

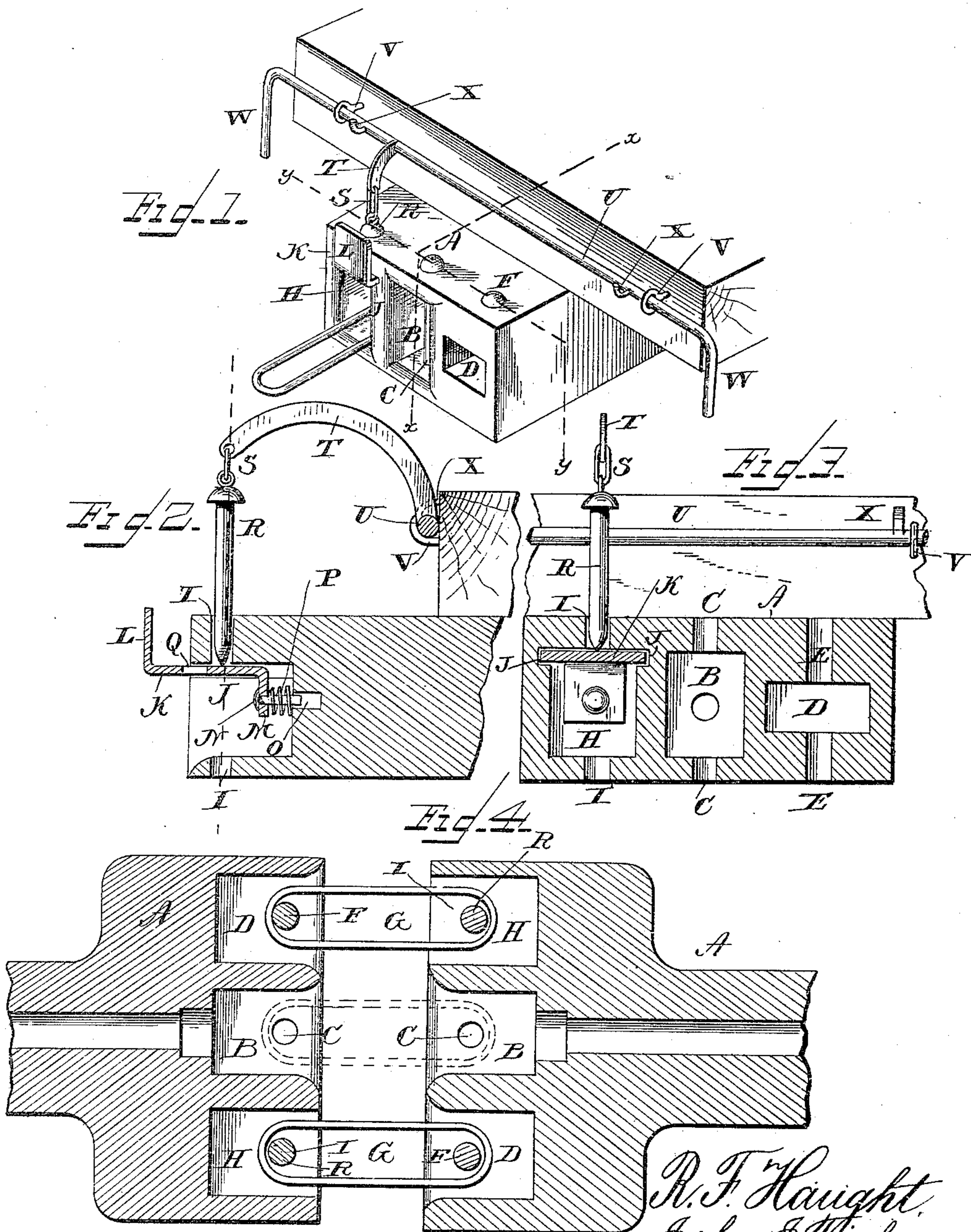
(No Model.)

R. F. HAUGHT & J. J. FISHER.

CAR COUPLING.

No. 338,965.

Patented Mar. 30, 1886.



WITNESSES
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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 338,965, dated March 30, 1886.

Application filed January 4, 1886. Serial No. 187,514. (No model.)

To all whom it may concern:

Be it known that we, RICHARD F. HAUGHT and JOHN J. FISHER, both residents of Manchester, in the county of Adams and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to 5 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a portion 15 of a railway-car provided with our invention. Fig. 2 is a vertical sectional view on line *x x*, Fig. 1. Fig. 3 is a similar view on line *y y*, Fig. 1; and Fig. 4 is a longitudinal horizontal sectional view of two united couplings.

Similar letters of reference indicate corresponding parts in all the figures.

