(No Model.)

E. NUESSLE.

VEHICLE COUPLING.

No. 455,761. Patented July 14, 1891.

Fig. 1.

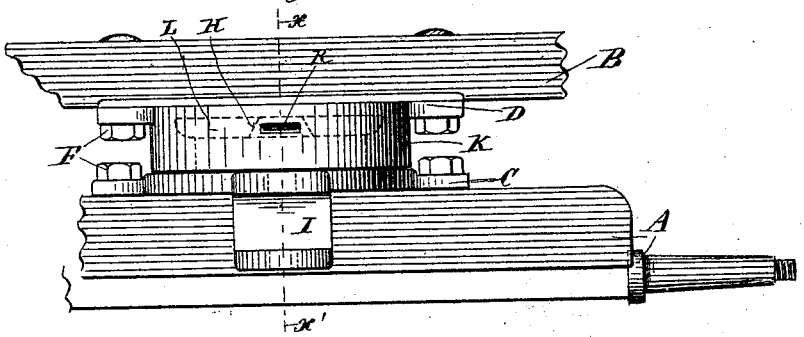


Fig. 2.

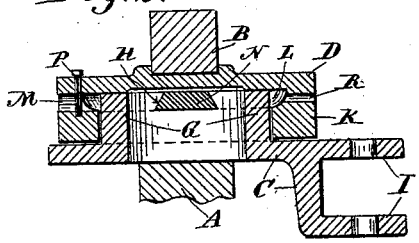
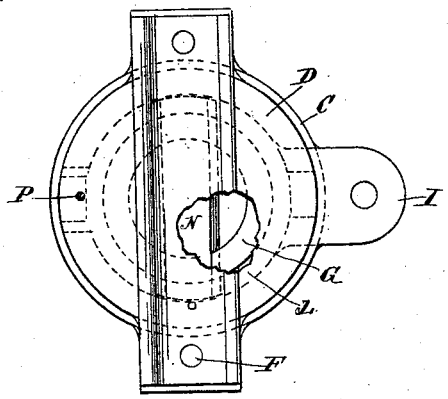


Fig. 4.

Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD NUESSLE, OF MINNEAPOLIS, MINNESOTA.

VEHICLE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 455,761, dated July 14, 1891.

Application filed April 11, 1891. Serial No. 388,539. (No model.)

To all whom it may concern:

Be it known that I, EDWARD NUESSLE, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Vehicle-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.

My invention has for its object to provide a cheap, simple, durable, and efficient coupling for vehicles. To this end I provide a coupling comprising two parts, movable one within the other. One of the parts is provided with a keyway and the other with an annular groove. The parts are secured together by a key fitting said keyway and engaging said annular groove.

In the accompanying drawings, which illustrate my preferred construction, like letters refer to like parts throughout.

This construction is especially designed for a wagon, and the parts are, for the sake of cheapness, preferably castings.

Figure 1 is a rear elevation showing the device in working position. Fig. 2 is a sectional elevation of Fig. 1 on the line X X'. Fig. 3 is a plan view of Fig. 1, and Fig. 4 is a side elevation of the key removed.

A is an axle, and B the bolster, of a wagon.

C and D are respectively the under and upper castings of the coupling. Of these the lower casting C is secured to the upper side of the axle and the upper casting D is secured to the under side of the bolster by bolts F or otherwise. The under casting C has a vertical annular flange G, which is provided with a transverse key-seat H, and rearward-extending ears or lugs I, between which the reach-rod (not shown) is secured. The upper casting D has a depending annular flange K, which works externally on the flange D, and is provided with an internal annular groove L. Extending outward from the groove through the flange D is a key-passage M, through which the key N may be inserted. As shown, this key is beveled to fit the key-seat H, forming a dovetail therewith, and is of sufficient length to project therethrough. The key-seat H being brought to registration with the opening M, the key may be inserted into position, extending through said key-seat and engaging the annular groove L with its projecting ends, and when the parts are then turned so that the key is out of line with the key-passage the key will be retained in position and the parts secured together.

The relative location of the keyway and the key-passage is preferably such that they will not be brought to registration by the working movements of the parts. If, however, it should be necessary for them to pass each other, the key-passage may be plugged or otherwise stopped to prevent the escape of the key, as shown, by a pin P. The outer flange may also be provided with a drive-hole R, located diametrically opposite the passage M, through which a punch may be inserted to assist in removing the key. This construction gives a cheap and simple device, which is efficient for all the requirements of a wagon or other vehicle-coupling, and it is obvious that it might be employed for many other analogous purposes.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A vehicle-coupling comprising two pivotally-connected parts provided one with a key-seat and the other with an annular groove, and a key adapted to fit the key-seat in the one part and engage the groove in the other for holding the parts together.

2. A vehicle-coupling comprising two pivotally-connected parts, the inner of which has a transverse key-seat and the outer of which has an internal annular groove and a key-passage, and a key insertible through said passage into its seat and engageable with said groove, substantially as and for the purpose set forth.

3. The combination, with the wagon-axle A and bolster B, of the casting C, provided with the flange G, key-seat H, and the lugs I for attaching the reach-rod, the casting D, having the flange K working over the flange G and provided with the internal annular groove L, the key-passage M, the key N, and a retaining device P, substantially as described.

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

EDWARD NUESSLE.

Witnesses:

E. F. ELMORE,

JAS. F. WILLIAMSON.