

UNITED STATES PATENT OFFICE

RICHARD SUTTON ROBERTSON, OF CASTLE GATE, UTAH TERRITORY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 489,092, dated January 3, 1893.

Application filed October 17, 1892. Serial No. 449,078. (No model.)

To all whom it may concern:

Be it known that I, RICHARD SUTTON ROBERTSON, a citizen of the United States, residing at Castle Gate, in the county of Emery, Utah Territory, have invented certain new and useful Improvements in Car-Couplings; 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 of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in car couplings and is designed as an improvement upon the construction shown and described in the Patent No. 479,079, issued to me July 19, 1892. Among other objects in view, is to simplify and cheapen the construction and to simplify and cheapen the device for uncoupling when desired. I dispense with the link connecting the pin with the pivoted arm and curve the said arm and connect it directly with the upper end of the pin. Numerous parts necessary by the prior construction are dispensed with altogether or simplified in their connection and operation. The interior of the mouth of the draw-head is provided with a lug to limit the movement of the dog.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The novelty in the present instance resides in the peculiar combinations, and the construction, arrangement and adaptation of parts, all as more fully hereinafter described, shown in the drawings and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which;

Figure 1, is a perspective view of a car coupling device embodying my present invention. Fig. 2, is a central vertical section of the same, with parts in side elevation.

Like letters of reference indicate like parts in both of the views.

Reference now being had to the details of the drawings by letter, A designates the draw-head substantially of known construction, having a flaring mouth and chamber *a* within which, at the front end, is a lug *a'* as seen in Fig. 2, the object of which will soon appear.

B is the dog pivoted within the mouth of the draw-head upon a pivot *b* fixed in the walls of the draw-head, the end of the dog having a slot *b'* as shown, which permits of the required movements of the dog, and the horizontal portion of the dog is weighted as seen at *b²*, or enlarged to aid in its gravitating to position to lock the link, and when the dog is down, so as to engage and hold the link C, the end of this dog engages the lug *a'* within the mouth of the draw-head and prevents further movement of the dog, thereby serving to hold it against unrequired movement and at the same time will prevent it from being thrown out of operative position.

The pin D works in a suitable passage or opening provided therefor in the top of the draw-head, and instead of being connected by link with the pivoted arm it is connected directly thereto by a suitable pivot *c*, the arm being curved as shown, and itself pivoted between suitable lugs *d* on the upper face of the draw-head: this saves the use of the link, simplifies the parts and makes them more positive in their action and less liable to become inoperative.

In order to provide for uncoupling when desired I have devised the following mechanism which is very simple and cheap yet most effective for the purpose for which it is intended.

F is a transverse shaft journaled in suitable bearings and it has firmly connected thereto or rigid therewith an arm G which extends at right angles thereto and has attached thereto one end of a chain H the other end of which is connected with the curved arm D' as shown. The shaft F is journaled so as to move end wise in its bearings and in order to lock the shaft in either its vertical or its horizontal position one of its bearings is provided with a horizontal groove *g* into which the said shaft is forced as it is turned in its horizontal position as seen in Fig. 1: when the shaft is turned vertically it is drawn outward by

reason of its engagement with the wall of the bearing, riding upon the curved surface of the lower wall of the groove and it is thus drawn outward to its fullest extent and the frictional engagement is sufficient to hold it in that position.

The operation will be readily understood from the foregoing description when taken in connection with the annexed drawings, and a detailed description thereof is not deemed necessary.

What I claim to be new and desire to secure by Letters Patent, is;—

1. The combination with the draw-head provided with a lug within its mouth, of a pivoted dog having an enlarged end adapted to

engage said lug, and having vertical arm with elongated slot in which the pivot works as set forth.

2. The combination with the draw-head having mouth with lug, of the pivoted dog having vertical portion with slot for the pivot, and having end to engage said lug, the pin and the curved arm connected directly with said pin, as set forth.

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

RICHARD SUTTON ROBERTSON.

Witnesses:

WM. DOXEY, Jr.,

H. B. ASADOORIAN.