

No. 655,072.

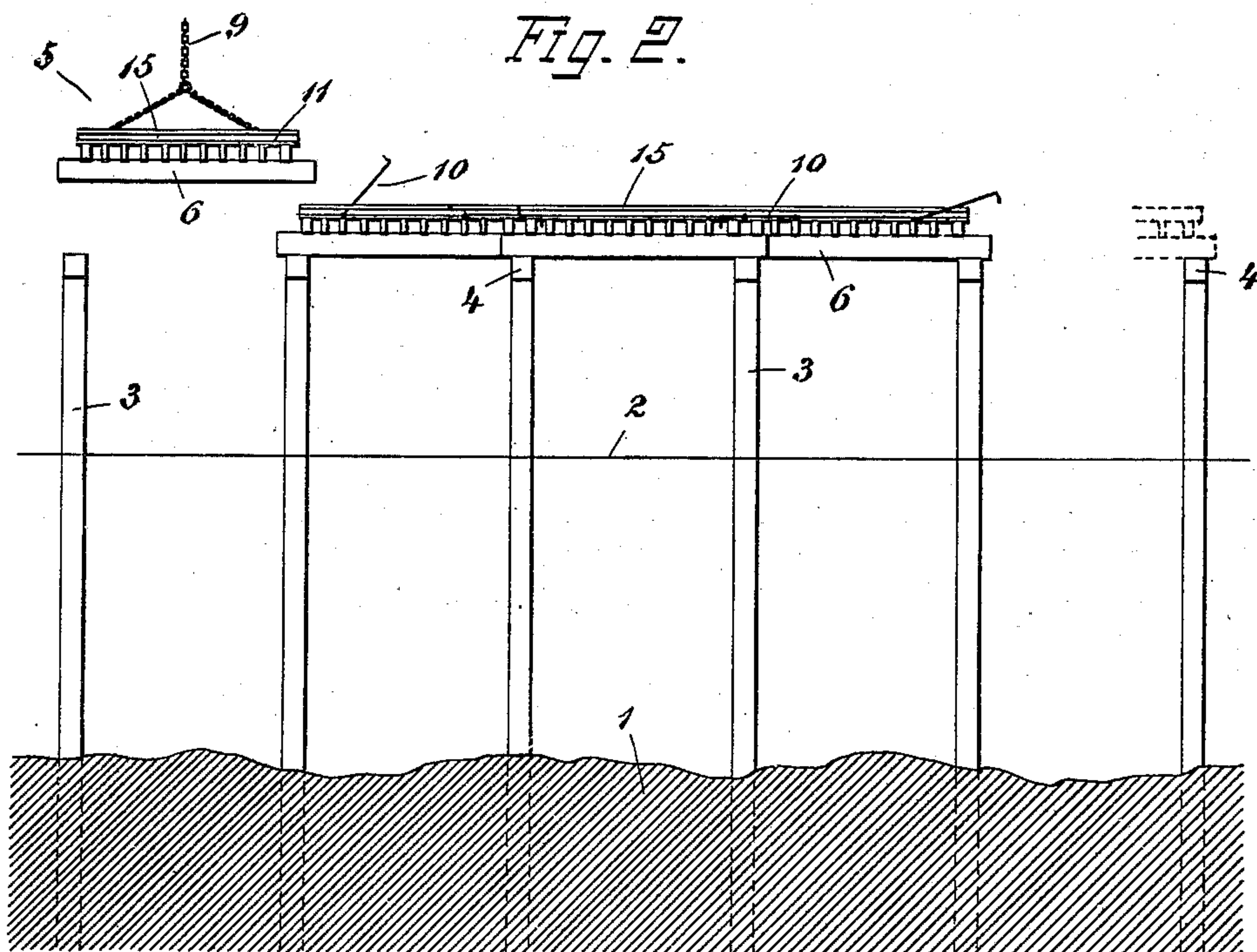
