

(No Model.)

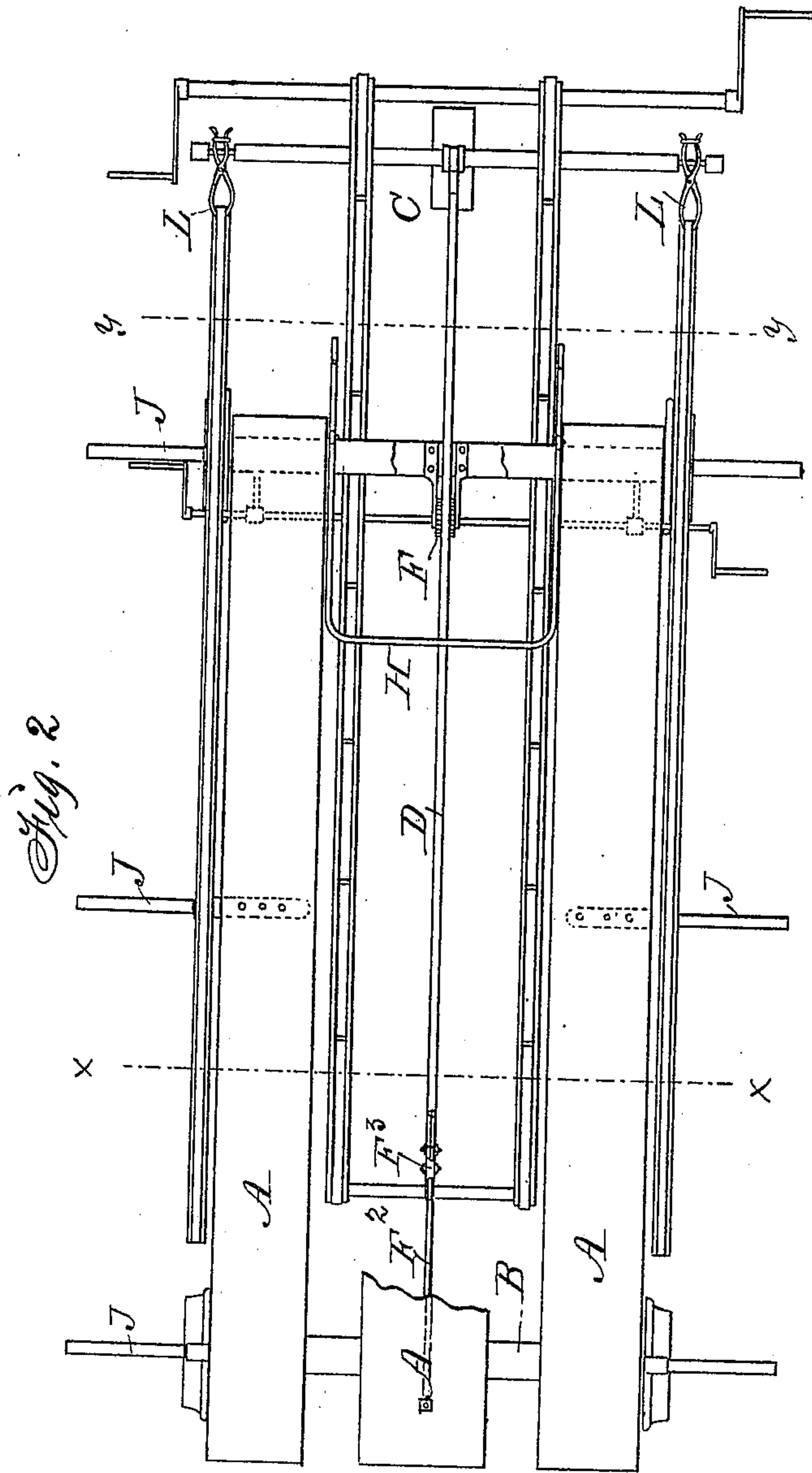
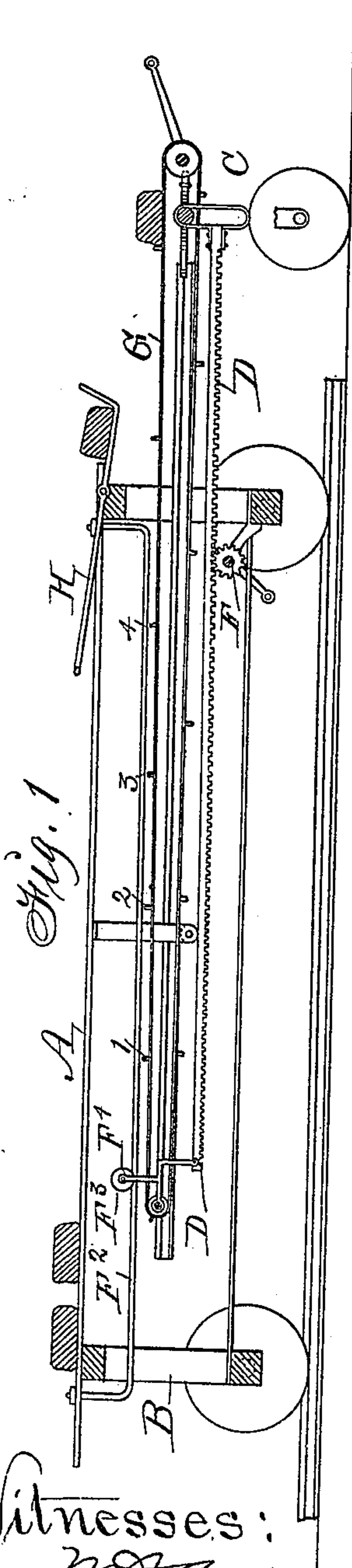
2 Sheets—Sheet 1.

