

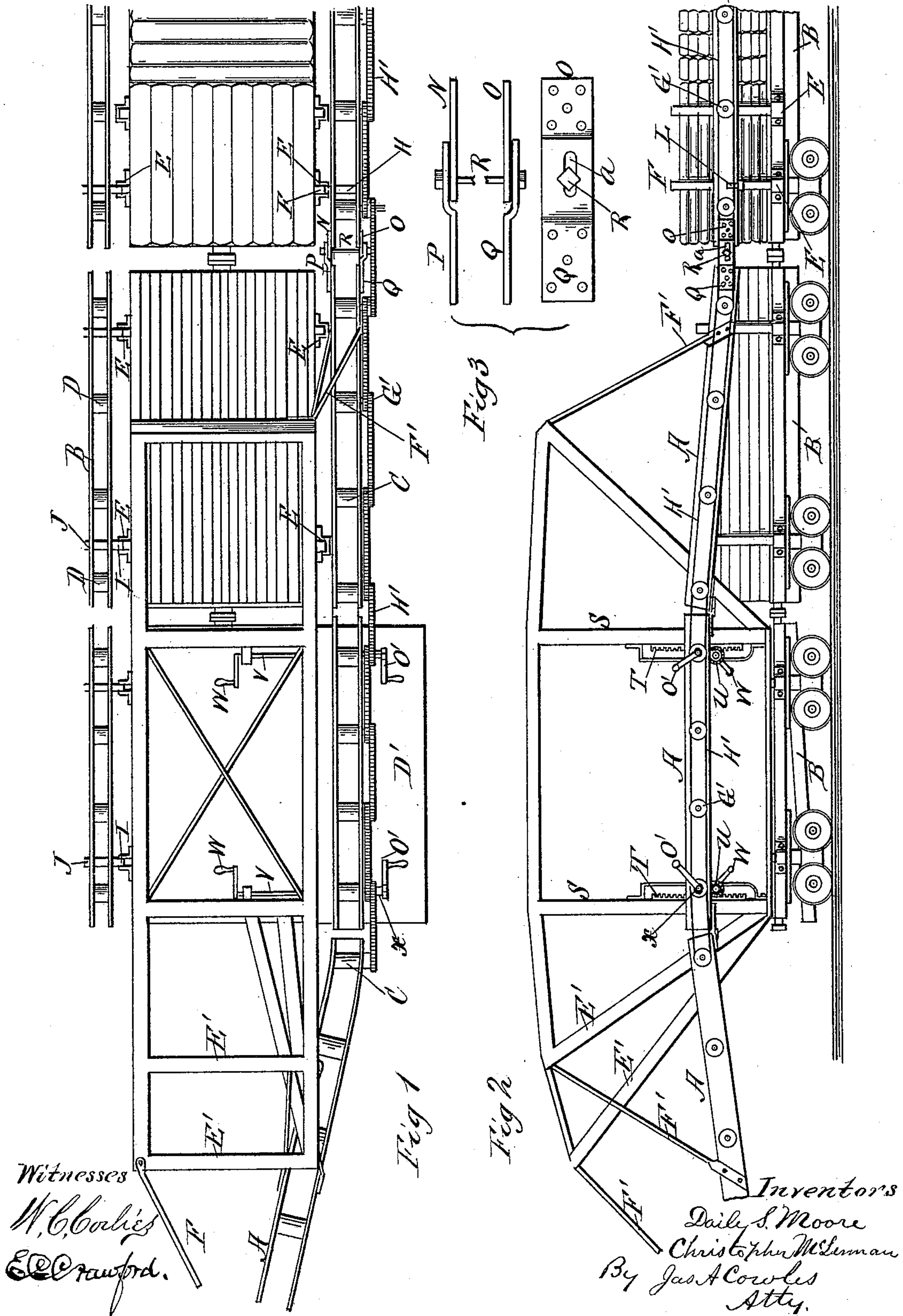
(No Model.)

2 Sheets—Sheet 1.

D. S. MOORE & C. McLENNAN.
RAIL TRACK LAYING MACHINE.

No. 405,318.

Patented June 18, 1889.

