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J. FRAVEL.

KNOCKDOWN TRESTLE.

APPLICATION FILED MAR. 14, 1907.

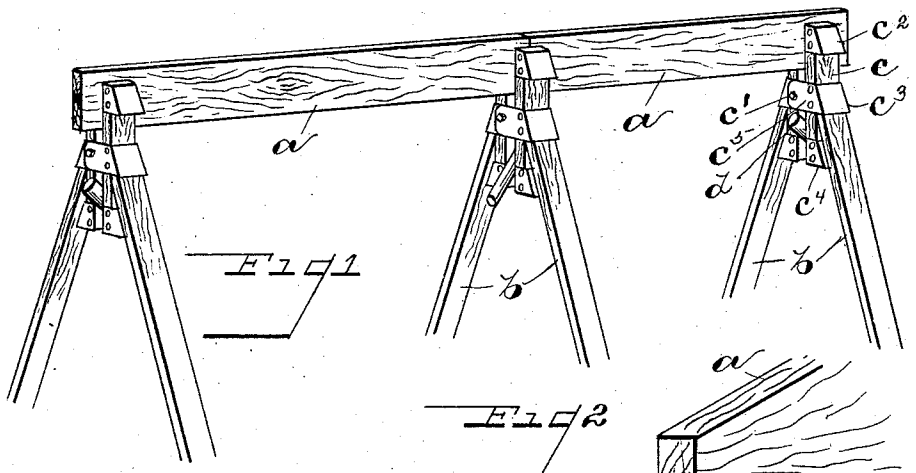


Fig. 1.

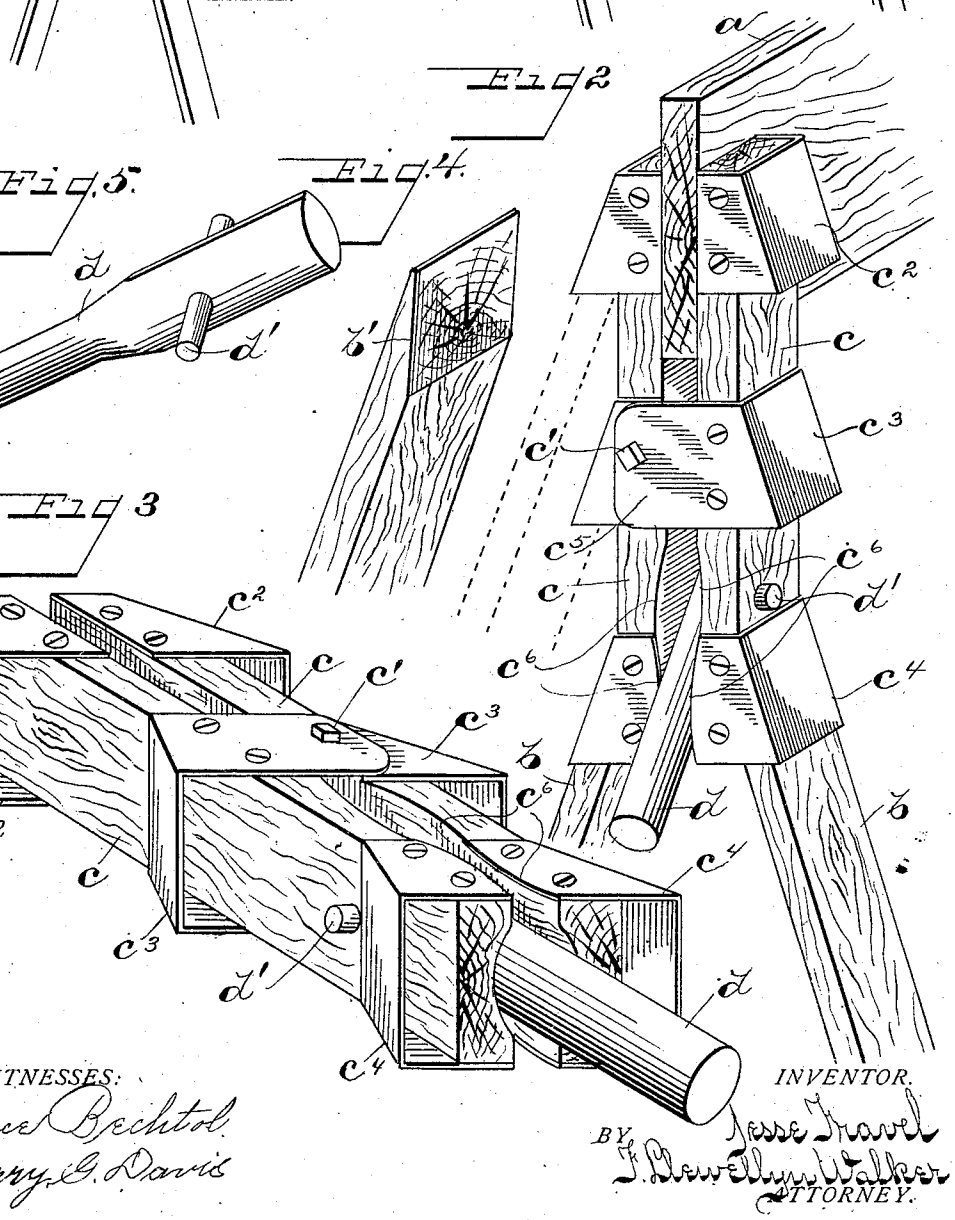


Fig. 2.