E. ACKORS.

RAILWAY TRACK LAYING APPARATUS.

No. 309,814.

Patented Dec. 30, 1884.



Witnesses:
M. A. Anderson,
Orra G. Moore.

Inventor:
Elias Ackors,
By Thomas G. Orwig, atty.

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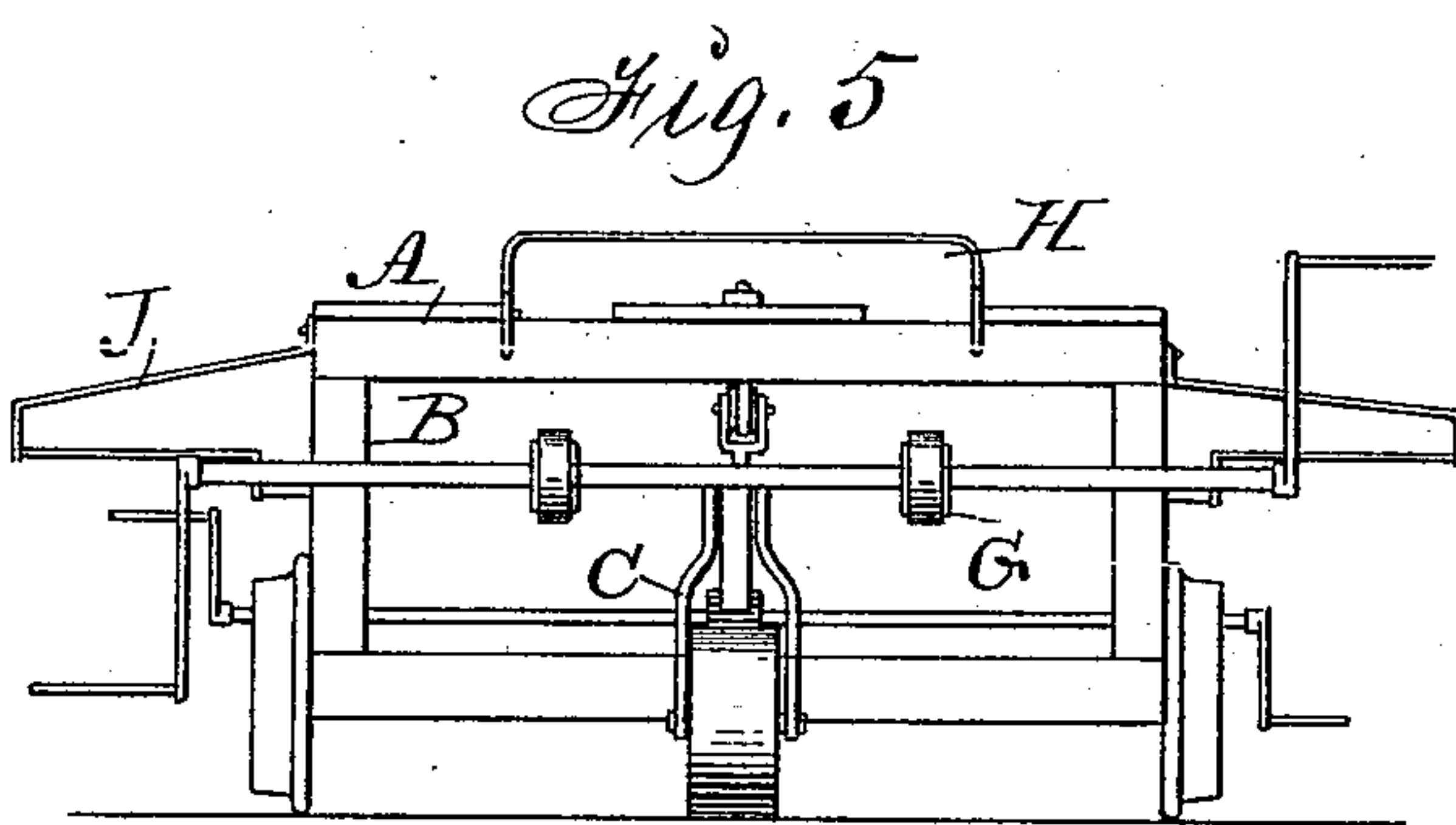
