

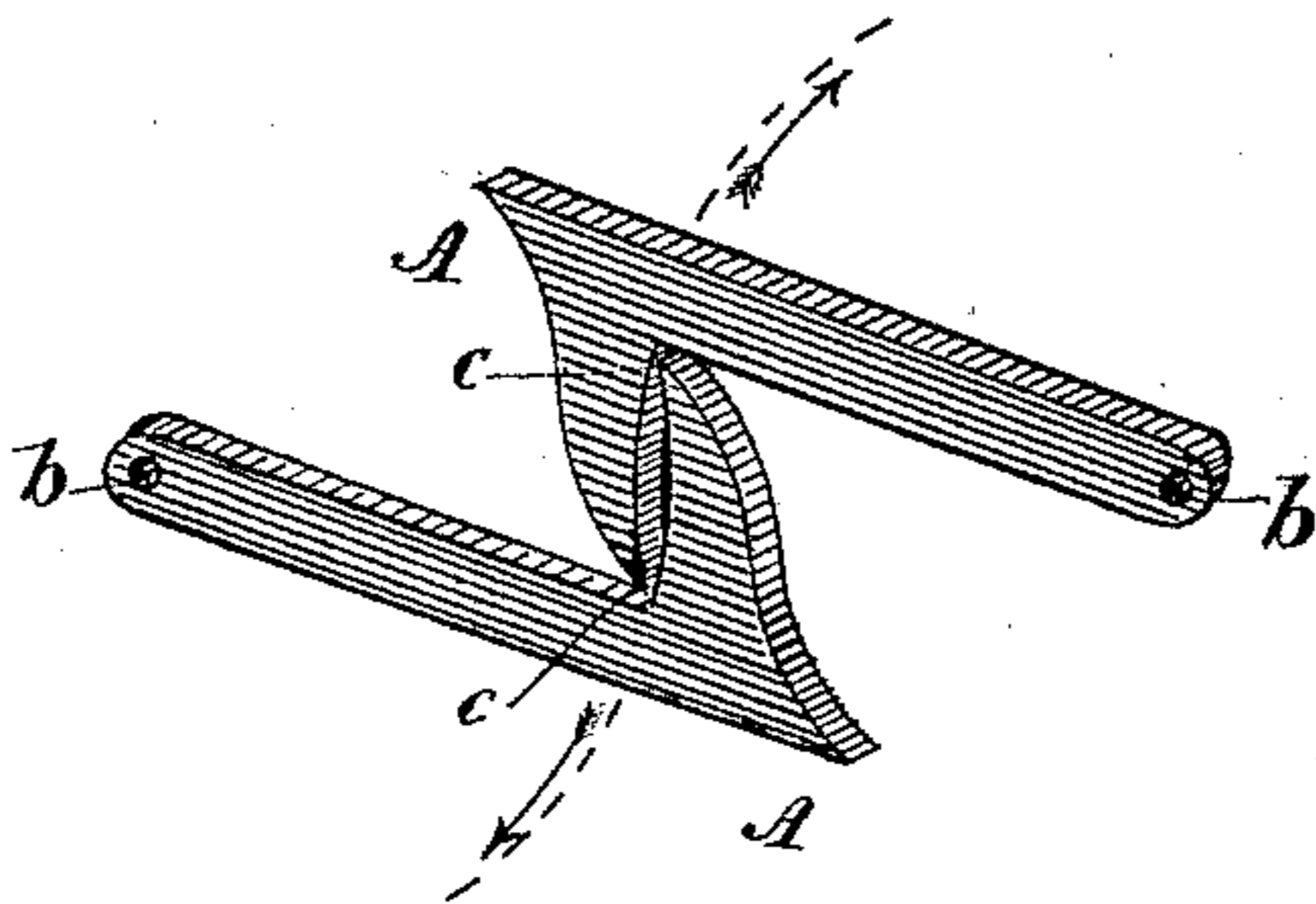
(No Model.)

G. CUSHEN.

CAR COUPLING.

No. 396,687.

Patented Jan. 22, 1889.



Witnesses,

Fred Burth
A. E. Jones.

George Cushen

Inventor,

By his Attorney *W. Bruce*

UNITED STATES PATENT OFFICE.

GEORGE CUSHEN, OF HAMILTON, ONTARIO, CANADA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 396,687, dated January 22, 1889.

Application filed February 4, 1888. Serial No. 263,010. (No model.) Patented in Canada February 10, 1888, No. 28,505.

To all whom it may concern:

Be it known that I, GEORGE CUSHEN, of the city of Hamilton, in the county of Wentworth, in the Province of Ontario, Dominion of Canada, have invented a certain new and useful Improvement in Car-Couplings, (for which I have obtained Canadian Patent No. 28,505, dated February 10, 1888;) and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

The invention relates more particularly to an improvement on what is known as the "Miller Coupling," which has been for some time in use on railway passenger-cars. While in many respects it is a good coupling, being simple, efficacious, and easy to couple, it has the disadvantage of being difficult to uncouple in certain circumstances, when it is absolutely necessary to uncouple quickly without stopping the train and backing up the cars.

My device is calculated to obviate this difficulty and cause cars provided with the improved Miller coupling to be uncoupled easily and quickly under all circumstances, with the same appliances as are at present used on passenger-cars adopting the Miller coupling.

My device consists in forming the shape of the gripping-surface of the point-headed hooks concave, or in the segment of a circle whose center is the pin each hook works on. This construction of the hooks possesses the advantage of enabling them to be uncoupled under any circumstances of strain or speed, and allows cars to be switched off on a siding or left on the track without stopping the train, and it saves time in removing cars from a train to go different directions.

In case of a train catching fire, (as frequently happens,) burning cars can be removed and isolated on account of the celerity with which the cars can be uncoupled.

By reference to the drawing forming part of this specification it will be seen that the figure represents a perspective view of the point-headed hooks of the Miller coupling with my improvement.

A are the hooks; *b b*, the pins on which they work; *c c*, the gripping-surface formed on the true segment of a circle from the center of the pin *b*, respectively, as shown in dotted lines. It will thus be seen that in uncoupling by the ordinary means common to the Miller coupling the hooks easily disengage. The hooks connect automatically as the two come into collision, a sufficient amount of lateral play is allowed them to admit their wedge-shaped points to slide past one another, and they will be provided with springs at the rear of each to keep them in engagement after being connected, and all the other parts and appliances commonly employed for operating the Miller coupling will be used by me; but it is not thought to be necessary to show them in the drawing, my claim being clearly seen in the view of the hooks alone.

Having thus described my device and its advantages, what I claim as my invention, and desire to secure by Letters Patent, is—

1. A car-coupling in which the gripping-surfaces of the point-headed hooks A are formed, respectively, concave or a segment of a circle from the center of their operating-pins, substantially as and for the purpose specified.

2. The Miller car-coupling constructed with concave gripping-surfaces of the point-headed hooks, substantially as and for the purpose specified.

Dated at Hamilton, Ontario, this 9th day of January, 1888.

GEO. CUSHEN.

In presence of—
A. CUSHEN,
W. BRUCE.