

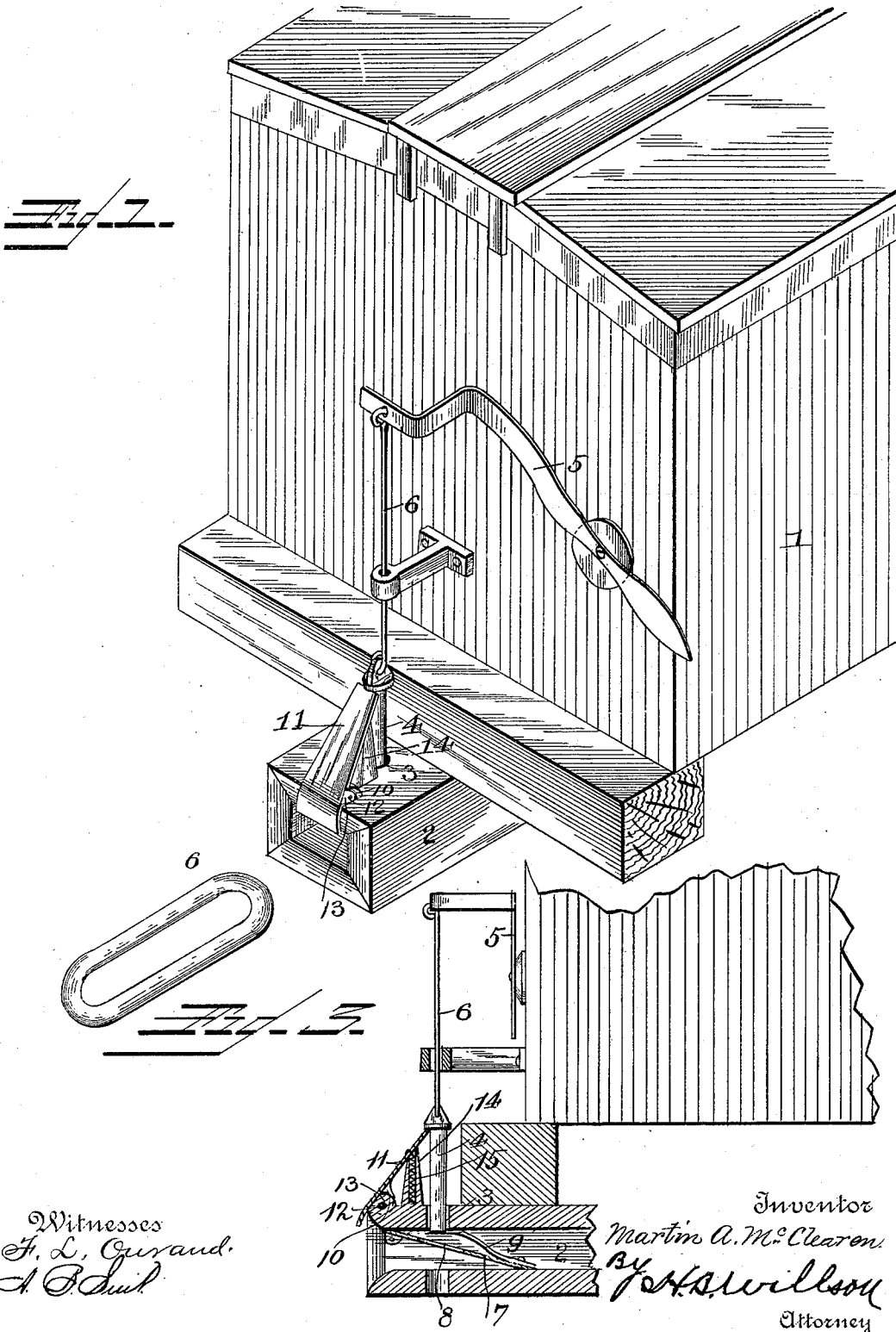
(No Model.)

2 Sheets—Sheet 1.

M. A. McCLEAREN.
AUTOMATIC CAR COUPLING.

No. 553,357.

