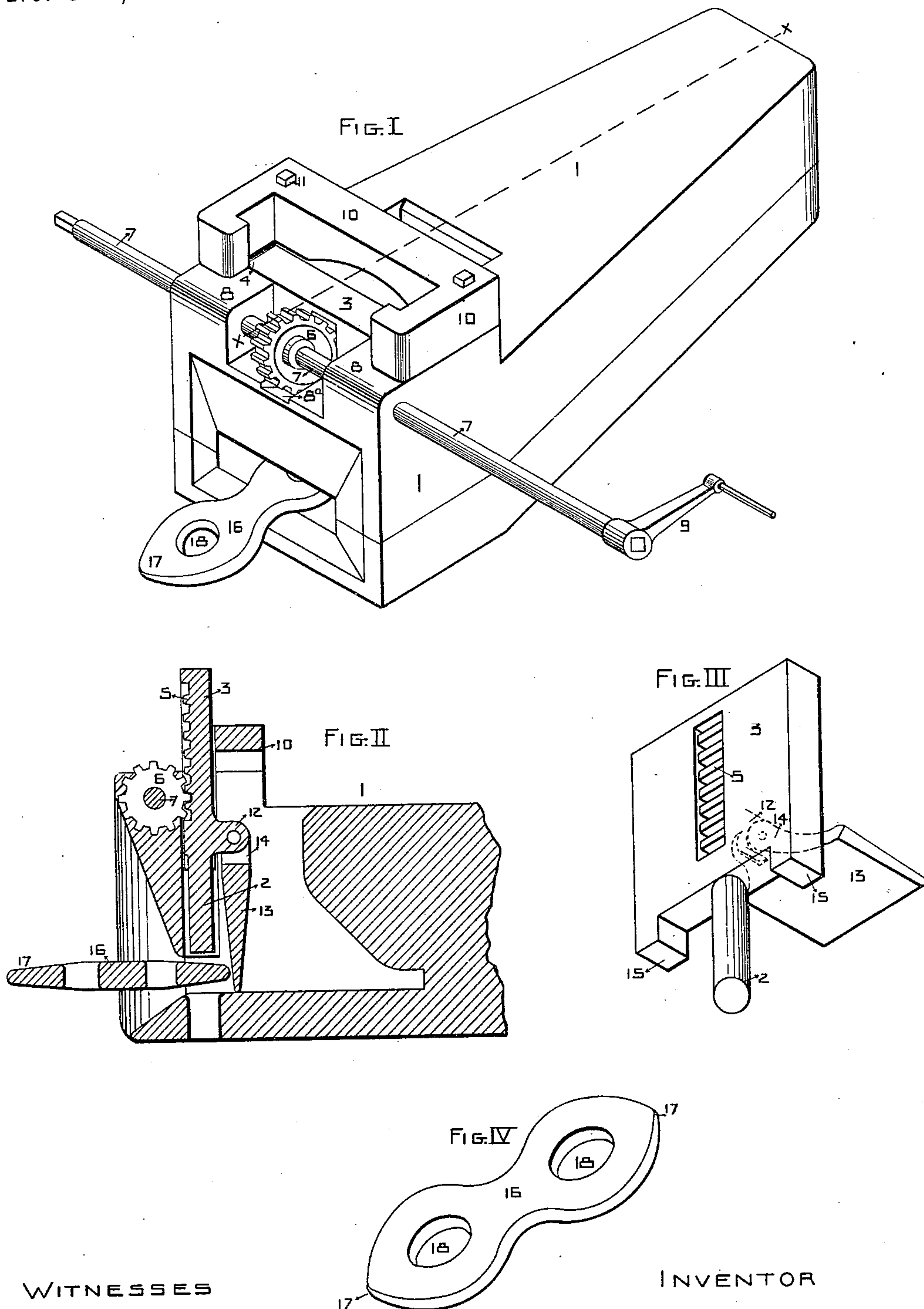


(No Model.)

H. L. DUNLAP.
CAR COUPLING.

No. 547,065.

Patented Oct. 1, 1895.



WITNESSES

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UNITED STATES PATENT OFFICE.

HORACE L. DUNLAP, OF NORTH TOPEKA, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 547,065, dated October 1, 1895.

