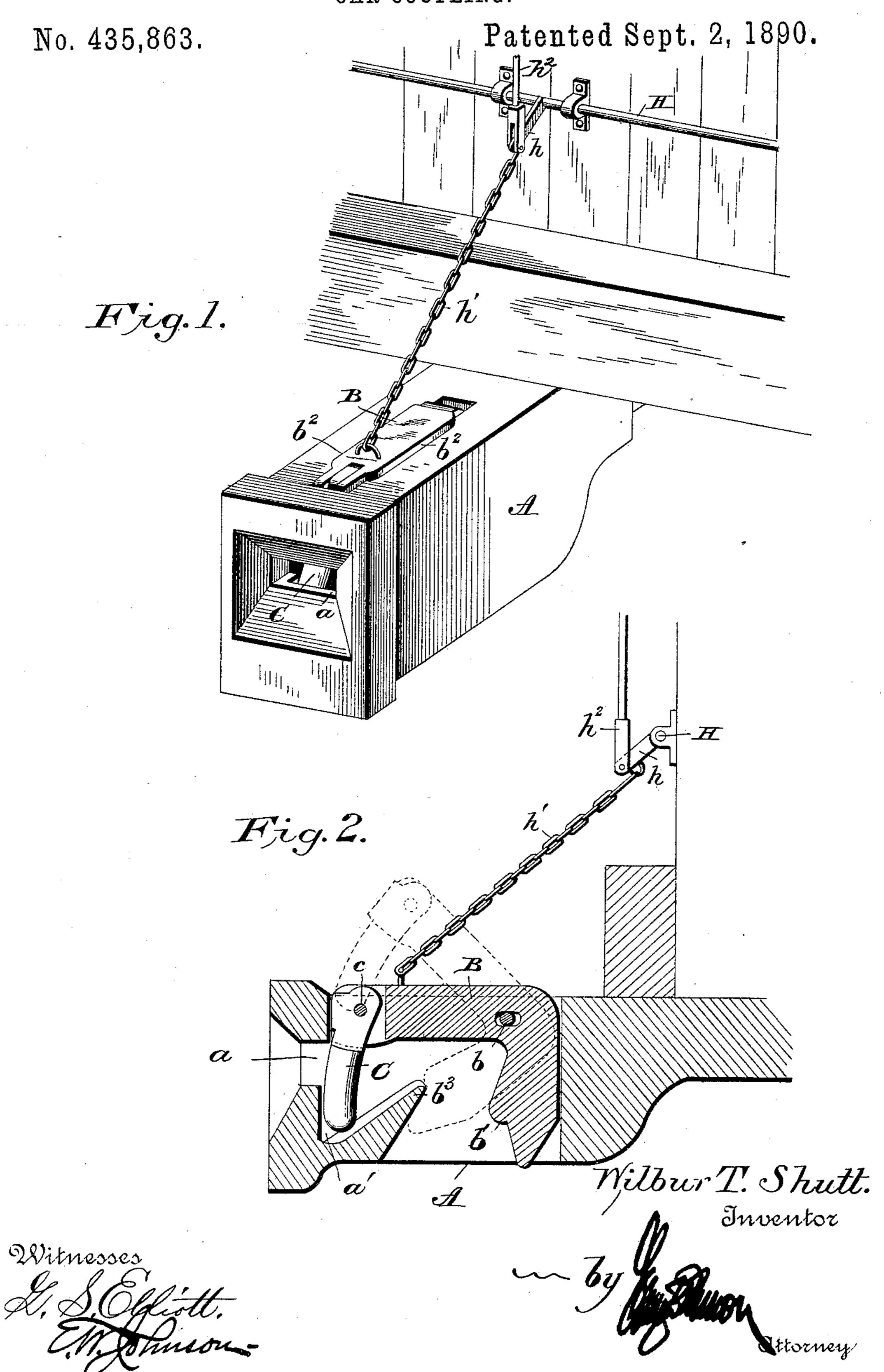
W. T. SHUTT.
CAR COUPLING.



## United States Patent Office.

WILBUR T. SHUTT, OF RAMSEY, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 435,863, dated September 2, 1890.

Application filed June 21, 1890. Serial No. 356,277. (No model.)

To all whom it may concern:

Be it known that I, WILBUR T. SHUTT, a citizen of the United States of America, residing at Ramsey, in the county of Fayette and State of Illinois, 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention has reference to improvements in car-couplings of that class in which the usual link and pin are employed, the pin being carried by a bell-crank lever pivoted within the draw-head, so that the lower member thereof will be acted upon to automatically couple the cars, the uncoupling being accomplished at the side or top of the car by operating a crank-shaft connected to the bell-crank lever, the parts being so constructed and positioned as to relieve them of undue strain and provide a rigid and durable coupling, all as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a car-coupling constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section.

A refers to the draw-head, which is pro-35 vided with the link-opening a, in rear of which is a socket a' to receive the lower end of the coupling-pin. The draw-head is chambered, as shown, within which is journaled a bellcrank lever B, to the end of the upper mem-40 ber of which is pivoted the coupling-pin C, the other member extending in the path of the link to be operated upon to automatically couple the cars. The lower member of the bell-crank lever is formed with an inclined 45 shoulder b', which rests upon the upper edge of the portion  $b^3$  of the draw-head, and against which the link abuts to throw the same rearwardly, and the upper member is provided with flanges  $b^2$  on either side thereof, which 50 engage with the upper edge of the draw-head to prevent excessive downward and upward movement. It will be noticed that the slot l

in the bell-crank lever through which the pivot-pin b passes is elongated, so that when the pin enters the link a pull upon the latter 55 will draw the pin against the rear edge of the front wall of the draw-head and relieve the pivots b and c of strain.

As described, the coupling of the cars is automatic; and to provide for uncoupling I 60 attach to the car-body above the draw-head a shaft H, which extends entirely across the front of the carand is provided at each end with crank-handles for operating the same. From this shaft, about centrally, projects an arm h, 65 which is connected to the bell-crank lever B by a flexible connection h', the end of said arm being engaged by a rod or connection  $h^2$ , leading to the top of the car. By this arrangement the bell-crank lever may be operated either from the sides or top of the car.

I claim—
1. The combination, in a car-coupling, of the draw-head A, having the link-opening a and chambered to receive the bell-crank le-75 ver B, which carries a pivoted coupling-pin, the opening in said bell-crank lever for receiving the pivot-pin b being elongated to

allow the pin C to bear against the front wall of the draw-head, said draw-head having an 80 upwardly and rearwardly extending portion against which the lower end of the bell-crank lever abuts when raised, substantially as set forth.

2. The combination, in a car-coupling, of 85 the draw-head A, having the link-opening a and socket a', of a bell-crank lever B, pivoted within the draw-head and carrying at the end of its upper member a pivoted coupling-pin C, the lower member being formed with a 90 shoulder which projects in the path of the coupling-link to provide for the automatic operation of the bell-crank lever, the opening in said bell-crank lever for receiving the pivot-pin b being elongated to allow the pin C to 95 bear against the front wall of the draw-head, substantially as set forth.

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

WILBUR T. SHUTT.

Witnesses:
ELI. C. FRANK,
CHARLES W. SHUTT.