

Oct. 20, 1925.

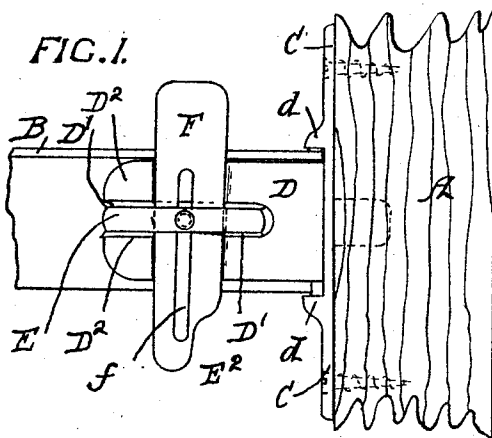
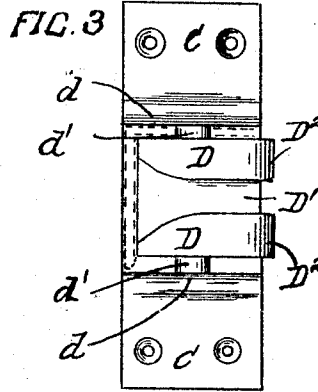
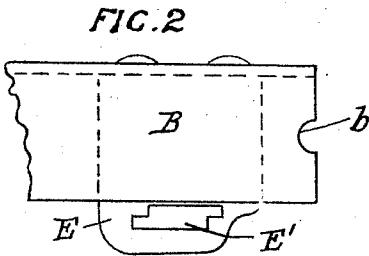
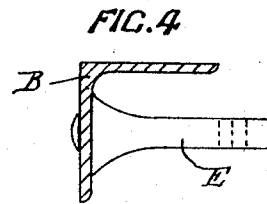
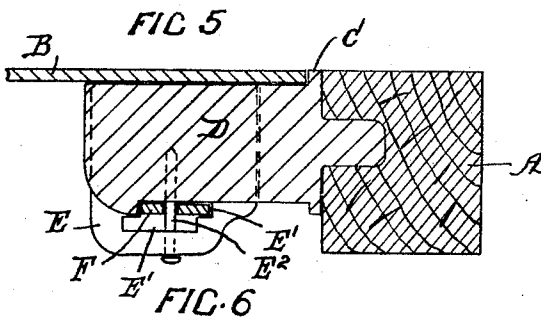
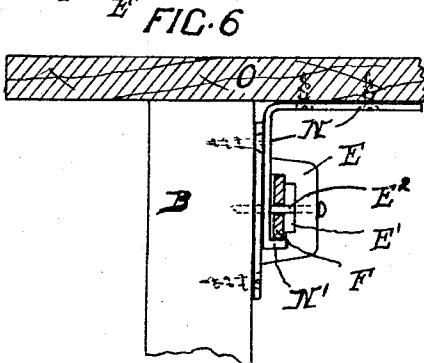
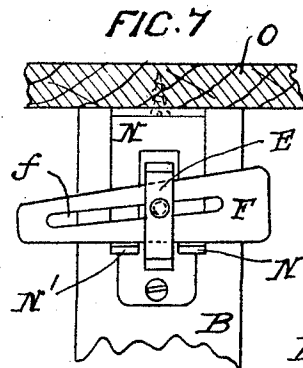
H. A. JENKINS