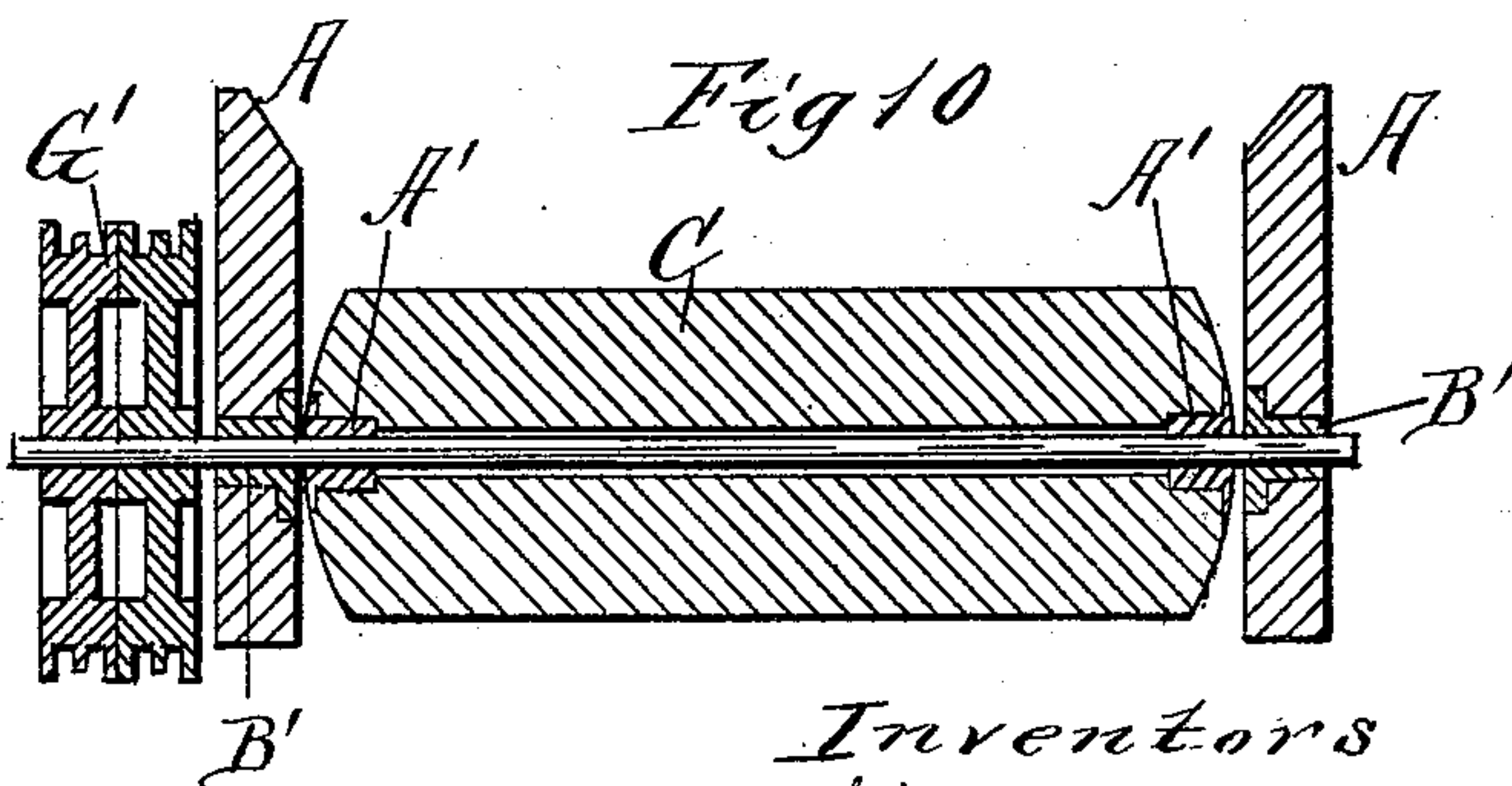
