No. 620,992. Patented Mar. 14, 1899.

G. E. SURGI.

ADJUSTABLE AND PORTABLE TRACK SECTION.

(Application filed Nov. 11, 1898.)

(No Model.)

Fig 1

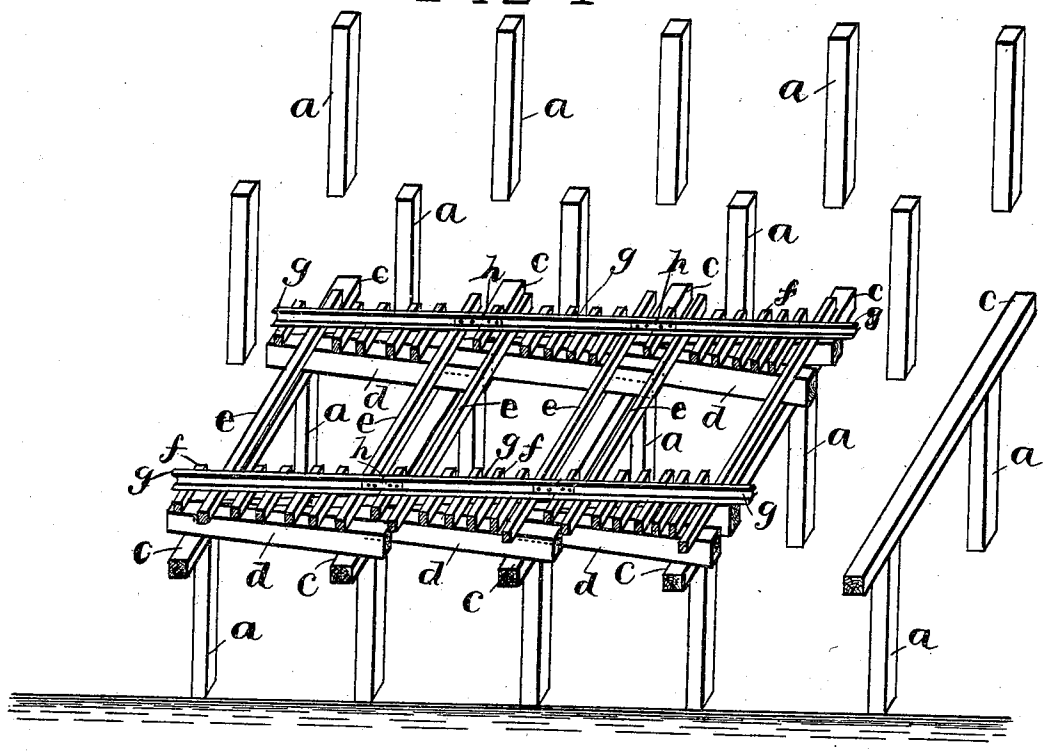


Fig 3

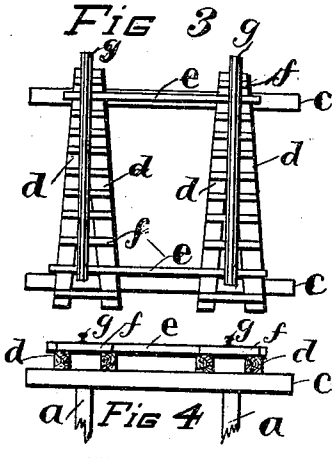


Fig 4

Fig 2

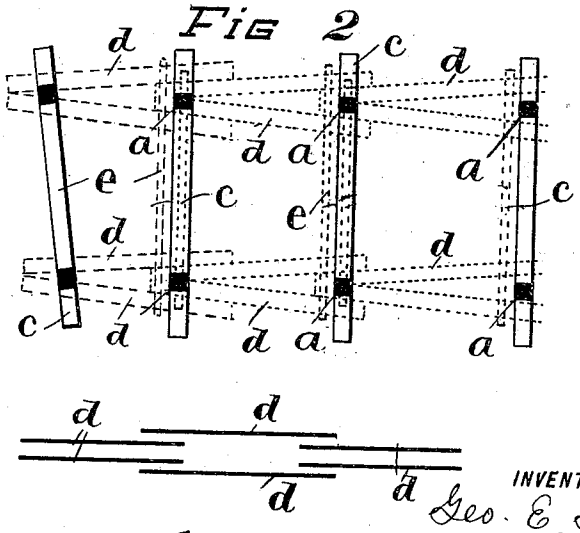


Fig. 5.

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GEORGE E. SURGI, OF NEW ORLEANS, LOUISIANA.

ADJUSTABLE AND PORTABLE TRACK-SECTION.

SPECIFICATION forming part of Letters Patent No. 620,992, dated March 14, 1899.

Application filed November 11, 1898. Serial No. 696,187. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. SURGI, a citizen of the United States of America, residing in the city of New Orleans, parish of Orleans, State of Louisiana, have invented certain new and useful Improvements in Adjustable and Portable Track-Sections, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to provide an adjustable and portable track-section for easily shifting and extending the track of a pile-driver, traveling derrick, steam-shovel, or other machinery of this character.

