

(No Model.)

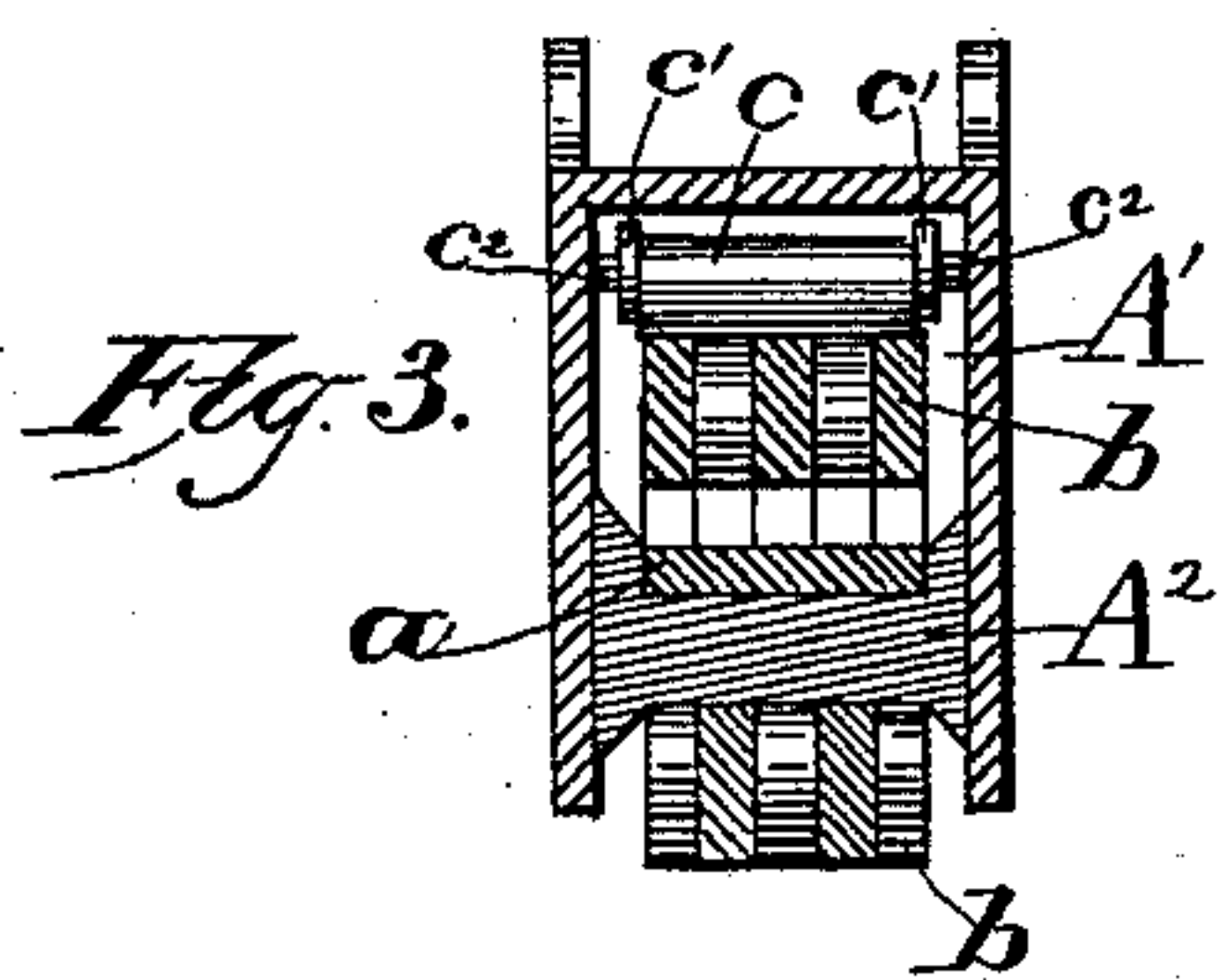