1,557,589

JOINTING MEANS

Filed Feb. 23, 1923

2 Sheets-Sheet 1



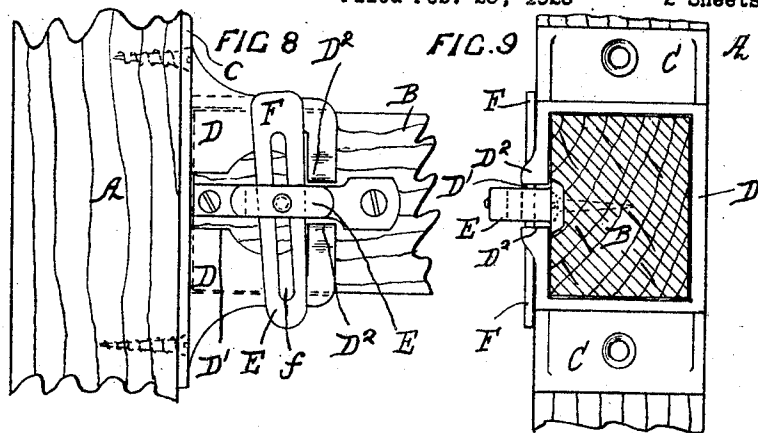
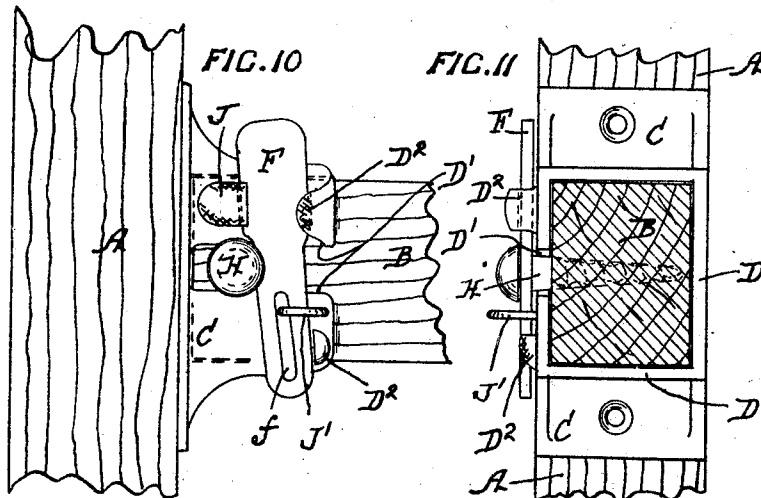
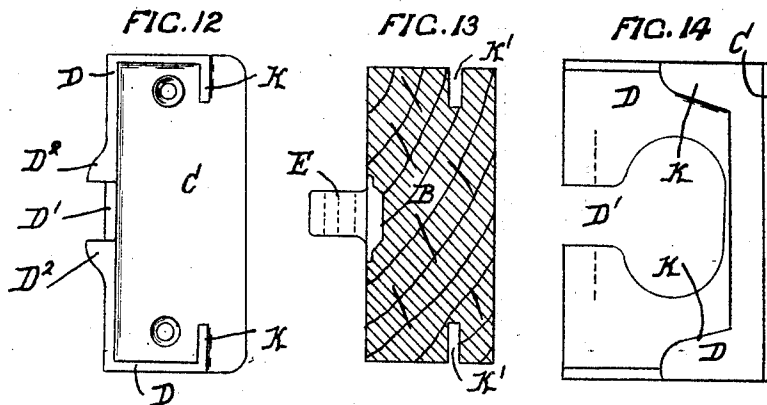
Inventor:
Halbert Augustine Jenkins
By *Lucas D. Smith*
Attorney.

Oct. 20, 1925.

H. A. JENKINS
JOINTING MEANS

1,557,589

Filed Feb. 23, 1923 2 Sheets-Sheet 2



Inventor:

Halbert Augustine Jenkins
By *Luise O. Jenkins*
Attorney

UNITED STATES PATENT OFFICE.

HALBERT AUGUSTINE JENKINS, OF HAWERA, NEW ZEALAND.

JOINTING MEANS.

Application filed February 23, 1923. Serial No. 620,765.

To all whom it may concern:

Be it known that I, HALBERT AUGUSTINE JENKINS, subject of the King of Great Britain, residing at 34 Union Street, Hawera, Dominion of New Zealand, have invented a new and useful Jointing Means, of which the following is a specification.

This invention has been devised with the object of providing means whereby a strong joint may be effected between two members of any article of structure that in the assembly thereof have to be connected together in a manner such that the connection may be made or broken at will, without the employment of skilled labour. The invention is particularly applicable to the jointing of the members of bedstead and table frames, counter structures, temporary partition or barrier framing, or other like articles in which framing members are to be connected to posts or standards or to flooring.

The invention has as its essential feature the provision of jointing means consisting in two main parts that are respectively attached to the members to be joined together. These parts are made of metal and are adapted to engage one another and then to be locked together by means of a wedge fitted in one part that draws the two parts together and holds them as one solid piece.

