

No. 652,200.

Patented June 19, 1900.

C. A. TOWER.
UNCOUPLING APPARATUS.

(Application filed Jan. 20, 1898.)

(No Model.)

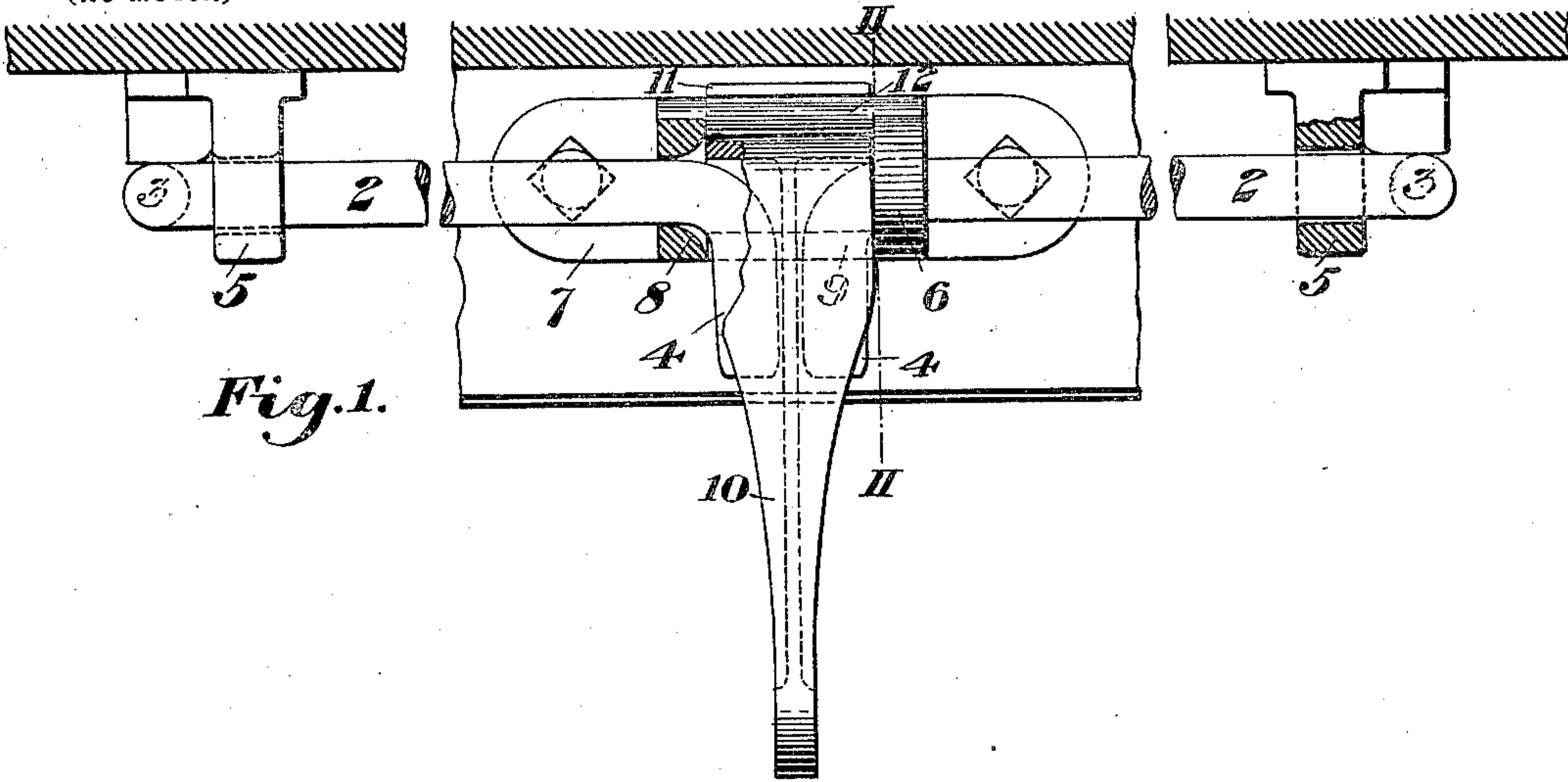