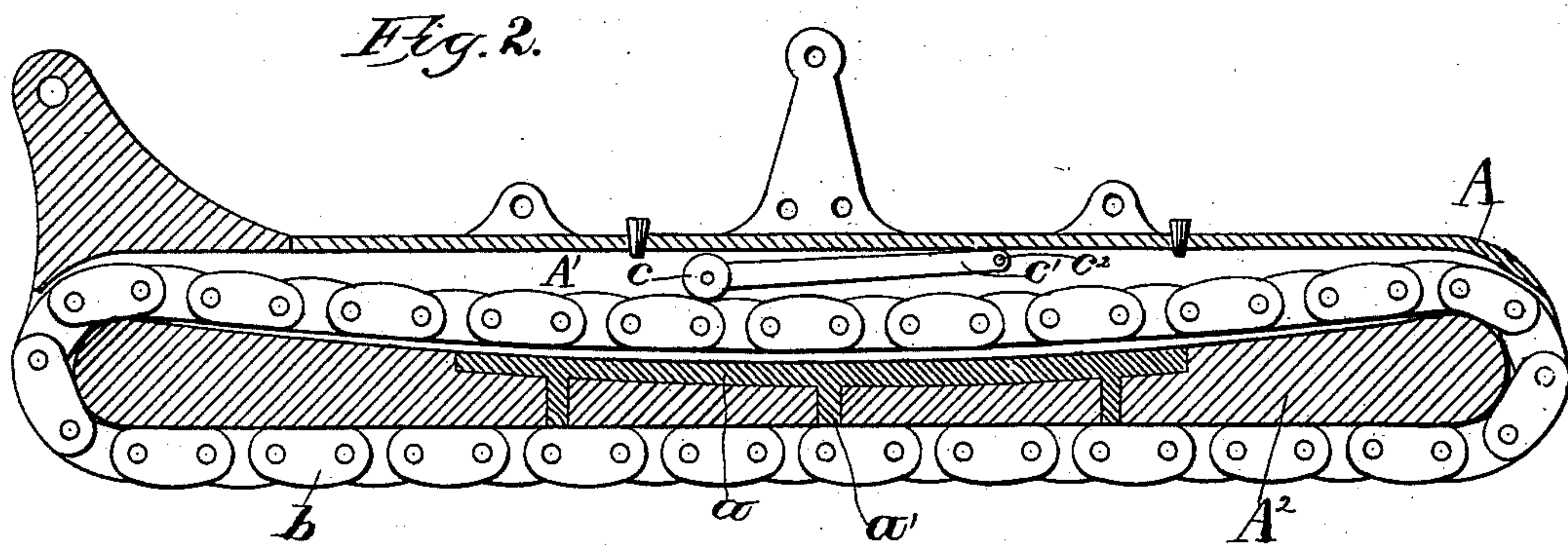