The invention may be carried out as to its details of construction in a number of different ways all embodying the same essential features. It is also adapted to be varied in its details according to the class of bedstead or article of furniture to which it is to be applied.

In the accompanying sheet of drawings a number of different forms of the invention have been illustrated and these will be hereinafter fully described in relation to such drawings.

Referring to the drawings:—

Figure 1 is a side elevation of the joint in the assembled and locked position, as adapted for connecting an angle iron side rail to the post of a bedstead frame.

Figure 2 is a plan of the side rail member of such joint.

Figure 3 is a face view of the post member of the joint.

Figure 4 an end view of Figure 2.

Figure 5 a longitudinal sectional plan of Figure 1.

Figures 6 and 7 are end and front elevations, respectively of a joint constructed for use in attaching a table top to the underframing of the table.

Figures 8 and 9 are side and end elevations respectively of a joint for wooden bedstead frames, in the assembled positions.

Figures 10 and 11 are respectively similar views of an alternative form of such a joint.

Figures 12 to 14 are views of jointing means adapted for attaching the rails of a table frame to the table legs.

Similar letters of reference relate to corresponding parts throughout all the figures.

Referring first to the jointing means shown in Figures 1 to 5, A represents the post and B the side rail of the bedstead frame, the latter in this case being formed of the usual iron angle bar section.

The post member of the joint is formed with a plate portion C that is adapted to be secured by screwing it or otherwise, to the face of the post, and a block D that projects outwards from the face of the plate for an approved distance. This block is made with a slot D' extending horizontally inward from its end, and on its vertical outer face, near the end, with shoulders or lugs D² projecting on each side of the slot.

The block D is made of such a size that the angle iron of the rail B will be adapted to fit over its top and inside when the joint is assembled and in order to make such fit one that cannot lift, a ledge *d* is formed across the face of the plate C between which and the block D the horizontal portion of the angle iron will fit, as shown in Figure 1.

In addition, the plate C between this ledge and the block is formed with a small centrally positioned projection *d'* that fits into a notch *b* (Figure 2) formed in the end of such horizontal portion of the angle iron B and thereby holds the said angle iron from lateral movement. The ledge *d* and knob *d'* are duplicated on the bottom side of the block D so that this member of the joint may be used either left or right handed as is required to suit the side rails of the different sides of the bedstead.

The rail member of the joint is provided with a tongue E of metal that is fastened by riveting, or in any other approved manner, to the inside surface of the vertical portion of the rail so that it projects outwards and

in a horizontal line such that when the rail is placed end on against the post member of the joint, the tongue will pass into the slot D' thereof. The tongue is made of such a length as to project beyond the outer surface of the block D when they are assembled together and in its projecting portion it is formed with a slot E' extending longitudinally along it. The slot is made of two widths as shown in Figures 2 and 5 and is so positioned that the inner portion of its width extends in the line of the shoulders D² of the block D while the outer portion extends outside the line of such shoulders.

A wedge F is provided to pass down through the slot E'. This wedge is made of equal thickness to one portion of the slot so that it may be placed to extend between the shoulders D² and the other end of the slot and thus when forced down to lock the two parts of the joint together, or it may be drawn upward and freed from the jamb and then placed in the outer portion of the slot so that the shoulders will be free of the wedge and the two parts may be drawn apart. This wedge is retained permanently within the slot E' by forming it with a slot f running through most of its height and through which a pin E² that is driven transversely in through the tongue E and across the slot E', also passes.

Thus the parts may be assembled together by drawing the wedge F up to the limit allowed by its slot f, placing it in the outer portion of the slot E' so that it will pass freely over the shoulders D² as the tongue E is passed into the slot D', and then positioning the wedge in the inner portion of the slot and forcing it downward to wedge between the shoulders and the end of the tongue slot. This draws the joint members firmly together and holds them in rigid engagement.

