C. A. TOWER.

DEVICE FOR SUPPORTING PIVOT PINS IN COUPLINGS.

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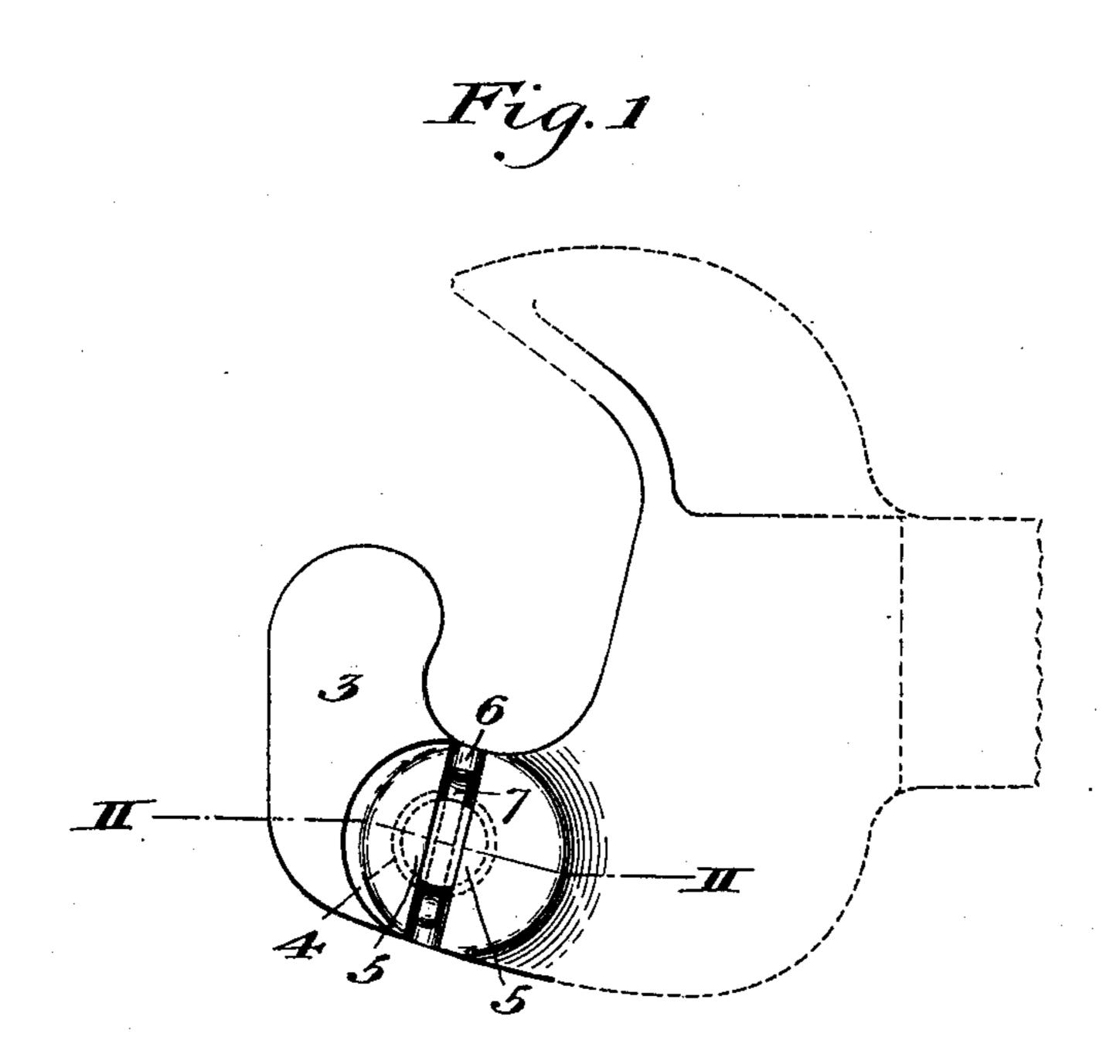
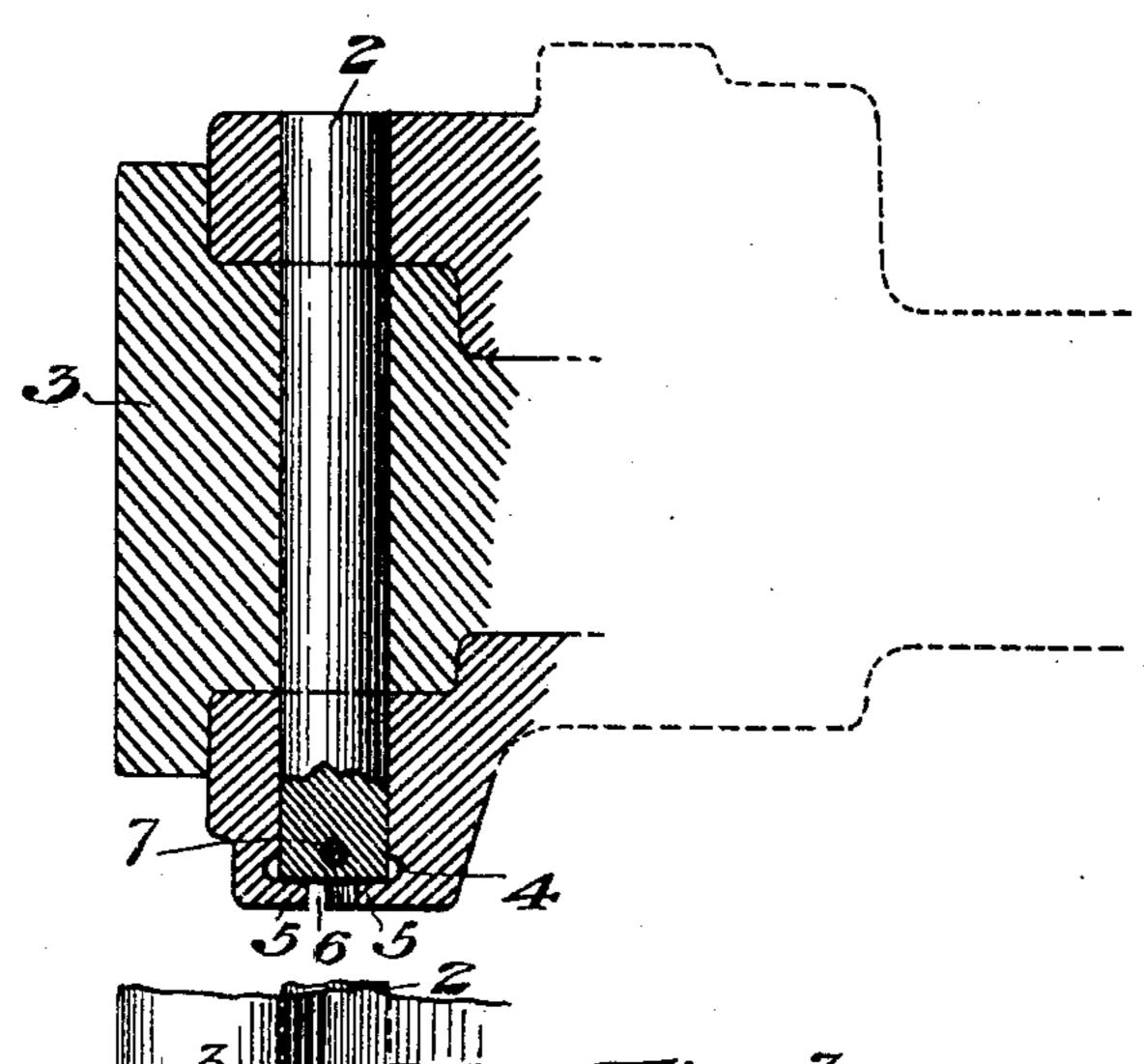
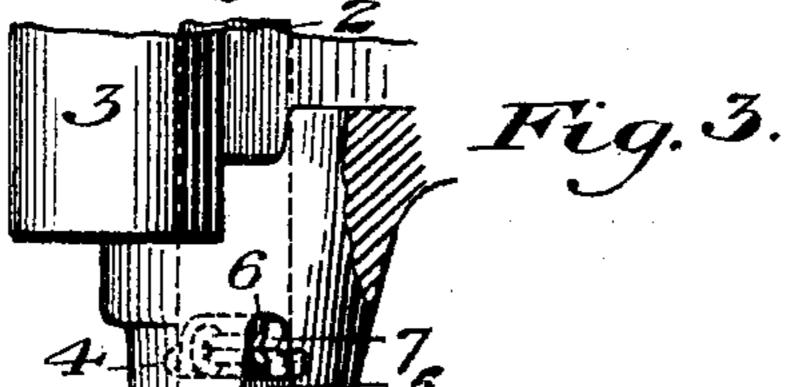