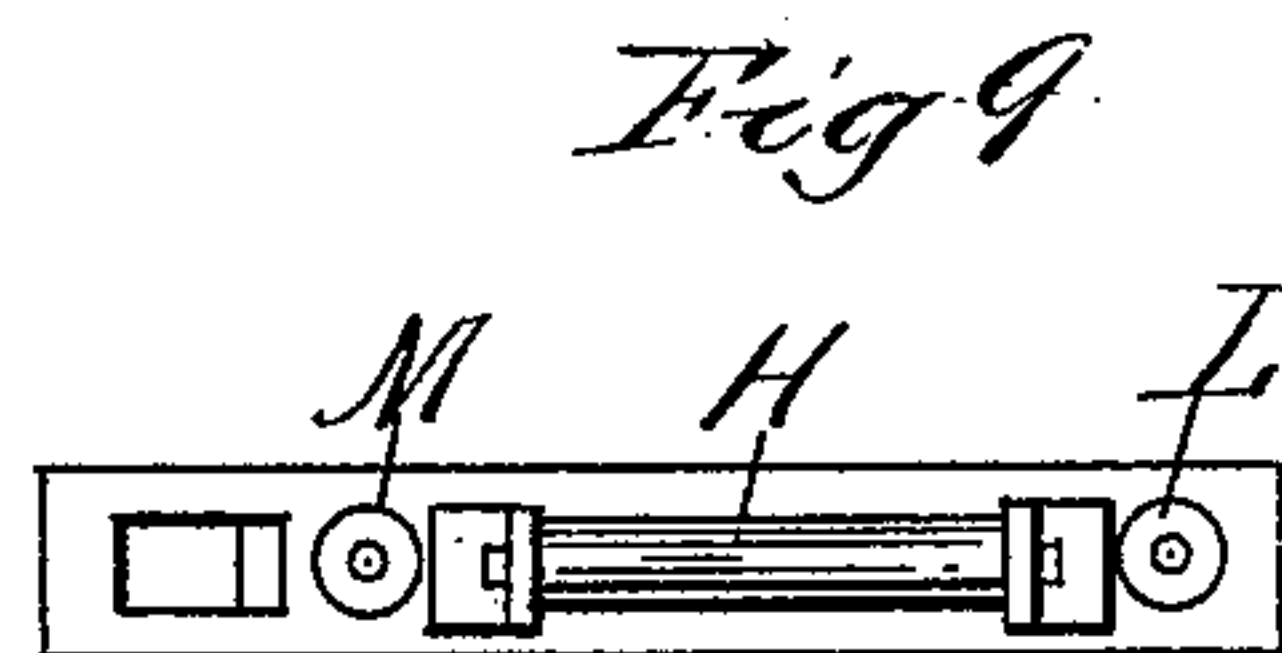
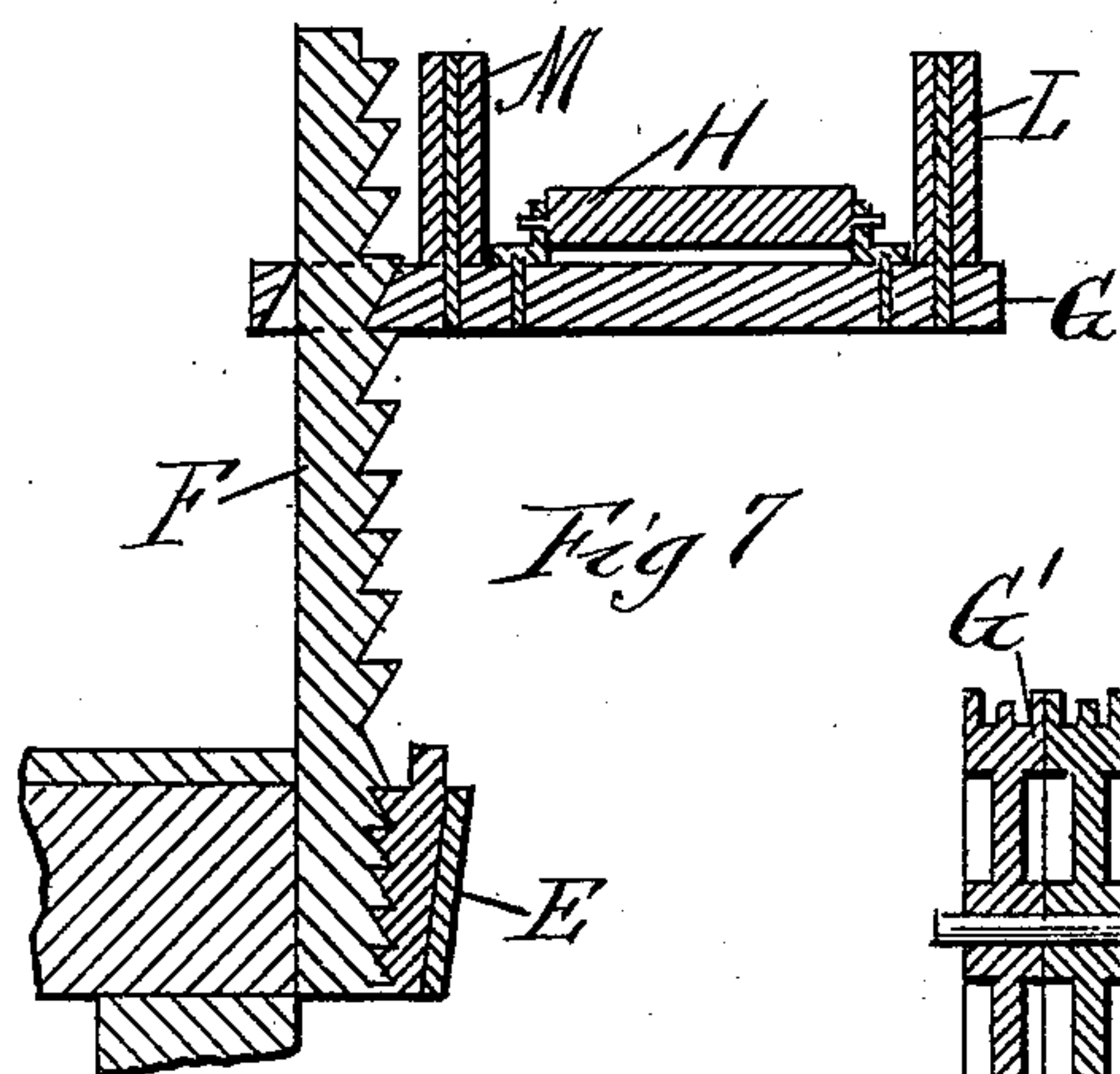