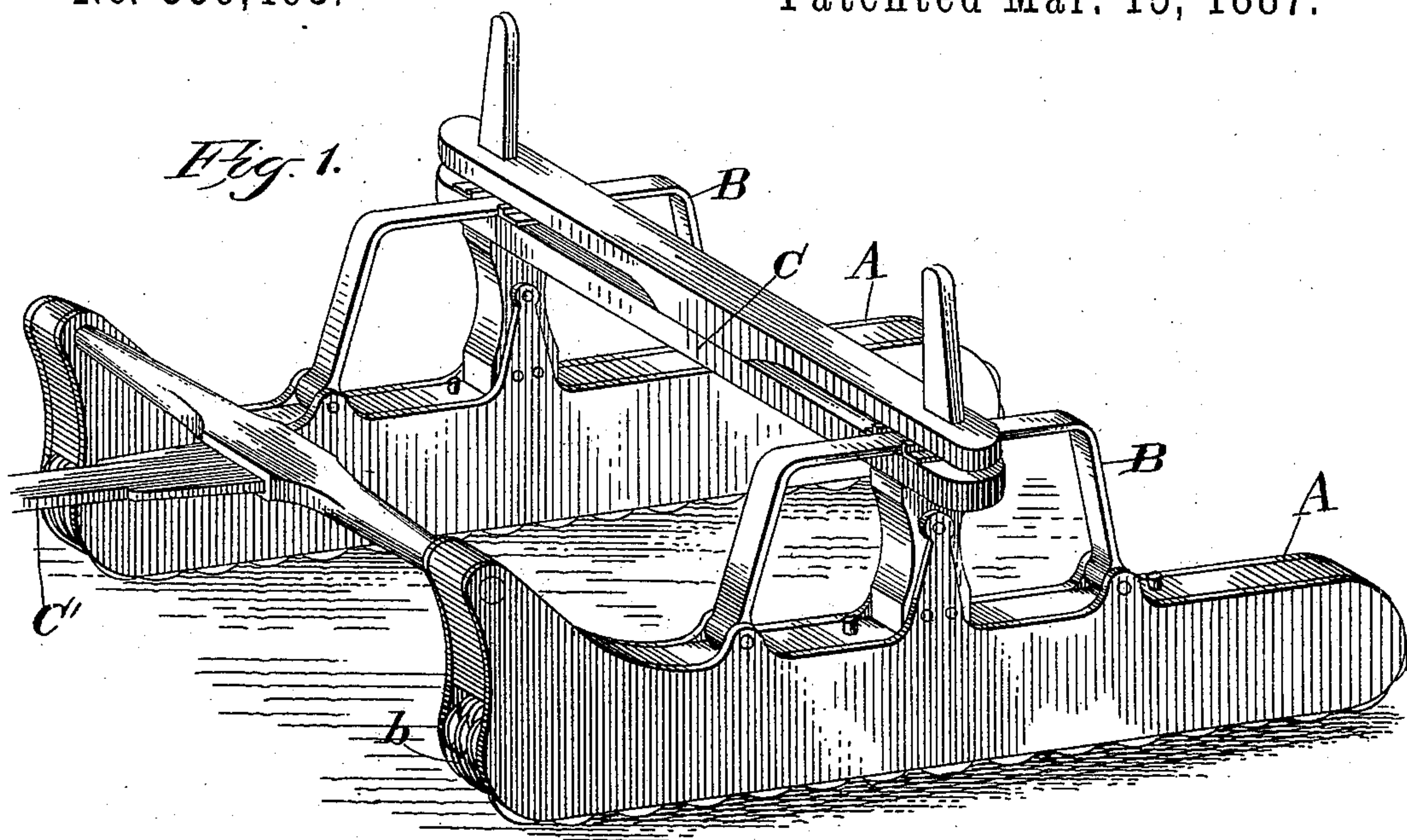
2 Sheets—Sheet 1.

