B. D. BROWN & J. F. PADEN.
Car-Coupling.

No. 206,769. Patented Aug. 6, 1878.

Fig. 1.

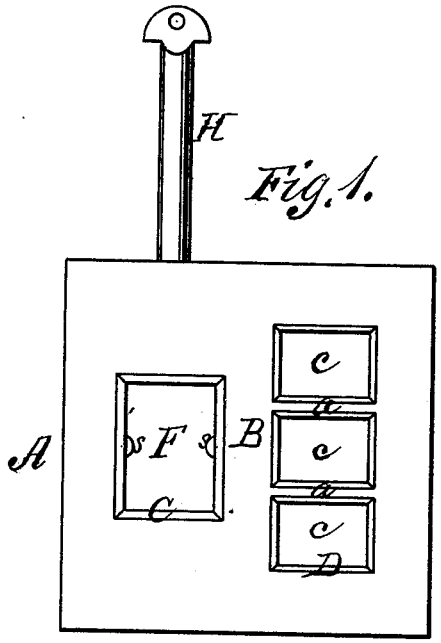


Fig. 2.

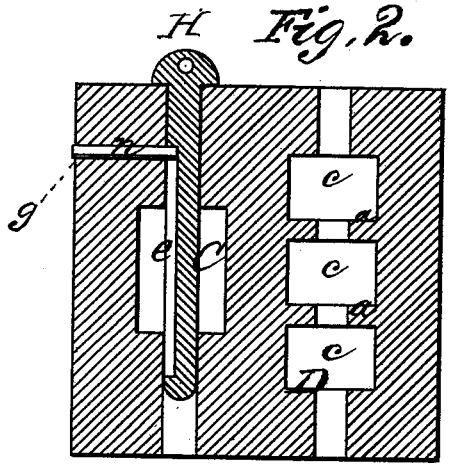
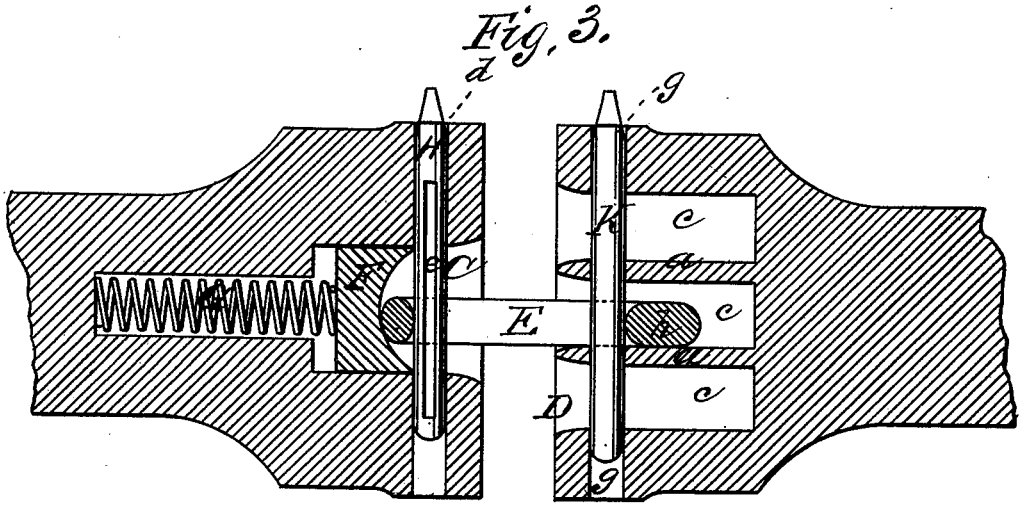
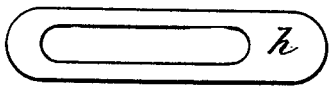


Fig. 3.



E.



WITNESSES

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BURLINGTON D. BROWN AND JOSEPH F. PADEN, OF SHAMROCK, MISSOURI.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **206,769**, dated August 6, 1878; application filed May 4, 1878.

To all whom it may concern:

Be it known that we, BURLINGTON D. BROWN and JOSEPH F. PADEN, of Shamrock, in the county of Callaway and State of Missouri, have invented a new and valuable Improvement in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of the draw-head. Fig. 2 is a vertical transverse section thereof; and Fig. 3 is a longitudinal vertical section of the coupled draw-head.

This invention has relation to automatic car-couplers; and it consists in the construction and novel arrangement of the lateral compartments of the mouth of the draw-head, one of said compartments being of large capacity and provided with a spring-slide with concave face to set the pin, and the other compartment being subdivided by horizontal partitions into three directing-sockets of small vertical aperture to hold the link, which is constructed with an elongated end to extend back into the small directing-socket, and is, by the engagement of said end with the approximating upper wall of said socket, held in a horizontal position, as hereinafter shown and described.

The object of this invention is to provide an automatic car-coupler which is adapted to cars of different heights.

In the accompanying drawings, the letter A designates the bumper or draw-head, having the usual external form. Its mouth is divided by a central vertical partition, B, into two lateral sections, C and D, whereof the latter section is subdivided by horizontal partitions *a* into sockets *c* of different heights, as shown in the drawings.

The former compartment, C, is the coupling-mouth of the draw-head, and is designed to receive the link E when the bumpers come together. In the back portion of this compartment is arranged a slide, F, which is pushed forward by means of an elastic coil or spring, G. The front face of this slide-block F is made concave from top to bottom, to centralize the pressure of the end of the link as it enters. When the link is out the slide F is advanced by the spring sufficiently to close the lower end of the perforation *d* in the top of the draw-head, through which the coupling-pin H passes, and serves to support or set the latter to fall through the link when it presses the slide back. The side of the coupling-pin H is grooved longitudinally, as indicated at *e*, to receive the end of a small transverse stop-pin, *n*, which is passed through the draw-head from the outside, as shown in the drawings, a perforation, *g*, being made in the draw-head for this purpose.

The sockets *c* of the other lateral compartment have sufficient vertical depth to receive the end of the link E, which is elongated, as shown at *h*, so as to give it sufficient inward extension to set its projecting portion horizontally true. The link is held in either socket, according to the height of the opposite link-mouth, by means of the pin K, which passes through perforations *k* in the wall of the draw-head and the horizontal partitions.

In order to prevent the slide F from coming out of the mouth of the draw-head, stops *s* are set in the side walls of said mouth. These may be made removable, if desired, so that the slide can be taken out when necessary.

In a pair of draw-heads of this character it is evident that in the opposite draw-heads similar lateral compartments are arranged on opposite sides, and a link fixed in the directing-socket of either head will therefore enter the link-mouth of the other if it is set at the proper height.

Four pins are used in a pair of draw-heads, two of them being connected with the draw-heads to prevent removal, as above described.

Having described this invention, what we claim, and desire to secure by Letters Patent, is—

In a draw-head having a central partition, B, on one side a receiving-mouth of large

size, provided with a setting-slide for the pin, and lateral stops *s*, and on the other side a setting-mouth having horizontal partitions dividing it into directing-sockets *c* of small vertical depth, one above the other, for the link, which has an elongated end to extend back into the directing-socket, substantially as specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

B. D. BROWN.
J. F. PADEN.

Witnesses:
J. P. PADEN,
S. S. NORRIS.