

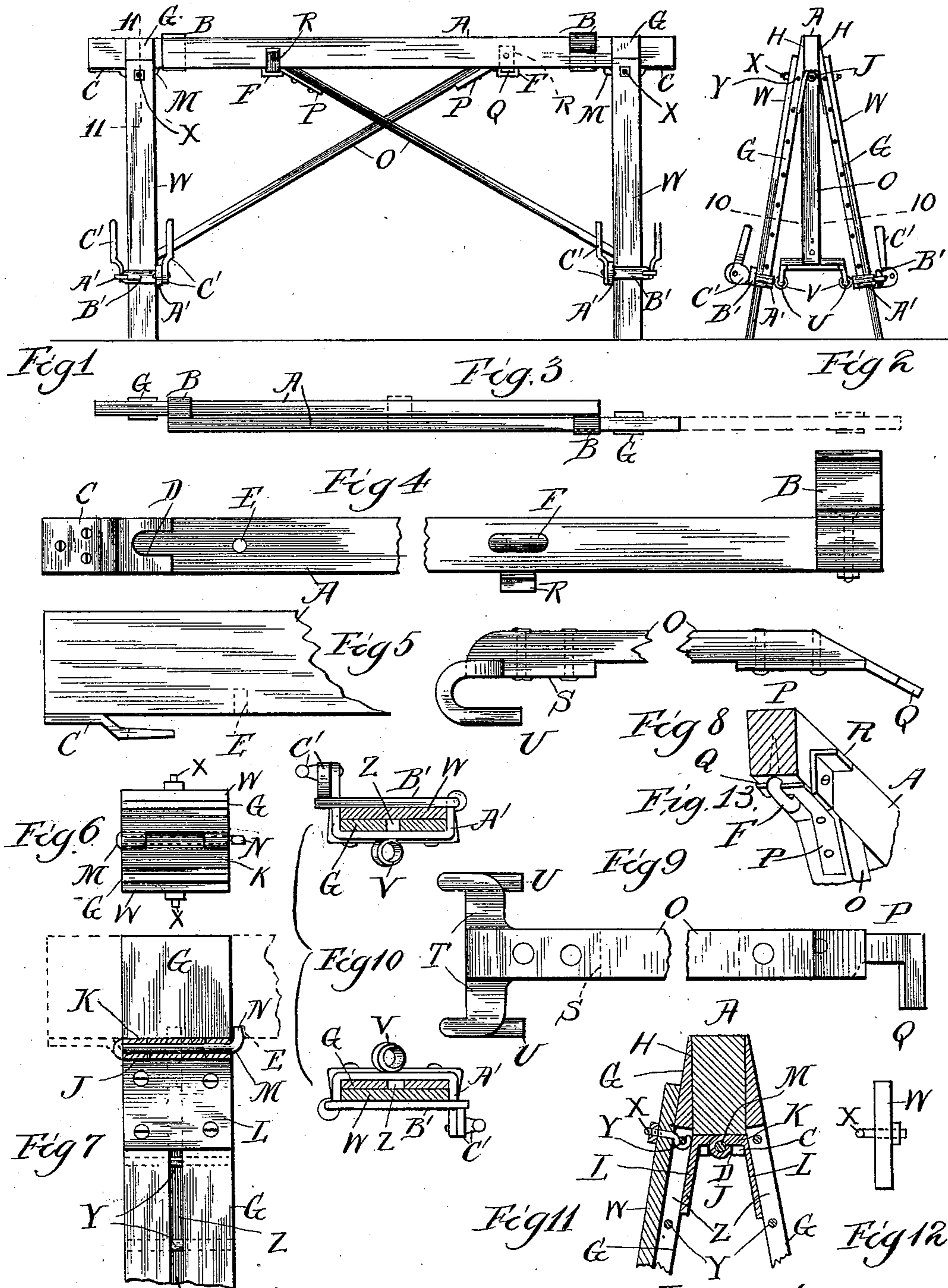
No. 646,620.

Patented Apr. 3, 1900.

B. E. CRONKHITE.
KNOCKDOWN TRESTLE.

(Application filed May 4, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

BYRON E. CRONKHITE, OF ROSSVILLE, ILLINOIS.

KNOCKDOWN TRESTLE.

