March 29, 1955 R. K. SQUIRE 2,705,174

SOCKET STRUCTURE FOR TRESTLES

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Fig. 1.

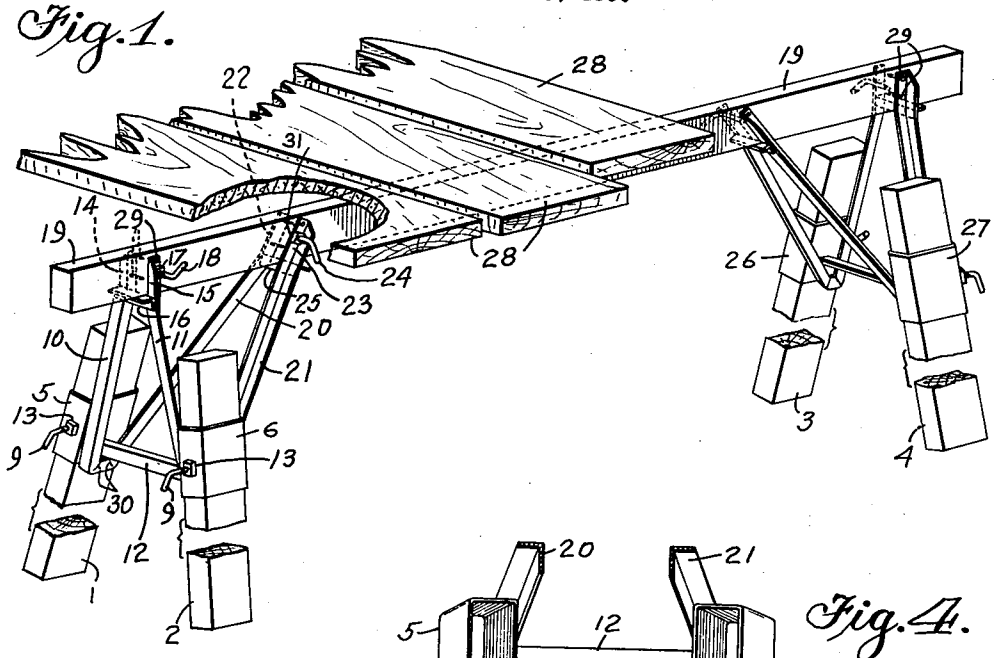


Fig. 4.

Fig. 2.

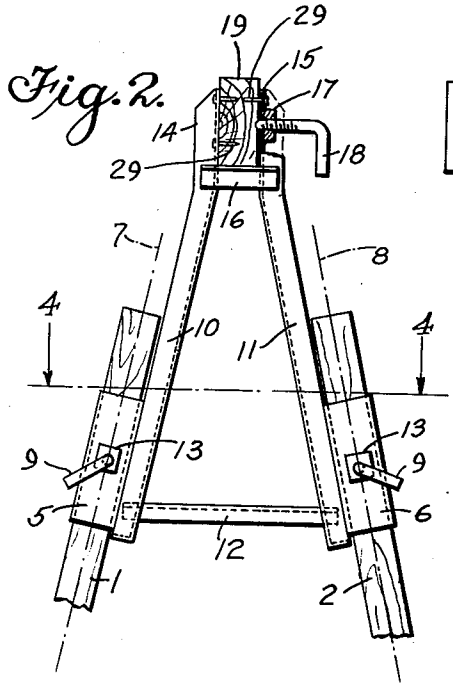
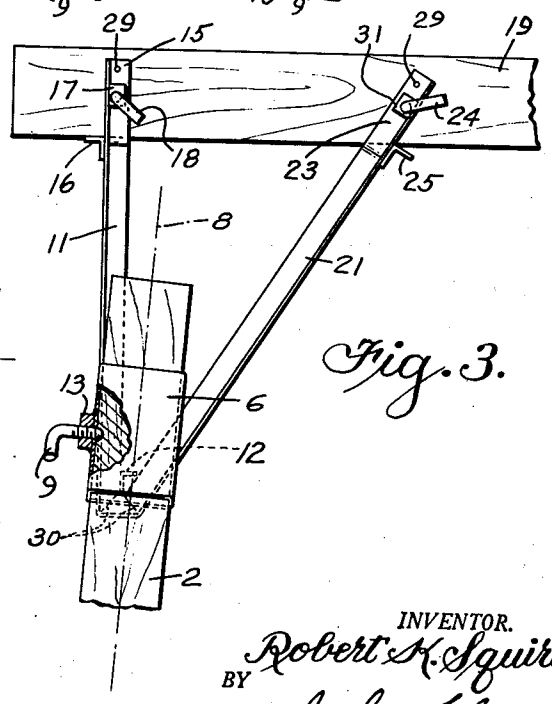


Fig. 3.



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SOCKET STRUCTURE FOR TRESTLES

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2 Claims. (Cl. 304—5)

This invention relates to the construction of scaffolding, and especially to temporary structures of this character.

Such structures are required, for example, by the building trades, for plasterers, painters, or the like.

It is one of the objects of this invention to provide a simple and inexpensive trestle structure for this purpose.

It is another object of this invention to provide a socket member capable of detachably joining wood pieces together to form a jack or trestle upon which a platform may be supported.

It is still another object of this invention to provide a device of this character that is easily and quickly assembled and disassembled.

It is still another object of this invention to provide a structure of this character that permits ready height adjustment within limits.

This invention possesses many other advantages, and has other objects which may be made more clearly apparent from a consideration of one embodiment of the invention. For this purpose there is shown a form in the drawings accompanying and forming part of the present specification. The form will now be described in detail, illustrating the general principles of the invention; but it is to be understood that this detailed description is not to be taken in a limiting sense, since the scope of this invention is best defined by the appended claims.

