

(No Model.)

C. O. BARNES & L. BARNES, Sr.

CAR COUPLING.

No. 335,675.

Patented Feb. 9, 1886.

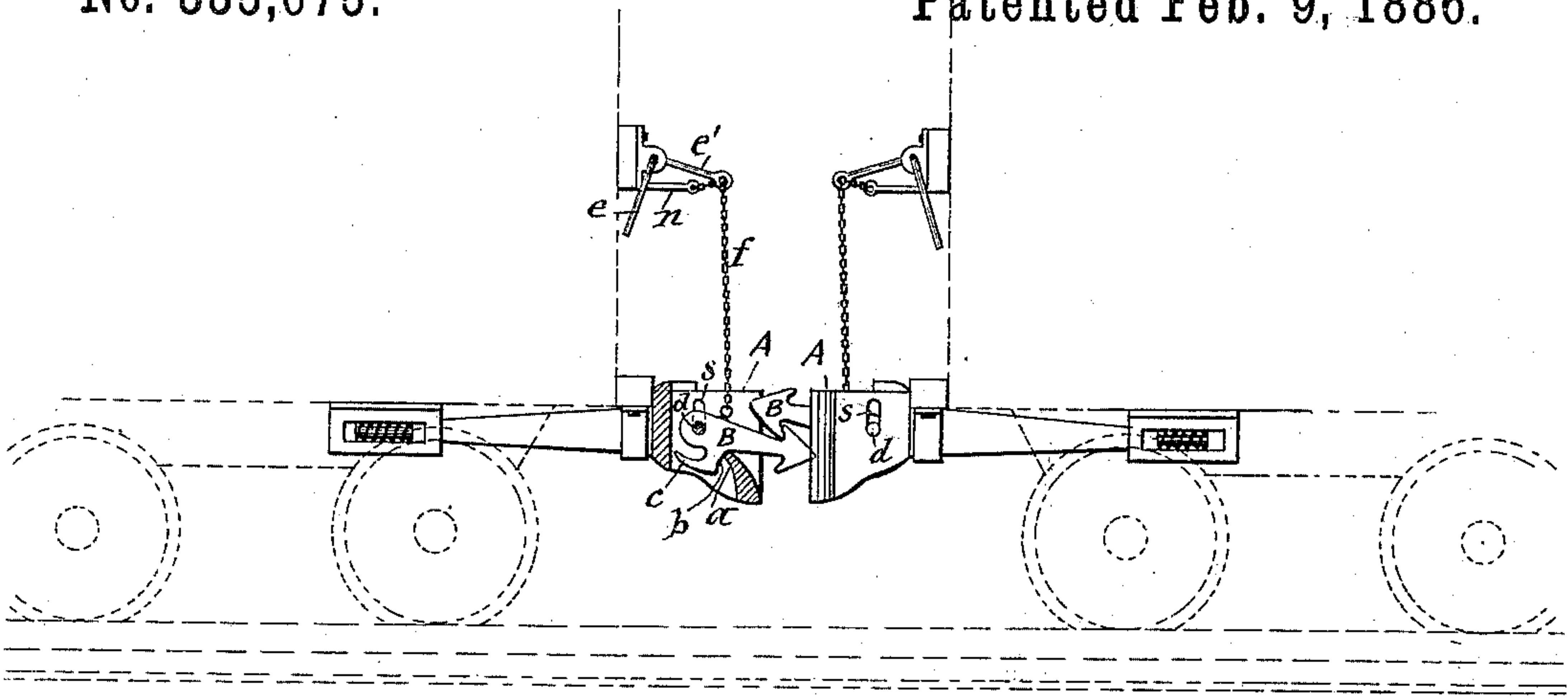


FIG-I-

