

(No Model.)

W. F. JULIAN.

CAR COUPLING.

No. 302,260.

Patented July 22, 1884.

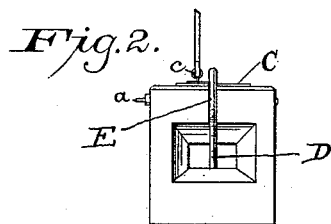
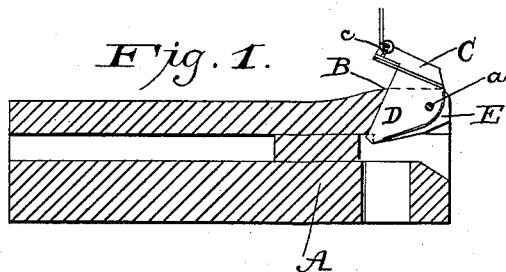
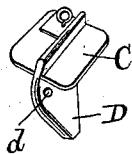


Fig. 3.



Witnesses:

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Inventor:

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By Wm. Conard

Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM F. JULIAN, OF MEDORA, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 302,260, dated July 22, 1884.

Application filed January 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. JULIAN, a citizen of the United States, residing at Medora, in the county of Jackson and State of Indiana, have invented certain new and useful Improvements in Car-Coupling Mechanism; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to the class of automatic car-couplers; and its objects are, first, to permit of the coupling or uncoupling of railway-cars without any necessity for the operator to place himself between the platforms of cars; and, secondly, to protect the pivoted hook by which the automatic coupling is usually effected from interference by ice during the frosty season. These objects I mainly effect by means of a bell-mouthed draw-head, a pivoted coupling-hook of peculiar construction, and a gravity cap or hood, which keeps the hook in true position when a coupling has been effected, and prevents the freezing up of the hook within its slot in cold wet weather.

In the accompanying drawings, wherein like letters represent like parts, Figure 1 is a long sectional view of a draw-head, showing the gravity-cap on a flat dome formed at the forward part of the draw-head. Fig. 2 is a front view of the mouth of the draw-head, showing its flared construction; and Fig. 3 is a detached view of the coupling-hook surmounted by its cap or hood.

A is a draw-head, with flat dome B formed at the forward end and gravity-cap C resting upon said dome. This cap consists of a long narrow crown fitting closely upon the top of the coupling-hook D, with a long wide flap extending horizontally from each side of the crown to protect the slot E, in which the hook works, from filling with ice. The hook D has its outer edge convexed in the manner shown, its inner edge straight, its point cut off square, and its sides broad and flat. By means of the

round eye *d* it is pivoted to the front and upper part of the draw-head by the bolt *a*. The slot E is cut far enough into and through the upper wall or dome of the draw-head to entirely receive the hook when the latter is lifted, so that there may be no obstruction to the entrance of the coupling-link. The rear part of the mouth of the draw-head is formed into four rectangular walls, so that when the link is hooked at one end the free end is held in such a position as will insure the entry of the link into the draw-head of any car brought against it to be coupled. The base of the mouth is formed into a flat wall, and serves to keep the link from receding into the draw-head when brought into contact with the draw-head of another car. The gravity-cap C extends backward considerably beyond the interior edge of the coupling-hook, and thus, by its overhanging weight, insures the fall of the hook, and the consequent catching of the link, after the latter has raised the hook in the process of coupling. The pressure of the end of an approaching link against the convexed edge of the hook raises the latter. A recess in the floor of the mouth of the draw-head receives the blunted end of the hook when the coupling is effected. An eye, *c*, attached to one of the flaps of the gravity-cap, enables the hook to be lifted by means of a rod or chain operated from above when it is desired to uncouple, and the overhang of the gravity-cap supplies the necessary leverage to raise the hook.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is the following:

In car-couplings, the combination consisting of the draw-head A, dome B, gravity-cap C, coupling-hook D, slot E, eye *d*, bolt *a*, and eye *c*, all constructed, arranged, and operated as herein described, and for the purposes specified.

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

WILLIAM F. JULIAN.

Witnesses:

WARREN WRIGHT,
JOHN ECK.