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T. & J. W. MEIKLE.

Car-Couplings.

No. 142,713. Patented September 9, 1873.

Fig. 1.

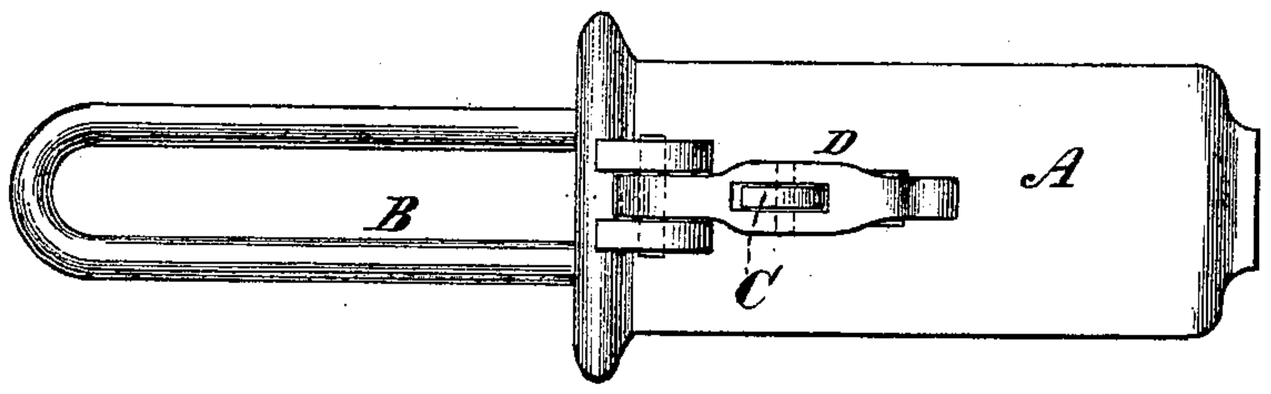


Fig. 2.

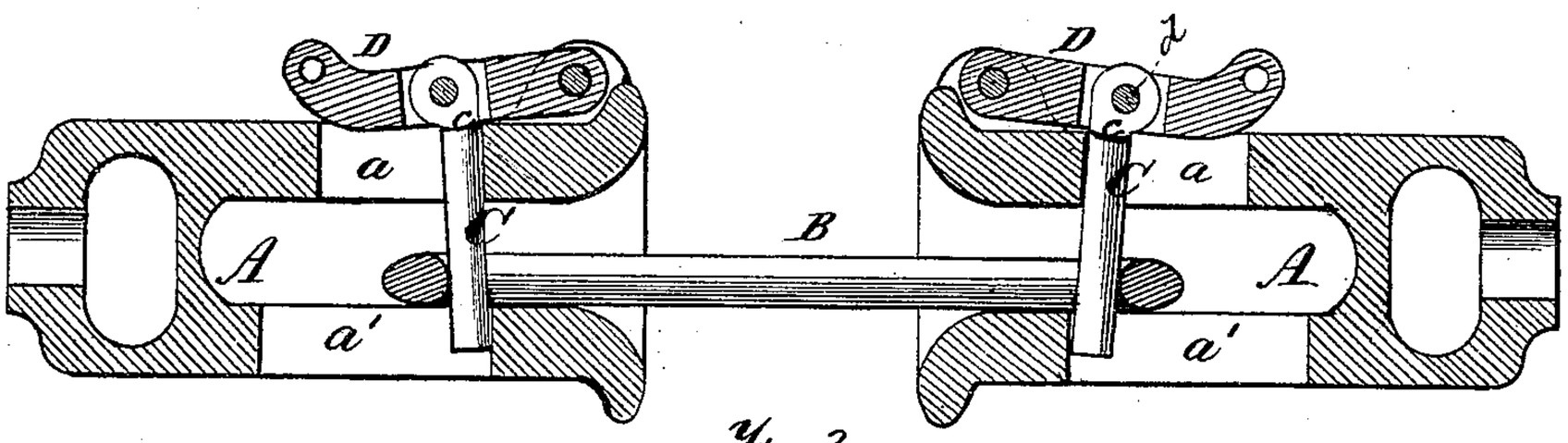
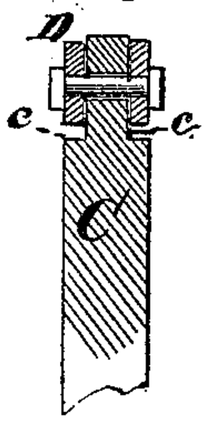