In the use of such machines in construction and erection it is necessary to often move them about over a temporary track supported on a series of piles or trestle-bents, and owing to the irregularity in the spacing of the supports and the heavy character of the machinery it has been found difficult to shift and extend the track without blocking up and taking a great deal of time.

The object of the present invention is to avoid the tedious and expensive method of blocking up the temporary track between supports and to save a large amount of the time heretofore used in moving the machine from one pile to the next or from one part of the work to another, during which time the machine is necessarily idle.

The invention consists of a series of adjustable frames each composed of two beams or stringers placed a short distance apart and carrying several short cross-ties for supporting the rail, the construction of all which will now be fully described and claimed.

In the drawings, Figure 1 represents a perspective view showing three adjustable track-sections carried on a series of piles. Fig. 2 is a plan showing in dotted lines the arrangement of adjustable frames applied to an irregular spacing of piles. Fig. 3 is a plan of one of the adjustable track-sections. Fig. 4 is a rear end elevation thereof. Fig. 5 shows in diagram a modified arrangement of the frames.

The piles or upright supports are denoted by *a*, and two or more of these are usually united at the top by a cross-piece or cap, forming a bent of piles. These bents may be regularly or irregularly spaced, and it is over these spaces that the adjustable frames are adapted to be placed. These frames are composed of two beams or stringers *d*, which are placed with their ends near together on one bent, while their other ends are separated some distance and rest on the adjacent bent, making a V-shaped frame. The term "frame" is used to denote the two beams or stringers *d*, placed in position as described and secured together or not, as desired. These stringers may be secured together by nailing the short pieces or cross-ties thereto; but it is not always necessary to do this, since they will often remain securely in position without nailing. The forward point of each frame is adapted to project into the space between the rear end of the beams *d* of the next preceding frame, as clearly shown in Fig. 2. The ends of the beams are spaced far enough apart to give a firm and stable support for the series of short cross-ties *f*, that are placed upon them at short intervals. The rails *g* are laid upon the cross-ties and may be loosely spiked thereto. Two sets or lines of frames are laid the proper distance apart for the two lines of rails *g*, forming the track upon which the traveler, pile-driver, or other machine is moved. At each end of each frame is placed a long cross-tie *e*, which reaches across the width of the track-sections and strengthens the construction.

In setting up one of the adjustable frames the two beams or stringers are placed side by side across the trestle bents or caps, the angle between the two beams being adjusted to any desired degree by separating the beams at one end. The short cross-ties are then placed upon the beams or stringers and may be secured thereto or not, as desired. The corresponding frame on the other side of the track having been adjusted in a similar manner, the long cross-ties are then placed across the two frames, one at each end. Several sections of the track are set up in this way, and the rails are secured to the cross-ties as above described.

When it is desired to shift or extend the track, the machine is moved onto the forward sections, while the rear frames are readily taken up and placed in front, the frames always meshing with those already laid by the V-shaped arrangement already described.

The space between bents may be long, so that the frames will just reach, or the bents may be so close that the same frame overlaps on each side and meshes deeper into the angle of the adjacent frames. The frames are always made long enough to reach the maximum distance between bents and so proportioned that they may be contracted by meshing to take in the narrowest distance.

The rails being loosely nailed may be easily moved, and it is the practice to keep an assortment of lengths on hand, although this is not absolutely necessary, for they may project beyond the frames and be slid along to different positions.

If fixed lengths of frames were used without meshing, it would frequently happen that the end of a frame and its rail would come in between the bents, which would then have to be blocked up to prevent tipping. By the use of my adjustable meshing frames this is avoided, and a great saving of time and expense results.

The triangular or V-shaped arrangement of the meshing frames is found to be most advantageous and preferable; but the frames might be laid in other ways, as shown, for instance, in Fig. 5. By this arrangement the frames are laid parallel, so that one pair is narrower than the other, and they mesh together in this way; but this arrangement has some disadvantages, for if two wide frames should chance to come together, which might easily happen, they would not mesh. In the triangular form, however, the frames will always mesh, no matter how many are being used.

What I claim is—

1. A portable track-section comprising a series of adjustable triangular or V-shaped frames meshing together, cross-ties thereon and a rail carried by the cross-ties.

2. An adjustable frame for portable track-sections consisting of two beams or stringers placed together at an angle in the form of a V the angle being adjustable in order to mesh with similar frames for different spans.

3. A series of adjustable V-shaped frames for a portable track, short cross-ties on each frame and long cross-ties reaching across the track and joining a pair of frames.

4. In a portable track-section adjustable frames consisting of two beams laid side by side and meshing with adjacent frames, short cross-ties joining the two beams of each frame, long cross-ties joining frames on opposite sides of the track and rails located over each line of frames.

5. In a portable track-section a series of frames, each consisting of two beams or stringers laid side by side, and each frame meshing with the adjoining frames, cross-ties supported on the stringers and a rail on each line of frames.

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