

(No Model.)

A. C. ELLIS.

CAR COUPLING.

No. 285,473.

Patented Sept. 25, 1883.

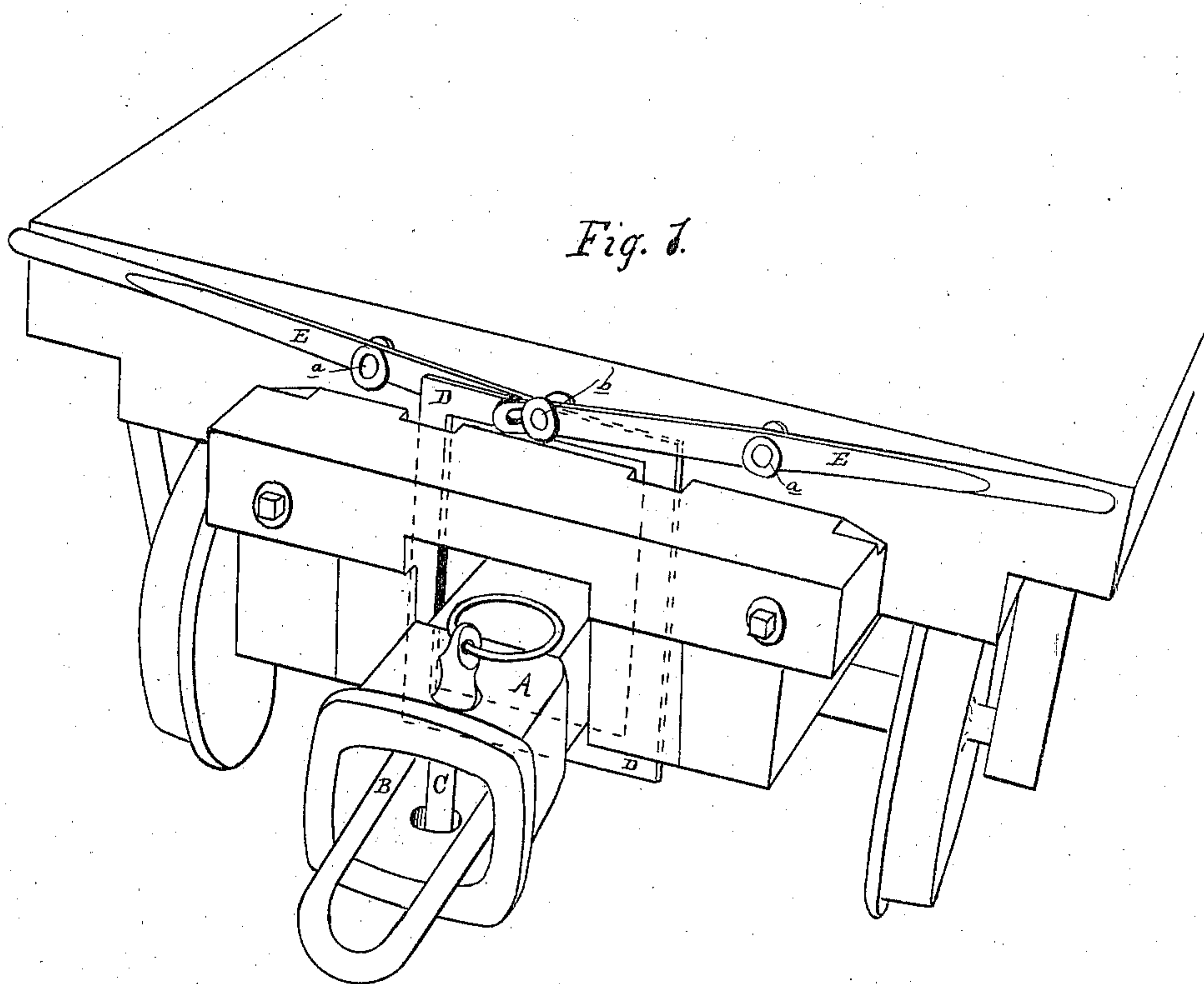


Fig. 7.