Patented Jan. 21, 1896.



Witnesses
F. L. Giraud.
A. J. Smith.

Inventor
Martin A. McClearen.
By J. H. Wilson
Attorney

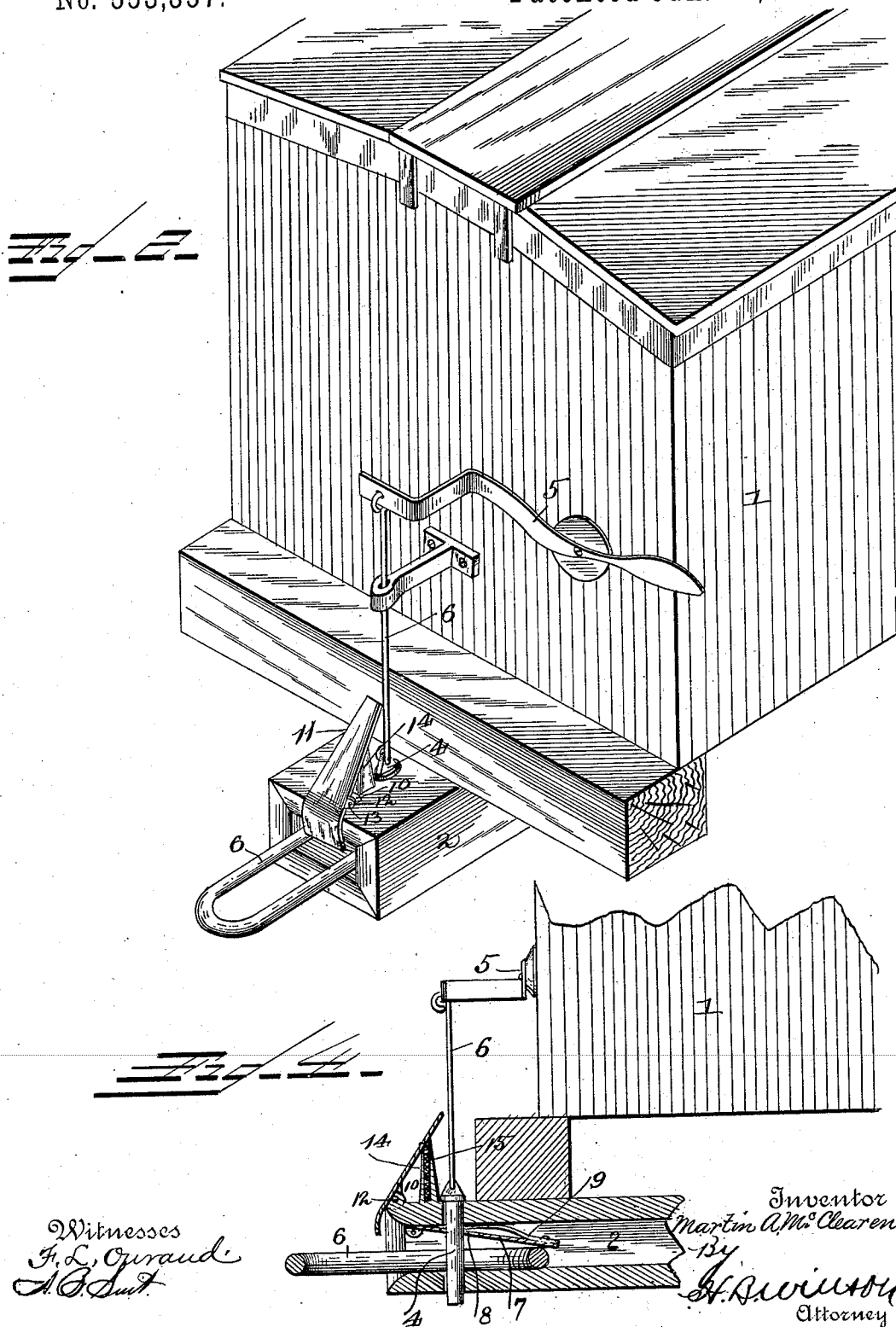
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UNITED STATES PATENT OFFICE.

