E. B. GILES.

TRESTLE JOINT.

APPLICATION FILED APR. 7, 1920.

1,352,188. Patented Sept. 7, 1920.

Fig. 1

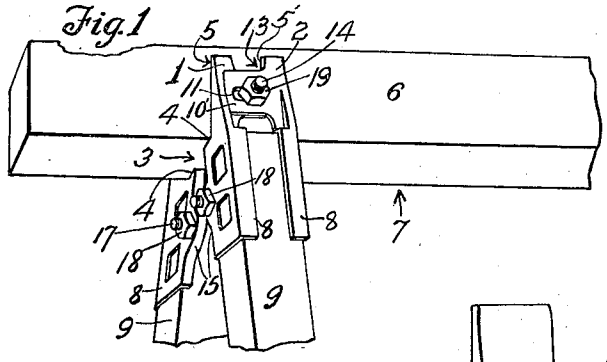


Fig. 4

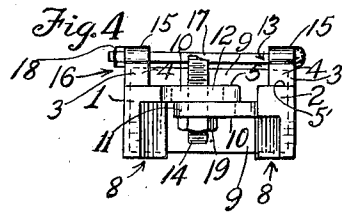


Fig. 3

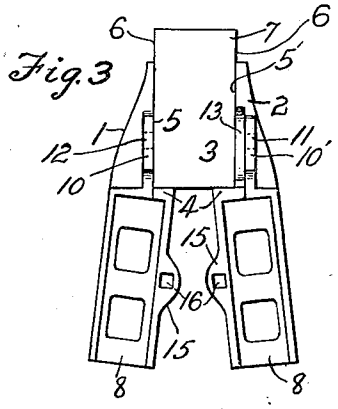


Fig. 2

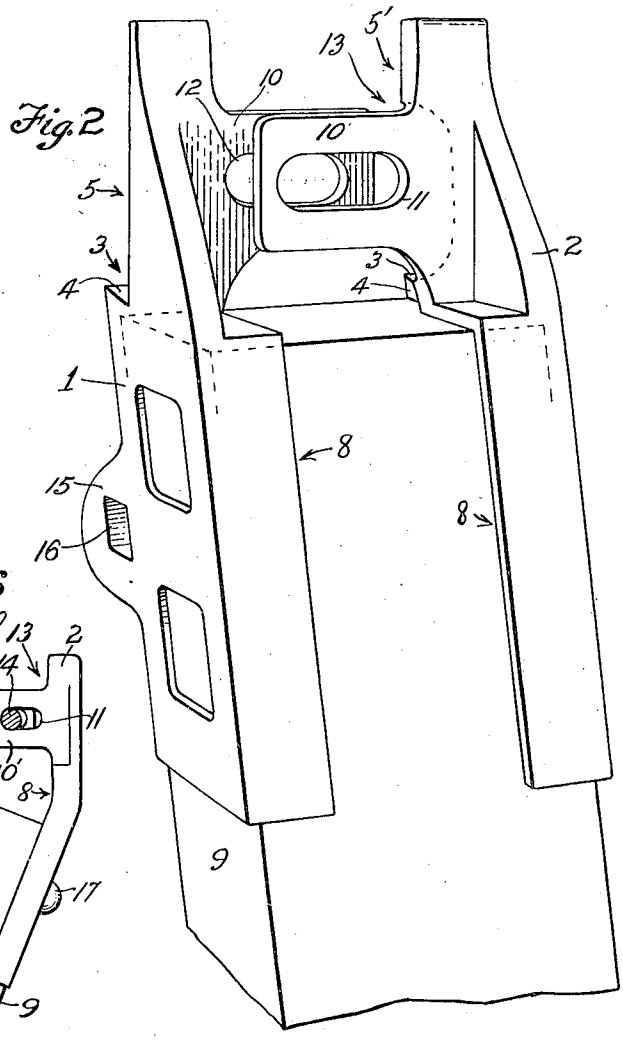


Fig. 5

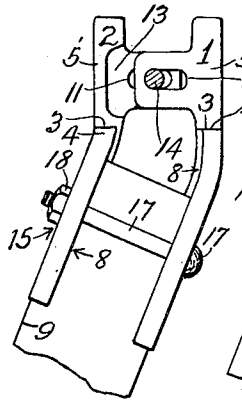
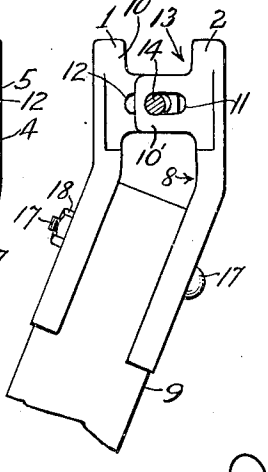


Fig. 6



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UNITED STATES PATENT OFFICE.

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TRESTLE-JOINT.

1,352,188. Specification of Letters Patent. Patented Sept. 7, 1920.

Application filed April 7, 1920. Serial No. 373,927.

To all whom it may concern:

Be it known that I, EDGAR BIRD GILES, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Trestle-Joint, of which the following is a specification.

This invention relates to devices for connecting trestle legs to trestle backs in the construction of scaffolding, staging or temporary platforms.

In building operations a greater or less number of scaffolding trestles are required upon each job and the trestles for any particular part of the work are required to be of predetermined height; and sometimes at one situation trestles of two or three different heights are required at successive stages to complete the work at one location. The trestle legs may be of different cross-sectional dimensions owing to irregularities in lumber or to different requirements as to strength. With legs of greater length greater cross-sectional dimensions are required and it is desirable to make changes from one length of leg to another with as little delay and expenditure of labor as possible. It is also desirable that the legs extend aslant with respect to the back, both sidewise and endwise in order to give maximum strength and stability.

An object of this invention is to provide a trestle joint that will fill all the requirements; that will be cheap and simple, and that is easily applied and removed.

The trestle joints for this purpose are made in pairs, each member of each pair having at its top a seat for the trestle back and underneath said seat means for fixing a trestle leg to the joint.

In my present invention I make provision for rigidly securing the parts together irrespective of the cross-sectional dimensions of the same, so that when the same joint is attached to a trestle back, it is readily adapted to connect to said trestle back, legs of different cross-sectional dimensions.