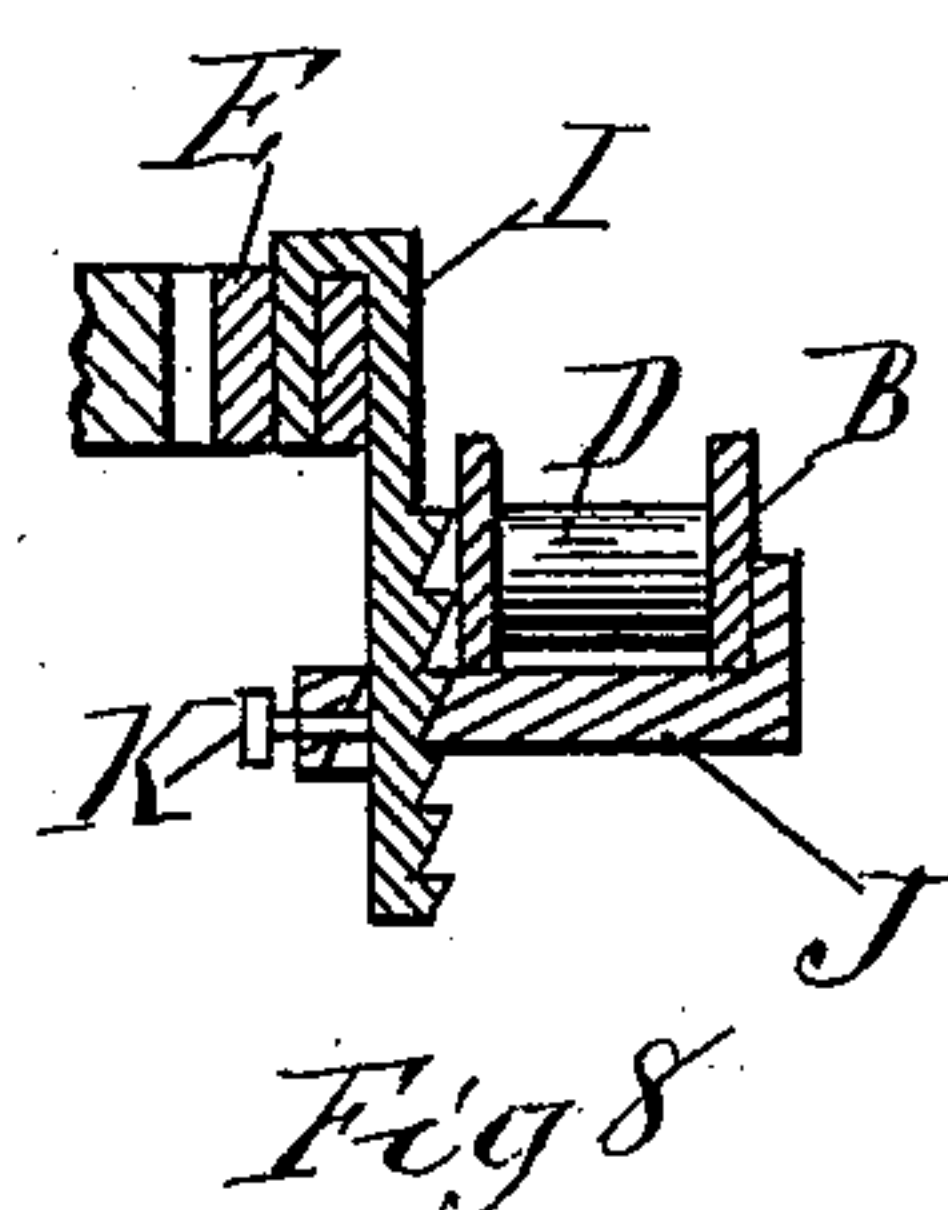
