

(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.

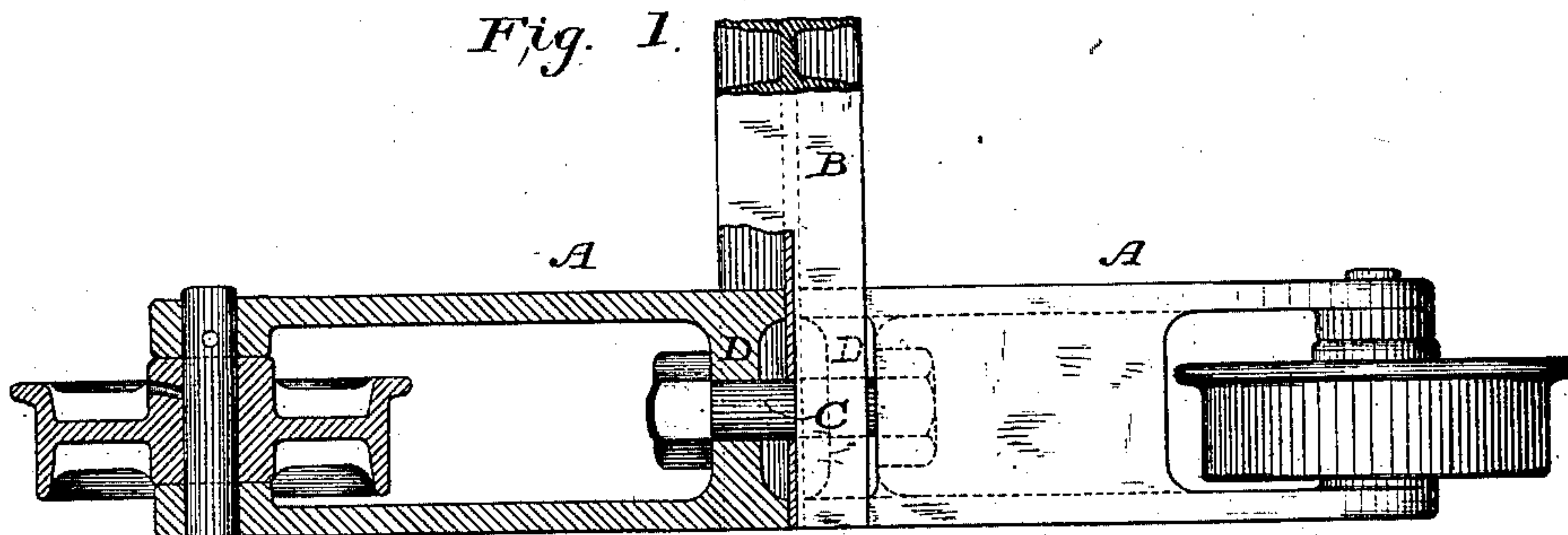


Fig. 2.