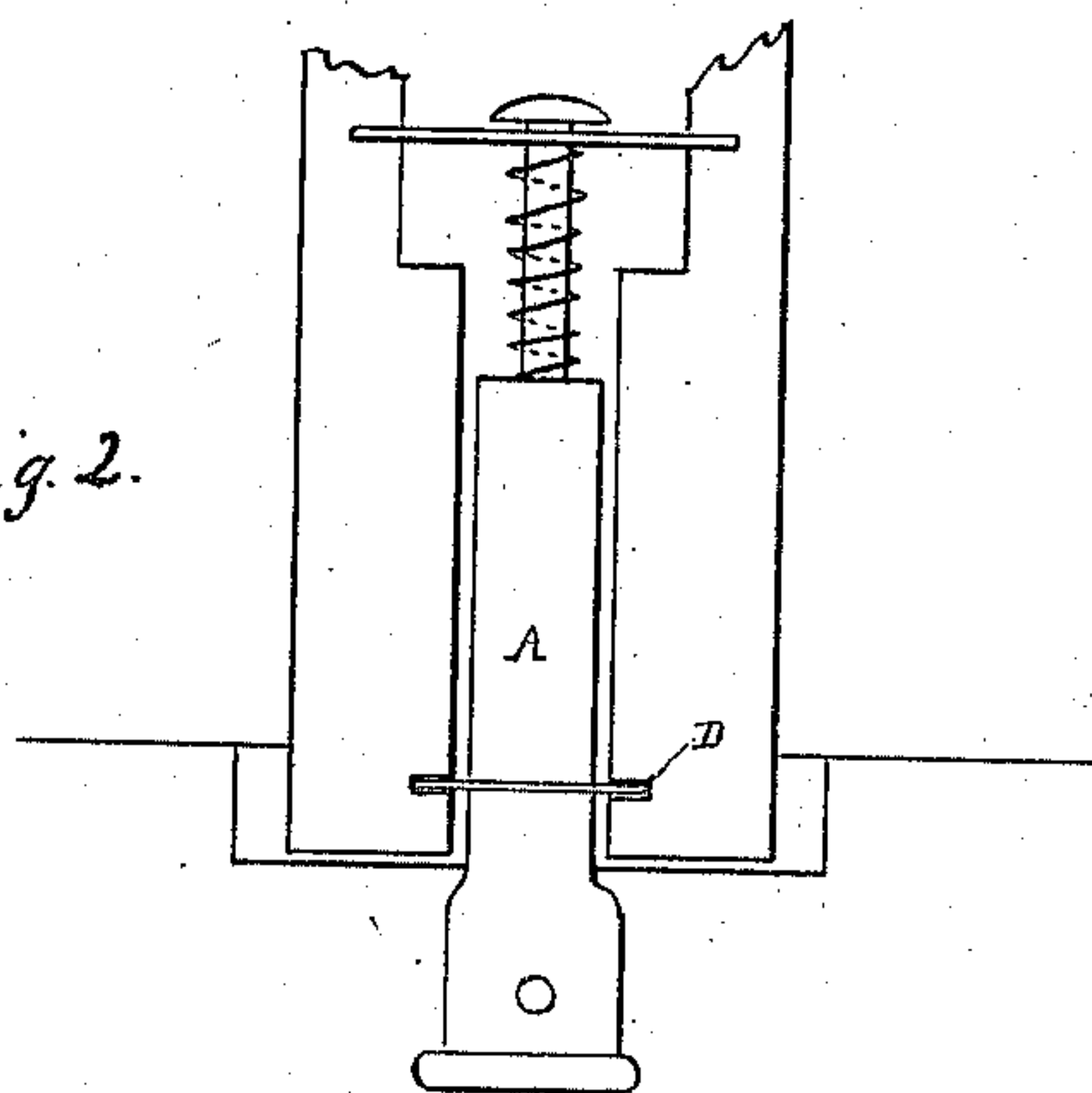


Fig. 2.

