

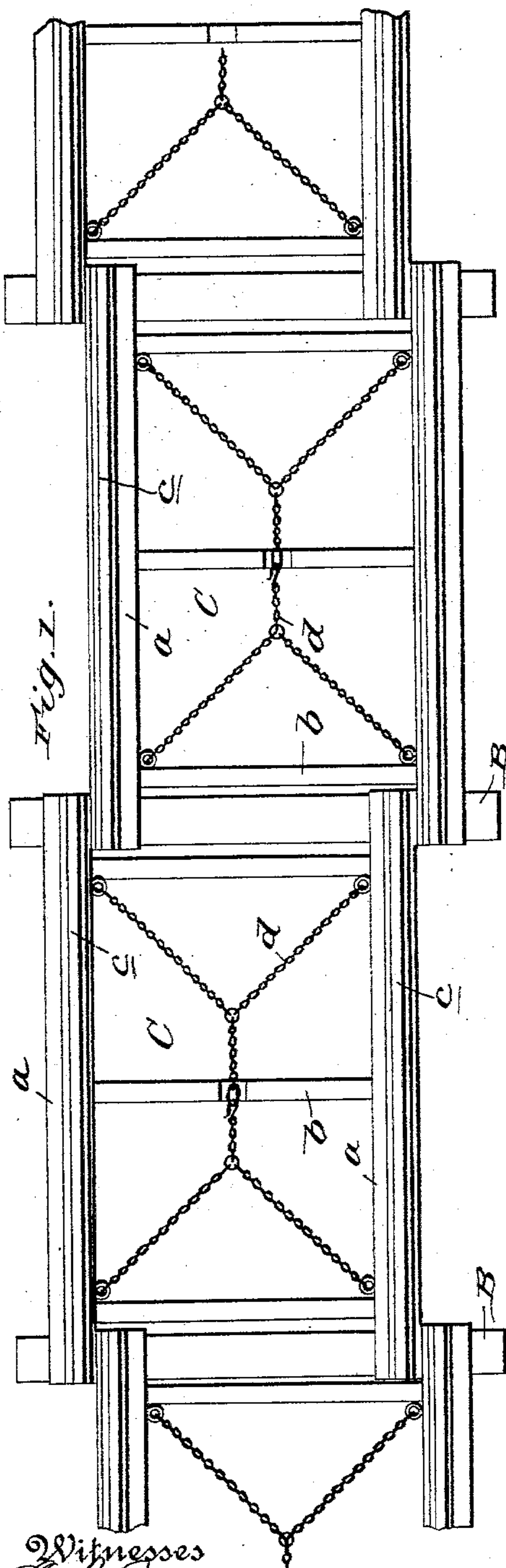
No. 694,851.

