R. G. CHESHIRE.

HINGE FOR TRESTLES AND THE LIKE.

APPLICATION FILED JUNE 5, 1918.

1,327,808. Patented Jan. 13, 1920.

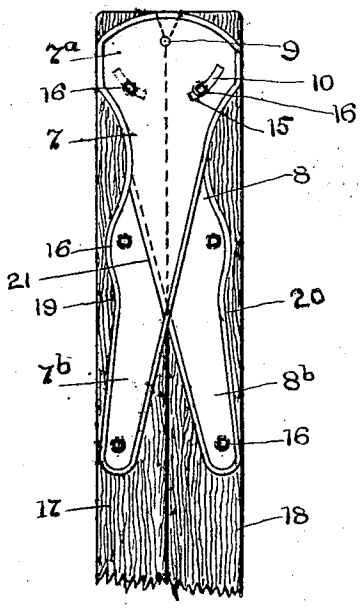


Fig. 1.

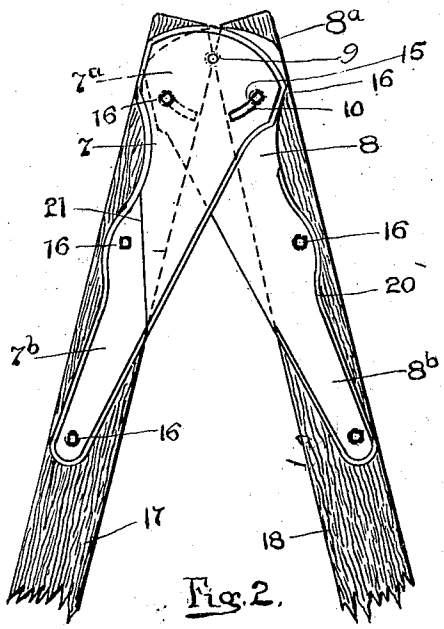


Fig. 2.

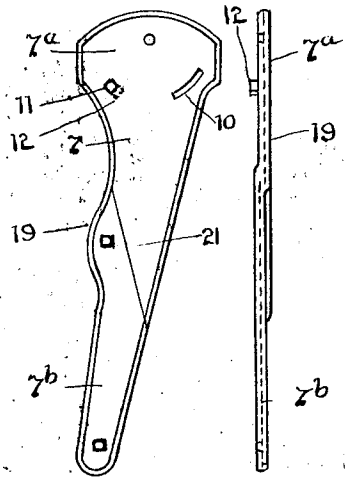


Fig. 3.

Fig. 4.

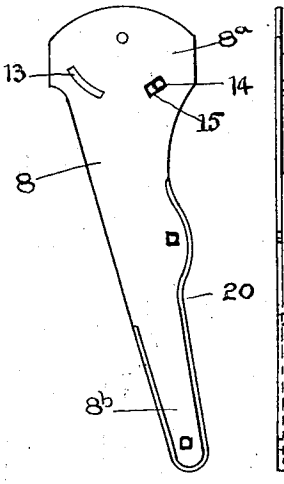


Fig. 5.

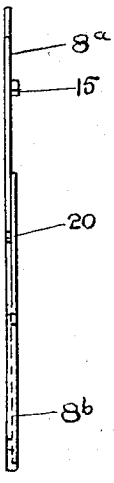


Fig. 6.

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HINGE FOR TRESTLES AND THE LIKE.

1,327,808. Specification of Letters Patent. Patented Jan. 13, 1920.

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To all whom it may concern:

Be it known that I, ROBERT GEORGE CHESHIRE, subject of the King of Great Britain, residing at 98 Grosvenor street west, Ladywood, in the city of Birmingham, in the county of Warwick, England, have invented new and useful Improvements in Hinges for Trestles and the like, of which the following is a specification.

This invention relates to hinges for trestles and the like and has for its object to provide means whereby the hinge is stronger and more rigid and will withstand side strain, the invention being particularly applicable to painters' trestles.

According to this invention, the hinge members are formed about their pivot with broad cheeks or flaps which considerably overlap and bear on each other so that should any side strain be caused to the hinge body, it is taken up by the broad cheeks or flaps mutually. This resistance to side strain is enhanced by arranging the arms of the hinge body to partly overlap at their inner edges when the hinge is in the closed position. The broad cheeks or flaps also overlap to take up side strain both when the hinge is open or closed, and the arm portions also overlap but in a reduced degree. In each cheek or flap there is provided a slot in which engages a pin or like projection from the other check or flap to limit the extent of opening or closing of the hinge.