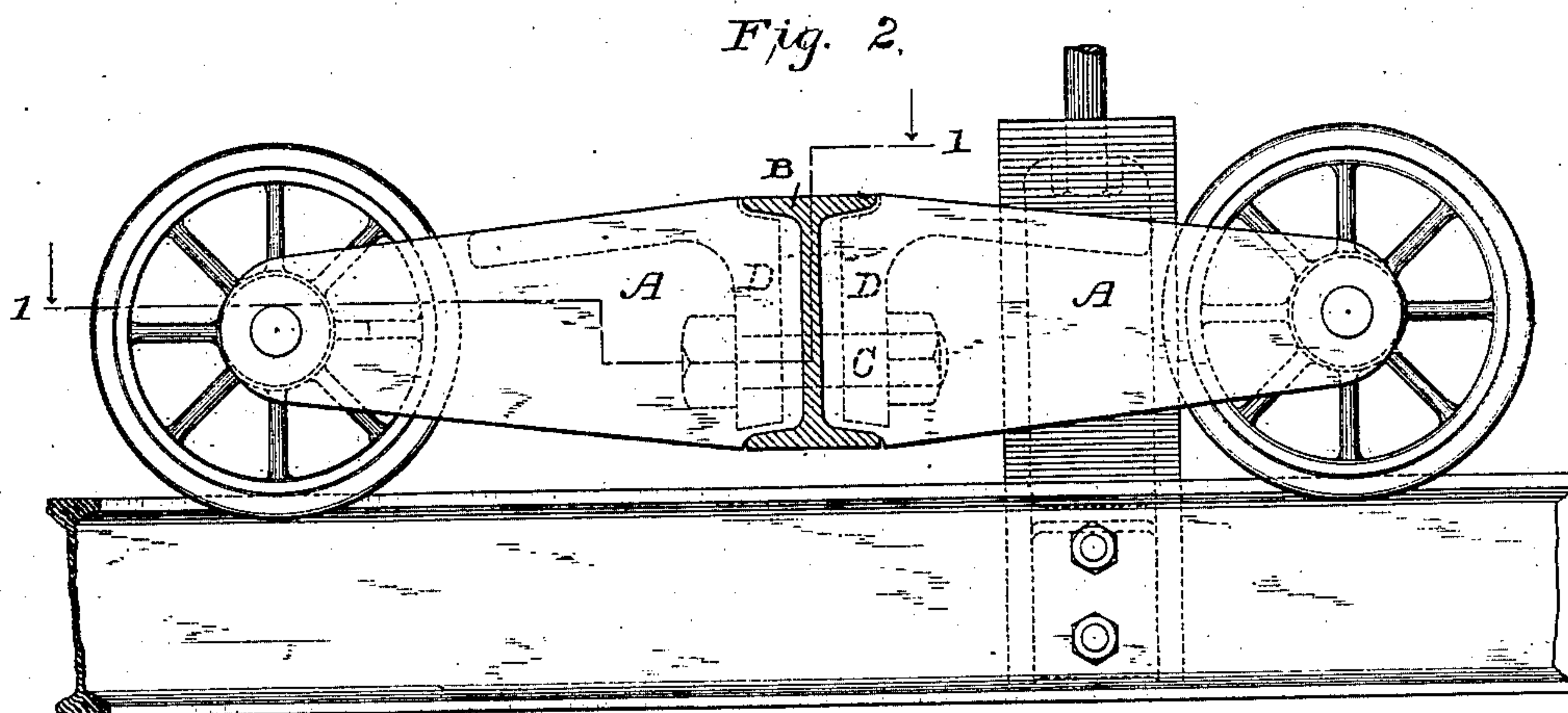
