

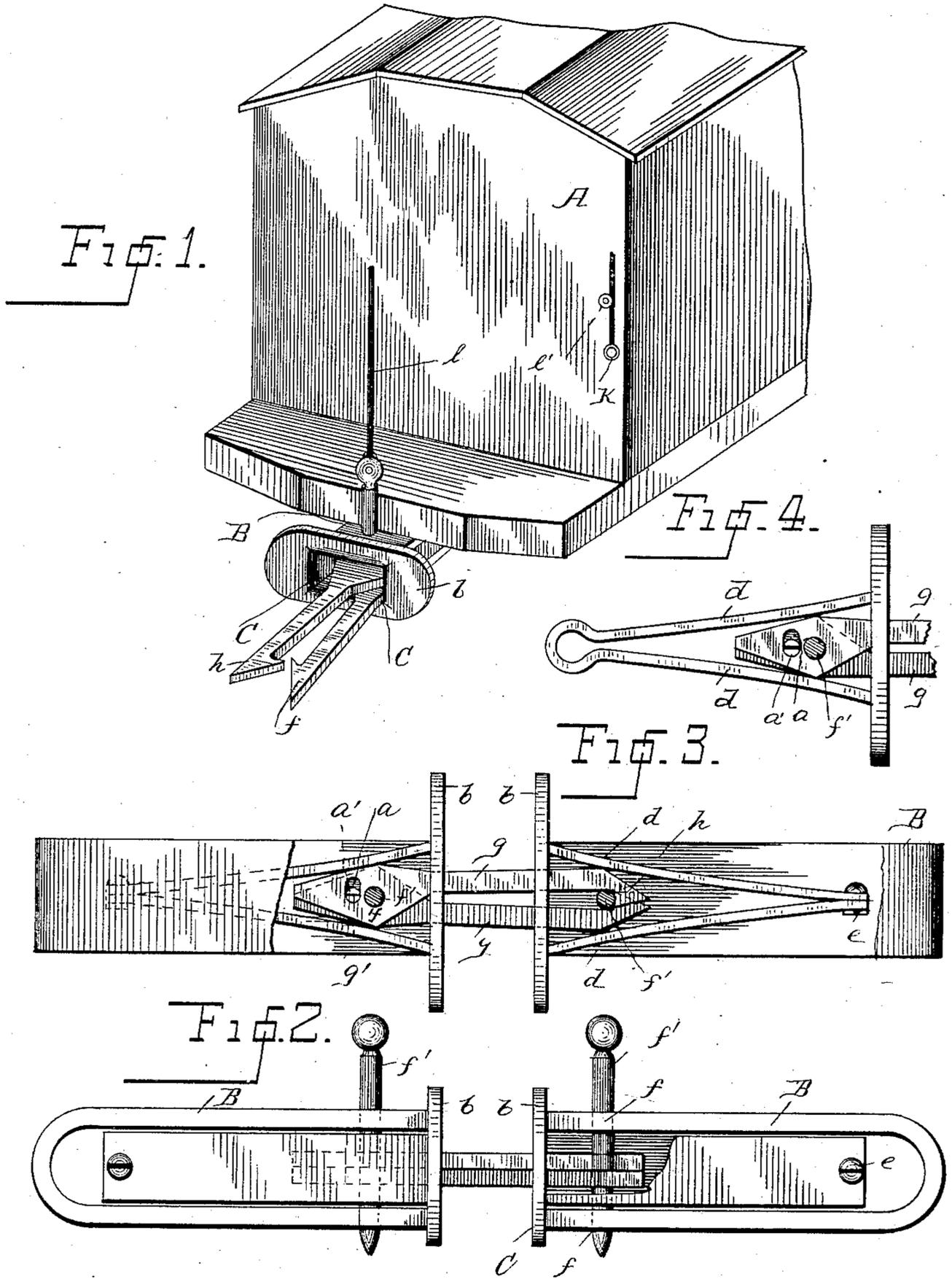
(No Model.)

D. Y. WILSON.

CAR COUPLING.

No. 363,784.

Patented May 24, 1887.



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID Y. WILSON, OF GUM TREE, ASSIGNOR OF ONE-FOURTH TO ROBERT L. McCLELLAN, OF COCHRANVILLE, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 363,784, dated May 24, 1887.

Application filed March 1, 1887. Serial No. 229,314. (No model.)