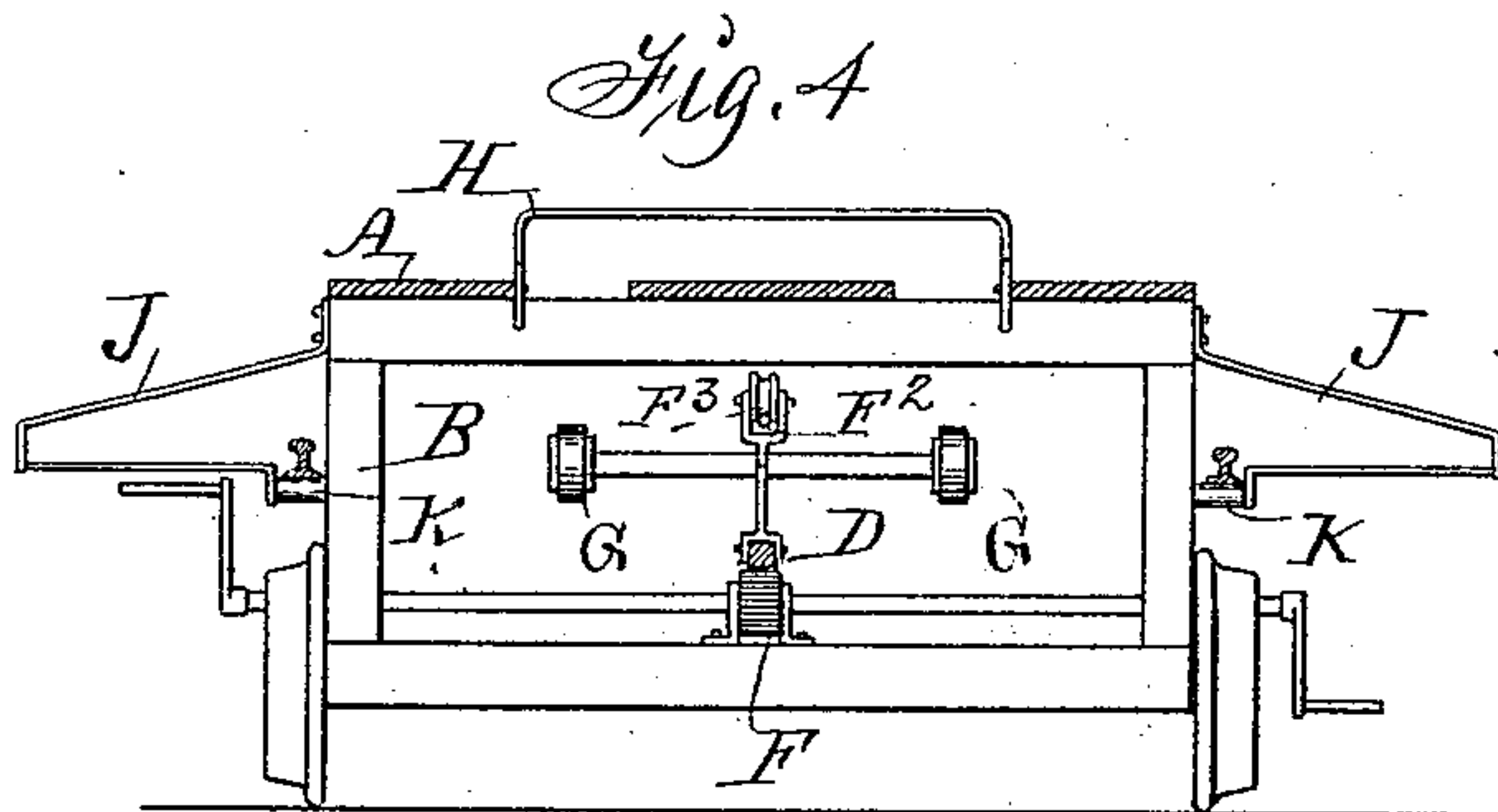
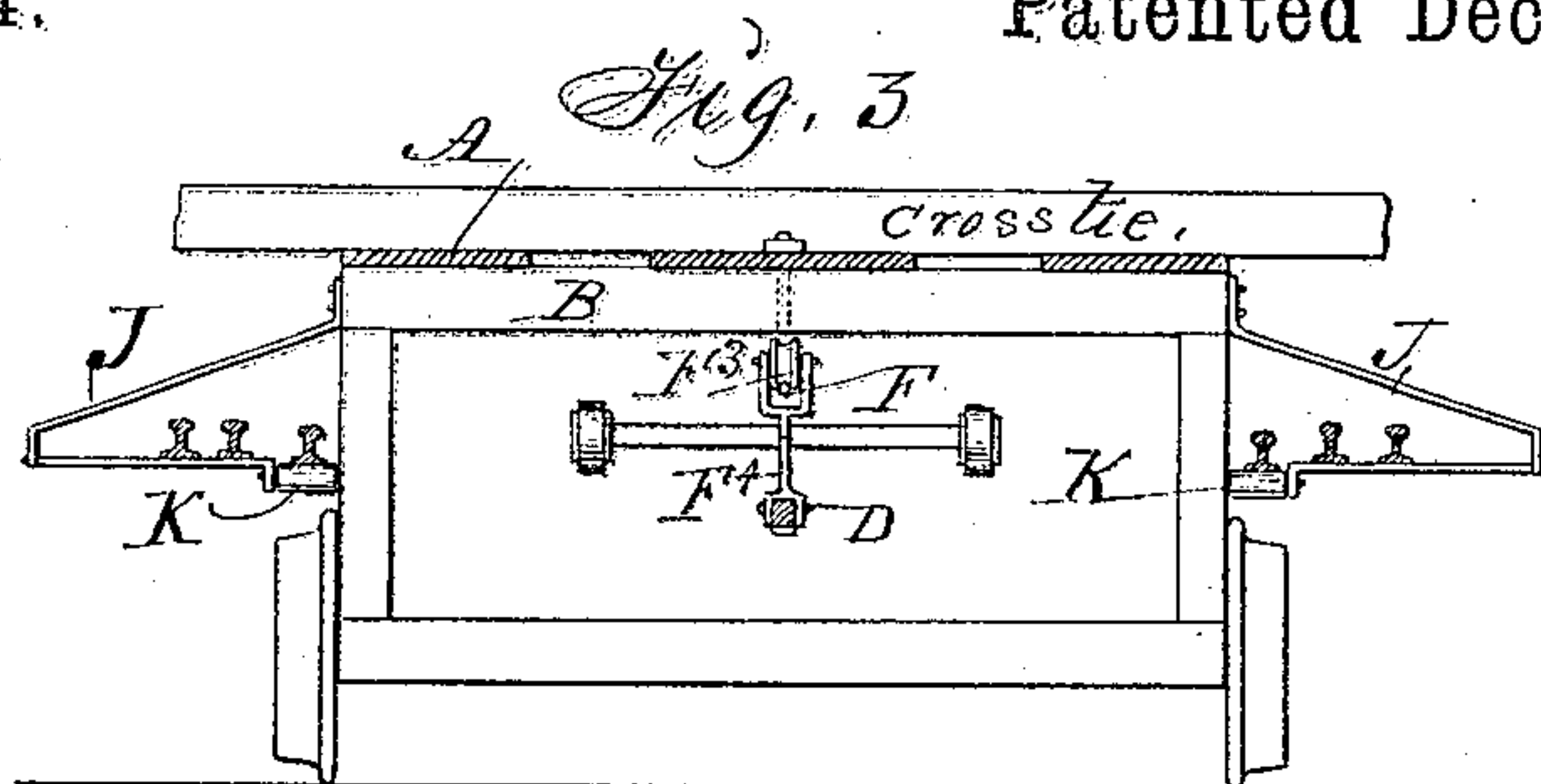
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UNITED STATES PATENT OFFICE.