Fig. Z.



WITNESSES JAMES SAME



Christon Q. Jawer by Bakewell Bywes Lie attorneys

United States Patent Office.

CLINTON A. TOWER, OF CLEVELAND, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

DEVICE FOR SUPPORTING PIVOT-PINS IN COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 785,698, dated March 21, 1905.

Application filed November 30, 1904. Serial No. 234,896.

To all whom it may concern:

Be it known that I, CLINTON A. TOWER, of Cleveland, Cuyahoga county, Ohio, have invented a new and useful Device for Supporting Pivot-Pins in 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 bottom plan view a coupler having a pin-retaining device constructed in accordance with my invention. Fig. 2 is a vertical section on the line II II of Fig. 1, and Fig. 3 is an elevation partly in section.

The purpose of my invention is to provide means for holding the pivot-pin of a couplerknuckle in place, so that even if the pin should break its lower part cannot drop out of the pin-hole, thus putting the whole strain upon to the upper lug of the coupler-head. To this end I use a pin 2, which, as shown in Fig. 2, may be constructed without a head and is of such length that when set in the coupler its upper end shall be flush with the top of the 25 coupler-head. 3 is the knuckle which is held by the pin. In the lower lug of the couplerhead the pin-hole is preferably enlarged, as at 4, for purposes described in my prior patent, No. 735,000, dated July 28, 1903. Below 30 the enlargement 4 the pivot-hole is contracted somewhat, as at 5, so as to form supports for the end of the pivot-pin, and the coupler-head is traversed by a slot 6, which, as shown in !

Figs. 1 and 2, extends transversely across the pin-hole and extends also to the bottom of the 35 lower lug of the coupler-head. This slot affords a space in which a cotter 7 can be inserted through the pivot-pin, so as to prevent the pin from creeping upwardly, and the slot gives free access to the pin-hole and by extending upwardly from the lower surface of the bottom lug of the coupler-head renders the coring very simple when the molding is done.

I claim as my invention—

1. Means for supporting a pivot-pin of a coupler-knuckle, consisting in a coupler having a pin-hole and in the lower lug of the coupler a transverse slot extending through the pin-hole, and extending also to the bottom 5° of the lug; substantially as described.

2. Means for supporting a pivot-pin of a coupler-knuckle, consisting in a coupler having a pin-hole and in the lower lug of the coupler a transverse slot extending through 55 the pin-hole, and extending also to the bottom of the lug, and a cotter which is inserted through the pin in said slot; substantially as described.

In testimony whereof I have hereunto set 60 my hand.

CLINTON A. TOWER.

Witnesses:
HENRY F. POPE,

HARRY E. ORR.