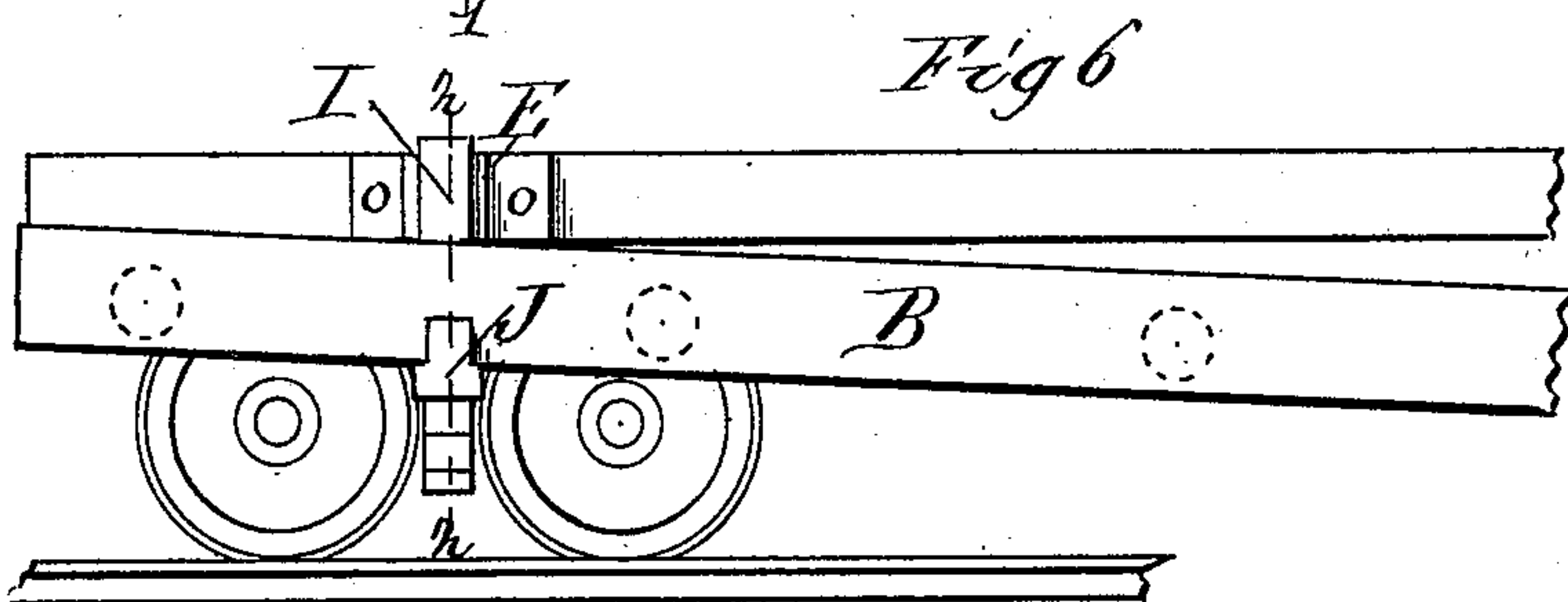
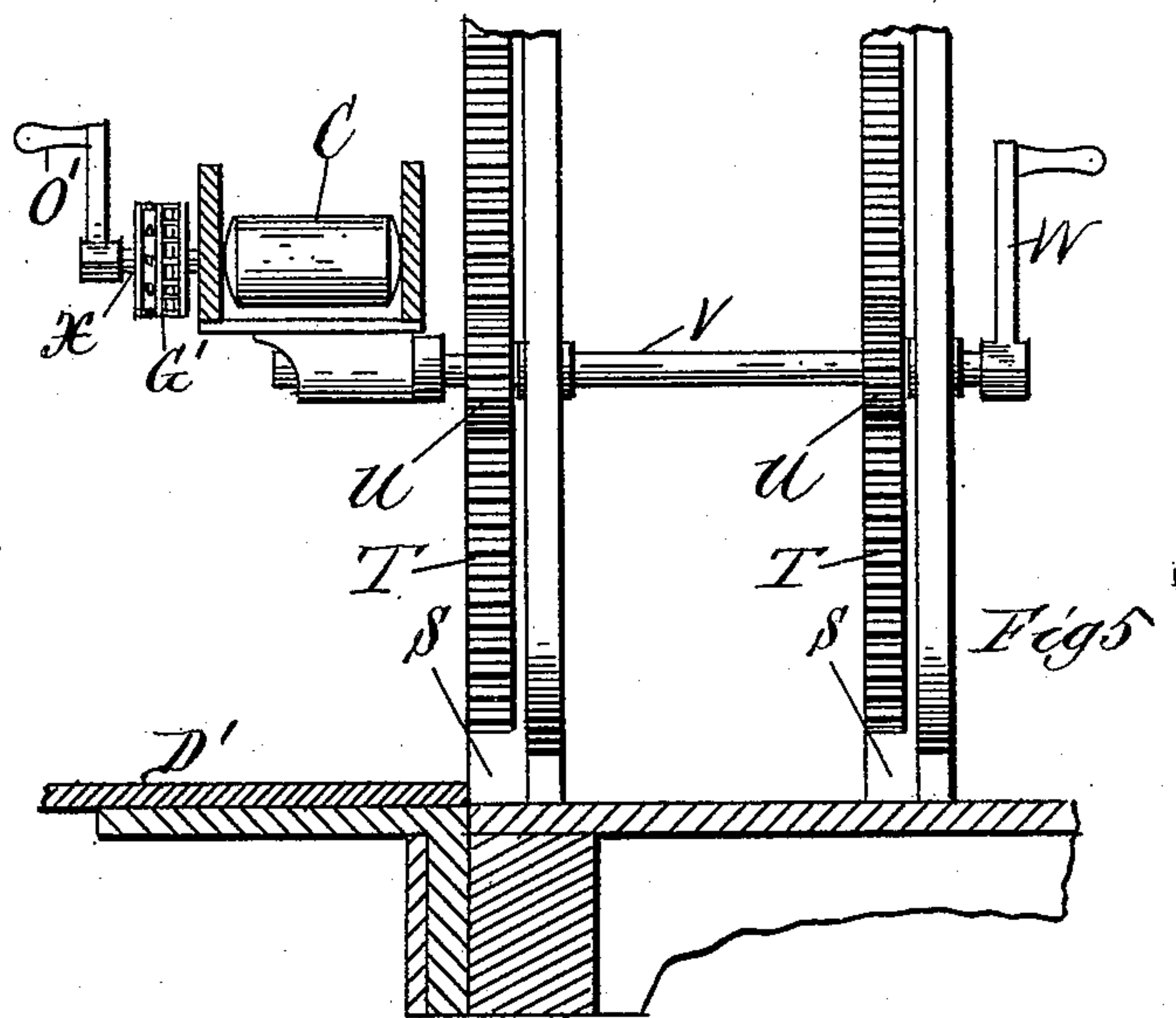
