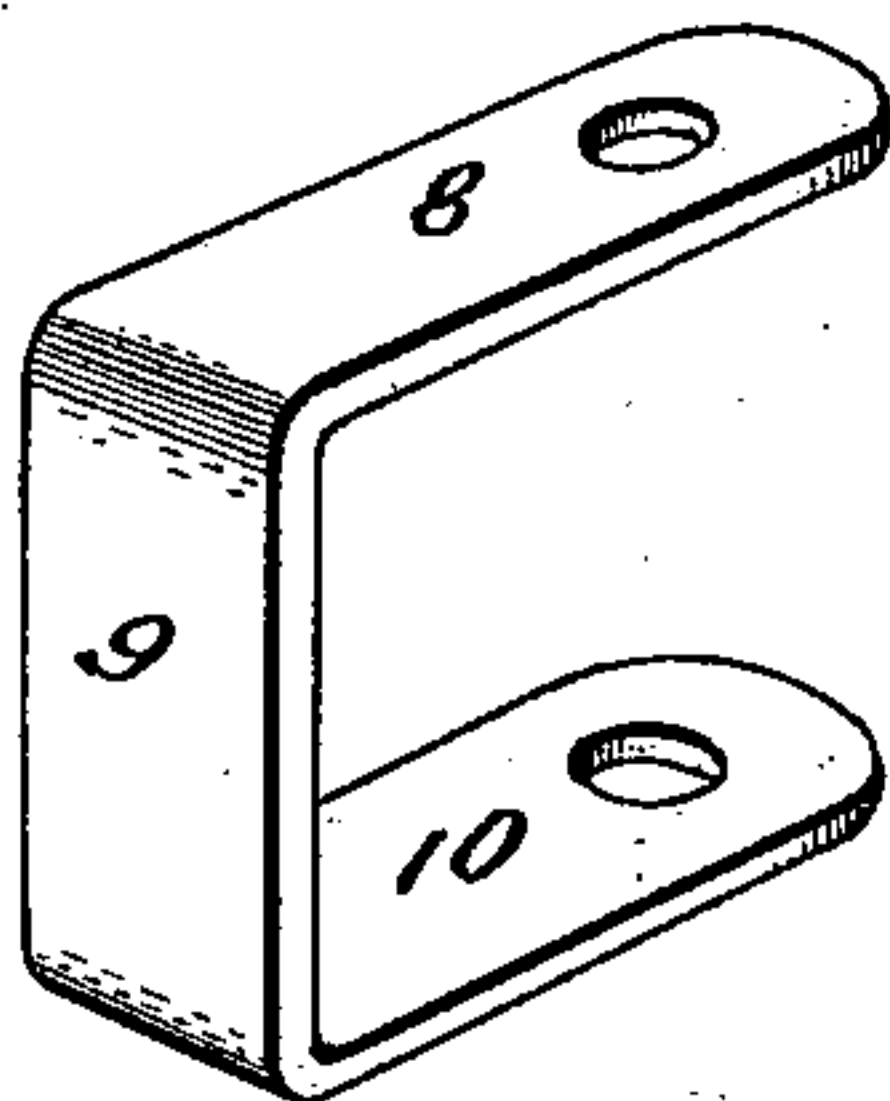


Fig. 4.