C. L. PEIRCE.

VEHICLE.

No. 359,468.

Patented Mar. 15, 1887.



Witnesses:

E. G. J. Smith

R. Platz

Inventor:

Charles S. Peirce

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Attorneys

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2 Sheets—Sheet 2.

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Fig. 4.

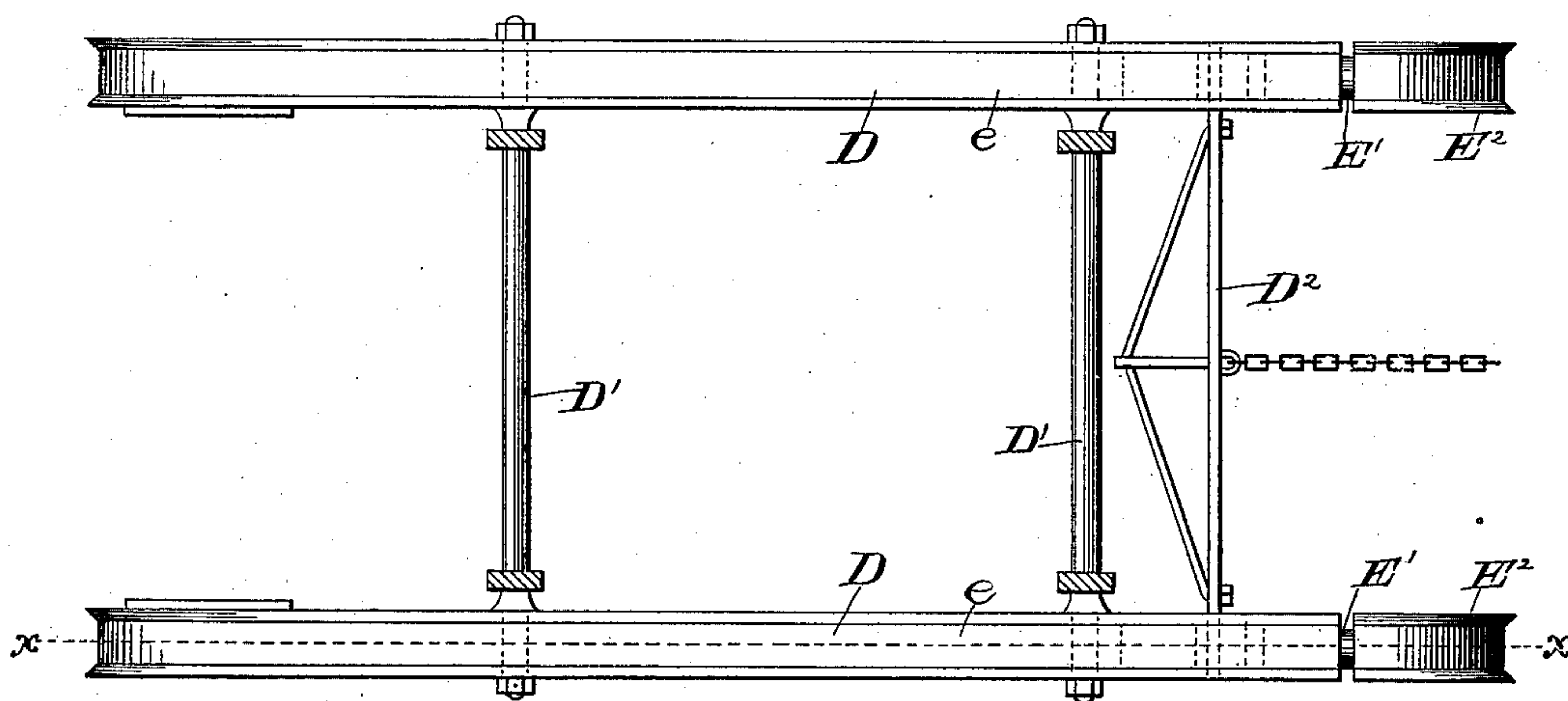
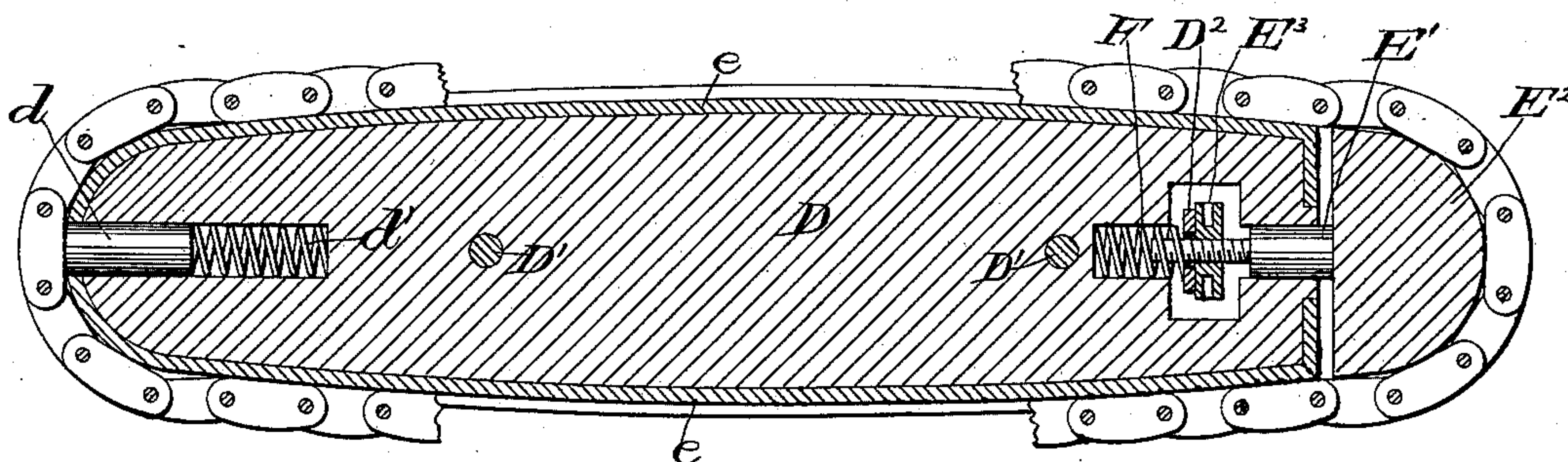


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHARLES L. PEIRCE, OF MILWAUKEE, WISCONSIN.

