

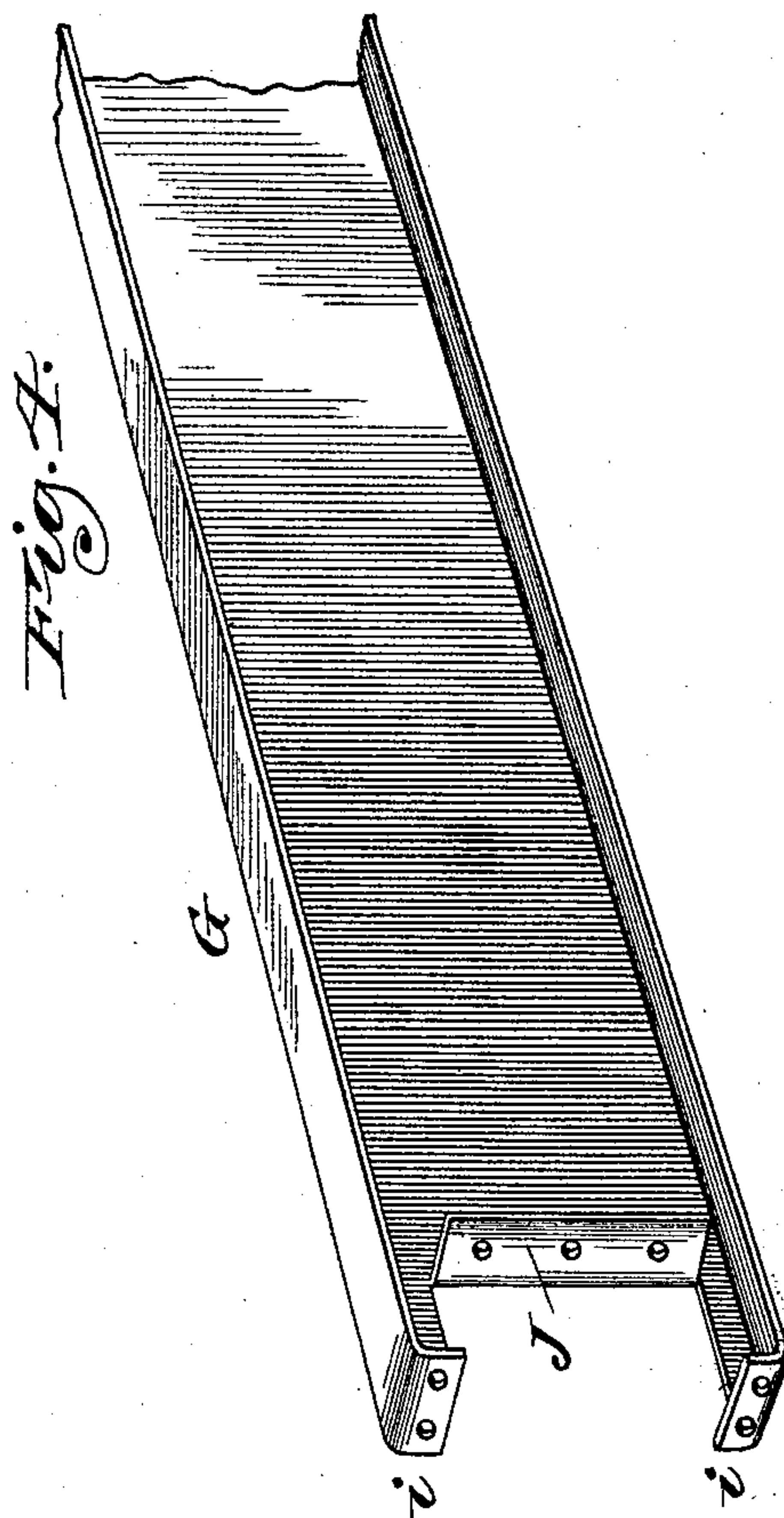
