

(No Model.)

2 Sheets—Sheet 1.

T. W. CAPEN.

TRUCK FOR THE BRIDGE OF A TRAVELING CRANE.

No. 267,149.

Patented Nov. 7, 1882.

Fig. 1.

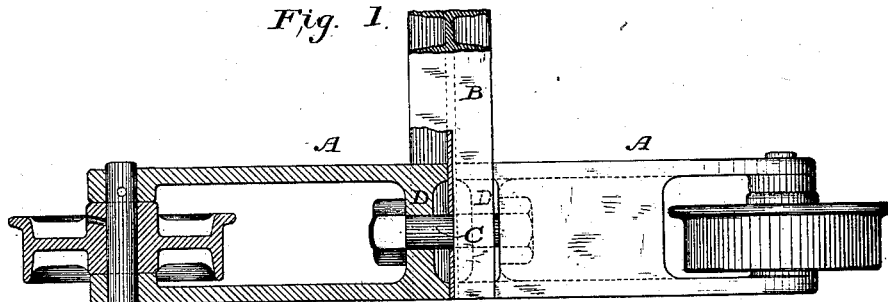


Fig. 2.

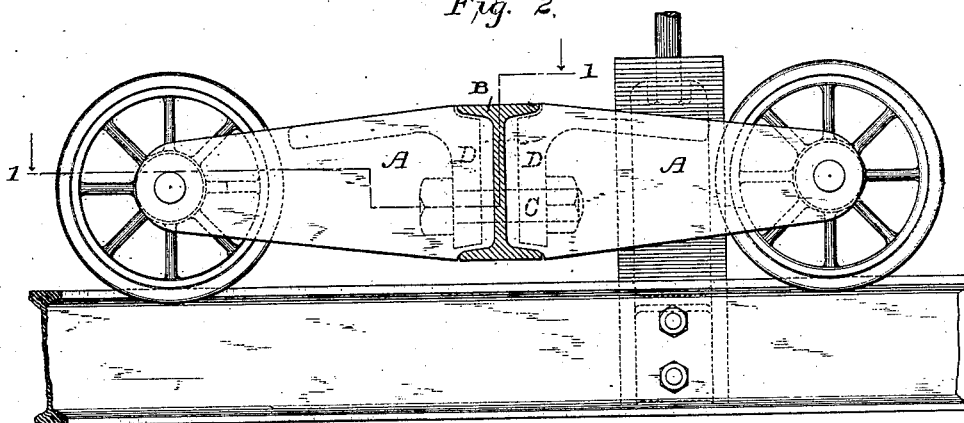
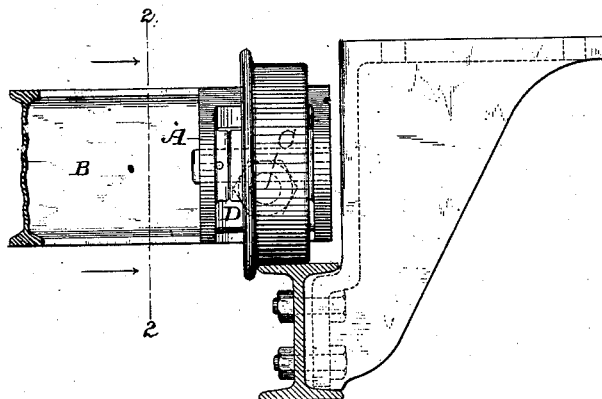


Fig. 3.



WITNESSES

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Fig. 4.

