(No Model.) 2 Sheets—Sheet 1.

D. E. TEAL.

TRESTLE.

No. 266,658. Patented Oct. 31, 1882.

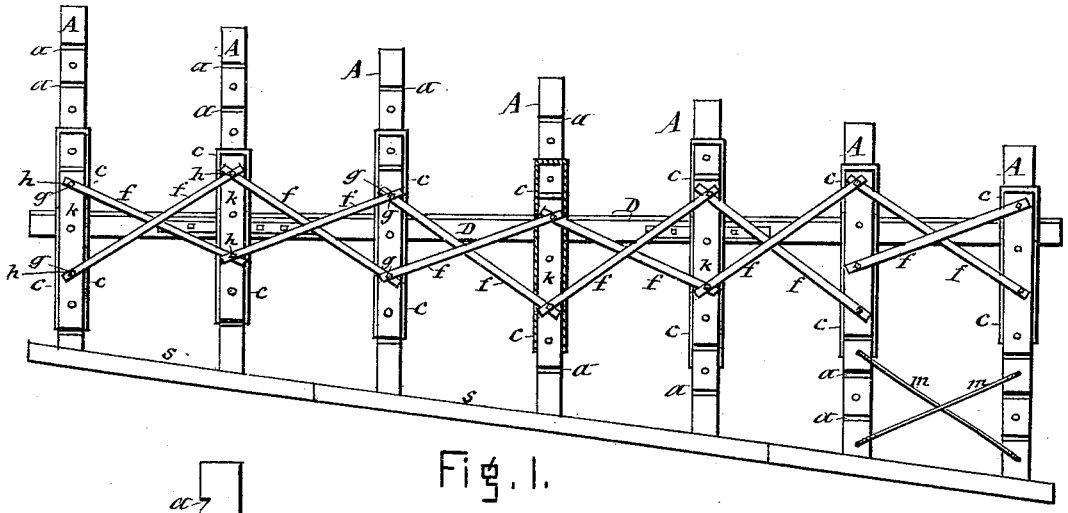

Fig. 1.

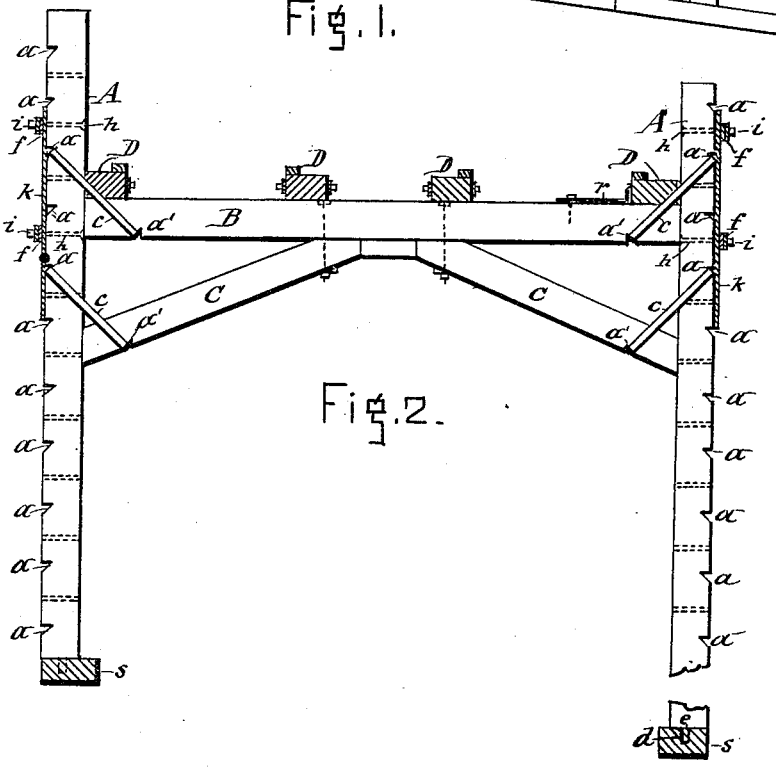

Fig. 2.

WITNESSES —

O. C. Laass

Wm. L. Raymond

INVENTOR —

Daniel E. Teal

per Smith, Laass & Hopkins his Attys

(No Model.) 2 Sheets—Sheet 2.