Our invention has relation to that class of automatic railway-car couplings in which the coupling-pin is supported by a spring-cushioned plate which is provided with a perforation for the passage of the pin, the said plate being pushed back on coupling, the cars allowing the pin to drop through the perforation and to engage the link; and it 30 consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the draw-head, which may be attached to the car in any suitable manner, and which is formed at its middle with a recess, B, having a beveled or flaring mouth similar to the recess usually found in the common pin-and-link draw-heads, and having the 40 usual vertical registering perforations, C C, for the passage of the coupling-pin.

At one side of the central recess is a small recess, D, having vertical registering perforations E E in its top and bottom for the passage of the coupling-pin F, and a link, G, is retained within this recess by means of the said pin, and has a limited amount of play within the recess, the recess being only slightly larger than the end of the link. At the other 50 side of the central recess the draw-head is formed with a recess, H, having its sides and

bottom beveled outward, and having vertical registering-perforations I in its top and bottom. The sides of this recess are formed at the top with horizontal grooves J J, in which 55 the side edges of a plate, K, slide, the said plate having an upwardly-bent outer end or flange, L, and an inner downwardly-bent lip, M, which is formed with a rearwardly-projecting bolt, N, which passes into a bore, O, 60 in the inner end of the recess, and which has a spring, P, coiled around it, bearing against the outer end of the bore and against the inner face of the lip. This plate is formed with a perforation, Q, which may register with the 65 perforations in the top and bottom of the recess when the plate is pushed back, so as to bring the upwardly-bent flange to bear against the edge of the top of the recess, and a pin, R, fits into the perforations in the top and bottom of the recess and in the plate, and may be 70 supported by the plate when the latter is allowed to be forced outward by the spring. The upper end of this pin is provided with a link, S, which is loosely connected to the 75 outer end of an arm, T, which projects from a rock-shaft, U, journaled in transverse bearings V upon the front end of the car, and this shaft is provided at its ends with suitable handles or levers, W, for rocking it, and with 80 stops X, which prevent the shaft from being turned too far, the stops bearing against the end of the car when the shaft is rocked, so as to tilt the arm upward.

It will thus be seen that when two of the 85 couplings come together the links in the small recesses will register with the large recesses in the opposite couplings, and the pins being raised by tilting the rock-shaft, the said pins will be supported by the plates, the lower ends 90 of the pins resting upon the plates.

As now the draw-heads come together, the links from the smaller recesses enter the larger recesses having the link-supporting plates, and as the faces of the draw-heads bump together the plates are pushed in against the 95 springs and the perforations in the plates brought to register with the perforations in the top and bottom of the recesses, allowing the pins to fall into the links which already 100 are within the recesses, and the draw-heads are coupled. It will now be seen that the

springs forcing the link-supporting plates outward will be compressed when the draw-heads are coupled, causing them to bear outward upon the plates continually, and by so doing
5 the perforations in the plates will bear with their sides against the pins in such a manner that the said pins will be held firmly within the perforations in the recess, and cannot possibly become disengaged from the link by the
10 jolting of the cars, thus preventing any danger of the draw-heads becoming uncoupled. The draw-heads being connected by two links will likewise insure safety in the coupling, and if it is necessary to couple a car provided
15 with our improved draw-head with one provided with a common link-and-pin draw-head, the central recess, U, of our improved draw-head, owing to its position, will coincide precisely with the recess and link of a draw-head
20 of ordinary construction, and will receive the free end of the link projecting from the said draw-head of ordinary construction, thereby enabling a car provided with my improved draw-head to be coupled both with cars having
25 draw-heads of similar construction and also with cars having draw-heads of the ordinary construction, which would be impossible were it not for the central recess, U.

Having thus described our invention, we
30 claim and desire to secure by Letters Patent of the United States—

In a car-coupling, the combination of a draw-head having a central recess formed with registering perforations in its top and bottom and a small recess at one side having registering
35 vertical perforations, and a larger recess at the other side formed with grooves in the upper ends of its sides and with registering perforations in its top and bottom, a pin and link fitting in the small recess, a plate sliding in the grooves
40 of the large recess and having a perforation corresponding to the perforations of the recess, and an upwardly-bent flange at the outer end and a downwardly-bent lip at the inner end, formed with a rearwardly-projecting pin,
45 a spring coiled around the pin and bearing against the lip and against the inner end of the recess, a coupling-pin fitting through the perforations in the recess and plate, and a transverse rock-shaft having an arm movably connected to the upper end of the coupling-pin, as
50 and for the purpose shown and set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

RICHARD F. HAUGHT.
JOHN J. FISHER.

Witnesses:

J. W. METZ,
JOHN H. FLANGHER.