SPECIFICATION forming part of Letters Patent No. 646,620, dated April 3, 1900.

Application filed May 4, 1899. Serial No. 715,502. (No model.)

To all whom it may concern:

Be it known that I, BYRON E. CRONKHITE, a resident of Rossville, in the county of Vermilion and State of Illinois, have invented certain new and useful Improvements in Knockdown Trestles, of which the following is a specification.

My invention relates to certain new and useful improvements in trestles, such as are used by lathers, plasterers, paper-hangers, and decorators generally, and is designed to produce a trestle which can be quickly taken to pieces, so as to consist of a few separate pieces which will pack together readily and occupy a very small space in transportation or storage, and which can be assembled with equal facility, so as to form a perfectly-rigid support.

While my improvements are applicable to the ordinary non-extensible and non-adjustable trestle, I have shown them as embodied in an extensible and adjustable trestle, such as shown in the patent granted to Ritter, No. 590,278, dated September 21, 1897.

Referring to the sheet of drawings, in which the same letters of reference are used to designate identical parts in all the views, Figure 1 is a side elevation of a complete trestle. Fig. 2 is an end elevation of one portion of it. Fig. 3 is a plan view of the cross-beams, in which the full lines show them in the closed-up position of Fig. 1 and the dotted lines show them in an extended position. Fig. 4 is an inverted plan view, on a larger scale, of one of the cross-beams. Fig. 5 is a side elevation of one end of the cross-beams. Fig. 6 is a top plan view of the hinge joining the legs. Fig. 7 is a central section through said hinge, showing a portion of one of the legs in elevation. Fig. 8 is a side elevation of one of the braces, the central part being broken away. Fig. 9 is a similar plan view of the same parts detached. Fig. 10 is a sectional view, on a larger scale, on the line 10 10 of Fig. 2, showing especially the location of the eyes by which the lower end of the brace is secured. Fig. 11 is a sectional view on the line 11 11 of Fig. 1, but on a larger scale. Fig. 12 is a plan view of the lower section of the adjustable leg, and Fig. 13 is a perspective view showing the details of the mechanism for holding the brace in position.

The cross-beam A is conveniently constructed of two-by-four material, and in the extensible form shown the inner end of each section is provided with the metallic hook B, secured thereto, which takes over the adjacent sections and serves to hold the sections securely on a level in any position of extension in which the trestle may be placed. At the outer ends of the cross-beams A are secured the retaining-plates C, which have their inner ends arranged, as shown especially in Fig. 5, at a lower level and provided with the notch D for the purpose to be presently described. In line with the center of the notch D and at a suitable distance therefrom is bored the hole E. Secured near the inner end of the section is the staple F. The legs G have their upper ends beveled off, as at H, and just at the termination of the beveled portion they are connected by the hinge J, the flattened leaves or straps of which consist of the horizontal portions K and the substantially-vertical portions L. The knuckles of this hinge are of the ordinary construction; but I preferably form the pin M with an upturned portion N. (Best shown in Fig. 7, where the relation of the cross-beam to the legs and hinge is clearly shown and where it will be seen that the retaining-plate C has its hooked portion passing underneath the horizontal portions K of the leaves of the hinge, the notch D being necessary to accommodate the knuckle.) The upturned end N of the pin takes into the hole E, and it will be seen that as long as the end N of the pin is retained in the hole E the legs are securely fastened to the cross-beam. For the purpose of retaining these parts in position, as well as for strengthening the structure, the brace O is employed, and this is provided at its upper end with a strap P of the shape clearly shown in Figs. 8 and 9, the projecting end portion Q of which takes into the staple F, previously mentioned, and is held in position by the catch R, pivoted on the side of the cross-beam. The lower end of the brace O is provided with the plate S, which has the arms T, terminating in the hooks U, which take into eyes V, secured to the inner sides of the hooks. In assembling the device the cross-beam A is placed on the ground with its bottom side up and the legs G are pushed

into position, with the retaining-plate C engaging the hinge J and the end N of the pin taking into the hole E. The hooks U are then passed through the eyes V, and the end Q of the strap P is pushed into the staple F, and the catch R being swung into position prevents the accidental disengagement of the parts. If the extensible form of trestle is employed, the two halves are placed together, and it will be seen that an extremely-rigid trestle is produced and one in which all the strain received in the ordinary usage tends to fasten the parts more securely together.

