No. 824,526. PATENTED JUNE 26, 1906.

W. E. COFFIN.

PIVOT PIN SUPPORT FOR COUPLINGS.

APPLICATION FILED JAN. 25, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

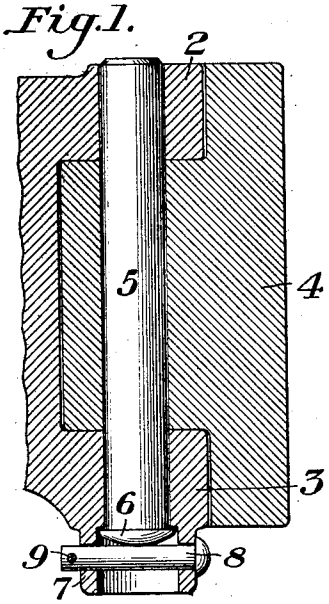


Fig. 3.

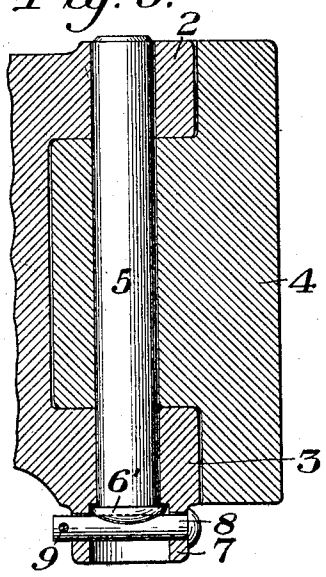


Fig. 2.

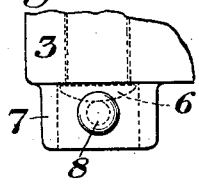


Fig. 4.

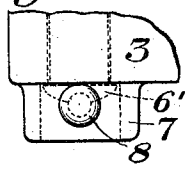


Fig. 5.

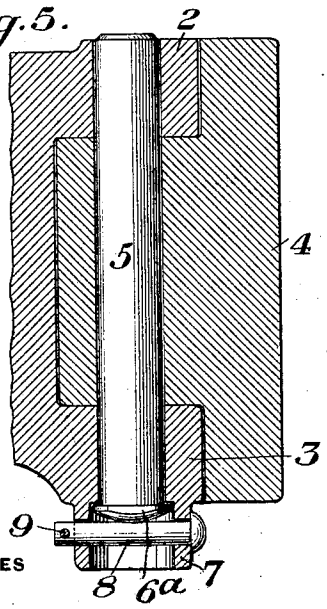
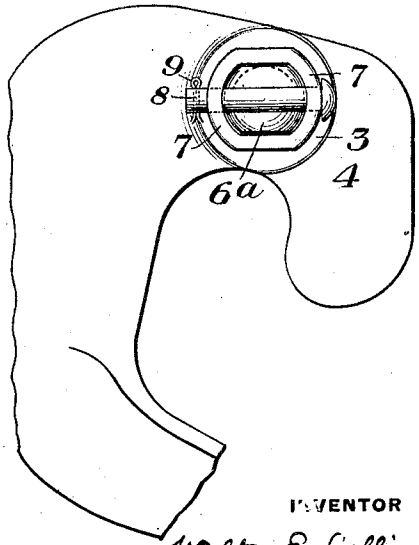


Fig. 6.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 7.

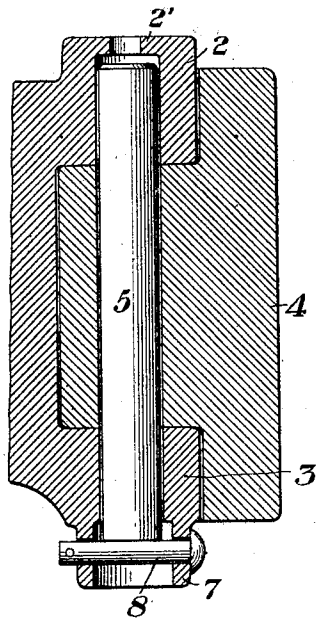
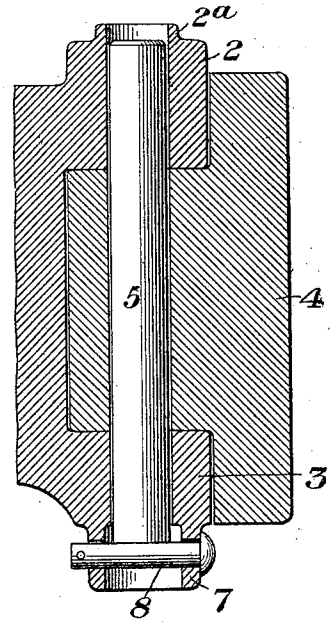


Fig. 8.