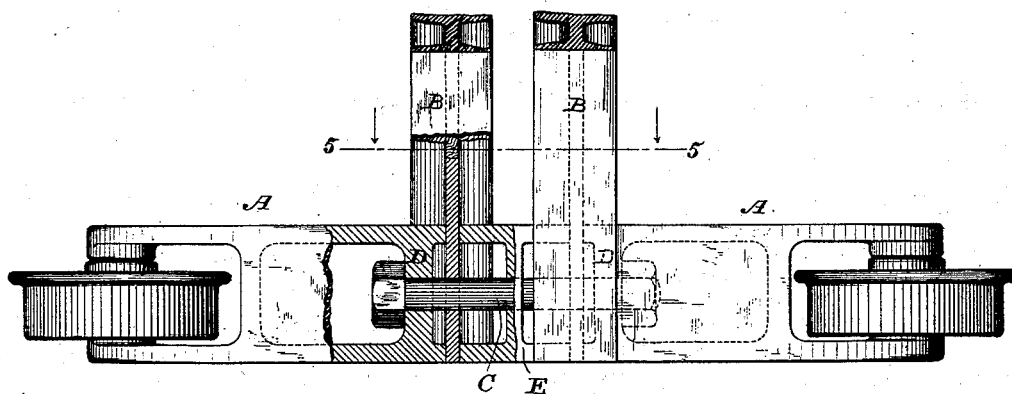
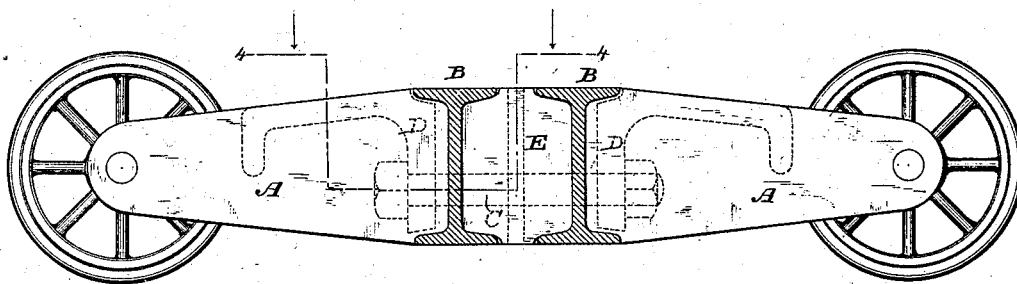


Fig. 5



WITNESSES

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UNITED STATES PATENT OFFICE.

THOMAS W. CAPEN, OF STAMFORD, CONNECTICUT, ASSIGNOR TO THE YALE
LOCK MANUFACTURING COMPANY, OF SAME PLACE.

TRUCK FOR THE BRIDGE OF A TRAVELING CRANE.

SPECIFICATION forming part of Letters Patent No. 267,149, dated November 7, 1882.

Application filed October 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. CAPEN, of Stamford, in the county of Fairfield and State of Connecticut, have invented an Improved Truck for a Bridge of a Traveling Crane, of which the following is a specification.

Heretofore such trucks have been made of wrought-iron straps, which require separate axle-boxes and a large number of bolts and rivets. Upon that plan, aside from the expense of it, it was exceedingly difficult to get the truck so stiff that the sagging of the bridge in the middle, when supporting great loads, would not twist the truck and cause its axles to bind, and thus obstruct the operation of the crane.

The object of my invention is to overcome this difficulty and greatly simplify and cheapen the construction of the truck, at the same time giving it more strength to perform the service required.

In the accompanying drawings, illustrating my invention, Figure 1 is a plan view, partly in section, on the line 1 1 of Fig. 2, of my improved truck. Fig. 2 is a side elevation, showing the bridge-girder in section on the line 2 2 of Fig. 3, and the rail in elevation. Fig. 3 is an elevation of one end of the truck in place on its rail. Fig. 4 shows a plan view, partly in section on the line 4 4 of Fig. 5, of a modification of my improved truck so far as necessary to apply it to a bridge made of two girders. Fig. 5 is a side elevation of the same, partly in section through the girders on the line 5 5 of Fig. 4.

Referring to the letters upon the drawings, A A indicate two castings, which are accurately fitted to each side of the end of the bridge-girder B, and fastened together by a bolt, C, passing through the downward projections D D and through the girder. The journals of the truck-wheels have their bearings in the outer ends of these castings, as illustrated. Pressure on the top of the bridge-girder will cause com-

pression strains at the top part of the truck-beams and tension strains at the bottom. The compression strains are resisted by the interposed end of the bridge-girder, and the tension strains are resisted by the bolt C. I have illustrated an excellent form, and, in my opinion, the best for giving suitable strength without waste of material; but I do not confine myself to the precise forms of channeled castings illustrated, because considerable variation of form is practicable without departing from the substance of my invention.

When it is desirable, as it is in most cases where heavy work is to be done with traveling cranes, to have two bridge-girders or I-beams placed side by side to connect the two trucks of the bridge and sustain the load it is only necessary to employ a metal block, E, to accurately fit and fill the space between the ends of the two girders, and I provide a hole in the block, through which the bolt C may pass, as illustrated in Figs. 4 and 5.

This form of bridge-truck frame is of great simplicity, strength, and cheapness of construction, as compared with any that have heretofore been known, so far as I am aware.

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

1. In a bridge-truck, the combination of castings A A with the interposed end of the bridge-girder and a bolt, C, substantially as set forth.

2. In a bridge-truck, the combination of the castings A A with the interposed ends of the I-beams, a block, E, and bolt C, substantially as set forth.

In testimony whereof I have hereunto subscribed my name this 3d day of October, A. D. 1882.

THOS. W. CAPEN.

Witnesses:

HOWARD L. UNDERHILL,
SCHUYLER MERRITT.