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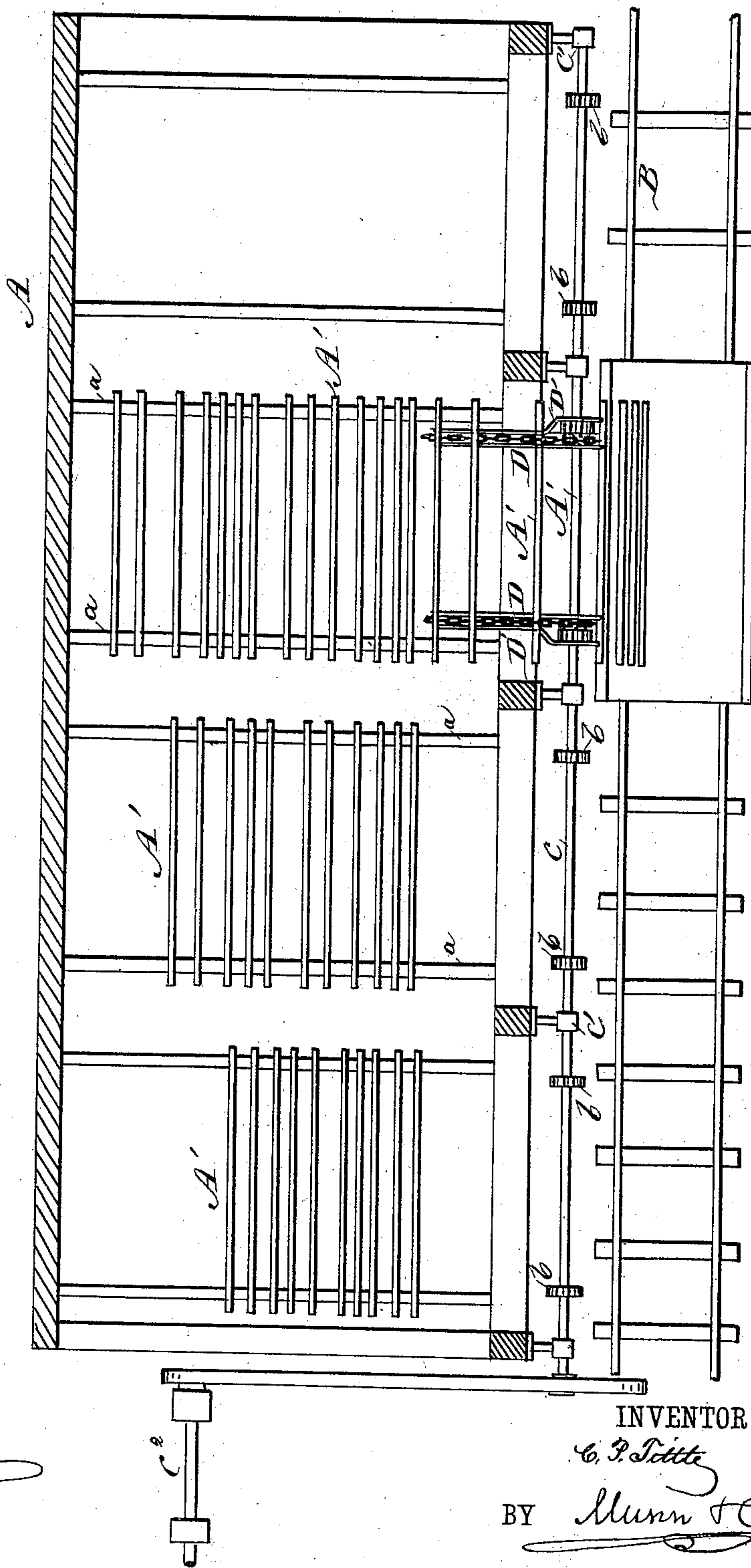
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C. P. TITTLE.
RAIL LOADING MACHINE.

No. 376,561.

Patented Jan. 17, 1888.