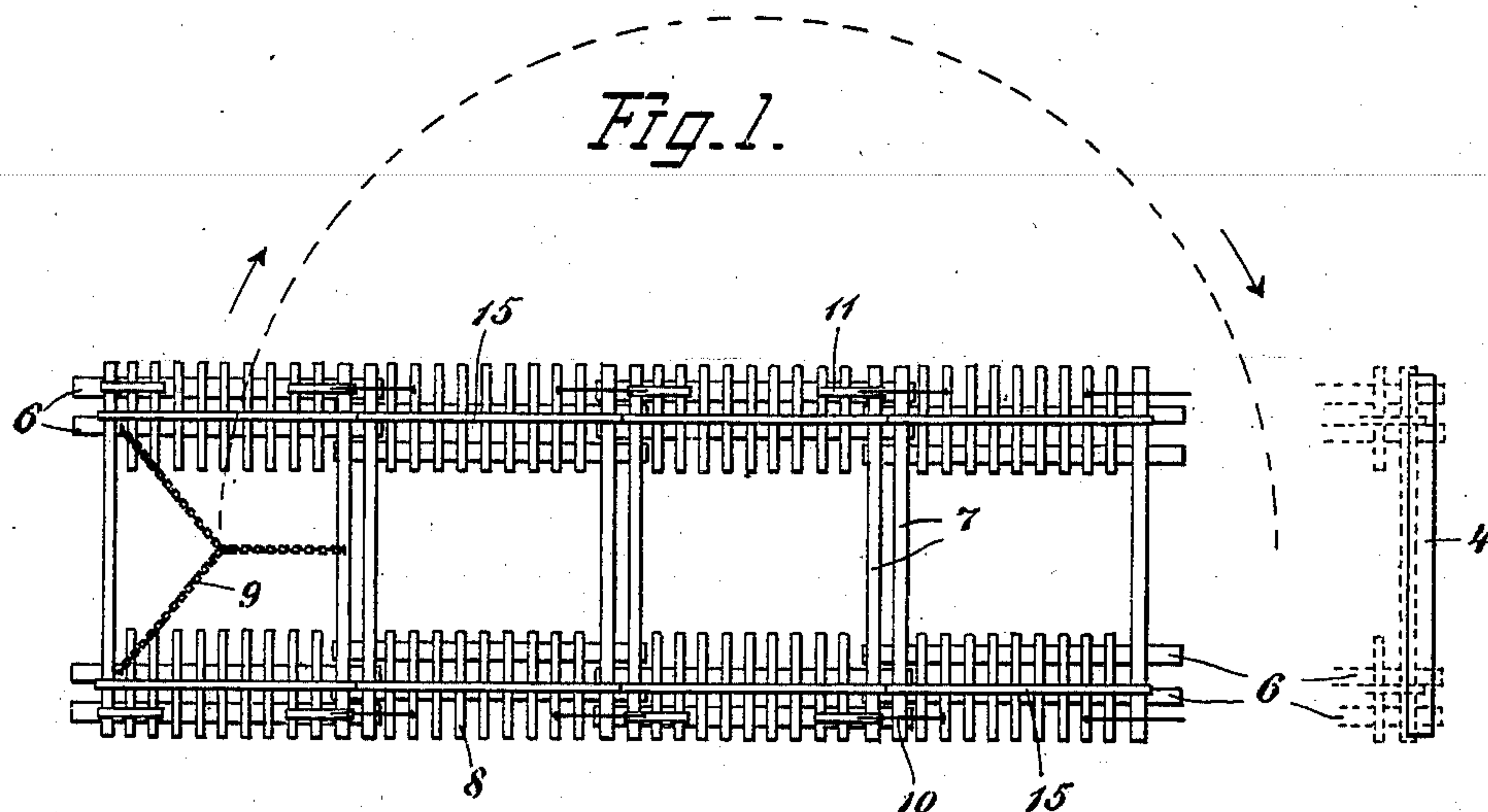
Patented July 31, 1900.

