

(No Model.)

N. F. CAMPBELL.
CAR COUPLING.

No. 426,915.

Patented Apr. 29, 1890.

Fig. 1.

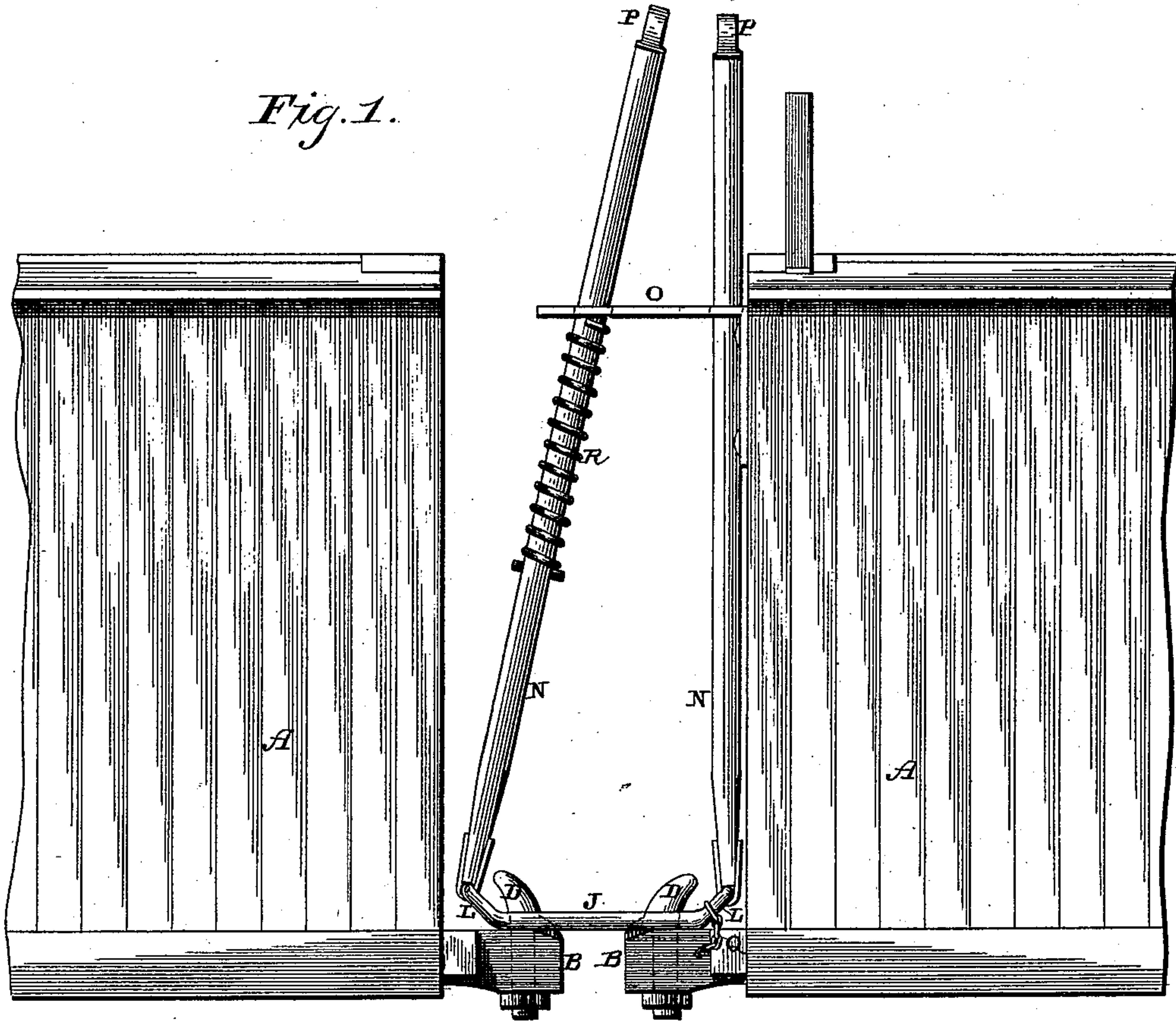
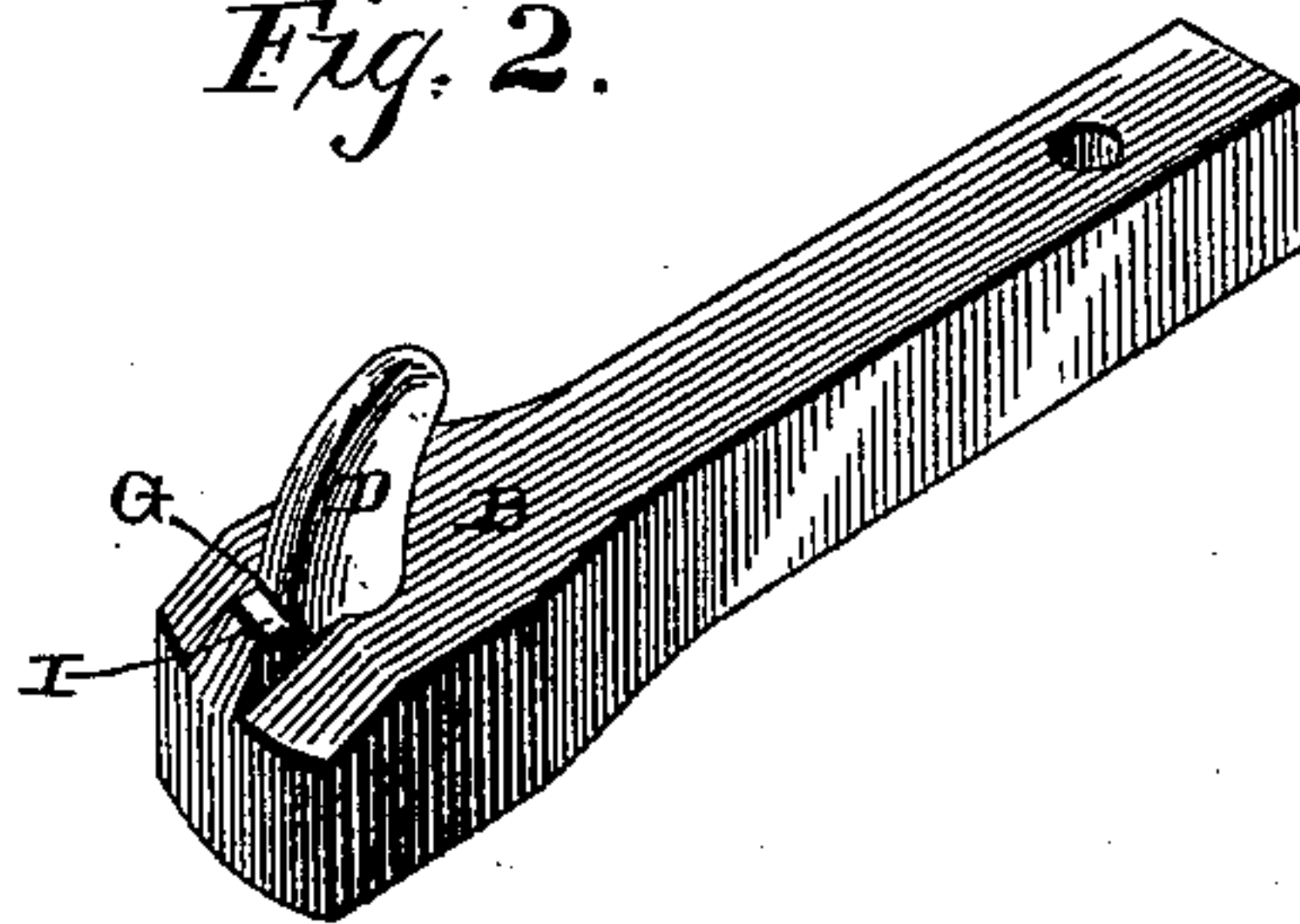