My invention will now be described in conjunction with the accompanying drawings, in which:—

Figure 1 illustrates the hinge attached to the trestle members in the position it occupies when the trestle is closed.

Fig. 2 illustrates the open position of the hinge upon the trestle members.

Fig. 3 is a front elevation of the front member of the hinge.

Fig. 4 is a side elevation of Fig. 3.

Fig. 5 is a front elevation of the rear member of the hinge, and

Fig. 6 is a side elevation of Fig. 5.

The hinge comprises a pair of members 7 and 8 of substantially similar shape, (compare Figs. 3 and 5). The front member 7 is pivotally connected by means of a bolt or rivet 9 to the rear member 8, each member of the hinge being formed with a broad cheek portion 7^a and 8^a respectively which extends downwardly into the elongated arm portion 7^b and 8^b respectively.

The front member 7 has an arcuate slot 10 formed in the check portion 7^a and also a square slot or bolt hole 11 adjacent to which and projecting from the rear face of the cheek is a square pin or the like 12. This pin is adapted to engage in a segmental slot 13 formed in the cheek portion 8^a of the rear member 8 of the hinge, and the cheek 8^a has a square slot or bolt hole 14 formed therein adjacent to which is the square pin 15 projecting from the front face of the cheek 8^a and adapted to engage in the slot 10 in the cheek 7^a.

Bolts 16 are employed to secure the members 7 and 8 to the trestle members 17 and 18, the upper pair of bolts 16 passing through the slots in the cheeks of the members 7 and 8 and forming also limiting stops for the extended motion of the hinge members by the abutment of the outer ends of the segmental slots 10 and 13 and the square pins 12 and 15 on either side of the said bolts 16, as seen in Fig. 2. The square pins 12 and 15 are slightly longer than the thickness of the metal of the members 7 and 8 into the slots 10 and 13 respectively of which they pass, thereby the end of the pin 12 abuts against the wood of the trestle while the end of the pin 15 makes an abutting contact with the underside of the head of the bolt 16, and by this means prevents the two members 7 and 8 being jammed together against each other and between the bolt heads 16 and the legs 17 and 18 of the trestle. The pins 12 and 15 may therefore be said to form distance stops and they also form secondary or emergency stops in the event of the breakage of the bolts 16.

The front member 7 of the hinge has a strengthening flange 19 formed thereon all around the edge of the member and the rear member 8 has a flange 20 thereon around the edge of the extended arm portion 8^b of the member as seen clearly in Fig. 5. The member 7 is off-set at 21 as seen in the drawings so as to form a flat rear surface in the same plane of the two members 7 and 8 so that the two members may be nicely fitted to and secured upon the trestle members 17 and 18.

A right and left pair of hinges constitute the necessary equipment for a trestle, one hinge (comprising two members 7 and

8) being attached to each side of the trestle, any lateral strain transmitted to the legs of the trestle is by this means taken up by one or other of the hinges.

I claim:—

1. A hinge for trestles and the like comprising two members of substantially the same configuration having overlapping broad cheek portions and partially overlapping integral arm portions, a hinge pivot connecting said members, an arcuate slot in each of said members, and a pin projecting from each of said members from opposite directions into the arcuate slot of the other member.

2. A hinge for trestles and the like comprising two members of substantially the same configuration having overlapping broad cheek portions and partially overlapping integral arm portions, a hinge pivot connecting said members, an arcuate slot in each of said members, and a pin projecting from each of said members from opposed directions into the arcuate slot of the other member, said pins being of a length slightly exceeding that of the thickness of the metal surrounding said slots.

3. A hinge for trestles and the like comprising two members having overlapping broad cheek portions and partially overlapping integral arm portions a hinge pivot connecting said members, a segmental slot in each of said members, a pin projecting from each of said members into the segmental slot of the other member, and a plurality of bolt holes formed in said members one of the said bolt holes being located adjacent to each of the said pins.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT G. CHESHIRE.

Witnesses:

GEORGE E. LOLKES,

D. M. HEATLEY.