J. H. GARDNER.
PORTABLE TRAMWAY.

(Application filed Jan. 12, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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INVENTOR

John H. Gardner

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2 Sheets—Sheet 2.

Fig. 3.

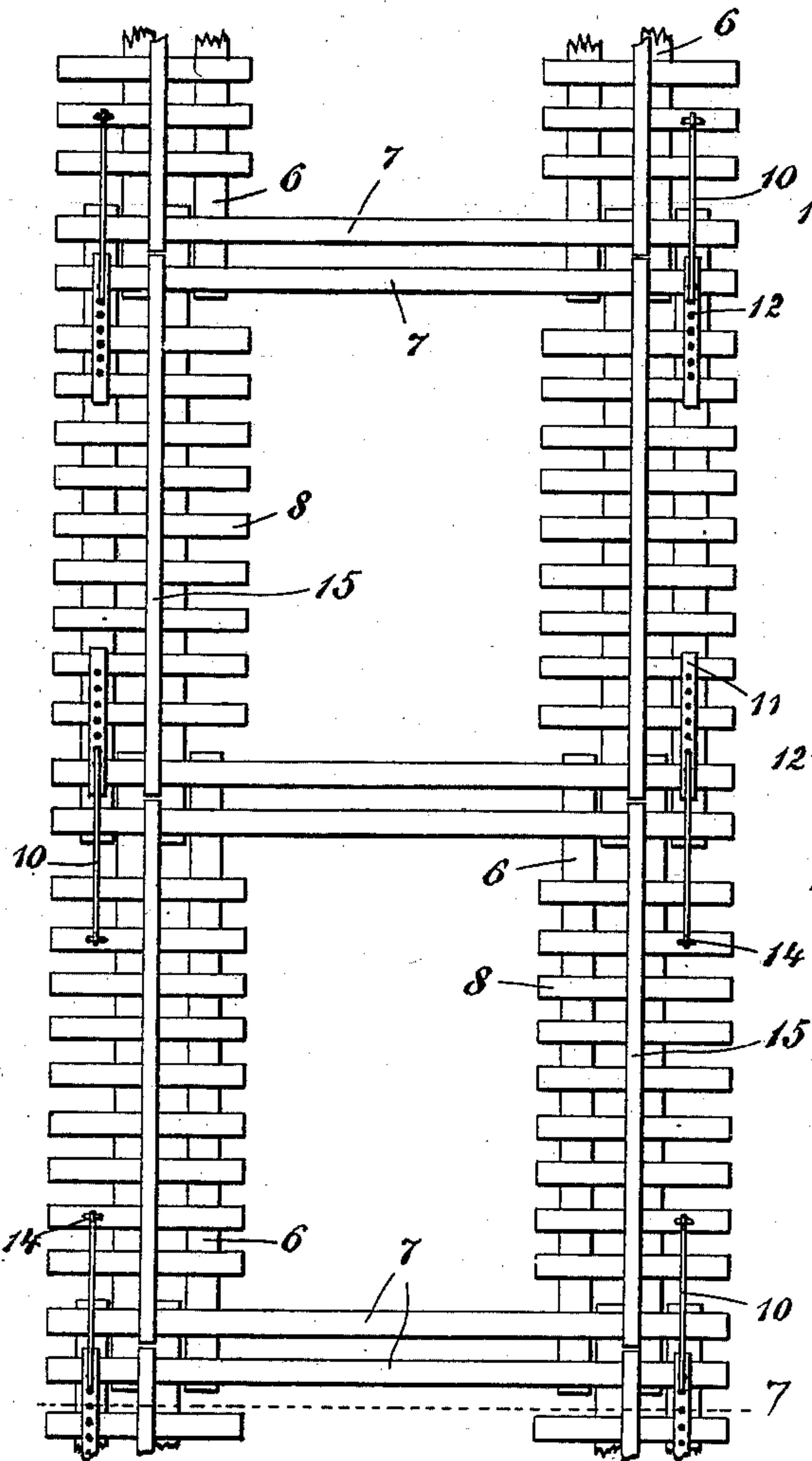


Fig. 4.