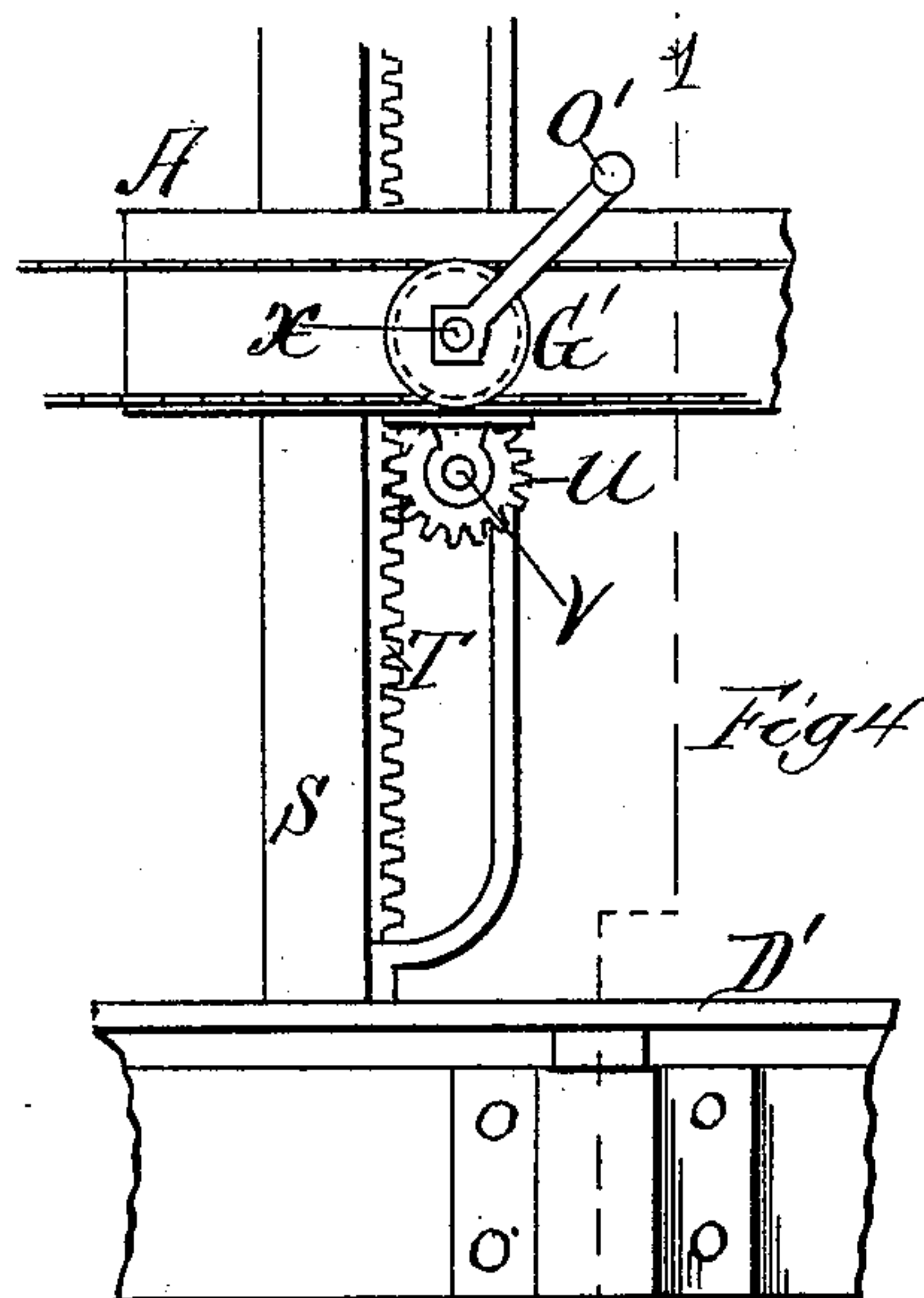