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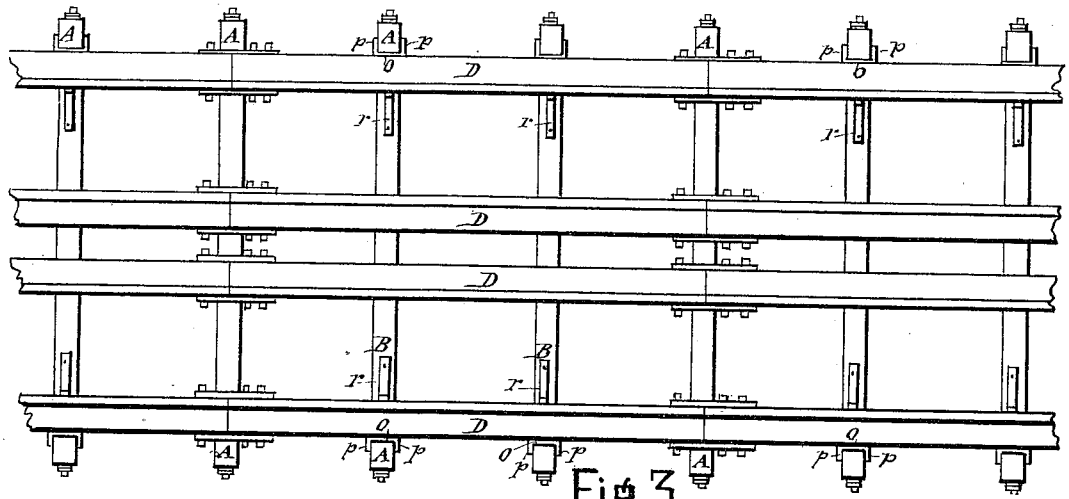

Fig. 3.

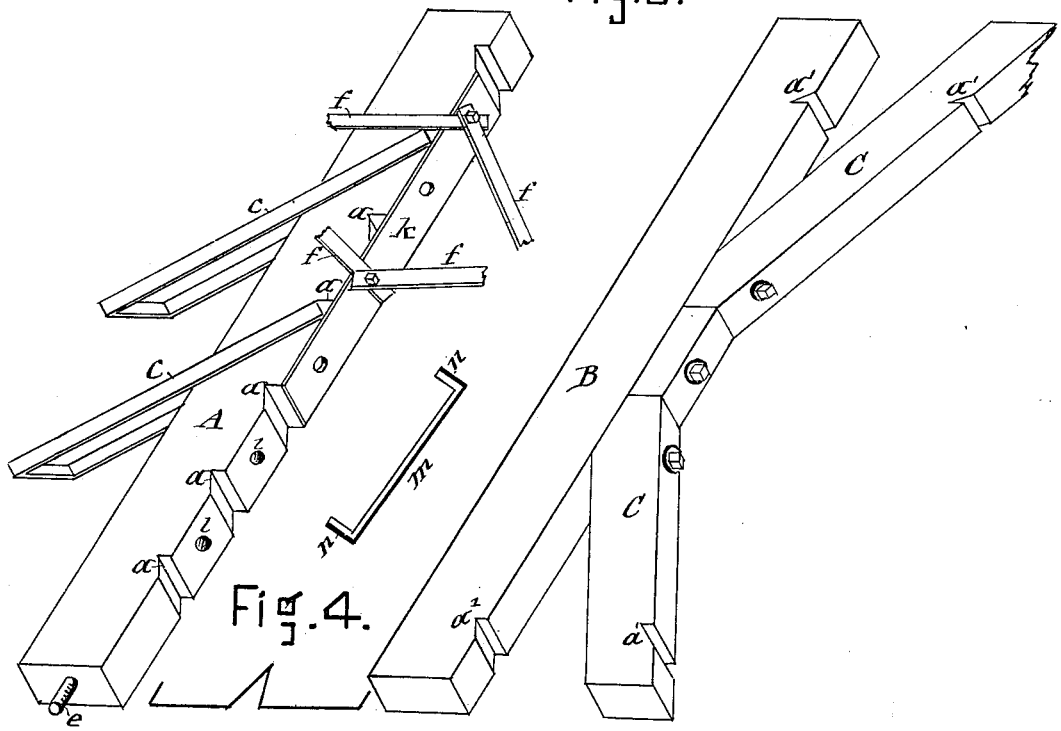

Fig. 4.

WITNESSES—

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INVENTOR—

Daniel E. Teal

per Dodd, Laass & Hey

his Attys.

UNITED STATES PATENT OFFICE.

DANIEL E. TEAL, OF ONEIDA CASTLE, NEW YORK.

TRESTLE.

SPECIFICATION forming part of Letters Patent No. 266,658, dated October 31, 1882.

Application filed April 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, DANIEL E. TEAL, of Oneida Castle, in the county of Oneida, in the State of New York, have invented new and useful Improvements in Trestles, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to a novel construction of trestle-work designed more particularly for supporting temporary tracks during the building of embankments, and for temporarily replacing damaged or broken-down or washed-out trestles.

The invention consists essentially in a knock-down trestle-bent composed of posts provided with straps or tie-rods adapted to be set at various heights on the posts, and a cross-beam extended from post to post and supported by the adjustable straps of the posts, the whole being arranged to be readily taken apart and moved about, and as readily united, and when united form a substantial, yet simple and cheap trestle.

The invention also consists in a novel means of bracing longitudinally a series of the aforesaid knockdown trestle-bents, and in devices for detachably connecting therewith the track-stringer, all as hereinafter more fully explained, and specifically set forth in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my invention; Fig. 2, an end view of the same; Fig. 3, a plan view, and Fig. 4 a detail view of the component parts of a trestle-bent.

Similar letters of reference indicate corresponding parts.