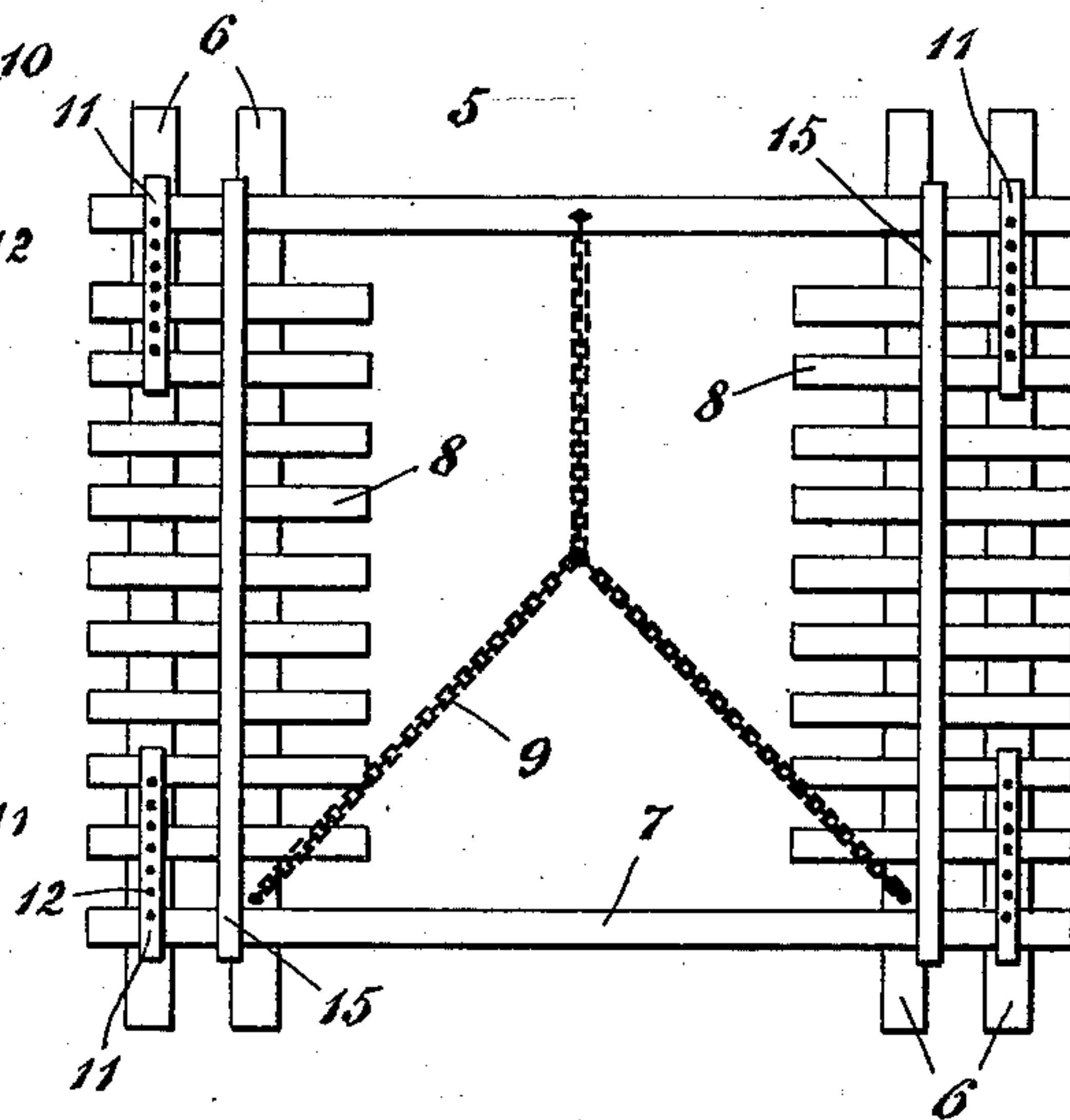


Fig. 5.