ELIAS ACKORS, OF INDIANOLA, IOWA.

RAILWAY-TRACK-LAYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 309,814, dated December 30, 1884.

Application filed May 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, ELIAS ACKORS, of Indianola, in the county of Warren and State of Iowa, have invented a Railway-Track-Laying Machine, of which the following is a specification.

My object is to save time and expense in building railroads; and my invention consists in the construction and combination, with a car or truck, of an auxiliary carriage that is adapted for distributing cross-ties, a device for lowering cross-ties from the car-platform to the auxiliary carriage, lateral extensions at the sides of the car-platform for carrying railway-rails, and mechanism for lowering rails and placing them upon the ties, as hereinafter fully set forth, in such a manner that cross-ties and rails can be loaded upon a construction-train and carried from the supply-depot direct to the place where they are to be laid, and ties and rails taken direct from the train and placed in position to extend the track so that the construction-train can be advanced to the end of each new section of track to discharge ties and rails for another section direct upon the road-bed where they are to be placed and to remain as a part of a continuous permanent railroad.

Figure 1 of the accompanying drawings is a side view, and Fig. 2 is a top view, of my machine. Fig. 3 is a transverse section through the line *xx* of Fig. 2. Fig. 4 is a transverse section through the line *yy* of Fig. 2. Fig. 5 is an end view of the complete machine in position on the track.

Jointly considered, these figures clearly illustrate the construction and operation of my complete invention.

A represents a platform upon a common car in an elevated position. It is composed of three parallel planks on the top of a frame, B, that is supported upon trucks, and is adapted for carrying railway-ties placed across the three parallel top planks.