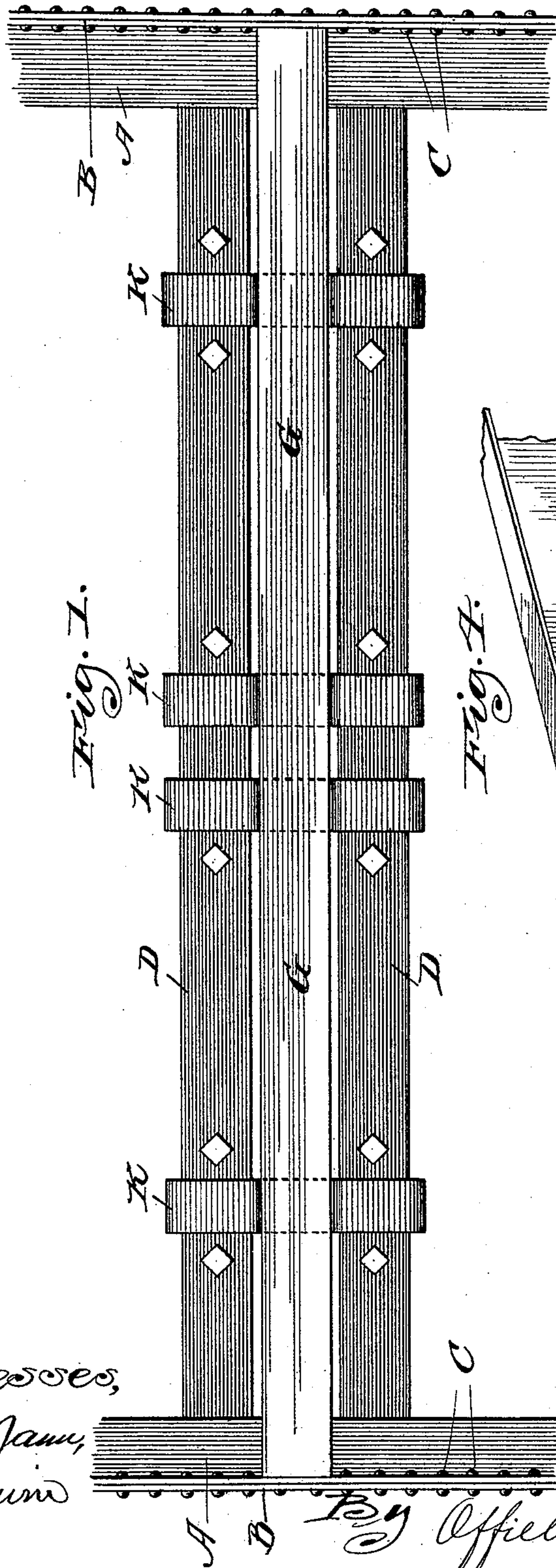
(No Model.)