Referring to the drawings:

Figure 1 is a pictorial view illustrating the invention in use for supporting a platform;

Fig. 2 is an end elevation thereof;

Fig. 3 is a fragmentary side elevation; and

Fig. 4 is a sectional view, taken along a plane corresponding to line 4—4 of Fig. 2, with a part of the wood structure being removed.

The trestle includes four wood pieces **1**, **2**, **3**, and **4** forming the legs, and a cross wood mmeber **19**. These wood pieces may all be standard two-by-fours. The legs **1** and **2**, as well as legs **3** and **4**, converge upwardly.

These legs are firmly clamped within tubular socket members **5**, **6**, **26** and **27**. Since the clamping and supporting structure is similar for both the pairs of legs **1** and **2**, and legs **3** and **4**, it is necessary to describe only one of these structures.

Thus, the socket members **5** and **6** may have a rectangular configuration having axes **7** and **8** (Fig. 2) that converge upwardly, corresponding to the converging of the legs. The legs **1** and **2** may be clamped tightly within the sockets **5** and **6** by the aid of the clamping screws **9**, provided with appropriate handles and extending respectively through a threaded boss **13** attached to a wall of each of the sockets.

The sockets **5** and **6** are rigidly fastened together by the aid of a frame having the converging arms **10** and **11**. The arms extend upwardly beyond the sockets **5** and **6**. They may be conveniently formed of angle irons. A strut member **12** also formed of angle iron joins the lower ends of these converging arms **10** and **11**. The socket members **5** and **6** are firmly attached to these arms as by welding. The strut **12** is also attached to the arms **10** and **11** as by welding.

As shown in Fig. 3, the axes of the sockets are slightly off vertical. Since the other sockets **26**, **27** are also similarly angled, the effect is to stabilize the entire trestle structure.

The upper ends of the arms **10** and **11** terminate in spaced parallel ears **14** and **15**. Connecting the lower

ends of these ears is a rest member **16** also formed of an angle iron. Ear **15** is provided with a boss **17** into which a clamping screw **18** is threaded.

The transverse wood support **19** extends between the ears **14** and **15**, and rests upon the rest **16**. The clamping screw **18** can be tightened to hold this member **19** firmly in place.

A supplemental frame is provided, including the converging arms **20** and **21**. These arms are conveniently formed integrally with arms **10** and **11**, respectively. As clearly shown in Fig. 3, one flange of the angle iron forming each set of arms **10**, **20**, and **11**, **21** may be slotted to permit the bending operation. The lines **30** indicate where triangular portions of the flange have been removed for permitting this bending operation.

Arms **20** and **21** terminate at their upper ends in the parallel ears **22** and **23**. The ear **23** is provided with a clamping screw **24**, which is threaded into a boss **31** formed on the ear. An angle iron rest **25** joins the lower portions of the ears **22** and **23**. The wood memer **19** is also accommodated between the ears **22** and **23**.

In use, the member **19** and the wood pieces **1**, **2**, **3**, and **4** are assembled, as indicated in Fig. 1, in sockets **5**, **6**, **26**, and **27**. The pieces of wood **1**, **2**, **3**, and **4** may be of any desired length, so as to provide a support for the planks **28** forming a platform or scaffording, and resting on member **19**. As many of the jacks or trestles shown in Fig. 1 may be used as are required for adequately supporting the platform **28**.

In order to insure against lengthwise movement of the member **19**, nails **29** may be driven through the ears **14**, **15**, **22** and **23**.

Adjustment of the height of the platform may be accomplished by adjusting the position of the wood pieces **1** and **2** in the sockets **5** and **6** and the wood pieces **3** and **4** in the sockets **26** and **27**. The amount of adjustment corresponds to the clearance between the tops of the socket members and the lower ends of the transverse piece **19**.

In order to disassemble the structure, the clamping screws **9**, **18**, and **24** may be released and the wood pieces removed from the sockets and from between the pairs of ears **14—15** and **23—23**.

The inventor claims:

1. In a device of the character described: a pair of integral frame members each comprising arms inclined to each other; a first rest member rigidly joining and spacing respectively one of the arms of each of the frame members, and defining with the ends of said arms so joined a channel shaped space; a second rest member rigidly joining and spacing respectively the other arms of the frame members, and defining with the ends of said arms so joined a second channel shaped space; a first tubular open ended socket element of rectangular configuration and secured to one of the frame members; a second tubular open ended socket element of rectangular configuration and secured to the other of the frame members; the projection of the axes of said elements into the plane of the frame members to which they are joined being inclined with respect to a line joining said rest members in said planes respectively; and a strut member rigidly secured to said frame members respectively remote from said rest members, said strut member being of such length as to incline said axes of said socket elements with respect to each other.

2. In a device of the character described: a pair of intergral frame members each comprising arms inclined to each other; a first rest member rigidly joining and spacing respectively one of the arms of each of the frame members, and defining with the ends of said arms so joined a channel shaped space; a second rest member rigidly joining and spacing respectively the other arms of the frame members, and defining with the ends of said arms so joined a second channel shaped space; a first tubular open ended socket element of rectangular configuration and secured to one of the frame members at the apex thereof, the axis of said first element being substantially parallel to the plane of said one frame member and inclined to a line joining said rest members in said plane, said axis of said first element being intermediate said arms of said one frame member; a second tubular

open ended socket element of rectangular configuration and secured to the other of the frame members at the apex thereof, the axis of said second element being substantially parallel to the plane of said other frame member and inclined to a line joining said rest members in said plane, said axis of said second element being intermediate said arms of said other frame member; a strut rigidly secured to said frame members respectively at the apices thereof, said strut member being of a greater length than said rest members to incline said axes of said socket elements with respect to each other; and clamping screws passing respectively through the walls of said socket elements.

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