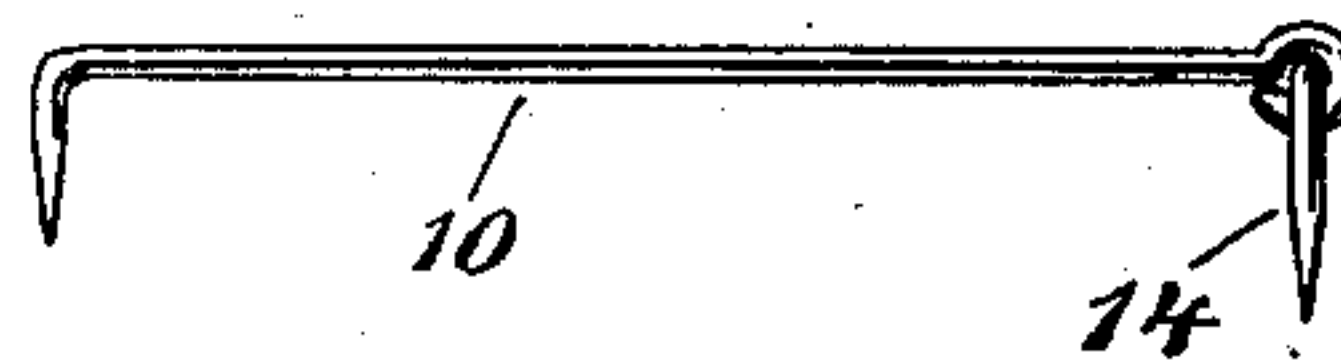
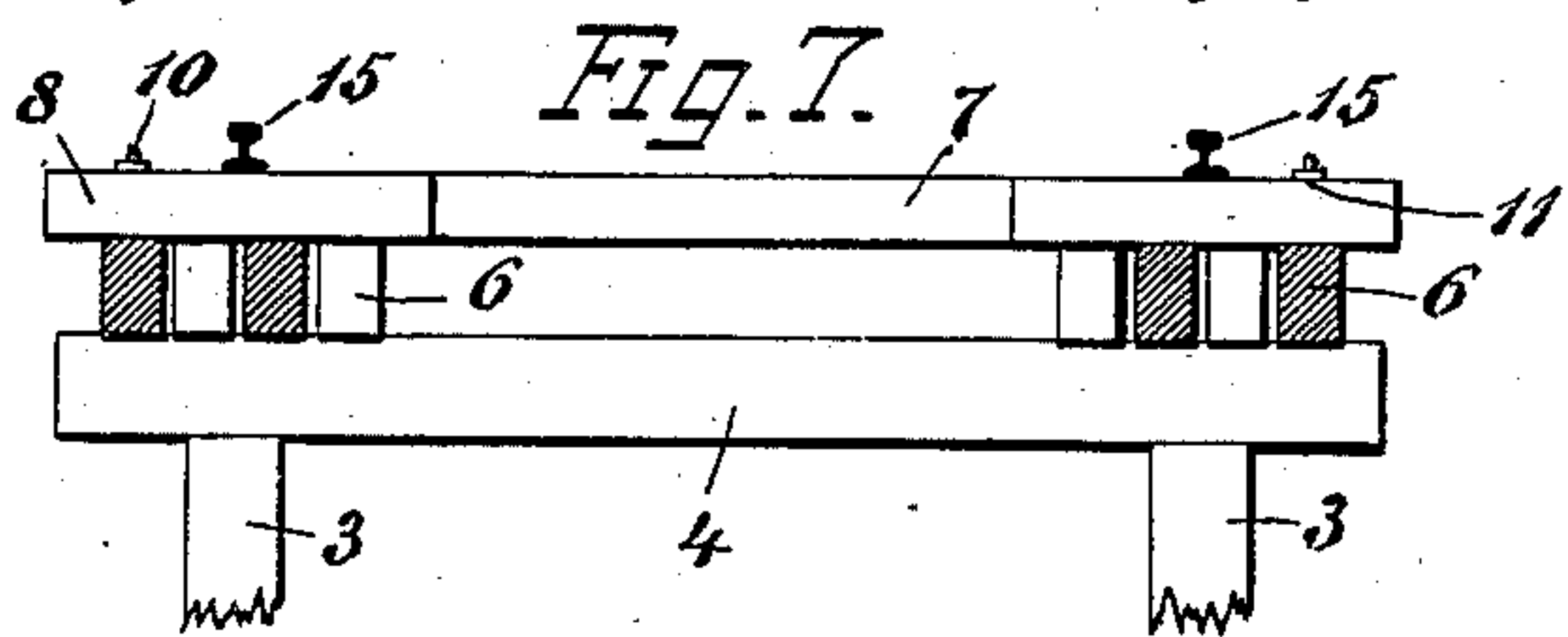