Fig. 1



WITNESSES:

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INVENTOR:

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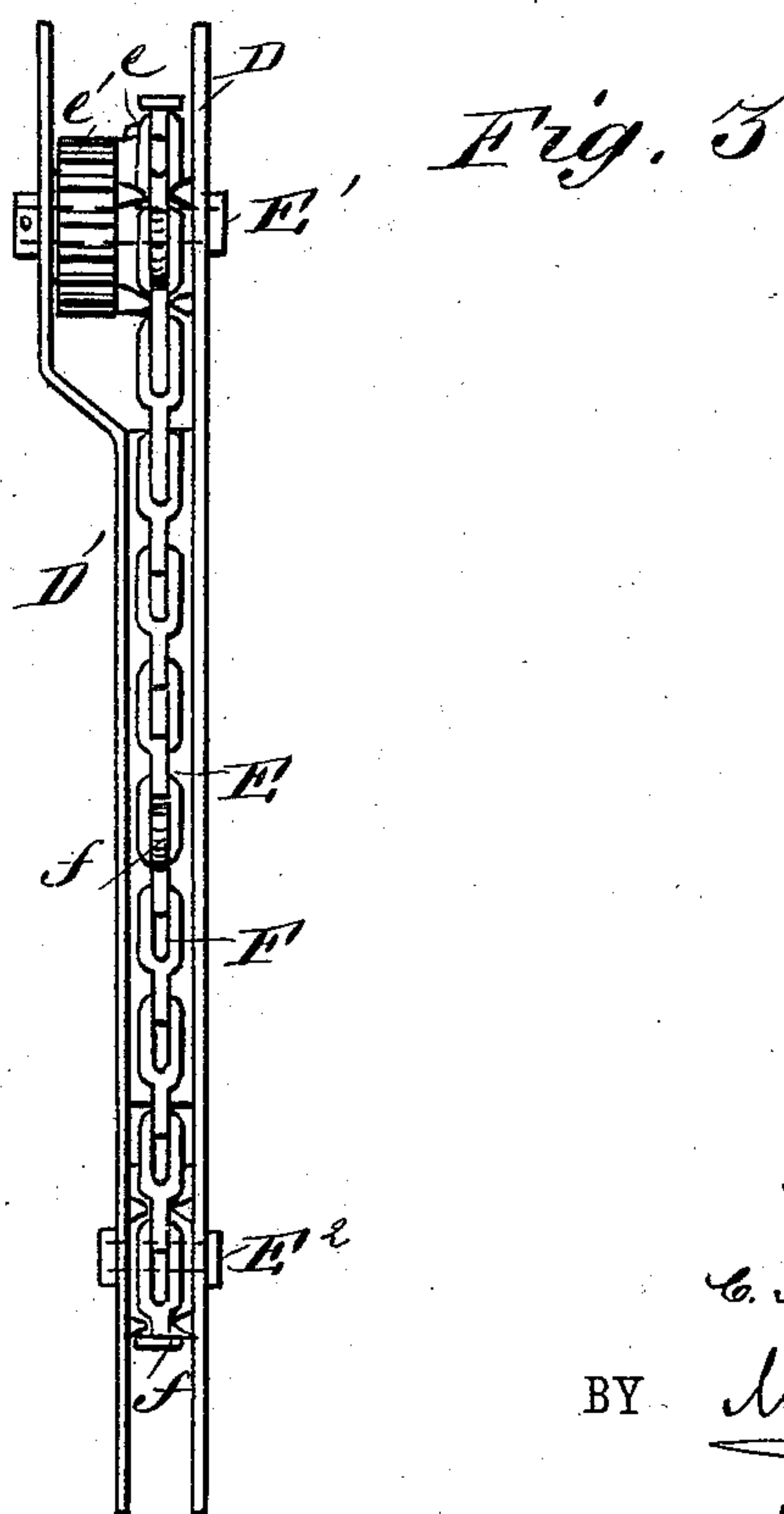
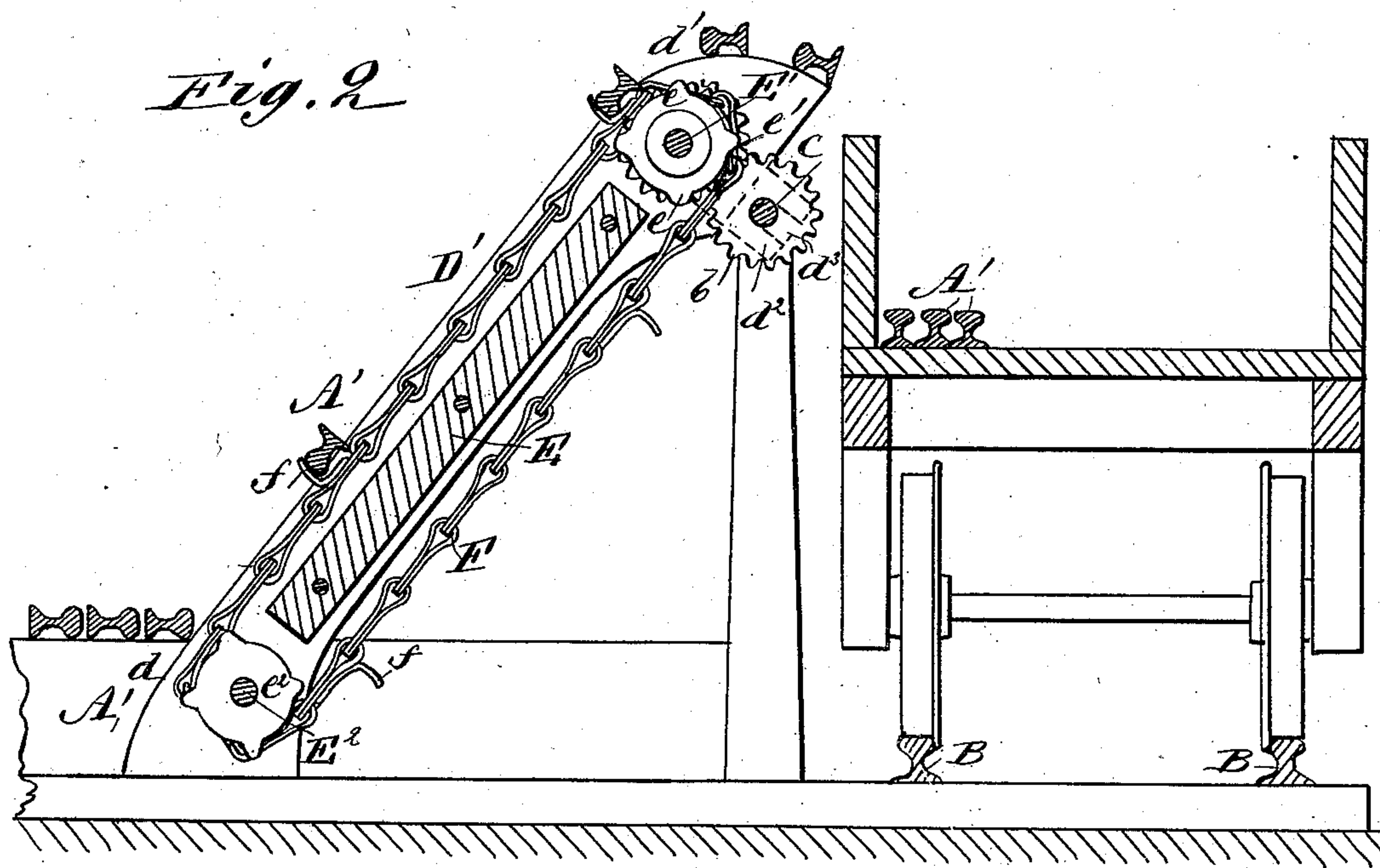
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UNITED STATES PATENT OFFICE.