Other objects, advantages and features of invention may appear from the accompanying drawing, the subjoined detail description and the appended claims.

The accompanying drawing illustrates the invention.

Figure 1 is a fragmental view of a trestle with legs of one size connected to the trestle back by a pair of adjustable trestle-irons or joints constructed in accordance with this invention.

Fig. 2 is an enlarged perspective view of an adjustable trestle-iron or joint shown in Fig. 1, detached from the back and applied to a leg of larger cross-section than shown in Fig. 1.

Fig. 3 is an elevation showing the furthermost sections of the pair of irons shown in Fig. 1; said sections being in position under and against the sides of a trestle-back.

Fig. 4 is a plan view of one complete leg socket in exaggerated proportions, clamped in position on a leg. A fragment of the bolt which normally extends through the trestle-back and connects to the trestle-back the joints for a pair of legs, is also shown.

Fig. 5 is a view of the inner side of a bent leg socket adapted to hold one leg longitudinally aslant as well as laterally aslant, a fragment of a leg is shown clamped in place.

Fig. 6 is a view analagous to Fig. 5, showing the outer face of the companion leg.

The joint is constructed of two sets of complementary, relatively adjustable, socket sections 1, 2 each of which sections is provided with a trestle-back receiving seat 3 formed by the shoulders 4 and the faces 5, 5′ adapted to fit against the lateral faces 6 of the trestle-back 7; and said sections are each provided with a semi-socket 8 of aggregate depth less than the width of the leg 9, to the edges of which the two sections may be applied tightly, the semi-sockets coöperating to form a leg socket. The connection between the two sections of each socket is composed of two tongues 10, 10′ one projecting from each section of the socket piece toward the other, and provided with a horizontal slot as at 11 or 12. Section 2 of the joint is provided with a groove 13 so that the adjacent surface may be flush with the face and tongue of section 1. The tongues may each have a slot, and in juxtaposition form means by which the sections may be secured together by a bolt 14 passed through both tongues of both pairs of socket pieces applicable to form a joint securing two legs at one place to and on opposite sides of the trestle-back.

