No. 617,463. Patented Jan. 10, 1899.

# H. S. DOTTS.

## MECHANIC'S TRESTLE.

(Application filed Dec. 27, 1897.)

(No Model.) 2 Sheets—Sheet 1.

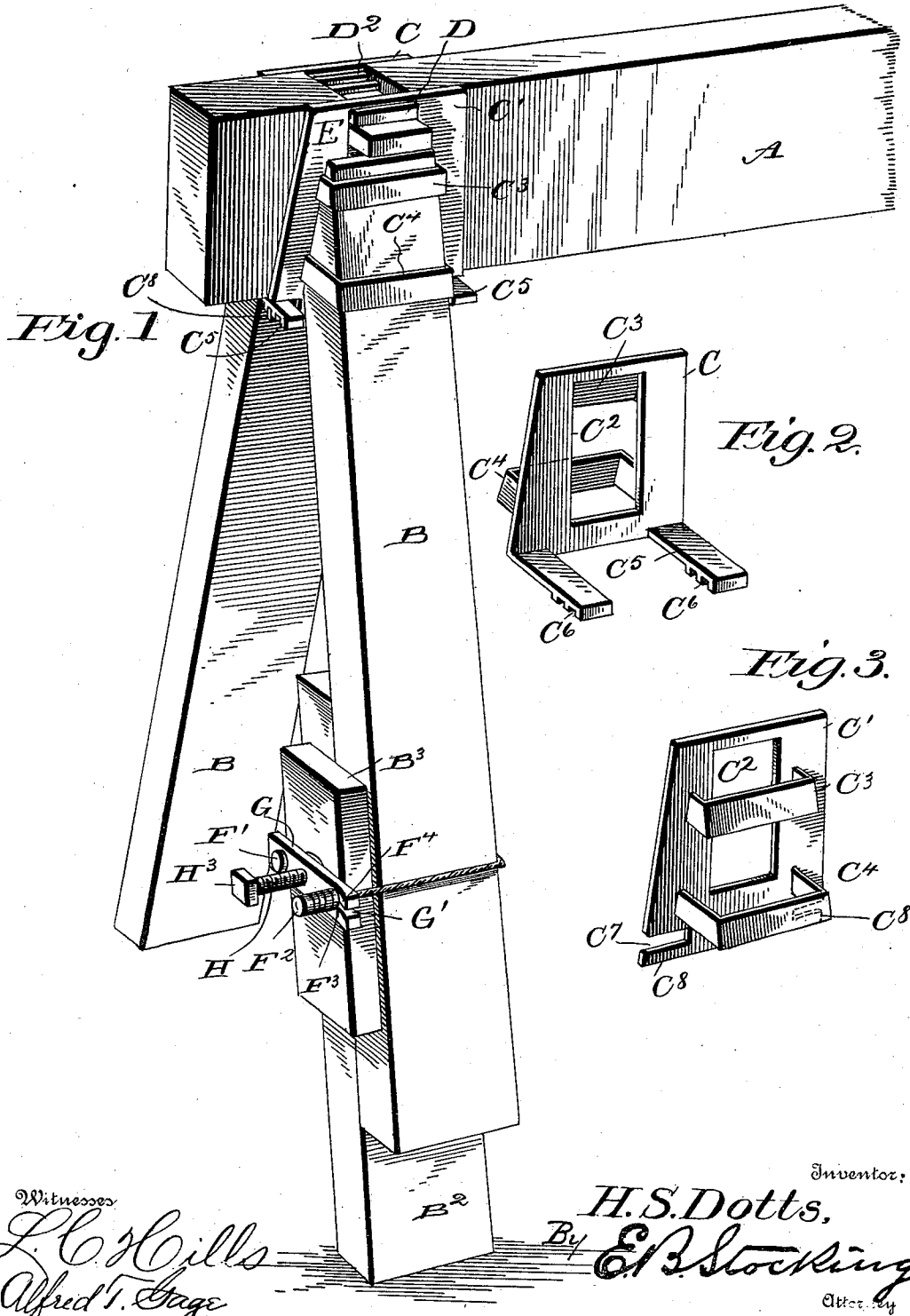



Fig. 1




Fig. 2.

Fig. 3.




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Fig. 8.

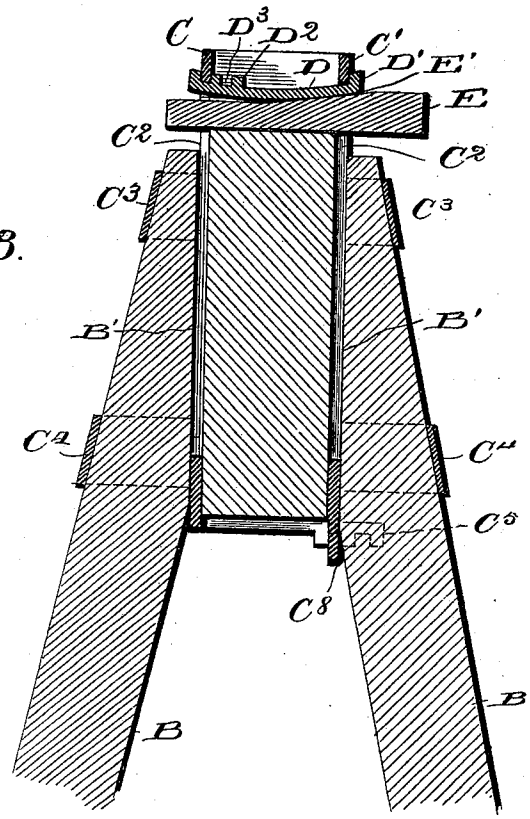



Fig. 4.