Application filed December 26, 1894. Serial No. 532,976. (No model.)

To all whom it may concern:

Be it known that I, HORACE L. DUNLAP, of North Topeka, in the county of Shawnee, in the State of Kansas, have invented certain new and useful Improvements in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in car-couplings; and it consists in certain features of novelty hereinafter described, and pointed out in the claims.

Figure I shows a perspective view of my improved car-coupler. Fig. II shows a cross-section of the same on the line $x x$, Fig. I. Fig. III shows a detail view of the coupling-pin, block, and foot-plate of my improved car-coupling. Fig. IV shows a detail perspective of the coupling-bar I preferably use.

Similar numerals refer to similar parts throughout the several views.

1 represents a draw-head.

2 represents a coupling-pin.

3 represents a block upon which the coupling-pin is carried. The pin may be formed integral with the block or may be secured therein, as may be desired. The block rides in the grooves 4 in the draw-head.

5 represents a ratchet on the forward face of the block.

6 represents a ratchet-wheel keyed on the shaft 7, said shaft being journaled in the jaws 8 of the draw-head, the draw-head being recessed at 8^a to accommodate the ratchet-wheel.

9 represents a crank by which the shaft is operated to revolve the ratchet-wheel to raise the coupling-pin, said crank being removable, if desired.

10 represents a block set on the draw-head and secured thereto by the bolts 11. Said block is formed with recesses at its ends to conform with the grooves 4 in the draw-head to receive and retain the block 3 in position when said block 3 is raised to remove the coupling-pin.

12 represents a lug on the rear face of the block 3, upon which is pivoted a foot-plate 13 by the extension 14 thereon.

15 represents extensions at the sides of the block 3, by which it is supported in the draw-head when the coupling is made.

16 represents the coupling-bar, which I preferably use, having the ends somewhat elongated, as shown at 17, and the openings 55 elongated, as shown at 18.

In operation the draw-head stands ready for coupling, as shown in Fig. II. When the coupling is made, the coupling-bar entering the draw-head pushes the pivoted foot-plate 60 13 backward, and its support being removed the weight of the block 3 carries the pin down through the opening in the coupling-bar, its weight being sufficient to revolve the ratchet-wheel 6, the shaft of which is loosely mounted in the jaws of the draw-head. The coupling is thus purely automatic. When it is desired to uncouple, placing the crank 9 on the shaft 7 and turning the same the ratchet-wheel is revolved, and by its engagement 70 with the ratchet 5 on the block 3 the coupling-pin is raised from engagement with the coupling-bar, and as the coupling-bar is removed from the draw-head the foot-plate 13 swings on its pivot into the position shown 75 in Fig. II and thus supports the pin in position for the next coupling. As the block 3 is raised, the extensions 15, riding in the groove 4, serve to keep the block true to its position, and the block 10, serving as a backing for the 80 block 3, also tends to keep the block true to the line of the groove and ready to fall freely when the supporting foot-plate 13 is pushed back by the entering bar. The lug 12 on the plate 3, upon which the foot-plate 13 is pivoted, is located thereon with such relation 85 to the pin that when the coupling is made and the pin down the plate 13 will rest in such close proximity to the coupling-bar as to hold it when the other end is loose in a substantially horizontal position ready for coupling, 90 thus making the coupling still more entirely automatic.

Having thus fully described my improvements, what I claim as my invention, and desire to secure by Letters Patent, is—

1. A car coupling consisting of a draw head, a block sliding in grooves therein, a coupling pin secured to the block, a ratchet on the block, a ratchet wheel engaging the ratchet, 100 a shaft loosely journaled in the draw head upon which said ratchet wheel is carried, a block set on the draw head to retain the block to which the coupling pin is attached in align-

ment with the groove in the draw head and a pivoted foot plate to support the pin and block to which it is attached when in an elevated position substantially as shown and
5 described and for the purpose set forth.

2. A car coupler a coupling pin, a block to which said pin is attached, the extensions 15 on said block, a ratchet on said block, a lug

12 on the block and a foot plate 13 pivoted to the lug 12 to support the block and pin 10 when the pin is raised substantially as shown and described and for the purpose set forth.
HORACE L. DUNLAP.

Witnesses:

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ROLLIN NICHOLS.