The seat 3 for the trestle-back 7 is composed of two shoulders 4 arranged at the inner edges of the sections; and each of the sections is provided upon its inner face below

said shoulders 4 with a lug 15 and a hole 16 to receive a clamping bolt 17 which is provided with a nut 18 and is adapted to force the two sections toward each other to clamp the leg.

In practice the trestle back 7 is bored at the appropriate places to receive the bolts 14. Each leg is fitted in the socket formed of the sections 1, 2; and said sections are clamped on the leg by means of the bolt 17 and nut 18. Then the legs are applied as indicated in Fig. 1 to opposite vertical faces of the back 7, and a bolt 14 is passed through the slots 11, 12 on one side of the back 7, thence through the back and then through the slots 11 and 12 on the other side of the back. Then the nut 19 of the bolt 14 is applied and tightened, thus rigidly fixing the legs in place.

In order to knock down the trestle, it is only necessary to loosen the nuts and withdraw the legs, leaving the sockets on the back, or to withdraw bolts 14, leaving the sockets clamped on the legs.

In order to change from one size of leg to another, it is only necessary to loosen the nut 19, drive back the bolt 14 slightly, loosen nuts 18, withdraw the legs 9 and adjust the members 1, 2 to the requisite width for clamping the desired legs, then insert the legs into the sockets therefor, and re-tighten the nuts 18, and finally the nuts 19.

The operation of application, change, and removal with respect to the bent legs shown in Figs. 5 and 6 is substantially the same as that just described.

The seats 3 for the trestle-back may be made in any desired angular relation to the clamping socket so as to allow the legs to extend aslant longitudinally as well as laterally at any desired angle to the trestle-back.

I claim.

1. A trestle joint comprising two relatively adjustable socket sections; means for fixing said socket sections to the side of the trestle-back, and adjustable means for clamping said socket sections upon a trestle leg.

2. A trestle joint comprising two complementary members provided with tongues and sockets, and with lugs extending from the socketed portions; means to force the lugs toward each other to clamp a leg; and a bolt for securing the tongues to a trestle-back.

3. A trestle joint comprising two complementary sections provided with tongues and sockets, a bolt for securing the tongues to a trestle-back, there being projections from the socketed portions of said sections provided with bolt holes, and a bolt extending through said bolt holes and adapted to clamp the sections upon a trestle leg.

4. The combination with a trestle-back of two sets of complementary adjustable socket members, each set being slidably connected by slot and bolt connections to form sockets of variable sizes; and means for clamping said sets of socket members to the trestle-back on opposite sides thereof.

5. In a trestle joint comprising two sockets, each of which sockets is composed of two complementary members provided with lugs adapted to receive a bolt and also provided with tongues slotted to receive a bolt by means of which said complementary members are adapted to be bolted together on the trestle-back in position to fit trestle-legs of different sizes; there being shoulders on said socket pieces adapted to support the trestle back and to hold said socket pieces at an angle to such trestle-back; a bolt adapted to draw the lugs toward each other, and a bolt extending through the tongues and trestle-back to hold said trestle-back and legs in rigid relation to one another.

6. A trestle joint socket comprising two adjustable complementary sections having a perpendicular face adapted to be applied to the side of a trestle-back, and having a socket adapted to be clamped upon a leg to support the trestle-back, said joint having its socketed leg-receiving end arranged in such angular relation to the perpendicular face, as to form a brace by extending the leg outward both laterally and longitudinally relative to the trestle-back.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 1st day of April, 1920.

EDGAR BIRD GILES.

Witness:
JAMES R. TOWNSEND.