Fig. 2.



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UNITED STATES PATENT OFFICE.

NEIL FRANKLIN CAMPBELL, OF MCDADE, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 426,915, dated April 29, 1890.

Application filed February 8, 1890. Serial No. 339,689. (No model.)

To all whom it may concern:

Be it known that I, NEIL FRANKLIN CAMPBELL, of McDade, in the county of Bastrop and State of Texas, have invented certain new and useful Improvements in Car-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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-couplings; and it consists in the combination of the draw-heads provided with projections, a coupling-link, an operating-rod loosely connected to each of its ends, and a suitable support or guide through which these rods move, as will be more fully described herein-after.

The object of my invention is to provide a car-coupling in which the two cars are coupled together by means of a link which is provided with an operating-rod at each end, both of the rods and the link being attached to one of the cars only.

Figure 1 is a side elevation of a car-coupling which embodies my invention. Fig. 2 is a perspective of one of the coupling-heads alone.

A represents two adjoining cars, and B the draw-heads, which are provided with the removable projections D. These projections are shaped as shown, and made separate from the draw-heads, so that in case one of them should be broken it can be removed and replaced by another. The lower ends of these projections are made smaller than their upper ones, so that they can be passed down through the draw-heads and fastened from underneath by means of a nut or other fastening device. If suitable holes are made through the ordinary draw-heads, these projections can be applied thereto, as well as to those draw-heads which are made especially for the purpose. In order to brace and strengthen these projections, shoulders G are formed upon them, and these shoulders bear at their lower edges against flanges I, formed upon the upper and outer edge of the draw-

head for the purpose of strengthening and bracing them in position.

The two cars are coupled together by means of the link J, of suitable length, and which is provided with a loop L at each end, and to these loops the operating rods or levers N are loosely connected. Both of these rods extend a suitable distance above the top of the car, and are held in position by means of a perforated plate O, which is secured to one end of one of the cars. To the upper ends of these rods are secured suitable rings or handles P, for the purpose of operating the rods and to brace and steady the brakemen in position. The rod which is nearest to the car is attached thereto by means of a short chain Q, because this rod is not to be raised or operated ordinarily, and because it is desired to attach the coupling to the car. The outer rod is to be freely raised and lowered for the purpose of coupling and uncoupling the cars, and for the purpose of preventing the link from being bounced or thrown upward by the motion of the cars a spring R is placed upon the rod for the purpose of holding this end of the link down in position. This spring bears at its upper end against the under side of the plate O and at its lower end against a suitable projection upon the rod, and thus the full tension of the spring is exerted in forcing the outer end of the link down against the draw-head. The ends of the draw-heads are slanted downward upon each side of the flange, and this allows the link to be inclined at any suitable angle, so that it will couple high and low cars.

The cars can be coupled and uncoupled when in motion, and, being operated entirely from the top of the cars, there is no necessity for brakemen to venture between the cars, and thus risk limb and life.

Having thus described my invention, I claim—

1. The combination of the draw-heads provided with projections with the coupling-link and the operating-rods attached to opposite ends of the link, substantially as shown.

2. The combination of the draw-heads provided with projections, the coupling-link, the operating-rods attached to opposite ends of

the link, and a guiding-plate which is secured to one end of one of the cars, substantially as described.

5 3. The combination of the guiding-plate secured to one of the cars, the two operating-rods which pass down through the plate, the coupling-link attached to the lower ends of the rods, the draw-heads provided with pro-

jections, and the spring which is applied to one of the rods, substantially as set forth. 10

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

NEIL FRANKLIN CAMPBELL.

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