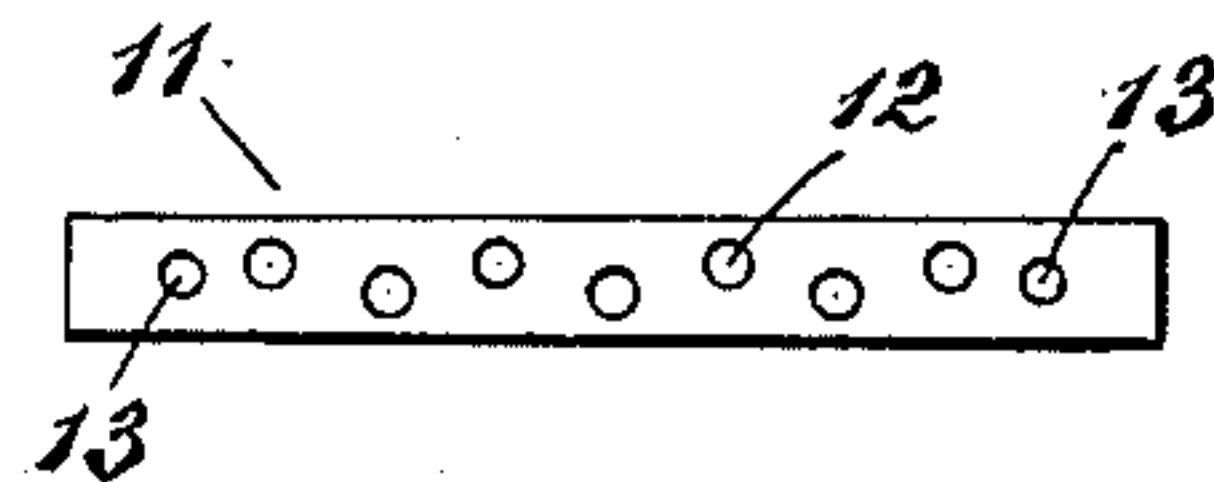


