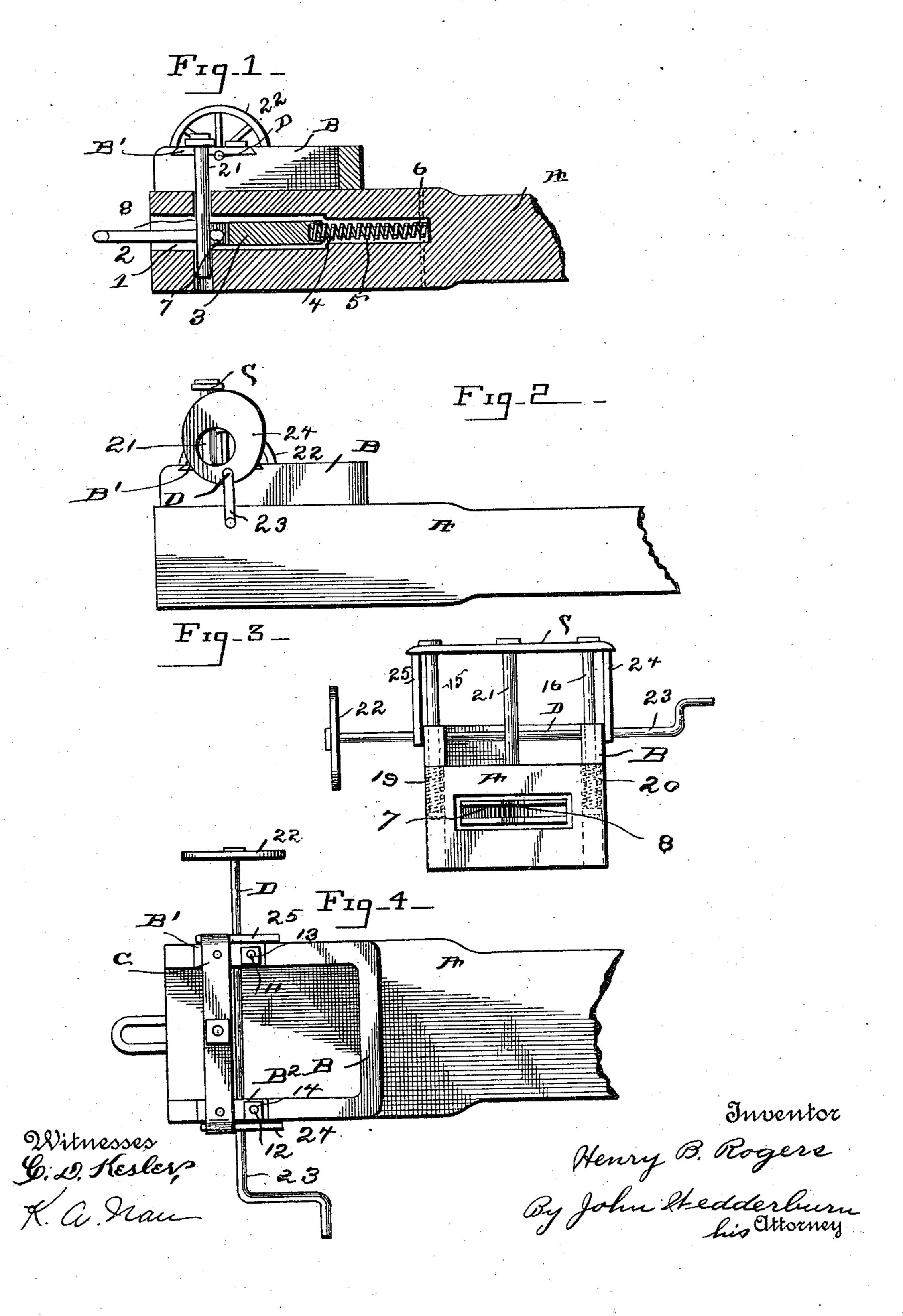
H. B. ROGERS. CAR COUPLING.

No. 574,825.

Patented Jan. 5, 1897.



United States Patent Office.

HENRY B. ROGERS, OF SANGER, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 574,825, dated January 5, 1897.

Application filed May 22, 1896. Serial No. 592,565. (No model.)

To all whom it may concern:
Be it known that I, HENRY B. ROGERS, a citizen of the United States, residing at Sanger, in the county of Fresno and State of California, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to 10 which it appertains to make and use the same.

This invention relates to automatic car-

couplings.

My object is to provide an improved and highly superior car-coupling which will cou-15 ple automatically and be adapted for quick and easy manipulation to uncouple.

The invention consists of certain novel features and combinations appearing more fully hereinafter and in the accompanying draw-

20 ings, in which—

Figure 1 is a longitudinal sectional view. Fig. 2 is a side elevation showing the coupler in uncoupling position. Fig. 3 is a front | elevation showing the link in position. Fig.

25 4 is a plan view.

A designates a draw-head. This draw-head is provided with a link-opening 1 and a longitudinal recess 2. A coupling-head 3 is adapted for movement in the link-opening, 30 being provided with a shank 4, which works in the longitudinal recess and is encircled by a spring 5, which is held in position by a pin 6. The front face of the coupling-head is provided with a semicircular link-groove 7, while 35 said coupling-head is also provided with a vertical pin-groove 8, which intersects the link-groove.

B designates a U-shaped integral portion of the draw-head, and it is located on top

40 thereof.

B'and B" are pillow-blocks. Vertical bolts 11 and 12 pass through the frame and the pillow-blocks and are provided with nuts 13 and 14 for holding said pillow-blocks in position. A frame C has vertical rods 15 and 16, which pass loosely through the respective pillowblocks, portion B, and draw-head A, terminating in caps 17 and 18, which are adapted for free movement in vertical openings in the 50 draw-head. Coiled springs 19 and 20, encircling these vertical rods, exert a tendency to keep the frame C normally pulled downward.

A coupling-pin 21 is secured to the cross-bar of frame C and projects downwardly through an opening in the draw-head, and lies in the 55

pin-opening in the coupling-head.

D designates a shaft which is journaled in the pillow-blocks, said shaft being provided with a hand-wheel 22 on one end and a crankhandle 23 on the other. Duplicate cams 24 60 and 25 are secured to said shaft and adapted to come in engagement with the cross-bar of the vertically-movable frame and lift the latter when the shaft is turned.

The operation is as follows: Assume that 65 a link E is held in one of my improved couplers and that said coupler is approaching the coupler on another car. When the free end of the link strikes the coupling-head, the latter is forced back against the action of the 70 spring until the pin-opening in said couplinghead comes in alinement with the pin, whereupon the retracting-springs for the verticallymovable frame cause said frame to be pulled downward and the pin projected through the 75 link, locking the latter in position.

When it is desired to uncouple, the rotary shaft is turned, bringing the cams thereon into engagement with the vertically-movable frame and lifting the latter, whereupon the 8c link may be withdrawn from the draw-head. If a link alone is held in the coupler, it is shot out of position by the operation just described.

Having thus described the invention, what

is claimed as new is—

In an automatic car-coupler, the combination with a draw-head, of a spring-pressed coupling-head movable therein, a spring-retracted vertically-movable frame carrying a coupling-pin adapted to be projected down in 90 front of the coupling-head, and a transverse rotary shaft carrying cams adapted for engagement with the vertically-movable frame and means for turning said shaft, whereby the frame may be lifted and the pin raised to allow 95 the coupling-head to move forward, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

HENRY B. ROGERS.

Witnesses:

W. M. BARR, GEO. A. BEMIS.