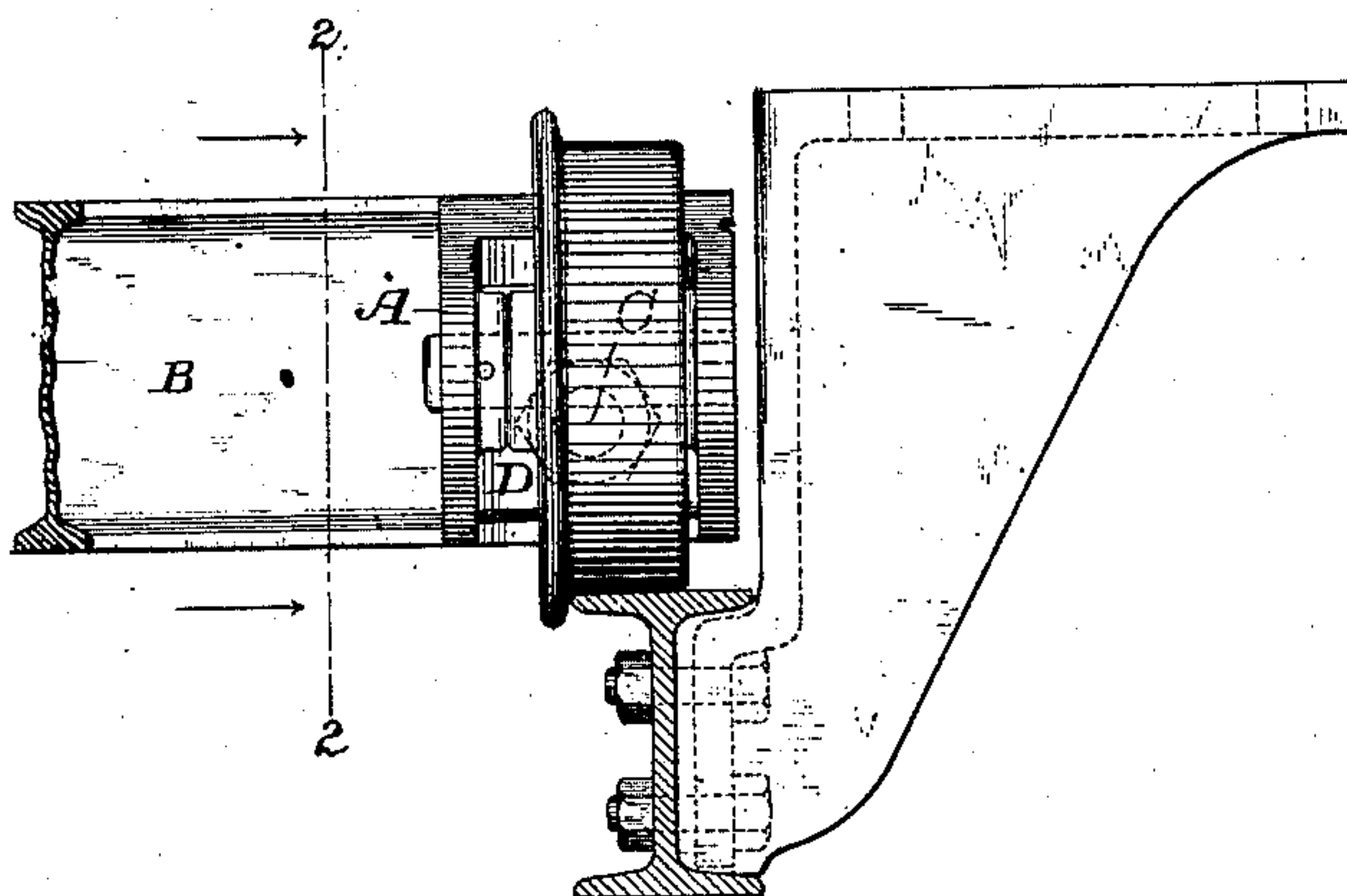


