

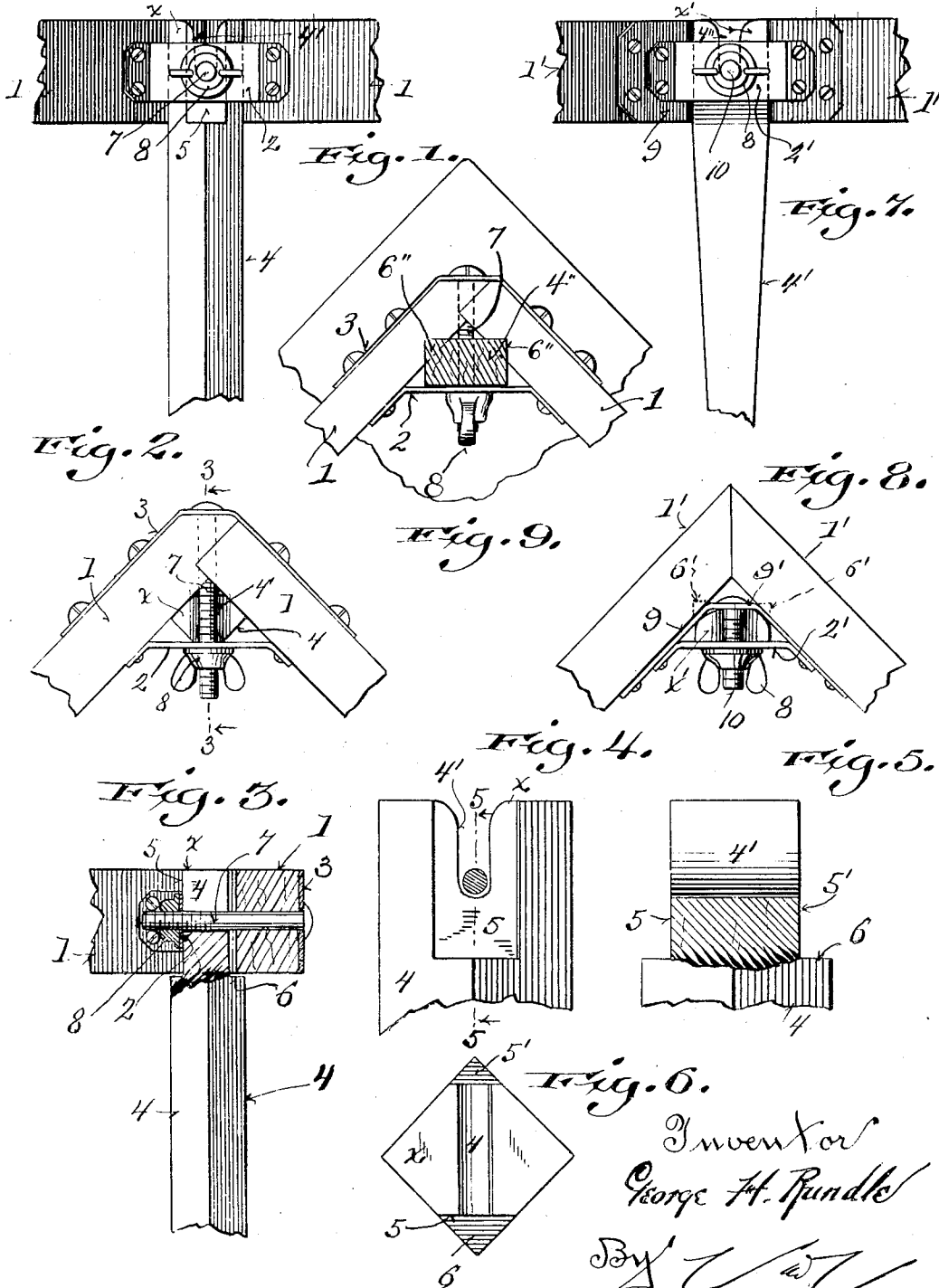
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G. H. RUNDLE

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KNOCK-DOWN LEG FOR FURNITURE

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Inventor  
George H. Rundle  
By *[Signature]*  
Attorneys

# UNITED STATES PATENT OFFICE

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## KNOCK-DOWN LEG FOR FURNITURE

George H. Rundle, Palmyra, Wis.

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1 Claim. (Cl. 45—48)

My invention refers to knock-down legs for furniture, and it is particularly designed for tables, or the like.

The specific object of my invention is to provide table legs which can be quickly fitted to sockets, or removed therefrom, and when so fitted the leg is securely braced and locked rigidly in its seat to avoid wobbling or loosening through wear, the locking means being in the form of a wing-bolt which can be adjusted securely without the aid of tools, or the like.

The particular advantage of this knock-down structure is that the tables so provided may be readily adapted for shipment, or easily stored when not in use, and thereafter quickly set up, and the legs when inserted in their sockets can be fastened in a few moments by those unskilled in the art. Tables so constructed are particularly advantageous where a number of such tables are required for public assemblages, picnics, card parties, et cetera.

A further object of my invention is to produce a table which can be cheaply manufactured, wherein the legs are held rigidly and can be adjusted as to their fit, irrespective of shrinkage or expansion of materials.

With the above and other objects in view, the invention consists in certain peculiarities of construction and combination of parts, as will be hereinafter fully set forth with reference to the drawing and subsequently claimed.

In the drawing:

Figure 1 represents a fragmentary inner elevation of a leg and table frame equipped with a leg embodying the features of my invention.

Figure 2 is a top plan view of the same with the table top removed.