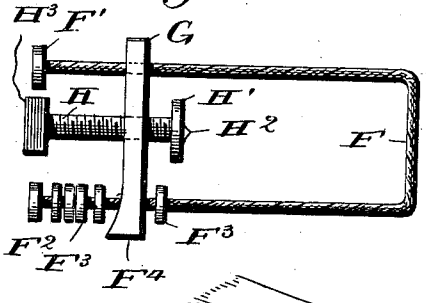



Fig. 5.

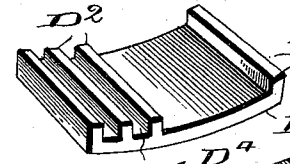
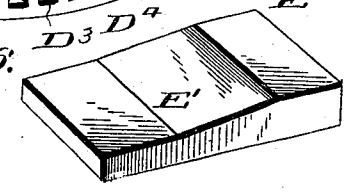



Fig. 6.



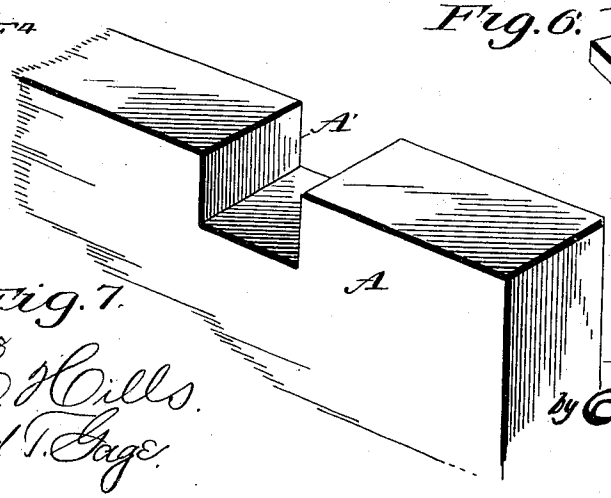




Fig. 7.

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# UNITED STATES PATENT OFFICE.

HIRAM SWART DOTTS, OF THOBURN, WEST VIRGINIA, ASSIGNOR OF ONE-FIFTH TO JULIA D. SCHUTTE, OF FARMINGTON, AND JOHN F. REGULSKI, OF MONONGAH, WEST VIRGINIA.

## MECHANIC'S TRESTLE.

SPECIFICATION forming part of Letters Patent No. 617,463, dated January 10, 1899.

Application filed December 27, 1897. Serial No. 664,607. (No model.)

*To all whom it may concern:*

Be it known that I, HIRAM SWART DOTTS, a citizen of the United States, residing at Thoburn, in the county of Marion and State of West Virginia, have invented a new and useful Plan or Device for the Construction of Mechanics' Trestles, of which the following is a specification.

This invention relates to mechanics' trestles, and particularly to a clamping device by which the supporting-legs may be connected to the beam and also extensions secured to said legs.

The invention has for its object to provide a construction of clamp which may be readily applied to beams of different sizes and adjusted so as to firmly connect the supporting-legs to said beams.

It has as a further object to supply a construction having the minimum number of parts and which may be applied quickly by the ordinary mechanic, so as to avoid delay in erecting scaffolding.

A further object of the invention is to provide an adjustable clamp for connecting extension-pieces to the supporting-legs, whereby the beam of the trestle will be adjusted to different vertical elevations.

Other objects and advantages of the invention will hereinafter appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective illustrating the clamping-plates applied and also the leg-adjusting device. Fig. 2 is a detail perspective of one of the clamping-plates. Fig. 3 is a similar view of the coöperating plate. Fig. 4 is a plan of the clamping device for the leg. Fig. 5 is a perspective of the connecting-plate. Fig. 6 is a similar view of the wedge-block. Fig. 7 is a detail perspective of the upper surface of the beam, and Fig. 8 is a vertical cross-section through the clamping-plates when assembled.

Like letters of reference indicate like parts throughout the several figures of the drawings.

The letter A designates the beam or timber to which the legs B are to be connected. If this beam be of greater size than the clamping-plates, it may be provided upon its upper surface with a recess A'. This, however, is not necessary when the proper size of beam and plates are used. The legs B are beveled, as at B', upon their inner upper face.