In the form of joint for use with wooden side rails shown in Figures 8 and 9 the same general features of construction are adapted, but in this case the block on the post member C is replaced by a socket D that receives the end of the rail B and makes a close fit all around it. The outside of this socket is formed with the slot D' formed to extend across its middle and the shoulders D² are formed on both edges of such slot on the outer surface of the socket. The tongue E is in this case fixed on a base plate G that is adapted to be countersunk into the surface of the side rail and to be fastened thereto by screws. It is also formed with the same form of a slot E' and is provided with the same type of wedge F as in the previous example and these work together in exactly the same manner as before described, in making and breaking the joint.

The construction shown in Figures 10 and 11 differs somewhat slightly from that

shown in Figures 8 and 9 although designed for a similar purpose, viz, for use with wooden side rails. In this case the same socket D is employed for the post member and it is made with the slot D' and with shoulders D² on each edge of the slot. This form of joint however provides for the tongue E being replaced by a coach bolt H that is screwed transversely into the rail B and the head of which is adapted to be engaged by the locking wedge F. The locking wedge is adapted to be driven down between the shoulders D² and the stem of the bolt H, behind its head, and thus to lock the rail within the socket. The wedge at its upper end is guided on its edge opposite the shoulders so as thus to keep flat, by means of the undercut knob J formed on the outside surface of the socket D and properly positioned to act in the manner mentioned. If desired, the wedge may be made a permanent attachment to the socket piece by forming it with a slot f extending longitudinally through the lower portion of its length, and by fastening it thereto by means of the staple J' passed through such slot and fixed in the face of the socket. This slot allows for the wedge being lifted far enough to cause its narrow lower end to be turned out from behind the shoulders and bolt head and then swung round on the staple out of the way of the side rail being drawn from the socket.

The form of joint shown in Figures 8 and 9 is adaptable for use in attaching the rails of a table frame to the table legs and such adaptation is illustrated in Figures 12 to 14 in which Figure 12 is an end view of the socket member for affixing to the table leg, Figure 13 is a cross section of the rail showing the tongue member affixed thereto, and Figure 14 is an inside elevation of the socket member. The construction and working of these parts follows closely in design those of the corresponding parts in Figures 8 and 9 but in order to provide for extra rigidity, the inside of the socket is preferably made as fins K, extending forwardly from the top and bottom, and these pass into grooves K' (Figure 13) made in the end of the rail to receive them, as the rail is passed into position within the socket.

For securing a table top to the underframing the jointing means may be made in the manner shown in Figures 6 and 7. These means comprise the combination with the tongue E affixed to the inside face of the frame B and having the slot E' and wedge F made and fitted in the manner before described, of a light bracket N of right angle form, one member of which is screwed to the underside of the table top O so that the other member is adapted to pass down against the inside face of the frame B. This vertical member is slotted to pass over the

tongue E and its extremity, on each side of the slot, is turned out to form shoulders N' with which the wedge F will engage when it is forced into its slot, as shown in the drawing and in the manner already fully explained.

I claim:—

1. Jointing means for frames having two members, comprising a plate portion secured to one of said members; a block associated with said plate portion and provided with a slot; a tongue secured to the other member and also having a slot, said tongue being adapted to project into and through the slot in said block; and a wedge adapted for engagement in the slot in said tongue to rigidly hold the two members together.

2. Jointing means for frames having two members, comprising a plate portion secured to one of said members; a block secured to said plate portion having a slot therein and shoulders on each side thereof; a tongue secured to the other member and also having a slot therein, said tongue adapted to project into and through the slot in the block; and a wedge adapted for engagement in the slot in said tongue to rigidly hold the two members together.

3. Jointing means for frames having two members, comprising a plate portion secured to one of said members; a block associated with said plate portion and provided with a slot; a tongue secured to the second member and provided with a slot, said tongue being adapted to project into and through the slot in said block; means on said plate portion for holding the second member from lateral movement; and a wedge adapted for engagement in the slot in said tongue to rigidly hold the two members together.

4. Jointing means for frames having two members, comprising a plate portion secured to one of said members; a block associated with said plate portion and provided with a slot; a tongue secured to the second member and provided with a slot, said tongue being adapted to project into and through the slot in said block; a wedge adapted for engagement in the slot in said tongue to rigidly hold the two members together; and means in said tongue for fastening the wedge in place.

In testimony whereof, I affix my signature.

HALBERT AUGUSTINE JENKINS.