Figure 3 is a longitudinal sectional view of said table leg structure, the same being indicated by line 3—3 of Figure 2.

Figure 4 is a detail elevation of the socket portion of the leg.

Figure 5 is a sectional elevation of the same, the section being indicated by line 5—5 of Figure 4.

Figure 6 is an end view of said leg socket.

Figure 7 is an elevation of a modified form of my invention, wherein a comparatively flat rectangular leg is employed in conjunction with an all-metal socket.

Figure 8 is a top plan view of the same, and

Figure 9 is a bottom plan view illustrating a leg rectangular in cross section fitted to a leg socket, such as illustrated in Figures 1 to 3 in the drawing, the section being taken substantially on the line 9—9 of Figure 7.

Referring by characters to the drawing, Figures 1 to 6, inclusive, 1—1 represent the rails of a rectangular frame suitably morticed to form a V-shaped corner. The inner faces of the rails

1—1 are connected by a metallic strap 2, suitably secured to said rails, and the outer surfaces of the rails are reinforced by a metallic binding strap 3, as best shown in Figure 2. The inner faces of the rails and strap 2 will thus form a triangular corner pocket or socket for the shank X of a rectangular table leg 4. The shank X is formed with a central slot 4' and is cut away, as best shown in Figures 3 to 6, to form a flat inner face 5 and flat outer face 5', which outer face 5' terminates in an abrupt weight-sustaining shoulder 6.

Hence, when the shank of the table leg is inserted within the socket, the flat face 5 will engage the juxtaposed face of the strap 2, and said leg is held in its vertical supporting position due to engagement of the shoulder 6 with the juxtaposed surfaces of the frame rails 1—1, when said leg is firmly drawn into its position, although it is understood that the shoulder 6, in some instances, may be dispensed with as a support, in which case the entire load strain of the leg will be taken up by the locking bolt 7.

The leg locking bolt 7, as best shown in Figures 2 and 3 of the drawing, passes through the strap 3 and mitre-joined portions of the rails 1—1, and also through an aperture in the strap 2. This bolt is provided with a wing-nut 8, and when the leg shank is adjusted to its socket, the bolt being drawn up will cause the rectangular leg shank to be frictionally gripped between the strap 2 and juxtaposed inner corner surfaces of said rail members 1—1. Furthermore, in drawing up and locking the leg in position just described, the bolt will also serve to rigidly brace and secure the frame rails 1—1, whereby the same, in conjunction with the strap 3, will be held against spreading.

It is understood that the bolt 7, as shown in the drawing, is adapted to enter the slot 4' of the leg shank when the same is seated within the corner socket just described.

Figures 4 to 6 illustrate the specific form of leg just described, which is rectangular in cross section. It is obvious that if so desired the contacting faces of the leg shank may be inclined slightly, whereby said leg, when locked in its position, would spread slightly from top to bottom to more effectually brace and support the table. This angular spread of the leg is particularly desirable in the construction of small, individual tables.

Referring particularly to that form of my table leg structure shown in Figures 7 and 8, the table leg is flat or rectangular in cross section, and is slightly tapered from top to bottom. In this form of my invention the rail members 1'—1' are mitre-joined, and the outer binding strap 3 is dispensed with. The inner corner surfaces of the rail members in this case have suitably secured thereto a metal strap 9, as best shown in Figure 8. The strap is spaced from the inner corner to form

a flat face 9', which is suitably apertured for the reception of a locking stud or bolt 10. This form of socket is also provided with a metallic cross strap 2' suitably secured to the rails and spaced 5 from the inner flat portion 9' of the strap 9; whereby an all-metal socket for the shank-X' of the leg is provided.

In this type of leg shank the bolt slot 4'' is similar to that previously described, and the locking bolt passes only through metallic straps 9 and 10 that this leg structure is shouldered at 6' for engagement with the lower faces of the rails 1', whereby load strain is taken up independently of the binding stud 10.

Figure 9 of the drawing illustrates an inverted 20 plan view of that form of my invention shown in Figures 1 to 3 in the drawing, with the exception that the leg 4'' in this instance is rectangular in form and is provided with a supporting shoulder 6'', as indicated in dotted lines.

25 Thus it will be seen from the foregoing description that these legs may constitute supports for various types of furniture, and when used in connection therewith they can be readily removed for shipment or storage, and when adjusted to their 30 sockets said legs will be rigidly attached to prevent wobbling. It is also apparent that the legs of the table when removed from their sockets may

be nested within the confines of the rectangular frame formed by the rails and suitable means (not shown) may be provided for temporarily fastening the legs in their nested position.

Attention is called to the fact that the binding 80 strap-members 2 or 2' may be slightly bowed or sprung outwardly in such manner that they constitute in effect a locking washer or nut for the wing bolts, and when said bolts are released to remove the legs, the slight spring in these straps 85 will instantaneously relieve the frictional engagement between the socket and legs so that they can be quickly withdrawn.

It will be noted that in practise the retaining bolts 7 and 10 may be squared or hexed at their 90 shank portions to prevent rotation.

I claim:—

In an article of furniture, side rails meeting at an angle at their adjacent ends forming a V-shaped corner, a metallic strap secured at its ends 95 rigidly to the inner face of the side rails and extending across said corner and forming in conjunction with the side rails a leg-receiving socket, a holding bolt supported by the side rails and extending through the central portion of the strap, 100 a table leg having a shank on its upper end receivable in the socket and bifurcated to straddle the bolt, and an adjusting nut on said bolt for engaging the strap to force the intermediate portion thereof in frictional engagement with the shank. 105

GEORGE H. RUNDLE.

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