2 Sheets—Sheet 1.

S. A. JENNINGS.
CAR CONSTRUCTION.

No. 496,881.

Patented May 9, 1893.



Witnesses,
J. M. Mann,
H. Goodwin

Inventor,
Stephen A. Jennings
By *Offield, Towle & Smith*
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Fig. 2.

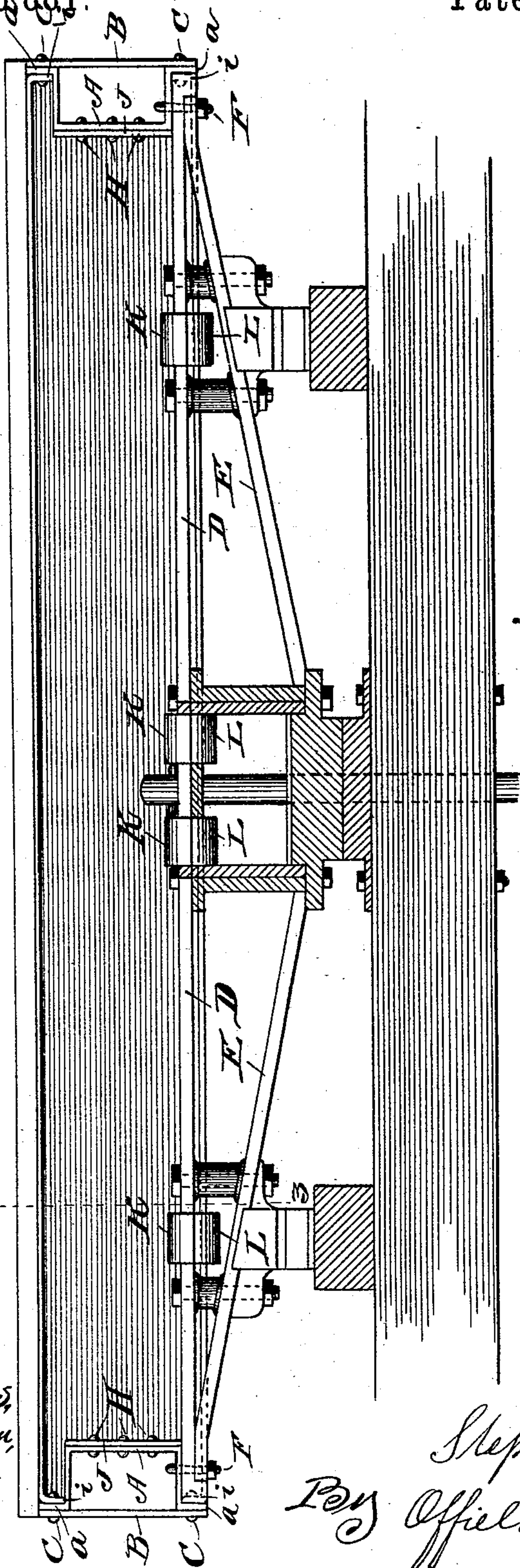
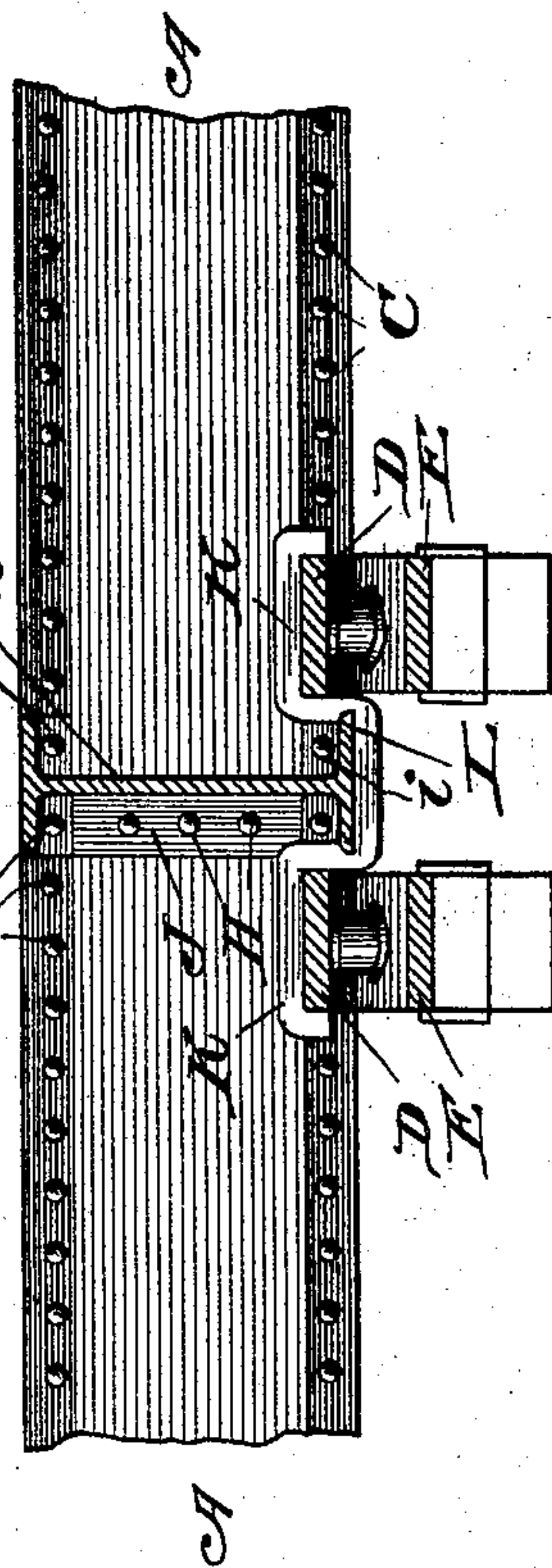