I have illustrated my improvements as applied to the structure of the aforesaid patent, in which the legs G have cooperating therewith the outer vertically-adjustable portions W, which are provided with the hook X, which cooperates with some one of the rods or bolts Y, passing through the legs G, the hook X taking into the slot Z, formed in the leg proper, G. The lower ends of the legs G have securely fastened thereto the clamping-piece A', the main portion of which is of a substantially U-shaped form and has pivoted thereto the swinging latch B', which catches over the other end of the main portion A' and is secured in place by the cam-piece C'. It will be seen that at whatever position the legs are placed the hooks X will cooperate with the pins Y and prevent their being separated so long as the clamping member A' holds the legs G and the extensions W in contact, and the greater the pressure on the cross-beam A the more firmly the legs proper and the extensions will be held together. I conveniently attach the eyes V to the inner side of the clamping member A', making the eyes rigid therewith or securing them thereto, as may be desired.

It will be seen that the trestle which I have thus produced is one of great utility on account of its compactness when its parts are knocked down and because it can be adjusted to any desired height or length or with the ends at different heights.

While I have shown my invention as embodied in the form which I at present consider best adapted to carry out its purposes, it will be understood that it is capable of some modifications and that I do not desire to be limited in the interpretation of the following claims, except as may be necessitated by the state of the art.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a device of the class described, the combination of the cross-beam, with the legs having the beveled surfaces H cooperating with the sides of a cross-beam, and the hinge J permanently connecting the legs and directly supporting the cross-beam, and the retaining-plate C cooperating directly with the hinge to prevent the accidental separation of the legs and cross-beam, substantially as described.

2. In a device of the class described, the combination of the cross-beam, with the legs having the beveled surfaces H cooperating with the sides of the cross-beam, and the hinge J permanently connecting the legs beneath said beveled surfaces and directly supporting the cross-beam, the retaining-plate C cooperating directly with the hinge and the pin N cooperating with the aperture E to prevent the accidental separation of the legs and cross-beam, substantially as described.

3. In a device of the class described, the combination of the cross-beam A having the retaining-plate C secured on the under side thereof, with the legs G having the beveled surfaces H cooperating with the sides of the beam A, and the hinge J permanently connecting the legs beneath said beveled surfaces and directly supporting the cross-beam, said hinge consisting of the substantially-vertical portions L to which the legs are attached and the horizontal portions K upon which the cross-beam rests and beneath which the plate C passes, substantially as and for the purpose described.

4. In a device of the class described, the combination of the cross-beam, with the legs connected by the hinge, and means secured to the beam for detachably engaging said hinge, said means comprising the retaining-plate C engaging the hinge, and the pin N on the hinge engaging the aperture E in the cross-beam.

5. In a device of the class described, the combination of the cross-beam, with the legs having the beveled ends at H, the hinge J having the horizontal portions K together equal to the thickness of the cross-beam, and the vertical portions L by which it is secured to the legs, connections for detachably securing the cross-beam to the hinge, comprising the retaining-plate C cooperating with said horizontal portions K of the hinge J, and means for holding the legs apart with their beveled ends H resting against the sides of the cross-beam.

6. In a device of the class described, the combination of the cross-beam A, with the legs G having the beveled ends at H, the hinge J having the horizontal portions K and together equal to the thickness of the cross-beam A, and the vertical portions L by which it is secured to the legs, connections for detachably securing the cross-beam to the hinge comprising the retaining-plate C engaging the horizontal portions K of the hinge and the pin N cooperating with the aperture E in the cross-beam, and means for holding the legs G apart with their beveled ends H resting against the sides of the cross-beam A.

7. In a device of the class described, the combination of the cross-beam, with the hinged legs cooperating therewith, connections for detachably securing said cross-beam and the legs, the brace for holding the legs apart and preventing the accidental dis-

gagement of said connections, and means for detachably engaging one end of said brace with the legs comprising the hooks U cooperating with the eyes V, and means for detachably engaging the other end of said brace with the cross-beam consisting of the plate B P having the nose Q engaging with the

staple F, and the catch R cooperating therewith, substantially as described.

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Witnesses:

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