C represents my auxiliary carriage. Its rear end is in the form of a truck that is adapted to move upon the railway-track. It is connected with the car by means of a parallel rack, D, that extends under the elevated platform of the car and engages a gear-wheel, F, that is fixed to a rotating shaft in such a man-

ner that the rack D and carriage C can be moved longitudinally relative to the car and track by rotating the wheel F by means of a crank.

F² is a rod fixed under the platform A.

F³ is a grooved roller that moves on the rod, and is connected with the carriage C by means of a bearer, F⁴, to suspend the carriage.

G represents an endless carrier, mounted in bearings fixed to the ends of the rack D.

H represents my device for lowering ties from the elevated platform to the endless carrier G. It consists of a frame pivoted to the platform in such a manner that it can be turned flat upon the platform to allow a tie to be rolled upon it, and then readily adjusted to carry the tie down upon the endless carrier.

J J represent lateral extensions at the sides of the frame B, that are adapted to carry railway-rails at the opposite ends of the ties upon the elevated platform.

K K are rollers at the rear ends of the extensions J, upon which the rails upon the extensions may be successively placed to facilitate pulling the rails rearward and laying them in advance of the car, as required, to extend the track from the end of the construction-train.

L L represent tongs attached to the auxiliary carriage C in such a manner that they can be readily attached to the ends of rails placed upon the rollers K to pull the rails rearward relative to the stationary car on the end of the track as the auxiliary carriage is moved under the elevated platform by means of the rack D and rotating gear-wheel F.

1 2 3 4 represent a series of pins projecting vertically from the endless carrier G. A cross-tie is placed across the carrier and against each pin, as required, to space the distances between the ties upon the carrier and the road-bed upon which they are to be placed.

In the practical operation of my invention I load a car at a supply-depot with cross-ties and rails, and then by means of a locomotive-engine push it to the end of the track that is to be extended, and let it stand there. I then place rails on the rollers K, on the opposite sides of the car, and attach the tongs L to the ends. I next, by means of a crank on the ends of the axle of the wheel F and the

rack D, move the auxiliary carriage rearward, and drag the rails along until they are immediately over the portion they are to occupy upon the road-bed. I next lower ties success-
 5 sively by means of the device H, and move them rearward in succession by means of the endless carrier G, which is operated by means of a crank until the ties are immediately over the position they are to occupy upon the road-
 10 bed. The ties are then successively taken off the carrier and placed across the road-bed, and the rails then placed upon the ties and fastened to allow the car to be advanced upon them to the end of the new section of track.
 15 By repeating the operation another section of track can be readily laid, and the road thus continued until the terminus is reached without loading and unloading the ties and rails more than once, or carrying them about after
 20 they are once placed upon the road-bed.

I claim as my invention—

1. The machine for carrying material and laying railway-tracks composed of a car hav-
 25 ing an elevated platform adapted for carrying cross-ties, an auxiliary carriage, C, connected with the car by means of racks D, gear-wheels F, for operating the racks and moving the carriage C, an endless carrier, G, a tie-lowering

device, H, rail-supporting extensions J, rollers K, and tongs L, substantially as shown and described, to operate in the manner set forth. 30

2. The carriage C, having a fixed rack, D, and the endless tie-carriers G, and the grooved roller F³ in the bearer F⁴, in combination with
 35 a car having a rotating gear-wheel, F, and a fixed bar, F², to operate in the manner set forth, for the purposes stated.

3. The pivoted tie-lowering device H, in combination with the platform A of a car
 40 and endless carrier G, having projections 1 2 3 4 at regular intervals of space, and an auxiliary carriage adapted to support the endless carriers G, and mechanism for operating said
 45 endless carriers, for the purposes stated.

4. The auxiliary carriage C D, carrying adjustable tongs L, in combination with a car, A B, having lateral extensions J, and rollers K, substantially as shown and described, to
 50 operate in the manner set forth, for the purposes stated.

ELIAS ACKORS.

Witnesses:

J. B. KNOTTS,
 GEO. W. SEEVERS.