Fig. 3.



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UNITED STATES PATENT OFFICE.

STEPHEN A. JENNINGS, OF EVANSTON, ILLINOIS, ASSIGNOR TO ARTHUR S. KIRK, OF SAME PLACE.

CAR CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 496,881, dated May 9, 1893.

Application filed July 11, 1892. Serial No. 439,682. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN A. JENNINGS, of Evanston, in the county of Cook, and State of Illinois, have invented certain new and useful Improvements in Car Construction, of which the following is a specification.

My invention has for its object to provide an improved construction of the floor frame of cars and relates more particularly to a novel method of securing the cross sills to the side sills and to means for supporting the middles of said cross sills, which means comprise stirrups adapted to hook over the top bars of the transom members and having seats to receive said cross sills.

My construction is particularly adapted for cars having their floor frames constructed from metal beams, and some of the features of construction are shown and described in my application, Serial No. 398,005, filed June 30, 1891.

The improvements hereinafter described are intended to furnish means whereby the weight of the car body and the load is transmitted to the trucks in a better manner than has heretofore been accomplished.

In the accompanying drawings, Figure 1 is a plan view of one of the cross sills showing a divided transom and showing also portions of the side sills. Fig. 2 is a side elevation of the parts shown in Fig. 1. Fig. 3 is a section on the line 3—3 of Fig. 2; and Fig. 4 is a perspective view of the cross sills broken away.

In the drawings, A represents the side sill which is constructed preferably of U-beams having the margins of their flanges turned at right angles, as at *a*, and presenting outwardly and with a metal plate B bolted over said opening by rivets C passed through the out-turned margins *a*.

D, E represent respectively the upper and lower transom members whose ends are secured to the side sills by the bolts F, the transoms being double and separated, as clearly shown in Fig. 1 of the drawings.

G represents the cross sills which are I-beams having their webs slitted and in-turned, as shown at J, Fig. 4, to form a flange whereby

they are secured to the webs of the U-beams, forming the side sills, by the bolts H, as clearly shown in Figs. 2 and 3. The heads of the I-beams are also in-turned, as shown at *i*, forming bolt flanges which are secured by the rivets C with the flanges of the U-beams and to the covering plate. The transom members are separated, as clearly shown in Figs. 1 and 3, but are lashed together by the stirrup irons K which have the central depressed seats L to receive the bottoms of the cross sills. It will thus be seen that the load is transmitted through the I-beams which are rigidly affixed to the side sills and through the stirrups to the divided transom and ultimately to the truck. I have shown four of these stirrup irons employed, but the number thereof may be varied as well as the details of construction of these and the other parts.

I claim—

1. In car construction, the combination with metallic side sills composed of U-beams presenting outwardly and having the margins of their flanges angularly disposed whereby to provide bolt or rivet flanges, of I-bar cross beams having their webs slitted, turned at an angle and secured with the webs of the side sills and flanges of their heads down turned and secured with the flanged margins of the side sills, substantially as described.

2. In car construction, the combination with a transom composed of two parallel members separated from each other, of stirrups having a bearing on said members and provided with seats and a cross sill resting in said seats, substantially as described.

3. In car construction, the combination with metallic side sills, of a metallic cross sill secured thereto and a transom having its members separated, stirrups lashing said transom members together, said stirrups provided with seats to receive the cross sill, substantially as described.

STEPHEN A. JENNINGS.

Witnesses:

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