Fig. 3.



WITNESSES

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Fig. 4.

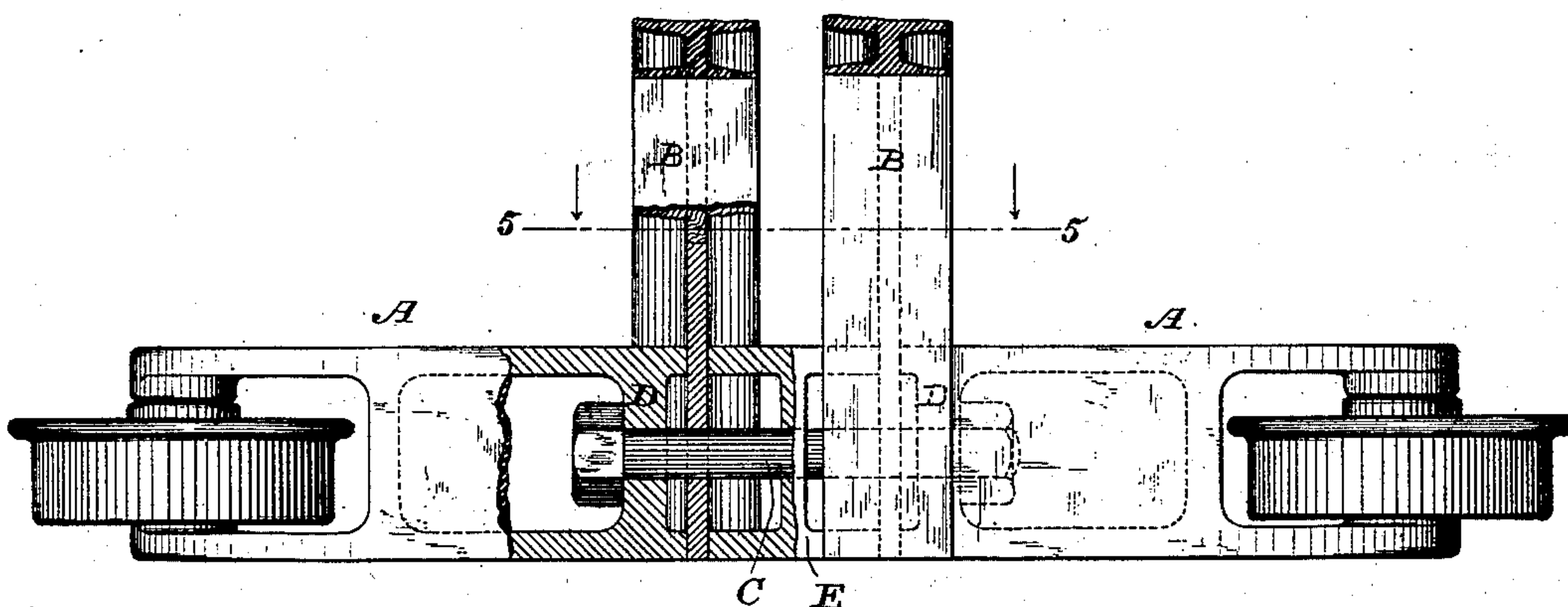
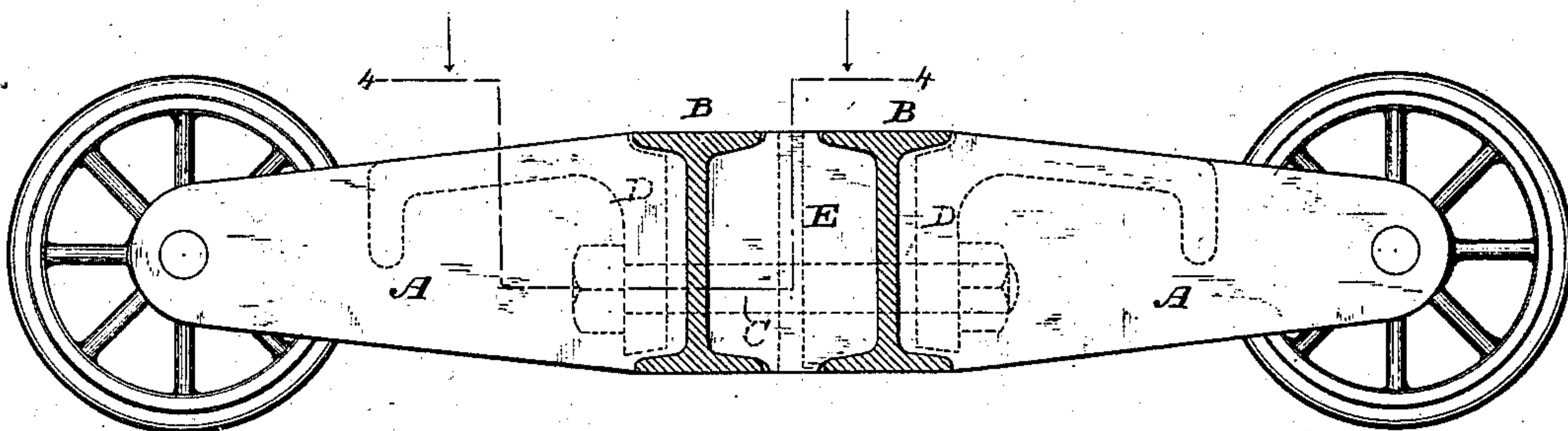


Fig. 5



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
5 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
10 rivets. Upon that plan, aside from the ex-
pense 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
15 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
20 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 im-
25 proved truck. Fig. 2 is a side elevation, show-
ing 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
30 in section on the line 4 4 of Fig. 5, of a modi-
fication of my improved truck so far as neces-
sary to apply it to a bridge made of two gird-
ers. Fig. 5 is a side elevation of the same,
partly in section through the girders on the
35 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
40 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- 45
beams and tension strains at the bottom. The
compression strains are resisted by the inter-
posed end of the bridge-girder, and the tension
strains are resisted by the bolt C. I have illus-
trated an excellent form, and, in my opinion, 50
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 55
substance of my invention.

When it is desirable, as it is in most cases
where heavy work is to be done with travel-
ing cranes, to have two bridge-girders or I-
beams placed side by side to connect the two 60
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 65
pass, as illustrated in Figs. 4 and 5.

This form of bridge-truck frame is of great
simplicity, strength, and cheapness of con-
struction, as compared with any that have
heretofore been known, so far as I am aware. 70

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 75
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 80
as set forth.

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

THOS. W. CAPEN.

Witnesses:

HOWARD L. UNDERHILL,
SCHUYLER MERRITT.