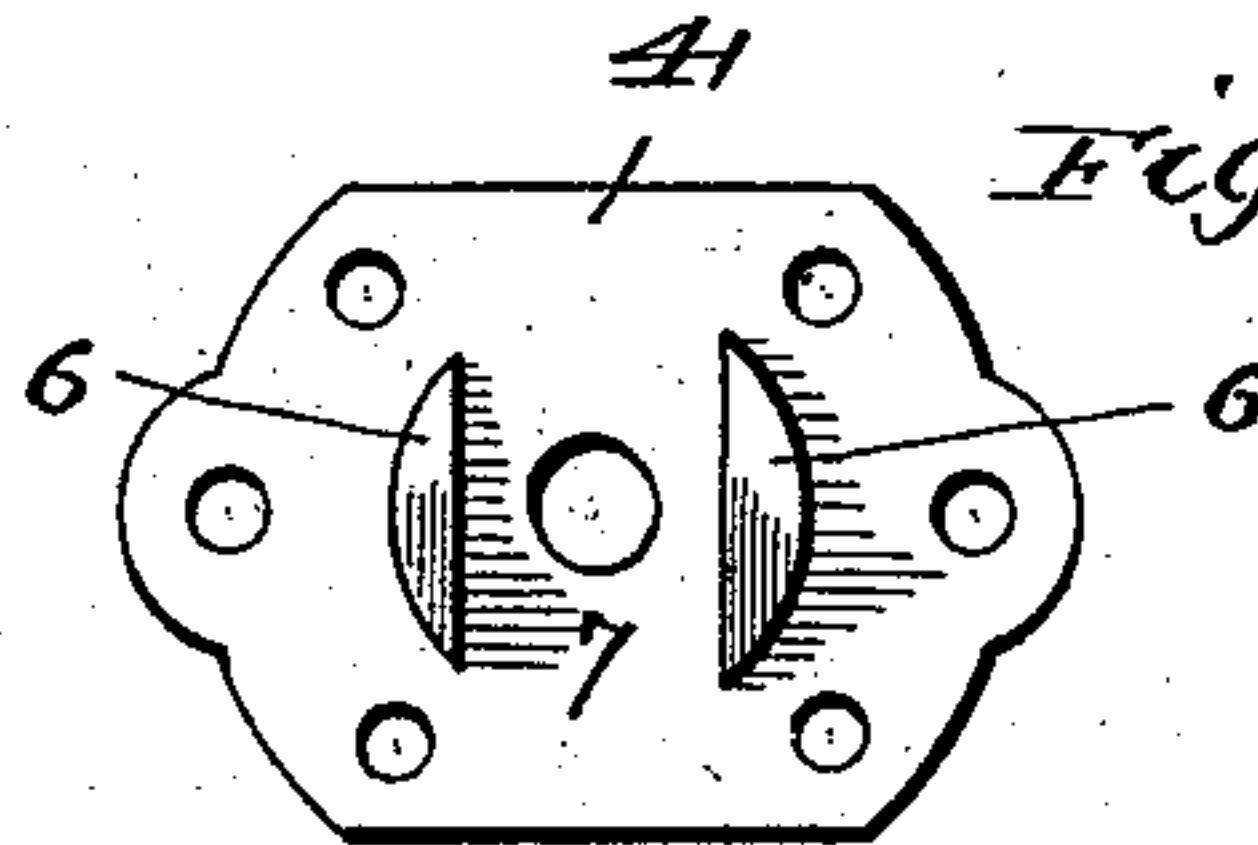
