J. T. WILSON.

CAR-COUPLINGS.

No. 194,543. Patented Aug. 28, 1877.

fig. 1.

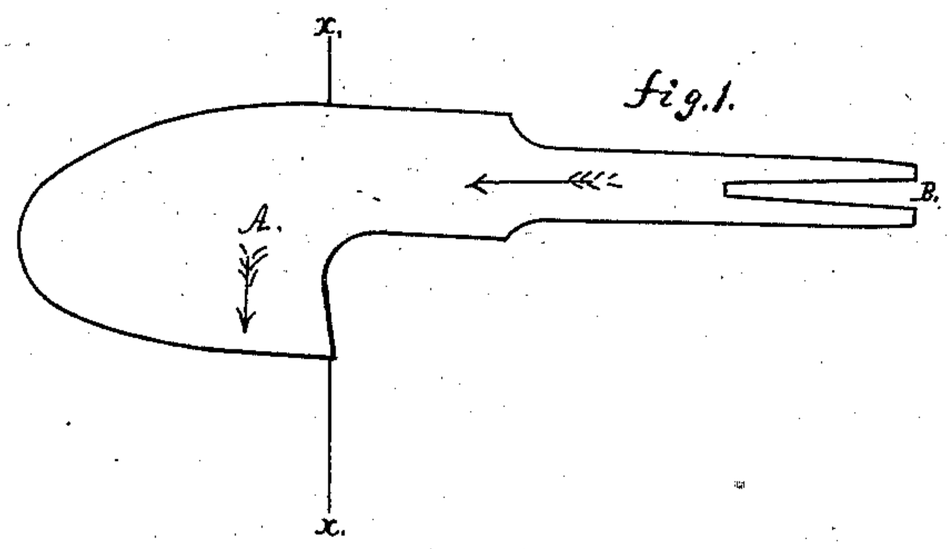


fig. 2.

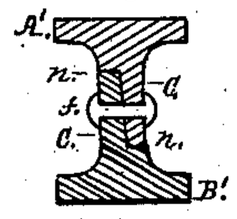


fig. 3.

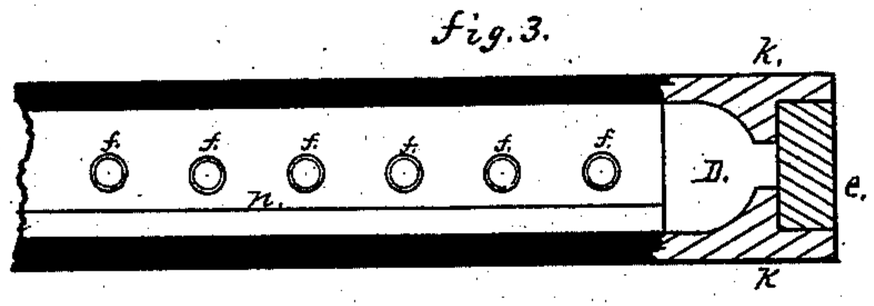


fig. 6.

fig. 4.

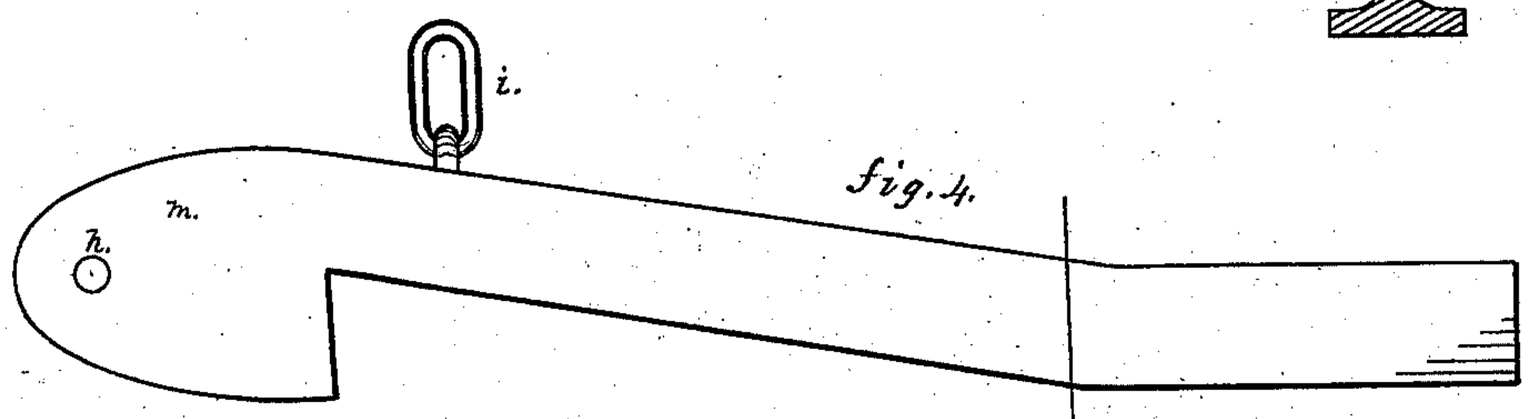
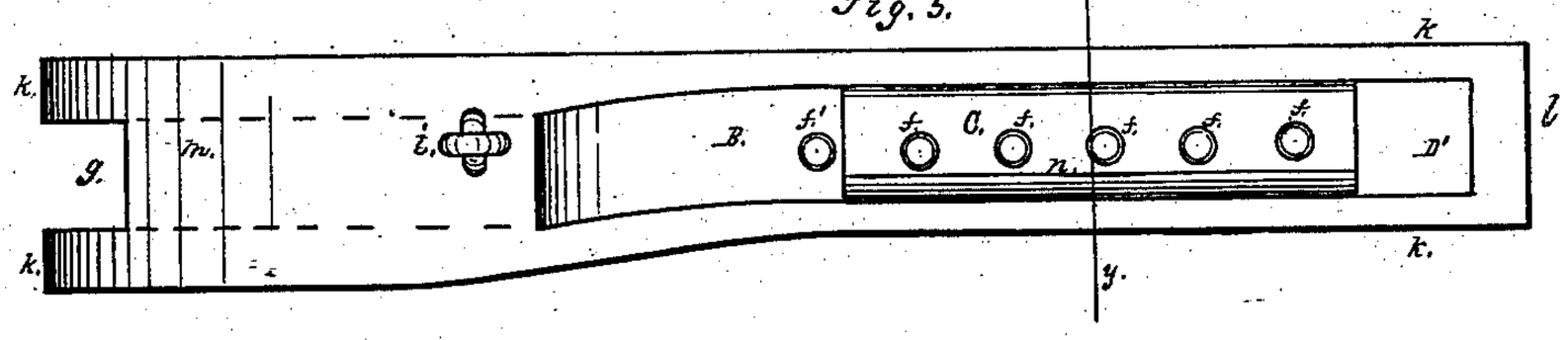