VEHICLE.

SPECIFICATION forming part of Letters Patent No. 359,468, dated March 15, 1887

Application filed June 11, 1885. Serial No. 168,321. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. PEIRCE, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to vehicles, and will be fully described hereinafter.

In the drawings, Figure 1 is the perspective view of the bob of the sleigh embodying my invention. Fig. 2 is the vertical longitudinal section through the center of one of the runners of the bob. Fig. 3 is a transverse vertical section through one of said runners. Fig. 4 is the plan view of a truck-frame forming part of my invention. Fig. 5 is a longitudinal vertical section of one of the members of the said truck-frame, taken on the line *x x*, Fig. 4, and showing my improved endless track in place thereon, but partly broken away.

A, Figs. 1 and 2, are the runners of the bob, and B are the knees, and C is the bolster. C' is the draft-bar. The runner A is partly hollowed out, so that there is a recess, A', above its base A², which latter is perforated and concaved on top, and is to receive an absorbent, *a*, that may extend down through said perforations therein, as shown at *a'*, this absorbent to receive any desired lubricant.

b is the endless band or chain that extends around the base A², and is held snugly in place thereon by a roll, *c*, which hangs from a bale, *c'*, which is pivoted to the runners at *c''*.

When my device is applied to such vehicles as street-cars, I use the truck-frame shown in Fig. 4. It consists of two members, D D, which are connected by cross-bars D', and to which are secured a draft-bar, D², of any desired form. In one end of each member I provide a bore to receive a pencil-lubricant, *d*, behind which is placed a spring, *d'*, which keeps it gently pressed out, so as to be flush with the periphery of the grooved bearing band or plate *e*. At the other end the member is bored to receive the stem E' of a plunger, E², which latter forms the continuation

of the member. The bore in the member D is enlarged and opened up to the sides, as shown in Fig. 5, to receive a tightening-nut, E³, that is screwed onto the screw-threaded portion of the stem E', and behind this tightening-nut the said screw-threaded portion of the stem E' receives the perforated end of the draft-bar D², and behind this in a continuation of the bore is arranged a spring, F, the tension of which is regulated by screwing the nut E³ in and out. The office of the plunger E² is to cause the endless band or belt to fit closely about the bearing band or plate *e*, which is grooved to receive it.

I do not confine myself to any of the forms shown herein, as my device may be greatly varied in construction without departing from the spirit of my invention; but I prefer to use an endless band or belt—such, for instance, as is shown in the drawings at *b*, and in my patents for improvement in skates, granted to me May 25, 1886, the essential features being that there is an endless runner having sliding contact with the body of the member A or D, and an immediate bearing on the surface traveled over, the blocks or members of the said endless runner being non-rotating in themselves and wholly independent of any rollers or wheels whatsoever.

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

1. In a vehicle, the combination, with the truck or runner members united by suitable cross and draft bars, of endless runners having sliding contact with the bodies of said members and an immediate bearing on the surface being traveled over.

2. In a vehicle, the combination, with the truck or runner members united by suitable cross and draft bars, and provided with grooved bearing plates or bands, of endless runners having sliding contact with said grooved bearing plates or bands and immediate bearing on the surface being traveled over.

3. In a vehicle, the combination, with the truck or runner members united by suitable cross and draft bars, and provided with

grooved bearing plates or bands, of endless runners having sliding contact with said grooved bearing plates or bands and immediate bearing on the surface being traveled
5 over, and a tightening device for causing the endless runner to fit closely about the said bearing-plate.

In testimony that I claim the foregoing I

have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wis. 10
consin, in the presence of two witnesses.

CHARLES L. PEIRCE.

Witnesses:

G. A. PLATZ,
STANLEY S. STOUT.