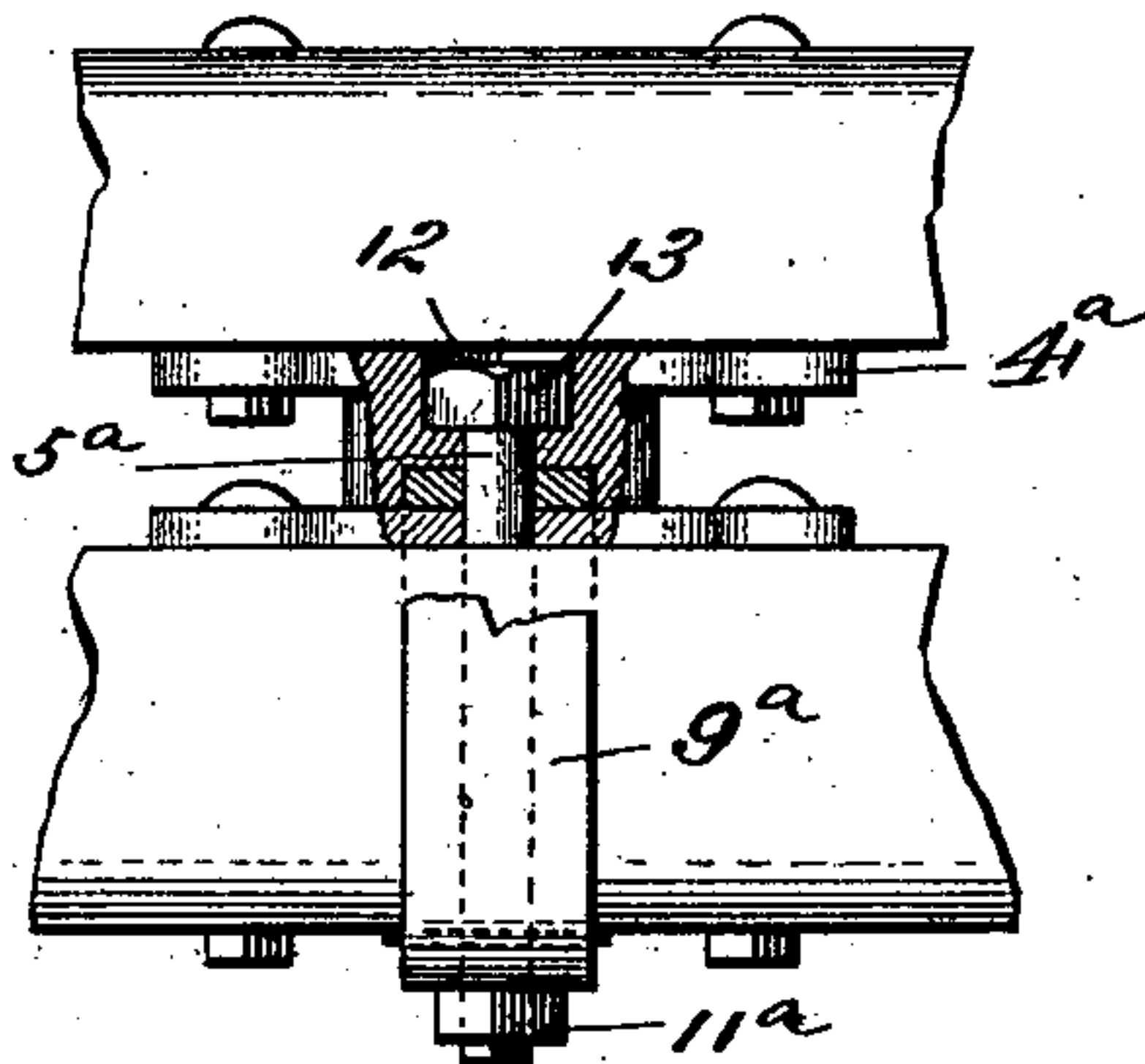