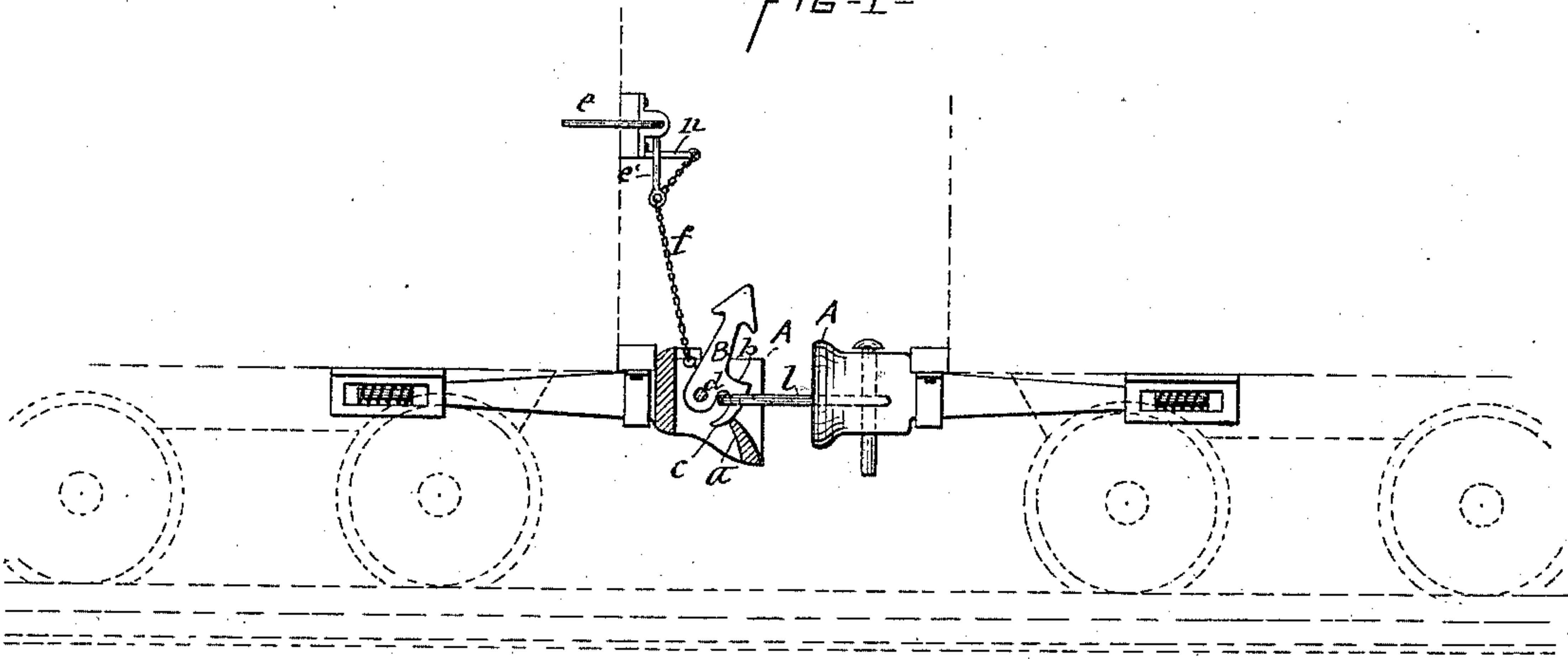


FIG-II-

FIG-III-

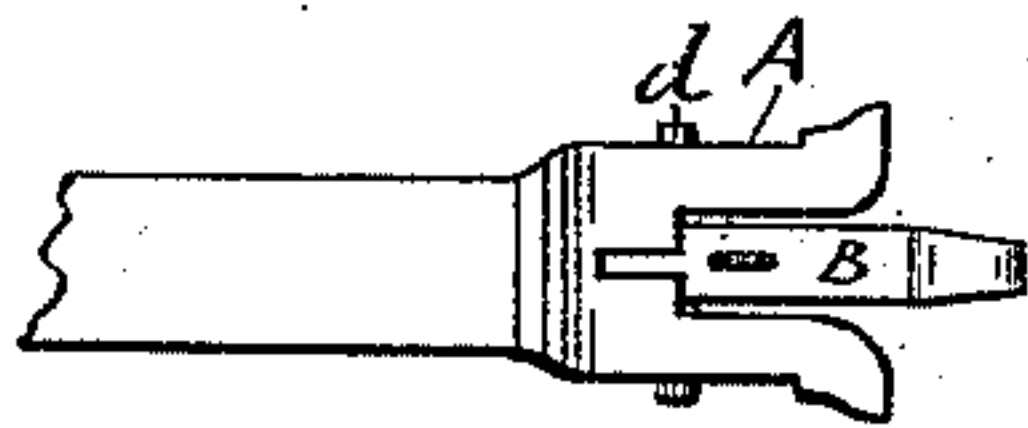
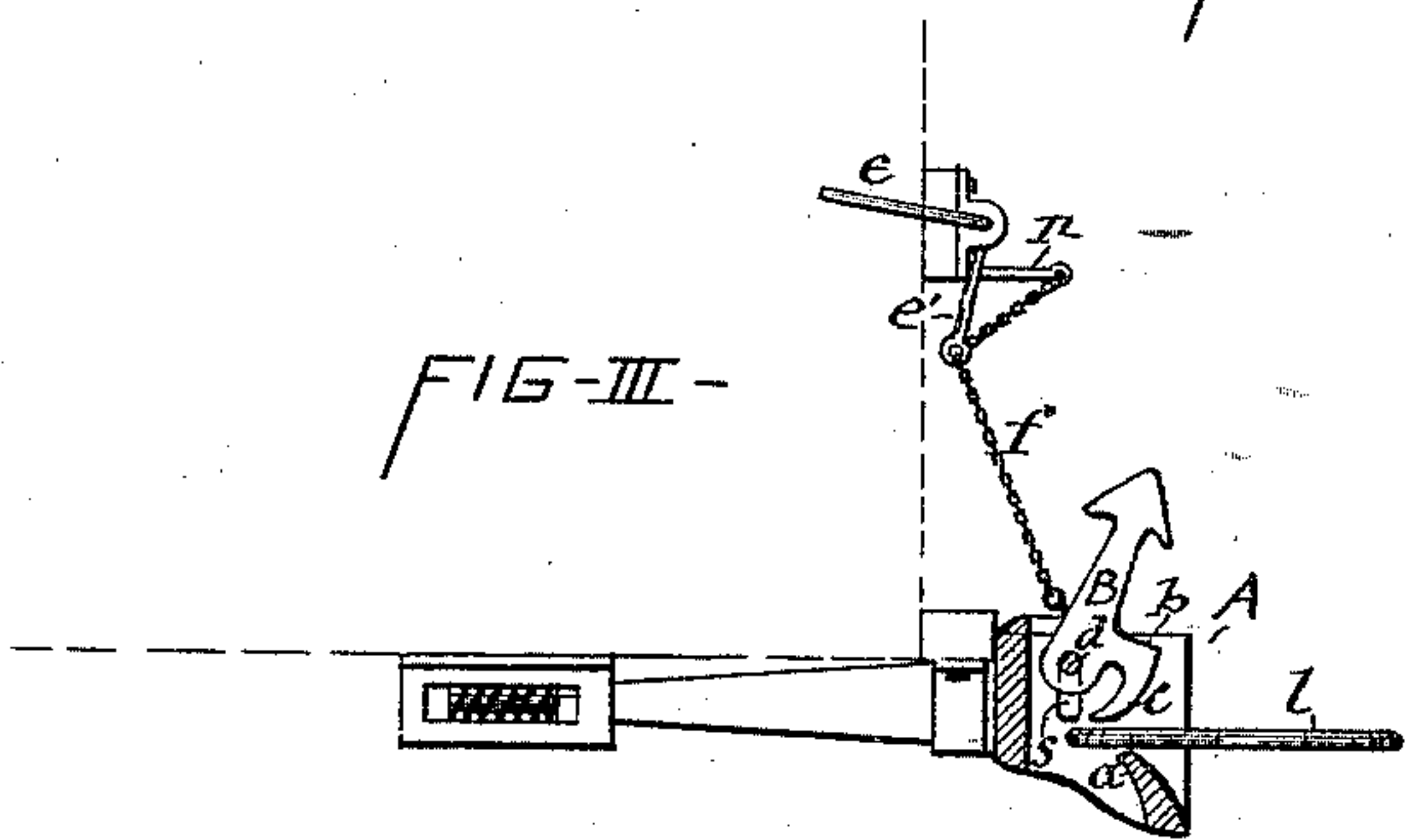


FIG-IV-

WITNESSES:

C. Bendixon
E. C. Cannon

INVENTOR:

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attys

UNITED STATES PATENT OFFICE.