A A represent the two posts of my improved trestle-bent, said posts being provided at their outer faces with a series of shoulders or notches, *a a*, arranged at different heights or different points in the length of the post.

B is the cross-beam, extended from post to post, and used in lieu of the usual cap-piece of ordinary trestles, said cross-beam consisting of a plain stick of timber devoid of the usual tenons on its ends for connection with the post. Its under side is provided with a notch or shoulder, *a'*, near each end, for the reception of the lower end of a strap, *c*, which strap is detachably hung by its upper end on one of the notches *a* of the post, and supports by its lower end the beam B, said strap being formed of an endless band of flat bar-iron, so as to obtain a broad bearing on the shoulders or notches *a a*. It embraces the sides of the post and beam, and thus effectually maintains the sides of said parts in line with each other.

C C are two braces secured to the under side of the central portion of the beam B, the outer end of said braces having a plain face in line with the end face of the beam. The under side of said end of the brace is provided with a shoulder or notch, *a'*, similar to that of the beam, and another strap, *c*, like that which supports the beam, is hung in one of the notches *a* of the post and engages the notch of the brace, and thus supports the same. It will be observed that by this arrangement the two straps *c c* are the sole means of supporting the beam B and brace C and of uniting the same with the post A, and that said sustaining-straps draw the parts together with increased force as the weight is applied to the beams B. When a series of the described trestle-bents are employed they are braced longitudinally by means of straps or flat bars *f f*, provided on their ends with eyes *g*, by which they are detachably connected to stud-bolts *h h*, secured to the outer side of the posts A, said bolts passing through the eye of the straps *f*, and being provided with a nut, *i*, over the strap, to confine the same in its position. The straps are arranged diagonally from post to post, so as to properly brace the successive bents.

K is a plate interposed between the ends of the straps *f* and the face of the post to which they are connected, said plate extending from bolt to bolt, *h*, and over the notches *a*, in which are hung the straps *c*, and thereby serving both as a washer under the straps *f* and as a guard to retain the strap *c* in the notch *a* of the post when the latter is detached from the beam B and brace C. Very high trestles I provide with additional braces in the form of rods *m*, having their ends *n* bent at right angles and inserted each in one of a series of holes, *l*, in the sides of the posts, as shown, said rods being disposed diagonally in the usual manner of ordinary braces. The posts A A are provided on their lower extremity with a dowel-pin, *e*, which enters a hole, *d*, in a longitudinal

sill, *s*, placed under the foot of the posts, as shown in Fig. 1 of the drawings.

D D represent the track-stringers, laid upon the beam B, the two outer stringers being placed close to the posts and detachably secured in their position by a clip or shoe, *o*, on the side of the respective stringers, said clip being provided with flanges *p*, which engage opposite sides of the post, the stringers being held against the inner face of the post by means of stays *r*, in the form of metal bars, pivoted on top of the beam B, and having on its end an upturned shoulder, by which it bears against the inner side of the track-stringer.

The described construction and combination of parts constitutes a knock-down trestle which is readily erected on most any ground, and when erected is as strong and durable as any wooden trestle, and with less consumption of timber.

The cross-beams B are trussed or braced for the express purpose of setting the posts of each bent a sufficient distance apart to allow the bent to stride the embankment in process of construction, and over which said trestle is designed to support a temporary track. The posts coming near the foot of the slope of the embankment prevents their being buried any considerable depth, and thus allows the trestle-bents to be readily moved forward as the embankment progresses.

Heretofore all temporary trestles used for the purpose aforesaid were buried and left in the embankment, thereby not only incurring the waste of said trestles, but also impairing the solidity of the embankment by the decay of the embedded trestle.

Having described my invention, what I claim is—

1. The combination of the posts A, provided at their outer side with notches *a a* at various points of their height, the cross-beam B and braces C, provided respectively at their under side with the notch *a'*, and the straps *c c*, hooked in two of the notches of the post and in the notch of the cross-beam and its brace, respectively, substantially as described and shown.

2. The combination of the sill *s*, provided with the holes *d*, the posts A, provided with dowels *e* and with notches or shoulders *a a*, the cross-beam B and braces C, provided with notches or shoulders *a' a'*, and the removable straps *c c*, embracing the post and the cross-beam and its brace, and adapted to engage the shoulders thereof, substantially as shown and set forth.

3. The combination of the posts A, provided with notches *a a*, the beam B, and brace C, provided respectively with the notch *a'*, the adjustable straps *c c*, engaged with said notches, the plate K, placed over the notches of the post, the metal straps *f f*, provided with eyes *g*, and the bolts *h h*, connecting said plate and straps detachably on the post, substantially as described and shown.

4. In combination with the posts A and cross-beam B, the track-stringer D, having on its side the clip or shoe *o*, with flanges *p*, engaging opposite sides of the post, and the stay *r*, adjustably connected to the beam B, substantially in the manner shown and described, for the purpose set forth.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 25th day of April, 1882.

DANIEL E. TEAL. [L. S.]

Witnesses:
C. H. DUELL,
WM. C. RAYMOND.