fig. 5.



Witnesses

A. C. Johnston.

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JOHN T. WILSON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO WILSON, WALKER & CO., OF SAME PLACE.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **194,543**, dated August 28, 1877; application filed October 26, 1876.

To all whom it may concern:

Be it known that I, JOHN T. WILSON, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Car-Couplings; and I do hereby declare that the following is is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in car-coupling; and consists in the peculiar construction of the same, whereby strength and lightness are obtained.

To enable others skilled in the art to which my invention is most nearly connected to make and use it, I will proceed to describe my method of constructing them.

In the accompanying drawings, which form part of my specification, Figure 1 represents the form of a piece which is welded between two parts of the end portion of the coupling. Fig. 2 is a transverse section of the coupling at line *y* of Figs. 4 and 5. Fig. 3 is a detail section. Fig. 4 is a top view or plan of the coupling. Fig. 5 is a side view of the same. Fig. 6 is a transverse section of a bar representing a form of iron which may be used in the construction of the coupling.

The class of car-couplings to which my invention relates is known as the "latch-coupling," "self-coupler," and "Miller coupling."

To secure the greatest strength and lightness, in constructing the before-mentioned couplings, I form a piece by the forging process similar to that represented in Fig. 1, taking care to have the fiber of the iron in it so that the line of draft upon the coupling will be parallel with the axis of the fiber of the iron in that part on the right of the line *x*, and in that part left of the line *x* the line of draft upon the coupling to be at right angle to the fiber.

The web C of the bars is cut away sufficiently to allow the part A, represented in Fig. 1, to be inserted between the horizontal parts *k* of the bars when secured in juxtaposition, as shown in Figs. 3 and 4, and as indicated in Fig. 5 by dotted lines, the forked part B straddling the united webs C, and attached to them by a rivet, as at *f'* in Fig. 5. The parts thus arranged are then heated and welded together, as shown in Fig. 5.

The end *l* of the coupling is formed by cutting away the web C and inserting between the parts *k* a piece of iron, *e*, as shown at D. The parts are then heated and welded together and finished, as shown at D′ in Fig. 5.

The latch or coupling end *m* is, with suitable tools, recessed, as at *g*, and furnished with openings *h* for the reception of a coupling-pin, the recess *g* and opening *h* being for the purpose of coupling with the ordinary link when it is necessary to do so.

The webs C of the bars A′ and B′ are secured together by rivets *f*, as shown in Figs. 2, 3, and 5.

i represents the lever-link usually used in couplings of this class.

The bars A′ and B′ are formed by suitable rolls, and are provided with a shoulder, *n*, as shown in Figs. 2, 3, and 5.

Through the medium of this shoulder *n* greater stiffness and a better finish can be given to the coupling than are obtained by the form of iron described in Letters Patent No. 163,429, granted to me May 18, 1875.

Iron of the form of the letter I (shown in cross-section in Fig. 6) may and can be used; but I give preference to the form of iron shown in Fig. 2, and marked A′ and B′.

Car-couplings constructed by the method, and of iron of the form, hereinbefore described will have great strength longitudinally, with stiffness and strength transversely, at the same time is light, with economy of material.

Having thus described my improvement, what I claim as of my invention is—

1. In a car-coupling, the part A, constructed as herein described, and welded between the bars A′ and B′, as and for the purpose hereinbefore described and set forth.

2. In a car-coupling, the part A, constructed as herein described, and welded between the bars A′ and B′, the edge of webs C resting on shoulders *n* and riveted together, substantially as and for the purpose hereinbefore described and set forth.

3. In a car-coupling, the end *l*, formed by welding the piece *e* between the parts *k*, substantially as and for the purpose hereinbefore described and set forth.

JOHN T. WILSON.

Witnesses:

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