To all whom it may concern:

Be it known that I, DAVID Y. WILSON, of Gum Tree, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to improvements in car-couplings in which I employ draw-heads in which are secured springs and between which is inserted an ordinary coupling-pin. I also secure in the draw-head links made of two pieces suitably pivoted, and which are adapted to enter the draw-head and by their point-headed hooks and the action of the spring close around the coupling-pin, and thus coupling the cars together; and the objects of my improvements are, first, to construct a coupling of great simplicity, of few parts, and which may be readily repaired, and the cost of constructing the same being exceedingly cheap; second, to provide means whereby cars can be automatically coupled together, and also to prevent shock when being so coupled, and which will yield to the various curves of the road and to lateral motion of the cars; third, in providing a spring formed of one or two parts which will be free to yield upon the insertion of the links, pivoted by a coupling-pin to the opposite draw-head, said links having hook-headed points adapted to fit around the coupling-pin, and held there by means of the spring.

It further consists of a link made in two pieces, pivoted at a point to one side of the center of its length, and having a prolongation on its rear end to come in contact with the spring, the said link near its point of pivot being provided with an elongated slot, by which the two parts of the links are connected together, and at the same time allowing ample room for opening and closing them, and will also hold the two sections together when not in use; and it further consists in certain details of construction and combination of parts, as will be

hereinafter more fully described, and specifically pointed out in the claim. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improvement, showing a draw-head attached to a car and the links connected thereto. Fig. 2 is a longitudinal view showing the draw-heads when coupled; and Fig. 3 is a plan view of the same, the upper portion of the spring being cut away to show the links when coupled. Fig. 4 is a view of the spring made in a single piece.

Similar letters refer to similar parts throughout the several views.

In the drawings, A represents an end portion of a car, to which the draw-heads B B are secured in any suitable manner. The draw-heads B B are preferably made in the form shown—*i. e.*, made of one piece of metal turned over at one end, as shown, and at the outer end provided with a projecting portion, *b*, to form a buffer, and having therein a rectangular-shaped hole, *c*.

To the portions *b b* are firmly secured, on each side of the hole *c c*, the springs *d d*, which extend into the interior of the draw-head and are connected together by a bolt or nut, *e*, and when thus fastened together form a V-shaped spring. I, however, do not confine myself to making the spring of two parts, as it can be made of one piece of spring metal bent over (see Fig. 4) and connected as described. In the draw-head B, I form holes or perforations *f f* for the reception of the coupling-pins *f' f'*. Said coupling-pins are connected at their head by a wire chain or rope, *e*, extending upwardly for a suitable distance, and thence passes through a hole in a bracket, *e'*, and thence over a pulley or wheel, (not shown,) and to the end of the chain or cord I secure a ring, as clearly shown. *g g* represent the coupling-links, their rear ends being provided with an enlarged portion, *g' g'*, as shown, and provided with holes *i i*, formed to one side of the center of its length, through which the coupling-pin is allowed to enter, the links near their point of pivot being provided with an elongated slot, *a*, by which means the two parts are pivoted together by a screw, *a'*, and when so pivoted are allowed ample room for opening and clos-

ing the ends of the link. It will also be seen that when the parts are thrown aside or are not in use they will always be held together for immediate use. The front ends of the
 5 links are constructed to form hook-headed ends adapted to fit partially around the coupling-pin when inserted. The inner ends of the hook-shaped portion are beveled, for the purpose of allowing them to slide easily over the
 10 coupling-pin.

In operation I secure by the coupling-pin the links *g g*, (two being employed,) having their hook-heads pointing toward each other. I then insert in the opposite draw-head a coupling-pin, and it will thus be seen that as the
 15 train backs up, the ends of the links, when they come in contact with the coupling-pin, will be pushed apart by means of their inclined portions until the hooks have passed the pin,
 20 when the spring by the force exerted will push and keep the links closely together, and thus automatically couple the cars.

To uncouple the cars all that is necessary to be done is to pull the end of the wire chain or cord, which will draw out the coupling-pin, 25 and thus release the cars.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In an automatic car-coupler, draw-heads B 30 B, opening *c*, and V-shaped springs secured therein, in combination with links *g g*, having hook-headed ends adapted to grasp a coupling-pin, and pivoted together through an elongated slot, whereby the links may be
 35 opened and held together when not in use, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

DAVID Y. WILSON.

Witnesses:

JULIUS SOLGER,
 ROBT. L. McCLELLAN.