CHARLES O. BARNES AND LUCIEN BARNES, SR., OF SYRACUSE, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 335,675, dated February 9, 1886.

Application filed July 27, 1885. Serial No. 172,785. (No model.)

To all whom it may concern:

Be it known that we, CHARLES O. BARNES and LUCIEN BARNES, Sr., of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Car-Couplers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

10 This invention relates to the class of car-couplings in which hooks pivoted to the draw-heads of two adjoining cars interlock with each other.

Our present invention consists in an improved construction and combination of the draw-head and coupling-hook and certain devices attached thereto, whereby the coupling is re-enforced, and also adapted to be used in connection with the ordinary coupling-link.

20 The invention is fully illustrated in the annexed drawings, wherein Figure 1 is a side elevation of our improved car-coupling, shown partly in section. Fig. 2 is a side elevation showing our improved car-coupling in use with the ordinary coupling-link. Fig. 3 is a sectional view showing our invention in position for disconnecting therefrom the coupling-link, and Fig. 4 is a top plan view of the draw-head.

30 Similar letters of reference indicate corresponding parts.

A represents the draw-head, formed with the usual bell-mouth for the reception of the coupling hook or link.

35 B denotes the coupling-hook, having its hooks standing in a vertical plane and pivoted to the draw-head so as to swing vertically thereon.

40 The outer end of the mouth of the draw-head is provided with a rigid abutment, *a*, which faces inward, as shown, for the purpose hereinafter explained.

Between the abutment *a* and the pivot of the coupling-hook B said coupling-hook is formed with an extra rearward or inward projecting hook, *c*, the front or outer face, *b*, of which is shaped to form a shoulder by which the coupler B, when interlocked with a similar coupler, rests against the abutment *a*, as

illustrated in Fig. 1 of the drawings, thereby providing a secure hold for the coupler on the draw-head, and relieving the hinge-pin *d* of the coupler of a great portion of the strain incident to the draft on said coupler. The function of the extra hook *c* is to engage with the ordinary coupling-link, *l*, in case a car furnished with our improved coupler has to be connected with a car equipped with the ordinary draw-head and coupling-pin, as represented in Fig. 2 of the drawings. In this case the abutment *a* serves to brace the hook *c*, so as to enable it to withstand the draft on said hook.

In order to permit of coupling and uncoupling the link *l*, we provide the draw-head A with vertical slots *s*, for the reception of the hinge-pin *d*, so as to allow the coupler B to be raised bodily, as represented in Fig. 3 of the drawings. Said raising of the coupler is effected by a rod extended across the end of the car and provided with a crank, *e*, at the sides of the car for turning said rod, and a crank-arm, *e'*, projecting from the central portion of the rod, engages a chain, *f*, which is connected at one end with the coupler A, and at the opposite end with a stationary arm, *n*, projecting from the end of the car, as shown.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupler, the coupling-hook B, provided with the extra hook *c*, for engaging a coupling-link, and an abutment on the draw-head arranged to encounter and brace the hook *c* when subjected to the draft of the link, substantially as set forth.

2. The combination, with the draw-head A, of the coupling-hook B, provided with the rigid extra hook *c* and shoulder *b*, and pivoted on the draw-head, and the abutment *a*, affixed to the draw-head and facing inward to engage the shoulder *b*, substantially as described and shown.

3. The combination of the draw-head A, provided with the vertical slots *s* and abutment *a*, the coupling-hook B, provided with the extra hook *c* and shoulder *b*, and the

hinge-pin *d*, projecting into the slots *s s*, all constructed and combined substantially in the manner described and shown.

In testimony whereof we have hereunto
5 signed our names and affixed our seals, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the

State of New York, this 18th day of July, 1885.

CHARLES O. BARNES. [L. S.]
LUCIEN BARNES, SR. [L. S.]

Witnesses:

FREDERICK H. GIBBS,
C. BENDIXON.