W. HARRISON.
Car-Couplings.

No. 196,896. Patented Nov 6, 1877.

Fig. 1.

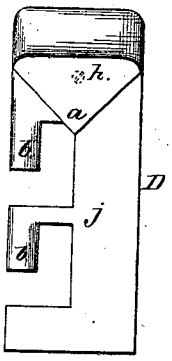
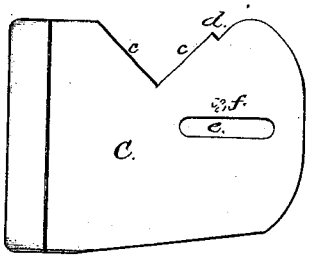


Fig. 2.



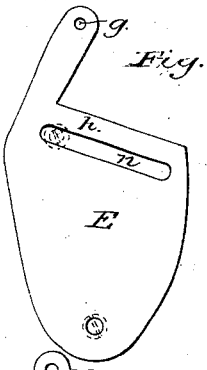


Fig. 3.

Fig. 4.

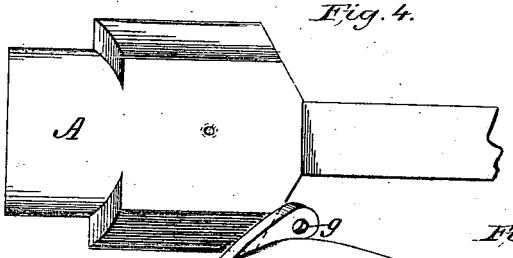


Fig. 5.

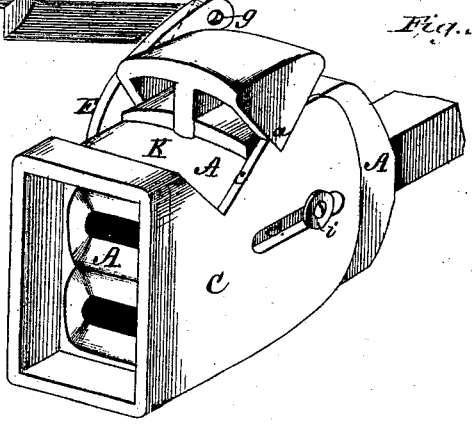
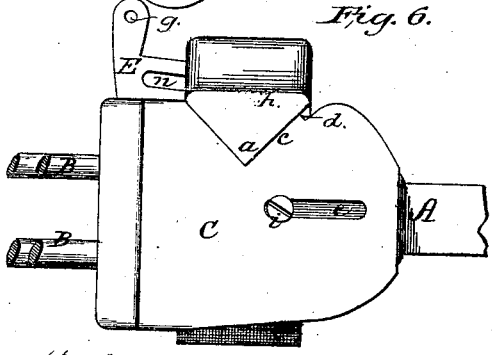


Fig. 6.



Attest:

B. J. Northcott
B. F. Northcott

Inventor:

his
William X Harrison
mark

UNITED STATES PATENT OFFICE.

WILLIAM HARRISON, OF LINNEUS, MISSOURI.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **196,896**, dated November 6, 1877; application filed April 21, 1876.

To all whom it may concern:

Be it known that I, WILLIAM HARRISON, of Linneus, in the county of Linn and State of Missouri, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to an improvement in the class of safety car-couplings—that is to say, couplings which are so constructed that the device for locking the link may be raised or lowered without requiring the operator to enter between the cars.

The invention consists, chiefly, in providing a sliding case for each draw-head, and constructing it with inclined shoulders and notches, whereby it is adapted to raise and lock in the elevated position the device that engages the link.

The construction and operation of parts will be understood from the following description upon reference to accompanying drawing, in which—

Figure 1 is a side view of the coupling device proper. Fig. 2 is a side view of the slotted case that incloses the draw-head. Fig. 3 is a side view of the slotted vibrating lever for operating the sliding case. Fig. 4 is a plan view of the draw-head with the sliding case removed. Fig. 5 is a perspective view of the draw-head and its attachments complete, the coupling device being raised and locked in such position. Fig. 6 is a side view of the same, the coupling device being lowered in its normal position.

The draw-head A is a metal block, having two recesses or cavities in its face to receive links B. The draw-head is inclosed by a sliding case, C, having lengthwise slots *e* in its sides; but its movement is limited by a bolt, *i*, which projects through the slots. The top of case C is cut out at K, and its sides are notched to form the inclines *c* and shoulders *d*, to adapt it to receive and co-operate with the coupling device D. The latter is a vertical bar, *j*, having claws or hooks *b* to engage or lock the links B, and provided with a head having lateral bevel-pointed shoulders *a*, which fit in the notches *c*, formed in the sides of the sliding case C.

The shank *j* of the coupling device passes through a vertical slot in the draw-head A, and when in the position shown in Fig. 6 its hooks *b* are engaged with the links B; but when raised, as in Fig. 5, they are detached from the links, as will be readily understood. It is obvious that to raise the coupling device it is only necessary to slide the case C forward, Fig. 5, when the beveled shoulder *a* on the head of device D will ride up on the inclines *a*, and their points enter the notches *d*, thereby locking the case and coupling device together, as shown in Fig. 5, so that neither can be moved until the coupling device has been raised to free the points *a* from said notches *d*.

The means for sliding the case C is a broad pivoted lever, E, having a nearly horizontal slot, *n*. The said lever is pivoted to the side of the draw-head, and will, in practice, be provided with a handle inserted in hole *g*, formed in its shank, Fig. 3. A pin, *h*, projects from the side of the head of the coupling device D, and works in the slot *n*, Fig. 6, so that when the lever E is vibrated the device D is raised or lowered correspondingly.

What I claim is—

1. The combination of the sliding case, having inclines, as specified, the coupling device having beveled shoulders and a draw-head, substantially as shown and described.

2. The combination, with the draw-head, of the sliding case, having inclines *c* and notches *d*, and the coupling device D, having beveled or pointed shoulders *a*, as shown and described, whereby, when the coupling device is raised by the forward movement of the case, the points *a* will enter said notches and lock the two parts D C together, as specified.

3. The combination of the coupling device, the sliding case, and pivoted slotted lever with the draw-head, substantially as and for the purpose specified.

his
WILLIAM × HARRISON.
mark.

Witnesses:
B. J. NORTHCOTT,
B. F. NORTHCOTT.