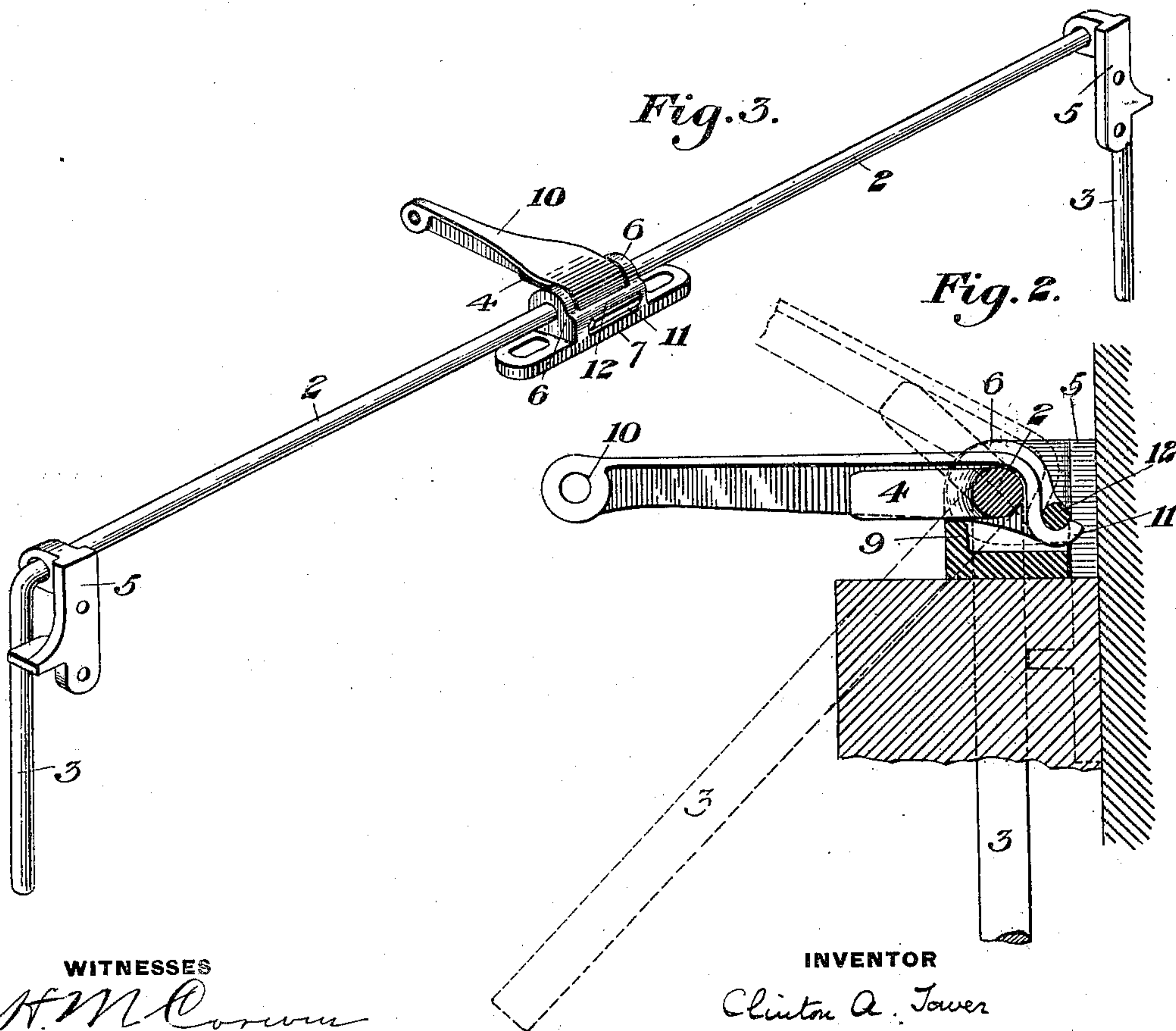


Fig. 1.

Fig. 3.

Fig. 2.



WITNESSES

H. M. Corwin
L. A. Comer

INVENTOR

Clinton A. Tower
by Baxendell & Baxendell
his Attorneys.