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Witnesses

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UNITED STATES PATENT OFFICE.

DAILY S. MOORE AND CHRISTOPHER McLENNAN, OF HYDE PARK, ILLINOIS.

RAIL-TRACK-LAYING MACHINE.

SPECIFICATION forming part of Letters Patent No. 405,318, dated June 18, 1889.

Application filed July 21, 1888. Serial No. 280,597. (No model.)

To all whom it may concern:

Be it known that we, DAILY S. MOORE and CHRISTOPHER McLENNAN, citizens of the United States, residing in the village of Hyde Park, in the county of Cook, in the State of Illinois, have made certain new and useful Improvements in Railway-Track-Laying Machines, of which the following is the specification.

10 The nature and object of this invention are to construct a railway-track-laying machine, as will hereinafter appear.

Figure 1 is a plan view. Fig. 2 is a side elevation. Fig. 3 is a detail showing means of joining ends of sections of tramway. Fig. 4 is a detail showing means for lowering and raising the tramway. Fig. 5 is a cross-section in front of view shown in Fig. 4. Fig. 6 is a side elevation of section of car, showing position of tramway for carrying forward the rails. Fig. 7 is a detail showing stake and bracket attached thereto for supporting tie-tramway. Fig. 8 is a detail showing stake and bracket attached thereto for supporting rail-tramway. Fig. 9 is a plan view of bracket-arm. Fig. 10 is a section of roller and tie-tramway.