MARTIN A. McCLEAREN, OF CENTREVILLE, TENNESSEE.

AUTOMATIC CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 553,357, dated January 21, 1896.

Application filed August 15, 1895. Serial No. 559,407. (No model.)

To all whom it may concern:

Be it known that I, MARTIN A. McCLEAREN, a citizen of the United States, residing at Centreville, in the county of Hickman and State of Tennessee, have invented certain new and useful Improvements in Automatic Car-Couplers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to automatic couplers, and more particularly to couplers used in connection with freight-cars.

The object of the invention is to provide a simple, strong, and inexpensive coupler which will retain the link in proper position to be inserted into the meeting coupler of another car; and furthermore to provide means for automatically grasping and retaining the pin in its elevated position when it has been raised to release the link, and which means is adapted to be actuated by the contact of the draw-head of another car in the act of coupling and allow the pin to fall into engagement with the link.

With these objects in view the invention consists of certain features of construction and combination of parts which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a portion of the front of a car embodying my invention, showing the coupling-pin elevated. Fig. 2 is a similar view showing the pin lowered, in which position it engages the link. Fig. 3 is a sectional view taken longitudinally through Fig. 1. Fig. 4 is a similar view taken longitudinally through Fig. 2.

In the drawings, 1 denotes a portion of the car-body; 2, the draw-head; 3, the pin-aperture; 4, the pin; 5, the pivoted actuating-lever, and 6 a rod connected to the actuating-lever and to the pin.

A plate 7 is hinged to the front end of the draw-head on its inner side and projects rearwardly into the same, and is provided with an aperture 8 corresponding to the pin-aperture in the draw-head. A spring 9 is interposed between the draw-head and the upper side of the plate, and exerts its energy to press the plate downward upon the link and hold said link in

a horizontal plane, so that it may be readily moved or projected into the draw-head of another car without necessitating the trainman going between the cars and exposing himself to great danger.

Secured to the upper side of the front of the draw-head is a block 10, to which is pivoted a spring-pawl 11 by a pin 12, which extends through ears 13 on the sides of the pawl and into the block.

14 denotes a tubular post, which is secured at the rear of the block and which contains a coil-spring 15, the lower end of which is secured to the tubular post and the upper end of which is secured to the upper inclined end of the pawl. The lower end of the pawl projects downwardly over the end of the draw-head.

In operation when it is desired to couple the cars the link is inserted into the draw-head and pushed back. The spring-plate will engage the link and hold it firmly in a horizontal plane. In this position the car is moved toward the car to which it is to be coupled, and when the draw-head strikes the spring-actuated pawl of the second car it will swing the upper end of the pawl from under the shoulder on the head of the pin and allow the pin to drop and engage the free end of the link. It will thus be seen that the trainman will not be obliged to get between the cars, and consequently will not be subjected to the danger incident to the coupling of cars employing the old-fashioned link-and-pin couplers.

From the foregoing description, taken in connection with the accompanying drawings, the operation and advantages of the present invention will be readily understood without requiring an extended explanation.

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

In a car-coupler, the combination with the draw-head provided on its upper face at its front end with a block to which is pivoted a spring-pawl, the tubular upwardly projecting post, containing a spiral spring connected at its upper end to the pawl, of the hinged spring-plate within the jaw of the draw-head and provided with an aperture in alignment with the pin aperture in the draw-head, a spring interposed between the draw-head and the upper

side of the hinged spring-plate, the coupling
pin connected to the operating lever by a rod,
the coupling-pin when in the uncoupled posi-
tion being in engagement with the external
5 spring-pawl, and with the interposed spring
between the upper wall of the draw-head and
the hinged plate within the same, as set forth.

In testimony whereof I affix my signature
in presence of two witnesses.

MARTIN A. McCLEAREN.

Witnesses:

J. N. PACE,
R. P. CRAIG.