UNITED STATES PATENT OFFICE.

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

UNCOUPLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 652,200, dated June 19, 1900.

Application filed January 20, 1898. Serial No. 667,286. (No model.)

To all whom it may concern:

Be it known that I, CLINTON A. TOWER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Uncoupling Apparatus, 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 top plan view, partly broken away, showing my improved apparatus secured in place at the end of a car. Fig. 2 is a cross-section of the same on the line II II of Fig. 1. Fig. 3 is a perspective view of the apparatus with its supporting-brackets.

My invention relates to that class of uncoupling devices wherein the operating-shaft is made in two separate parts or halves, and is designed to provide an apparatus of this character wherein each half of the shaft is so connected to the locking-block that it may be operated without interfering with the other half or portion of this shaft.

In the drawings, 2 2 represent the two halves or portions of the operating-shaft, each half consisting of a rod one end of which is bent to form the operating-lever 3, while the other end is bent to form a short crank 4. The outer ends of the shaft portions are supported in suitable end brackets 5 5, and their inner ends are carried within eyes 6 upon the center bracket 7. The eyes 6 are rounded or beveled, as shown at 8 in Fig. 1, so as to allow the bent crank end of the shaft portion to be slipped therethrough in assembling the parts. Between these eyes the front portion of the center bracket is provided with an upwardly-projecting flange 9, which forms a rest and stop for the cranks 4 and for the crank-arm 10, which they act upon. The rear end of this crank-arm is curved downwardly and provided with a hinge-lip 11, which engages a transverse pintle 12, formed in the rear portion of the bracket. The under face of the crank-arm is provided with a vertical flange or rib 13, which separates the cranks 4 and strengthens the crank-arm. The usual operating chain or link is connected to the end of the crank-arm so as to enable it to actuate the locking-block of the coupler.

The hinge-lip of the crank-arm is so arranged that after the parts are secured to the car it cannot swing into position to detach it from the pintle, and in securing the apparatus to a car these parts are first assembled in their proper relation and the brackets then fastened in place.

The advantages of my invention result from the fact that either portion of the shaft may be actuated to lift the unlocking-block without moving or disturbing the other shaft portion and that each part when moved will operate directly and certainly upon the crank-arm. The parts are simple and few in number and not liable to get out of order and may be easily and quickly assembled and secured in place.

I prefer to make the hand-lever and the crank integral with the shaft portion; but they may be made separate from and secured thereto. The crank-arm may be pivoted above or between the cranks or upon the inner ends of the shafts.

I claim—

1. In uncoupling apparatus, a fixed bracket and a crank-arm connected with the coupler-lock and having a hinge-lip fitting under a pintle on the bracket.

2. In uncoupling apparatus, a fixed bracket and a crank-arm connected with the coupler-lock and having a hinge-lip engaging a pintle on the bracket, and an uncoupling-shaft having a crank at its inner end adapted to engage said crank-arm.

3. In uncoupling apparatus, a fixed bracket and a crank-arm connected with the coupler-lock and having a hinge-lip engaging a pintle on the bracket, an uncoupling-shaft having a crank at its inner end adapted to engage said crank-arm, and a stop adapted to support said crank and crank-arm.

4. In uncoupling apparatus, the combination of a fixed bracket having eyes to receive the uncoupling-shaft, a two-part uncoupling-shaft, each part journaled at its inner end in one of said eyes, and having at said bracket between the eyes a right-angled crank, and a separate crank-arm also pivoted to the bracket, extending over said cranks and adapted to be actuated thereby.

5. In uncoupling apparatus, the combination of a fixed bracket having eyes to receive the uncoupling-shaft, a two-part uncoupling-shaft, each part journaled at its inner end in one of said eyes, and having at said bracket between the eyes a right-angled crank, and a separate crank-arm having a hinge-lip fitting under a pintle on said bracket back of said

eyes, extending over said crank and adapted to be actuated thereby.

In testimony whereof I have hereunto set my hand.

CLINTON A. TOWER.

Witnesses:

HENRY F. POPE,
O. K. BROOKS.