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN HENRY GARDNER, OF NEW ORLEANS, LOUISIANA.

PORTABLE TRAMWAY.

SPECIFICATION forming part of Letters Patent No. 655,072, dated July 31, 1900.

Application filed January 12, 1899. Serial No. 701,970. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY 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.

My invention relates to improvements in tramways, and contemplates the provision of a portable tramway which in addition to affording a support for and enabling a pile-driver to expeditiously set piles in alluvial soil, such as is found in the levees or banks of the Mississippi river, is calculated to be used to advantage in repairing crevices of levees and constructing bridges, trestle-work, and the like in marshy locations.

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 is a side elevation of the same with the rear track-section raised from the rear supports. Fig. 3 is an enlarged detail plan view of a portion of the tramway. Fig. 4 is an enlarged plan view of one of the track-sections with a chain connected thereto. Fig. 5 is a detail view of one of the hooks for detachably connecting the track-sections. Fig. 6 is a similar view of one of the foraminated plates for the engagement of said hooks. Fig. 7 is a transverse section taken in the plane indicated by the broken line 7 7 of Fig. 3.

In said drawings similar numerals designate corresponding parts in all of the views, referring to which—

1 is the bed of a stream or other body of water; 2, the water-line; 3, piles driven in the bed 1 and arranged in pairs at suitable intervals apart; 4 4, transverse caps which are arranged upon and connected to the piles of each pair, and 5 5 track-sections which are arranged end to end upon the support afforded by the several pairs of piles and the connecting-caps thereon. The track-sections are similar in construction, and therefore a detail description of the one shown in Fig. 4 will suffice to impart an understanding of all. Said section 5 comprises two pairs of parallel longitudinal bars or stringers 6, arranged

about the proportional distance illustrated apart, cross-bars 7 connecting the several longitudinal bars 6 at about the distance shown from the ends thereof, short transverse ties 8 laid upon and connected to the bars 6 of each pair between the cross-bars 7, longitudinal track-rails 15 arranged upon and connected to the ties 8 and extending slightly beyond the cross-bars 7, and longitudinally-disposed plates 11 arranged upon and connected to the end ties 8 and cross-bars 7 at the outer sides of the rails 15, said plates having apertures 13 at their ends for the passage of the bolts which connect them to ties 8 and cross-bars 7, and also having apertures 12 at intermediate points of their length for a purpose presently described.

The several track-sections 5 are arranged upon the piles 3 and caps 4 after the manner best shown in Fig. 3—that is to say, the bars or stringers 6 of each section rest at their rear ends on the cap of one pair of piles and at their forward ends rest on the cap of the next pair of piles in advance. The bars or stringers 6 are also arranged in such manner that when the track-sections are properly placed in position the ends of the bars 6 of one section are intermeshed or interlocked with the bars 6 of the section in advance and in the rear of said first-named section after the manner best shown in Figs. 3 and 7, with the result that lateral movement of the sections with respect to each other is effectually prevented, and the rails 15 are held in true alinement with each other. After the track-sections C are arranged end to end on the supports afforded by the piles 3 and caps 4 in the manner described they are detachably connected through the medium of hooks 10, (see Fig. 5,) said hooks having spikes 14 and being designed to be connected by said spikes 14 to one track-section and engage the foraminated plates 11 of a contiguous section, as best shown in Fig. 3.

9 is a chain designed to be connected to the track-sections, as shown in Fig. 4, for a purpose presently described.

In practice I set, say, five pairs of piles and connect the same by caps 4, after which I arrange four track-sections 5 on the support thus afforded and detachably connect said sections in the manner before described.

On the tramway thus formed I place a car, which I have not deemed it necessary to illustrate, the said car being equipped with a boiler, an engine, a pile-driver, and a davit or crane. Now when it is desired to extend the series of pairs of piles 3, with their connecting-caps 4, I move the car to the forward end of the tramway (shown in Figs. 1 and 2) and drive two piles in advance of the tramway, as shown in said figures, and connect them by cap 4. I then disconnect one track-section 5, preferably the rear one, from the others, and by means of a crane elevate the same and swing it around in the path described by the broken line in Fig. 1 and place it upon the cap 4 of the newly-set pair of piles and the cap 4 of the next pair of piles to the rear and interlock it with and connect it to the next track-section to the rear in the manner before described. This operation is repeated until the desired number of piles are driven to close a levee crevasse or complete the bridge or trestle-work that it is desired to construct.

It will be readily appreciated from the foregoing that my improved tramway is simple and inexpensive in construction and may be conveniently used in setting piles in alluvial and marshy ground.

I have entered into a detail description of the construction and relative arrangement of the parts comprised in my improved tramway in order to impart a full, clear, and exact un-

derstanding of the same. I do not desire, however, to be understood as confining myself to such specific construction and arrangement of parts, as such changes or modifications may be made in practice as fairly fall within the scope of my invention.

Having thus described my invention, what I claim is—

In a tramway, the combination with a support comprising piles arranged in pairs at intervals apart, and transverse caps connecting each pair of piles; of a series of track-sections removably arranged end to end upon the support, and respectively comprising parallel pairs of longitudinal bars or stringers, cross-bars connecting said pairs of longitudinal bars adjacent to the ends thereof, cross-ties secured upon the longitudinal bars of each pair, and longitudinal rails secured upon said cross-ties; the said track-sections having the ends of their longitudinal bars or stringers interlocked or intermeshed, plates connected to one track-section and having perforations, and hooks loosely connected to the other track-section and engaging the perforated plates of the first-named section, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HENRY GARDNER.

Witnesses:

PETER F. NOUDET,
HENRY CAMOR.