Fig. 3



Witnesses.
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P. Edwd. Wils

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Attys

2 Sheets--Sheet 2.

T. & J. W. MEIKLE.

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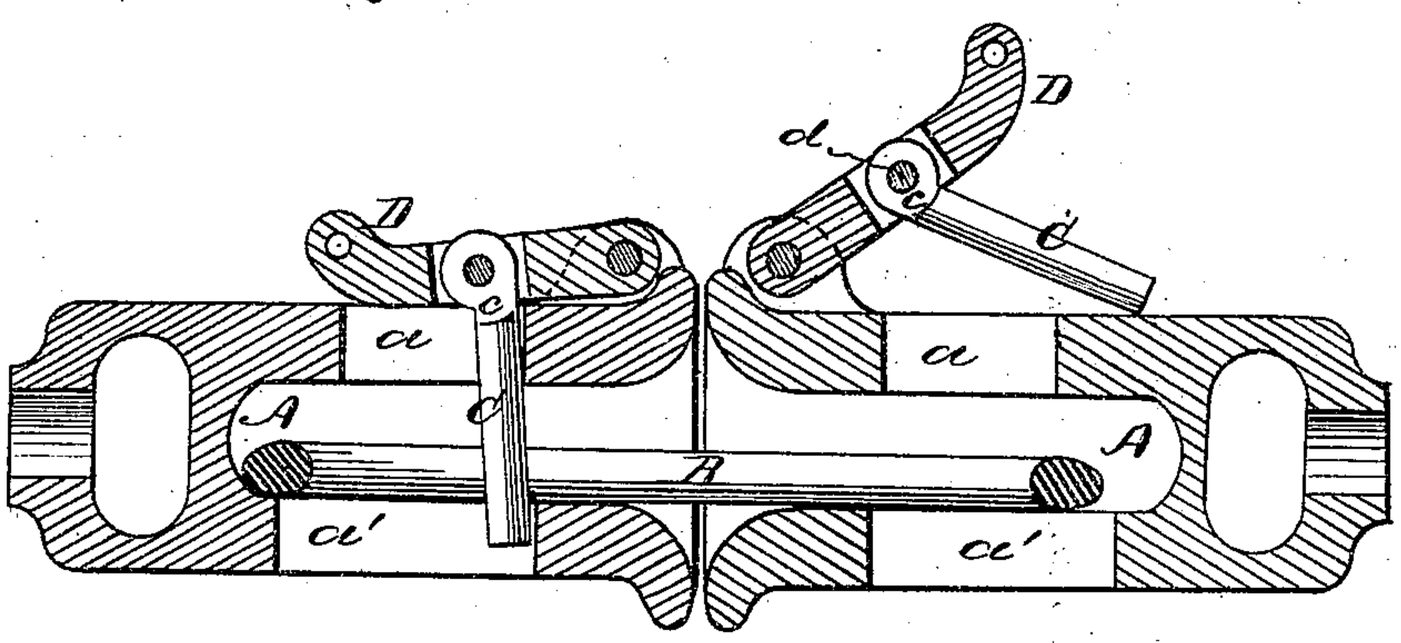
Fig 4.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS MEIKLE AND JAMES W. MEIKLE, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **142,713**, dated September 9, 1873; application filed January 8, 1873.

To all whom it may concern:

Be it known that we, THOMAS and JAMES W. MEIKLE, of Louisville, in the county of Jefferson and State of Kentucky, have invented a certain Improvement in Car-Couplings, of which the following is a specification:

This invention relates to that class of car-couplings in which the pin is permanently attached in such a manner that it can automatically lock an entering link. The pin is suspended from a lever upon the top of the draw-head, and when struck by an advancing link first swings back and then rises, together with the free end of the lever, until the end of the link has passed beyond the pin, when the latter drops and couples the link. The principal feature of our improvement consists in so constructing and connecting the parts that the coupling-pin, after having been lifted by the lever entirely out of the draw-head, can be turned upon its pivot to reach with its end beyond the slot in the top of the draw-head, and then supported thereon to prevent its engaging an entering link. This feature is of vital importance in the practical application of car-couplings of this kind; for it is of daily and hourly occurrence that cars are brought together which it is not desirable to couple together.

Figure 1 is a plan view of our improved coupling. Fig. 2 is a sectional elevation of two draw-heads and adjuncts coupled together by a link. Fig. 3 illustrates the construction of the coupling-pin and its connection with the lever. Fig. 4 shows the manner of supporting the coupling-pin upon the top of the draw-head.

The same letters of reference are employed in all the figures in the designation of identical parts.

The draw-head A is provided with a long low cavity having the usual flaring mouth to facilitate the entrance of the link B. The coupling-pin C plays in elongated apertures *a* and *a'* in the top and bottom of the draw-head, and is pivoted to the lever D in such a manner that when the link draws upon the pin it will bear against the forward edges or ends of the slots *a* and *a'*, so that no strain shall come upon the bolt *d*, connecting the lever and the pin. The head of the pin may either enter a slot in the lever or be attached to the side thereof. It is constructed with a shoulder, *c*, formed at the junction of the head and shank of the pin, at such distance from the center of the bolt *d* that the pin can have only a limited movement independent of the lever, by reason of the shoulder *c* coming in contact with the under side of the lever when both will move together, and rise in the arc of a circle described over the fulcrum of the lever; thus the descent of the coupling-pin will be aided by the weight of the lever. The pin can be elevated by the lever D above the top of the draw-head, and then swung backward and supported on the draw-head back of the slot *a*, as clearly shown in Fig. 4. The lever is pivoted to the draw-head forward of the pin, so that the arm by which it is operated may be made of considerable length to afford the necessary leverage upon the pin for raising it when the link is pulling upon it.

Suitable devices may be attached to the arm *d'* of the lever for operating it, to raise the coupling-pin for the purpose of releasing the link, either from side or from the top of the car.

What we claim as our invention, and desire to secure by Letters Patent, is—

The draw-head A in combination with the pin C and lever D, when the fulcrum of the lever is forward of the pin, and the latter has a shoulder, *c*, to lift the lever on the entrance of a link, and is so constructed and connected that it can be elevated above and supported upon the draw-head, as described and shown.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS MEIKLE.
JAMES W. MEIKLE.

Witnesses:
E. GARLAND,
JAMES KIRWAN.