Our improved track-layer can be used with any ordinary platform-car, and any required number of cars can be placed in a train. 30 Alongside of the cars are tramways A B. On one side the tramway A is for ties, and on opposite side is tramway B for rails. In tramway A, at proper intervals, are plane rollers C, and in the tramway B are interspersed rollers D. These two tramways are suspended from the sides of the car, as shown in Fig. 1, by properly-constructed stakes and sockets. In the sides of the car are ordinary stake-sockets. In these sockets are placed the stakes F. 40 These stakes are provided on the outer side with teeth above the socket. On this stake is placed the bracket G, in one end of which is an oblique mortise, Fig. 7. In placing the bracket on the stake the outer end of the bracket is elevated, so the oblique sides of the mortise will be parallel with the rear and toothed sides of the stake, when the bracket will readily slip down over the stake to the proper point, when it is brought to a horizontal position, and the lower edge of one oblique side of the mortise will rest on one of the teeth

in the stake and the opposite oblique edge will rest on the rear side of the stake and thus be held in position. (See Fig. 7.)

In Fig. 8 is shown the stake I, used to support the rail-tramway. It is made of metal and bent in the form of a loop, with one arm thereof longer than the other. The shorter arm is placed in the socket E, leaving the longer arm to extend below the socket. The bracket J, with a hole or mortise in it, is slipped over the longer arm and held there by a set-screw K, or any other proper means. There is mounted upon the bracket G the roller H, on a bearing supported from the bracket, upon which sets the tramway A. At each end of these rollers H are vertical rollers L and M, properly supported.

The sections of tramway A are connected together at their abutting ends by projecting irons on the outer sides of the ends. It is shown in Fig. 3, and consists of the straight pieces N and O, both fixedly attached to opposite sides of same ends of side pieces and projecting forward, having in their projecting ends oblong holes α , and also the pieces P and Q, similarly attached to the opposing ends of the abutting side pieces, with the projecting ends shouldered outwardly, so as to fit the first two pieces on their outsides, and provided with similar oblong holes. Through these holes passes the bar R, provided with head and nut. Thus the two ends are joined together, but allowed sufficient play for all practical purposes. The tramway A at the forward end of the train is elevated above the platform of the car. On the posts S S are the racks T T. Working in these racks are the spur-wheels U, working on shaft V. This shaft works in bearings attached in posts placed in the platform of the car, and is turned by the crank W, and as this crank is turned the tramway is raised or lowered. The crank W is locked by any suitable means. The object of raising this tramway is to place the delivery end above the workmen. This tramway A extends forward of the train and is turned at its delivery end toward the center of the grade of the road-bed or the center of the car. The object of this is to insure the delivery of the ties on the grade of the road-bed, which in case of curves it would not always do if it extended

directly forward. This forward projection is supported by the boom E', guys F', and any other suitable bracing, the guys being provided with tie-locks to raise and lower the
5 end of the tramway, as desired.

The rollers C in the tie-tramway are constructed with convex ends, (see Fig. 10,) to prevent cramping or clogging. The shaft X passes through this roller, and is smaller than
10 the hole through which it passes. At each end of the roller and in the hole therein are boxes A' A', which are bearings for the shaft. Thus the roller can revolve on this shaft. The shaft also has bearings in the sides B' B'. On
15 the outer end of this shaft is a double sprocket-wheel G', provided with three flanges—one at each side and one in the middle thereof. These double sprocket-wheels are connected together by link-belt chains H', one chain
20 passing over the outer division of one wheel to the outer division of another wheel, and a second chain passing over the inner division of this last one to the inner division of the next sprocket-wheel, and so on. Thus all the
25 connections from one roller to another are

made from the outer ends of the rollers, and the cranks O', by which they are actuated, are placed at their outer ends. Thus all cramping and clogging is avoided, as the chains working both ways from the same end
30 of the rollers holds the rollers in a neutral position.

D' is a platform attached in any proper manner to the side of the car, on which the workman stands to operate the crank O'. This
35 platform is made adjustable, so it can be turned in a vertical position or removed, at pleasure.

We claim—

1. The combination of the rollers C, shaft X, 40 boxes A' A', located at each end of and within roller C, and bearings in the sides of tramway.
2. The combination of the rack T, pinion U, shaft V, crank W, and tramway A, as and for the purpose shown.

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Witnesses:

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