Fig. 5. Fig. 4.

Fig. 3.

WITNESSES:

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KNOCKDOWN TRESTLE.

No. 872,722. Specification of Letters Patent. Patented Dec. 3, 1907.

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To all whom it may concern:

Be it known that I, JESSE FRAVEL, a citizen of the United States, residing near Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Knockdown Trestles, of which the following is a specification.

My invention relates to trestles and particularly to knock-down trestles especially adapted to builders use.

The object of the invention is to simplify the means and mode of operation of such devices whereby they will not only be cheapened in construction, but are rendered more reliable in operation, easily adjusted and disengaged, and unlikely to get out of repair.

A further object is to provide a device in which ordinary boards of different lengths may be used as a beam, and with which legs of different length may be employed, and to provide means whereby the respective legs may be differently adjusted to compensate for any inequalities in the surface upon which the trestle rests, and to permit the trestle to be adjusted to different heights while using a given set of legs.

With the above primary and other incidental objects in view, as will appear from the specification, the invention consists of the construction, the devices, parts, and combination thereof or their equivalents hereinafter described and set forth in the claims.

In the drawings herewith, Figure 1 is a perspective view of the assembled trestle showing the method of extending the beam when a trestle of great length is required. Fig. 2 is a perspective view of one end of an assembled trestle. Fig. 3 is a perspective view of the connecting portion of the trestle disengaged from the beam, and legs. Fig. 4 is a detail perspective view of the upper extremity of one of the leg members. Fig. 5 is a detail perspective view of the adjusting lever.

Like parts are indicated by similar characters of reference throughout the several views.

Referring by letter to the drawings, *a* is the beam which may be any ordinary board; it being unnecessary to give the beam an especial shape. The legs *b*—*b* are beveled at their upper ends as indicated at *b'* Fig. 4. To connect the beam *a* and legs *b*—*b*, a connecting member is provided comprising parallel levers *c c* having a common fulcrum point *c'*. Attached to each of the levers *c* are a plurality of sockets c^2, c^3, c^4 preferably formed of sheet metal, in the shape of an inverted triangular pocket, within which the beveled end *b'* of the leg *b* is adapted to fit. The socket c^3 of one lever is extended as at c^5 and provided with a pivotal connection with the opposite lever *c* at *c'*. It is obvious that instead of this construction other means of hinging the levers *c*—*c* might be employed. Below the hinged connection of said levers *c*—*c* the adjacent faces of the levers are irregularly shaped to provide cam faces as at c^6.

Pivotally mounted intermediate the levers *c*—*c* is an adjusting lever *d*. This lever *d* is preferably mounted on trunnions *d'* engaging in the levers *c*—*c*. The lever *d* on being moved about its pivotal connection engages the cam faces c^6 of the levers *c c* and moves said levers about their pivotal connection to cause the upper ends thereof to grip the beam *a*. To facilitate the operation of the device the lever *d* is preferably formed cam or wedge shaped in cross section, as shown in Fig. 5.

In operation the beam *a* is placed between the upper ends of the levers *c* and the adjusting lever *d* operated to cause the levers *c* to tightly engage the beam. The beveled ends *b'* of the legs *b* are fit within the sockets c^2—c^3—c^4 as desired. If the device is being used on an uneven or sloping surface, the legs of one side may be engaged in the sockets c^2 while those of the opposite side may engage the sockets c^4, or all the legs may engage corresponding sockets and be shifted to other corresponding sockets to raise or lower the structure. Also an entire set of legs of greater length may be employed without necessitating the construction of an entire new structure, but may be used with the same beam, and connecting devices; in the same manner the structure may be made of greater or less length by the use of a board of required length as a beam.

It is obvious that there is thus provided a structure embodying the features of advantage before enumerated as desirable and which is susceptible to modification in its form, proportion and detail arrangement without departing from the principle involved or sacrificing any of its advantages.

Having thus described my invention, I claim:

1. In a knock-down trestle, an independent beam, independent legs, vertical members hinged together between which said beam extends, a cam member pivoted be-

tween said hinged members and adapted to move said members to clamp the beam, and means for attaching said legs, substantially as specified.

2. In a knock-down trestle an independent beam, independent legs, two parallel levers having a common fulcrum, a third lever pivoted between said parallel levers adapted to cause said levers to grip said beam and means for engaging said legs with said parallel levers, substantially as specified.

3. In a knock-down trestle, an independent beam, independent legs, two parallel levers having a common fulcrum, cam faces formed on the adjacent sides of said levers, an adjusting member engaging said cam faces to move said parallel levers about their pivotal connections and cause it to engage the beam and means for engaging said legs, substantially as specified.

4. In a knock-down trestle an independent beam, independent legs, two parallel levers, a plurality of sockets attached to said levers, in any of which said legs are adapted to engage, an extension on one of said levers pivotally engaged with the corresponding lever, a pivoted lever for moving said parallel levers about their pivotal connections, substantially as and for the purpose specified.

In testimony whereof, I have this 2nd day of March 1907 hereunto set my hand.

JESSE FRAVEL.

Witnesses:

HARRY G. DAVIS,

V. A. TROXELL.