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UNITED STATES PATENT OFFICE.

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PIVOT-PIN SUPPORT FOR COUPLINGS.

No. 824,526. Specification of Letters Patent. Patented June 26, 1906.

Application filed January 25, 1906. Serial No. 297,738.

To all whom it may concern:

Be it known that I, WALTER E. COFFIN, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Pivot-Pin Support for Couplers, 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 shows in vertical section a coupler having a pivot-pin support embodying my invention. Fig. 2 is a side elevation of the lower ear of the coupler. Fig. 3 is a view similar to Fig 1, showing a modified construction. Fig. 4 is a view similar to Fig. 2, showing the lower lug of Fig. 3. Figs. 5 and 6 illustrate a modification, and Figs. 7 and 8 illustrate other modifications.

When car-couplers are used for some purposes, it is important that the pivot-pin should be constructed so as to be insertible and removable from below, and in such cases it is essential that means be provided for supporting the pivot-pin in the coupler. My invention is directed to this end, and it provides a strong and efficient support well adapted for the purpose intended.

In the drawings, 2 is the upper ear, and 3 the lower ear, of a Master Car-Builders' coupler. 4 is the swinging knuckle, and 5 is the pivot-pin which passes through the ears and through the intermediate knuckle. This pivot-pin is insertible from below and is provided with a head 6, which when the pin is in position fits within a circular lug 7 of the lower ear 3. The pin is upheld by a bolt 8, which passes through the walls of the circular lug 7, extending diametrically across the same, and is provided with a cotter 9. The weight of the pivot-pin is borne by the bolt 8, which is strong and substantial and being passed through cored holes in the lug 7 can be readily and cheaply applied.

It will be noted that the bolt which supports the pivot-pin does not extend through that pin, but is entirely below it. This enables the ordinary bolts, which railroads carry in stock in large quantities, to be used in case of loss or breakage and avoids the necessity for a special bolt.

In Figs. 3 and 4 I show a modification in which the head 6′ of the pivot-pin is provided with a transverse groove which fits upon the bolt 8, and thus keeps the pivot-pin from turning.

In the modification shown in Figs. 5 and 6 the head 6^a of the pivot-pin is flattened on opposite sides, and the sides of the cavity of the lug 7 are also flattened to keep the pivot-pin from turning.

In Fig. 7 I show a modification in which the top of the pin-hole in the upper lug of the coupler is closed or partially closed, as at 2′, so as to prevent upward displacement of the pin, which in this case need not be provided with a head.

In the modification shown in Fig. 8 the upper lug 2 has an upward extension 2^a, which extends above the end of the pin. The lug is formed in this way, so that after the hole through the lug has been drifted the extension 2^a can be hammered down so as to partly close the hole and bring the parts into substantially the same condition as shown in Fig. 7.

Other modifications of my invention can be made by those skilled in the art, since

What I claim is—

1. A car-coupler having a pivot-pin insertible in the coupler from below, said coupler having a hollow lug at its base in which the head of the pin fits, and a sliding bolt which passes through bolt-holes in the walls of the lug beneath the pin and supports the pin.

2. A car-coupler having a pivot-pin provided with a head and insertible in the coupler from below, said coupler having a hollow lug at its base in which the head of the piece fits, and a retaining device for said piece, said device comprising an ordinary bolt slid through bolt-holes in the walls of said lug below the pin and supporting the same; substantially as described.

3. A car-coupler having a pivot-pin provided with a head and insertible in the coupler from below, said coupler having a hollow lug at its base in which the head of the pin fits, a bolt which passes through the walls of the lug and supports the pin, and means beneath the pin engaging the head of the pin to prevent it from turning.

4. A car-coupler having a pivot-pin pro-

vided with a head and insertible in the coupler from below, said coupler having a hollow lug at its base in which the head of the pin fits, and a bolt beneath the pin which passes through the walls of the lug and forms a rest for the pin-head, said head and bolt being interfitted to prevent the pin from turning.

In testimony whereof I have hereunto set my hand.

WALTER E. COFFIN.

Witnesses:
HENRY F. POPE,
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