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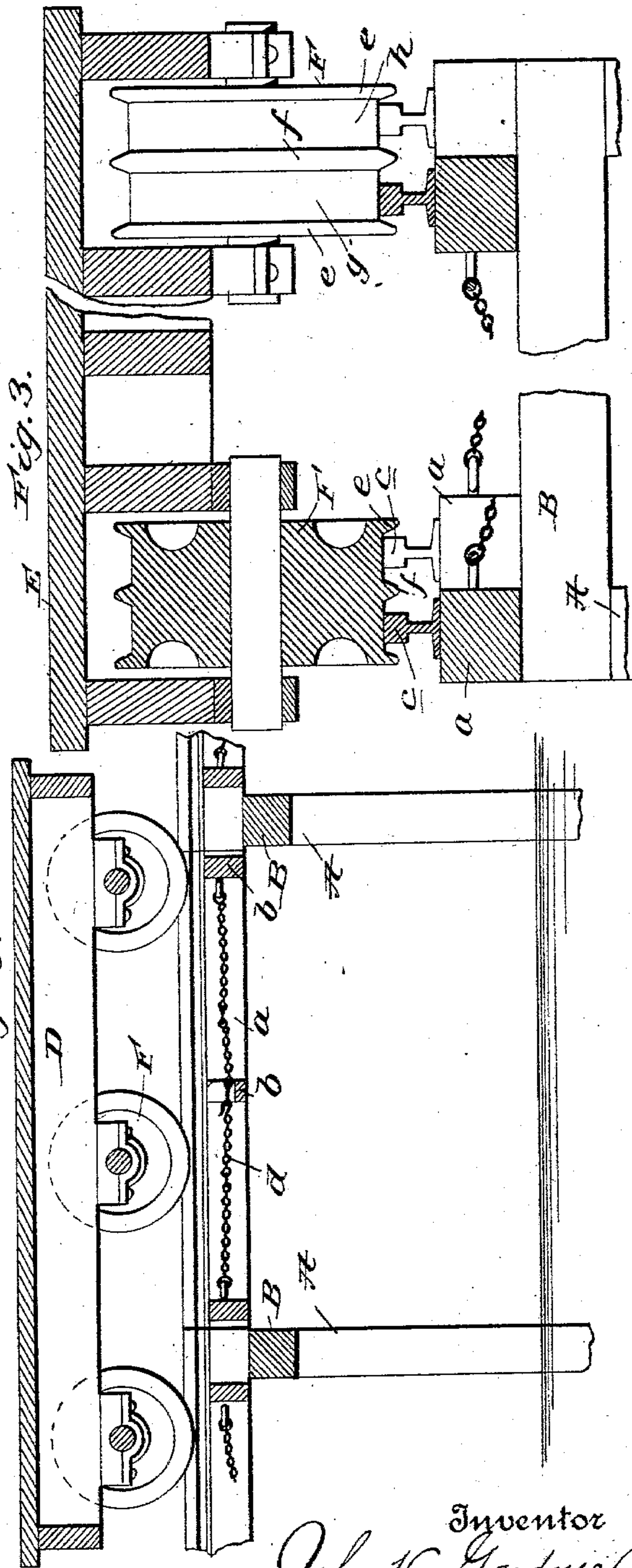
J. H. GARDNER.
PORTABLE TRAMWAY.

(Application filed Oct. 28, 1901.)

(No Model.)



Witnesses
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JOHN H. GARDNER, OF NEW ORLEANS, LOUISIANA.

PORTABLE TRAMWAY.

SPECIFICATION forming part of Letters Patent No. 694,851, dated March 4, 1902.

Application filed October 28, 1901. Serial No. 80,268. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. GARDNER, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Portable Tramways, of which the following is a specification.

In the construction of wharves, railway and other trestles, and similar work in which piles are used for the substructure it frequently happens that because of the lack of water or the presence of obstructions it is inexpedient and in some instances impossible to drive the piles from a barge; also, that when the work is to be erected over uneven, soft, or marshy ground the construction of a false foundation capable of sustaining the heavy pile-driving machinery is entailed and, in consequence, the cost of the work greatly increased.

The object of my invention is to provide a portable tramway comprising a plurality of track-sections in combination with a car having wheels of peculiar and advantageous construction, the car being designed to be equipped with a boiler, an engine, a pile-driver, and a davit or crane and adapted to be supported by its own work as the construction proceeds. In other words, as the construction of the work proceeds the equipment of the car is adapted to raise and swing the track-sections one by one from their positions in rear of the car to the piles driven in front of the car. This is materially advantageous, because the car after being first mounted on blocking to the height required is supported by its own work and can therefore be operated indefinitely without the necessity of employing further blocking or false work, with the result that the work can be carried on very expeditiously and at a minimum cost.

With the foregoing in mind the invention will be fully understood from the following description and claim, when taken in conjunction with the annexed drawings, in which—

Figure 1 is a plan view of a portion of my improved tramway; Fig. 2, a detail longitudinal section illustrating the car on the tramway; Fig. 3, an enlarged broken transverse section of the same.