Fig. 5.



Witnesses
G. M. Lawrence
Chas. M. Muzzey

Inventor
J. H. Osborne
By Alexander D. Davis
Attorneys

UNITED STATES PATENT OFFICE.

JOHN H. OSBORNE, OF UNION CITY, INDIANA.

COUPLING-CLIP FOR WHIFFLETREES.

SPECIFICATION forming part of Letters Patent No. 539,292, dated May 14, 1895.

Application filed September 29, 1894. Serial No. 524,505. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. OSBORNE, a citizen of the United States, residing at Union City, in the county of Randolph and State of Indiana, have invented certain new and useful Improvements in Coupling-Clips for Whiffletrees, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to a new and useful improvement in coupling clips for whiffletrees; and it has for its object to provide a device of simple construction which will be easy of manufacture, and which when in position will prevent the nut on the lower end of the coupling bolt from being loosened by the constant vibration of the whiffletree.

15 The invention consists in certain novel combinations and arrangements of parts herein-after described and particularly pointed out in the claims appended.

20 In the drawings, Figure 1 is a cross section of a whiffletree and cross-bar, showing my coupling device in position; Fig. 2, a longitudinal vertical sectional view thereof; Fig. 25 3, a detail view of the removable strap; Fig. 4, a bottom plan of one of the coupling-plates; Fig. 5, a detail side elevation of a modification, parts being broken away to show its construction.

30 Referring to the various parts by numerals, 1 designates the cross bar of a vehicle shaft; 2, the whiffletree; 3, the center plate secured to the upper side of the cross bar in any suitable manner, and 4 the center plate secured to the under side of the whiffletree in the center thereof.

40 The center or coupling plates 3 and 4 are apertured centrally for the passage of the coupling bolt 5. This bolt is preferably formed with a T-head whose under side closely fits the upper surface of the whiffletree thereby causing said bolt to vibrate with the whiffletree. To prevent the securing nut on the lower end of the bolt 5 from loosening up under this constant vibration I form either on the upper or lower side of the center-plate 4 which is secured to the whiffletree, a central boss 6, and form in this boss on the under or upper side thereof a central transverse groove or passage 7 thereby forming lugs between which fits the upper arm 8 of a C-shaped strap

9. The lower surface of this arm rests and bears on the upper surface of the center-plate 3 on the cross bar, as clearly shown. The lower arm 10 of the strap 9 passes under the cross bar; and these upper and lower arms are apertured co-incidentally for the passage of the bolt 5. The vertical arm of the strap 9 passes to the rear of the cross bar, as shown.

60 A suitable washer is placed between the cross bar and the lower arm 10 of the strap, and the securing nut 11 is then screwed home, as shown, securely binding all the parts in their proper positions. It will thus be seen that the strap 9, by reason of its upper arm fitting snugly within the transverse recess of the boss 6 of the center-plate 4, will be caused to vibrate and turn with the central bolt and the whiffletree, and as the securing nut 11 bears on the lower arm of the strap it will vibrate and turn with it without being loosened in the least.

75 In Fig. 5 of the drawings is shown a slight modification of the device. In this construction the plate 4^a is formed on its upper side with a central angular recess or depression 12 to receive the correspondingly shaped angular head 13 formed on the bolt 5^a in place of the T-head shown in Figs. 1 and 2. The center plate 4^a in this construction is securely bolted or otherwise fastened to the whiffletree, as shown, and as will be readily seen the strap 9^a will turn with the whiffletree, plate 4^a and bolt 5^a; and the securing nut 11^a will remain securely in position as in the form shown in Figs. 1 and 2.

85 Having thus fully described my invention, what I claim is—

1. In a whiffletree coupling the combination of the cross-bar, the whiffletree, the center plates, a removable, independent, approximately C-shaped strap, one of its arms extending between the cross-bar and whiffletree and resting between lugs formed on one of the center plates, a coupling-bolt passing through the center plates and the other arm of the strap, a securing nut on said bolt binding against said other arm of the strap, substantially as described.

100 2. In a whiffletree coupling, the combination of a cross-bar, a whiffletree, center plates on the cross bar and whiffletree, an independent removable strap embracing the cross bar and

adapted to turn with the whiffletree, the horizontal arms of said strap being apertured, the upper arm of said strap resting between lugs on the plate secured to the whiffletree, and a
5 coupling bolt adapted to pass through the center plates and the horizontal arms of the strap, and a securing nut binding against the lower arm of said strap, substantially as described.

3. In a whiffletree coupling, the combination
10 of a cross-bar, a whiffletree, a centrally apertured center-plate secured to the whiffletree and formed with a central angular recess on its upper surface and depending lugs on its under side, a coupling bolt provided with an

angular head to fit the angular recess of the
center plate, a removable E-shaped strap embracing the cross-bar its upper arm resting between the lugs of the plate, the upper and lower arms of said strap being apertured coincidentally for the passage of the coupling
20 bolt, and a securing nut, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. OSBORNE.

Witnesses:

PET PARENT,
F. L. MARSHALL.