CYRUS P. TITTLE, OF JOHNSTOWN, PENNSYLVANIA.

RAIL-LOADING MACHINE.

SPECIFICATION forming part of Letters Patent No. 376,561, dated January 17, 1888.

Application filed July 12, 1887. Serial No. 244,077. (No model.)

To all whom it may concern:

Be it known that I, CYRUS P. TITTLE, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and Improved Rail-Loading Machine, of which the following is a full, clear, and exact description.

My invention consists in an improved rail-loading machine, and has for its object to provide a means of loading railroad-rails from the storage-house, or any other place where said rails are deposited, into a suitable car with dispatch and ease.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a horizontal section through a rail-storage house, illustrating the application and operation of the device; and Fig. 2 is a central vertical section through the device and the car upon which the rails are to be loaded. Fig. 3 is a front elevation of the device.

In carrying out the invention, A represents a shed or house in which the rails A' are stored in a series of parallel lines, as shown in Fig. 1. Longitudinally the front of the building, at a distance from the ground adjacent to the track B, a line of shafting, C, is provided, journaled in suitable hangers, C', secured to said building and rotated by a drive-shaft, C², a crank, or in any suitable or approved manner. Opposite each of racks a, upon which the rails are supported, two spaced pinions, b, are keyed upon the shaft C, adapted for use as hereinafter set forth.

The hoisting or loading device consists of two parallel plates, D D', both provided with a curved lower outer edge, d, and a decidedly convexed upper and outer edge, d', as shown in Fig. 2, the two plates having attached upon their inner or outer face near the upper end and transversely the same, lugs or ears d², provided with a central longitudinal slot, d³, in the outer edge, as shown in dotted lines, Fig. 2. The two plates D and D' are preferably connected and spaced by an intermediate bar, E, bolted thereto and extending longitudinally

the plates and centrally the same nearly from end to end. One plate, D, is made, preferably, straight, while the opposing plate, D', at the top is projected at an angle outward and then vertically upward, as shown in Fig. 3, whereby the upper end of the device is nearly double the width of the bottom end.

In the upper ends of the plate, preferably in central alignment with the lugs d², a shaft or mandrel, E', is journaled, having keyed thereon a sprocket-wheel, e; and at one side of said sprocket-wheel, also upon the shaft E', a gear-wheel, e', is keyed. Near the bottom, in the said side plates, another shaft or mandrel, E², is transversely journaled, carrying a sprocket-wheel, e², in alignment with the aforesaid sprocket-wheel e; and over the said sprocket-wheels e and e² an endless chain, F, is made to travel, as illustrated in Figs. 2 and 3.

Upon the outer face of the endless chain F a series of hooks, f, are attached at suitable intervals and in such manner as that when the chain is brought to the front of the device the said hooks will point upward, the length of the hooks being slightly greater than the width of the rail at the head, as shown in Fig. 2.

In operation two hoisting or loading devices constructed as above described are employed, which are rested at the lower end upon the ground, as near as possible to the side bars of the rack, the upper ends being made to bear against the shaft C, and held in engagement therewith by the entrance of the said shaft into the slot d³ of the lugs or ears C, as shown in Figs. 1 and 2. The pinions b will thereupon mesh with the gear-wheels e'. The rails are then moved along the rack and brought in front of the device in such manner as that when the hooks turn to pass from the rear to the front they will engage the rail and deliver the same upon the upper curved edges, d', as illustrated in Fig. 2. Prior to the hoisting of the rails a suitable car to receive the rails is carried along the track opposite to and nearly under the device, the rails being tipped from the curved edge of the device, when they are delivered by the hooks, into the cars in any approved manner. When one rack of rails has been exhausted, the devices are readily moved to the next, and so on until the car has been loaded.

In the event the rails are not housed, the necessary shafting may be supported in the most advantageous manner.

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

1. A rail hoisting or loading machine consisting of parallel side plates provided upon their inner faces near the upper ends with slotted lugs, a transverse shaft or mandrel journaled at top and bottom of said plates, a sprocket-wheel secured to each of said shafts or mandrels, an endless chain provided with carrying hooks and encompassing said sprocket-wheels, the outer ones of said side plates being offset at their upper ends providing for the reception upon the upper shaft or mandrel of gear-wheels engaging with a driving shaft, pinion, or wheel, substantially as set forth.

2. In a rail hoisting or loading machine, the parallel side plates carrying sprocket and gear wheels, and provided upon their inner faces near the upper ends with slotted lugs, which

sprocket-wheels carry an endless belt provided with hooks, in combination with an independent elevated driving-shaft having a series of pinions arranged to engage with the gear-wheels carried by said side plates, and means for driving said shaft, substantially as set forth.

3. In a rail loading or hoisting machine, the parallel side plates carrying sprocket and gear wheels, and provided upon their inner faces near the upper ends with slotted lugs, which sprocket-wheels carry an endless chain provided with a series of hooks, in combination with an independent elevated driving-shaft carrying a series of pinions arranged in pairs, each pair being disposed opposite a rail-supporting rack and adapted to engage with the gear-wheels carried by the said side plates, substantially as described.

CYRUS P. TITTLE.

Witnesses:

W. T. EDWARDS,

J. E. PARSONS.