Referring by letter to said drawings, A A are piles driven in the bed of a body of water

or in the ground and arranged in pairs at suitable intervals apart; B B, transverse caps arranged upon and connected to each pair of piles; C C, track-sections arranged in a longitudinal series on the support formed by the several pairs of piles and caps thereon, and D a car which, as before stated, is designed to be equipped with a boiler, engine, pile-driver, and davit or crane. These latter may be and preferably are of the ordinary well-known description, and I have therefore deemed it unnecessary to illustrate them.

The track-sections C respectively comprise a pair of longitudinal bars or stringers *a*, cross-bars *b*, connecting the same, and track-rails *c*, laid on and connected to the stringers, and each of the said sections is preferably equipped with a chain *d*, as shown, for the connection of the lifting and swinging means on the car. The stringers and rails thereon of the several sections C may be and preferably are arranged a common distance apart, this in order that the ends of the stringers and rails of any two sections may be lapped after the manner shown in Fig. 1.

The car D comprises a platform E, for supporting the before-described machinery, and wheels F, upon which the platform is mounted in any approved manner. These wheels F are peculiar in that they have inner and outer peripheral flanges *e*, an intermediate peripheral flange *f*, and inner and outer treads *g* *h*, and when used in conjunction with the lapped rails of sections C they are materially advantageous, as will presently appear.

In practice, with the car D blocked up to the height required, I set a plurality of pairs of piles A and connect the same with caps B, after which I arrange a plurality of track-sections on the support thus afforded, the ends of the stringers *a* of the sections being lapped on the caps B, as shown. I then run the car from the false work previously mentioned on the tramway formed as stated, and when this is done it will be observed that the treads *g* of the car-wheels F will engage and travel on the inner rails of the several track-sections as laid, while the outer treads *h* of said wheels will engage and travel on the outer rails of the track-sections; also, that when the car rests on two of the track-sections its wheels will engage all of the rails thereof, and thereby

hold said sections against lateral movement with respect to each other. Now when it is desired to extend the wharf, trestle, or other work having the substructure of piles I move the car D to the forward end of the tramway and drive two piles in advance of the tramway and connect the same by a cap B. I then by means of the davit or crane on the car raise one of the sections C back of the car, preferably the rear one, and swing it around to a position in front of the car and place it upon the cap B of the newly-set pair of piles and the cap B of the next pair of piles to the rear and lap its rear ends against the forward ends of the stringers of the next section C to the rear in the manner before described. This operation is repeated until the desired number of piles are driven to complete the wharf, bridge, or trestle-work to be built or to close a crevasse in a levee or the like, and it obviously may be expeditiously and cheaply conducted, inasmuch as the car is supported by its own work, and the construction of false work incident to the building of the trestle or other work is obviated. It will also be appreciated that incident to the building of the trestle or other work the track-sections on which the car is placed in the first instance may be repeatedly used, which contributes materially to the cheapness of the structure. The stringers *a* of the several track-sections are obviously adapted to be lapped with a view of holding their rails in proper juxtaposition much more readily than they could be placed end to end and connected together for the

same purpose. Moreover, when lapped as stated the track-sections tend to hold each other against casual lateral movement or displacement, and they need not, therefore, be connected together.

When desirable, the rails of the track-sections, which may be of iron or any other suitable material, may be employed without the stringers or sills—that is, may be laid directly on the pile-caps or other support—without departing from the scope of my invention.

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

The combination of a suitable support, portable track-sections each of which comprises two parallel rails permanently connected together; the rails of the sections being arranged a common distance apart, and the said sections being arranged on the support with the end of one rail of one section disposed at the inner side of the corresponding rail of the other section, and the end of the other rail of the first-mentioned section arranged at the outer side of the remaining rail of the second-mentioned section, and a car, the treads of which are arranged to engage and travel on the parallel lapped rails of the sections.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN H. GARDNER.

Witnesses:

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