Attest:
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By *Wm. L. Sprague* J. J. J.

UNITED STATES PATENT OFFICE.

ALDRIDGE C. ELLIS, OF BIRMINGHAM, MICH., ASSIGNOR OF ONE-HALF TO
HORACE A. RANDALL AND GEORGE F. RANDALL, BOTH OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 285,473, dated September 25, 1883.

Application filed May 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALDRIDGE C. ELLIS, of Birmingham, in the county of Oakland and State of Michigan, have invented new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction of devices for coupling railway-cars together, by means of which the ordinary link-and-pin coupling now so generally employed may be utilized and converted into a coupling wherein the necessity of the operator entering between the cars for the purpose of guiding the link is entirely avoided.

It is a fact notorious to all that many lives and limbs are sacrificed every year from the necessity, in the use of the ordinary link and pin, for the operator to enter between the cars, when being coupled into a train, to guide the link of one into the mouth of the draw-bar of the adjacent car; and it is equally notorious that a large number of patents have been issued upon improvements in self-coupling draw-bars and other devices designed to accomplish the same result which I have in view in the present application; but all or nearly all of the devices, if adopted, would compel the railroad companies to substitute the new for the present draw-bars, links, and pins. Hence the object of the present invention is to provide means of safety to the operator, and at the same time avoid the necessity on the part of the railroad companies of throwing away their present devices and adopting new ones. This I accomplish by supporting the front end of the ordinary link-and-pin draw-bar in a stirrup or gate having a vertical play in the dead wood, and operated by levers projecting from said gate to either side of the car, so that, as the cars come together for the purpose of coupling, if the operator sees that the link in the one draw-bar will not enter the mouth of the draw-bar upon the adjacent car, but will pass below, he can by the use of the one or the other of the levers elevate the draw-bar carrying the link until the link will enter as the cars come together.

In the accompanying drawings, which form a part of this specification, Figure 1 is a per-

spective view of my improvement as attached to one end of a car, and Fig. 2 is a reversed plan view of the draw-bar and parts of the car-frame.

A represents the draw-bar, B the link, and C the pin, all of the usual form of construction and operation, said draw-bar being secured at its rear end and provided with buffer-springs in the usual way.

D represents a stirrup or a sash-gate, through which the draw-bar passes, and which supports the front end of said draw-bar whenever it is desired to adjust the same to allow the link to enter the mouth of the draw-bar upon the adjacent car. The upper cross-bar of this gate has centrally secured thereto the inner ends of the levers E, pivotally supported at *a*, and engaging by means of slots with the central bolt, *b*, which passes through the top bar of the sash. These levers project toward the sides of the car sufficiently far to enable the operator to stand outside the car and guide the end of the draw-bar carrying link.

Other devices than the levers might be employed to give the necessary vertical motion to the gate; but such could not be used without interfering with the spirit of my invention, which is to so support the overhanging end of the draw-bar that it may have a vertical adjustment to enable it to be readily coupled with cars of different heights, and to guide the overhanging and downwardly-hanging link into the adjacent draw-bar.

I am aware of Patents No. 88,440, of 1869, and No. 134,414, of 1872, and the constructions therein set forth are not sought to be covered in this application.

What I claim as new is—

The car-coupling herein described, consisting of the draw-bar A, the single gate D, working in vertical guides and embracing and supporting the draw-bar, the levers E, pivoted at *a*, upon either side of the draw-bar, to the end of the car, and connected to the said gate by a slot-and-pin connection, all combined and arranged to serve in relation to the link and pin, whereby the draw-bar may be manipulated from either side of the car, as and for the purpose set forth.

ALDRIDGE C. ELLIS.

Witnesses:

H. S. SPRAGUE,
E. SCULLY.