For the purpose of detachably connecting the legs to the beam I provide clamping-plates C and C', each of which is cut away at its central portion, as at $C^2$, to provide an aperture through which connecting means may pass. The outer face of each of the plates C and C' is provided with leg-retaining keepers $C^3$ and $C^4$, the outer wall of which inclines inwardly toward the plate. The keeper $C^4$ is of greater length and also extends a greater distance away from the plate, so as to accommodate the inclination of the outer face or surface of the leg when inserted therein. The plate C is provided at its lower portion with one or more lateral extensions $C^5$, which lie beneath the surface of the beam and are provided upon their under faces with projections which form recesses $C^6$. The opposite plate C' is provided at each side with apertures $C^7$, which leave a finger $C^8$, adapted to seat in one of said recesses $C^6$ when adjusted to the proper width of the beam A. For the purpose of connecting the upper ends of the plates C and C' a connecting-plate D has been provided at one end with an upwardly-extending flange D' and at the opposite end with a series of projections or ribs $D^2$, which form recesses $D^3$, in which the upper edge of the opposite plate is adapted to seat. The lower face of this plate may be slightly curved, as at $D^4$, and beneath the same the wedge-block E is driven. This block has an inclined surface E' upon its upper face, which when in contact with the curved face $D^4$ forces the connecting-plate D upward, thus securely holding the opposite clamping-plates together and drawing the lower portion of the plate C' into one of the recesses $C^6$ provided upon the opposite plate.

For the purpose of connecting an extension-piece $B^2$ to the leg B, I provide the flexible clamping-band F, which may be formed

of wire or other suitable flexible material. One end of this band is provided with a head F′, passed through a brace-plate G, the opposite end of which is provided with a slightly-inclined slot G′, which permits the introduction and removal of the opposite end of the band F. The plate is formed of increased thickness on opposite sides of the slot G′, as indicated at $F^4$, which prevents the band from lateral displacement. This end of the band is provided with a permanent head $F^2$ and with a series of washers $F^3$, slidingly mounted upon the band, so that they may be located upon either side of the bracing-plate G, and thus adjust the length of the band in its relation to the plate. Beneath the brace-plate G a bearing-block $B^3$ may be located, and threaded through this plate is an adjusting-screw H, provided at its inner end with a bearing-disk H′, having thereon a holding-point $H^2$. The outer end of this screw is provided with a suitable head $H^3$, the rotation of which will force the brace-plate G away from the bearing-block, and thus tighten the band F and firmly connect the leg and extension-piece.

I have described in detail the preferred construction of the several parts; but it is obvious that changes may be made in the details thereof without departing from the spirit of this invention, as defined by the appended claims.

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

1. In a trestle, oppositely-located independent clamping-plates adapted to engage a beam, adjustable plates provided with recesses engaging the upper and lower portions of said clamping-plates, and leg-retaining keepers upon the outer faces of said plates; substantially as specified.

2. In a trestle, oppositely-located slotted clamping-plates adapted to engage a beam, an extension upon the lower portion of one plate adapted to engage the opposite plate, and securing devices passing through said slots to connect the upper ends of said plates, and means for attaching supporting-legs to said plates; substantially as specified.

3. In a trestle, a clamping-plate provided with a lateral extension at its lower edge, an opposite clamping-plate adapted to engage said extension, an adjustable recessed plate connecting the upper portion of said clamping-plates together, and means for attaching supporting-legs to said plates; substantially as specified.

4. In a trestle, a clamping-plate provided with a lateral extension having recesses upon its lower face, an opposite plate provided with apertures through which said extensions pass, and a wedge-block bearing upon the upper portion of said plates; substantially as specified.

5. In a trestle, a clamping-plate provided with a lateral extension having recesses upon its lower face, an opposite plate provided with apertures through which said extensions pass, a wedge-block bearing upon the upper portion of said plates, and a connecting-plate at the upper portion of said clamping-plates held by said wedge; substantially as specified.

6. In a trestle, a clamping-plate provided with a lateral extension having recesses upon its lower face, an opposite plate provided with apertures through which said extensions pass, a wedge-block bearing upon the upper portion of said plates, and a connecting-plate having ribs or projections upon its upper surface and held in contact with said clamping-plates by said wedge; substantially as specified.

7. In a trestle, the combination with a leg, of an extension-piece, a brace-plate, a flexible band having its opposite ends secured to said plate, a tension-screw threaded in said plate, and a series of washers slidingly mounted on said clamping-band; substantially as specified.

8. In a trestle, the combination with a leg, of an extension-piece, a brace-plate, a flexible band having its opposite ends secured to said plate, a tension-screw threaded in said plate, a series of washers slidingly mounted on said clamping-band, and a bearing-plate upon said tension-screw; substantially as specified.

9. In a trestle, the combination with a supporting-leg, of an extension thereto, a bracing-plate provided with a slot at one end and of increased thickness adjacent to said slot, a flexible band having enlargements at its ends one of which is removably held in said plate, and a tension-screw threaded in said plate; substantially as specified.

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