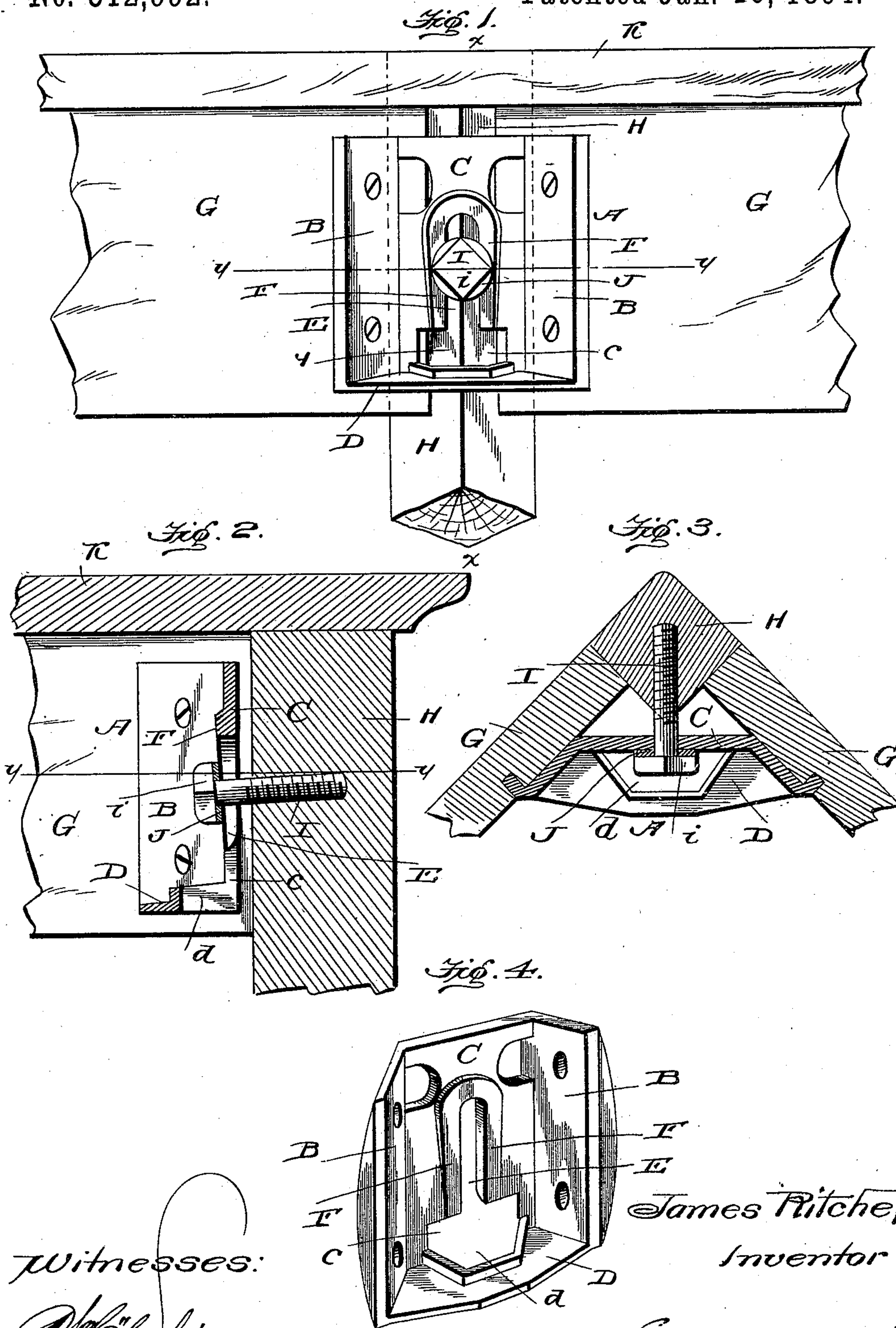


(No Model.)

J. RITCHEY.
TABLE LEG FASTENING.

No. 512,992.

Patented Jan. 16, 1894.



Witnesses:

W. H. Ashlee
W. J. Bernhard

James Ritchey.
Inventor

By *Edoan Bros.*
Attys.

UNITED STATES PATENT OFFICE.

JAMES RITCHEY, OF EVANSVILLE, INDIANA.

TABLE-LEG FASTENING.

SPECIFICATION forming part of Letters Patent No. 512,992, dated January 16, 1894.

Application filed April 4, 1893. Serial No. 469,060. (No model.)

To all whom it may concern:

Be it known that I, JAMES RITCHEY, a citizen of the United States, residing at Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Fastenings and Bracings for Legs of Knockdown Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to a device for fastening and bracing table legs of that class which employ a cast-metal angle iron at the corners of a table frame of the class known to those skilled in the art as "knockdown tables." In this class of tables it is desirable to provide means which will rigidly connect and brace the rails of the table frame and provide for the convenient and expeditious fastening of the legs, to the frame by the retailer, which means shall be very simple of construction and, above all, be cheap of manufacture.

I am aware that prior to my invention a metallic corner bracket has been used to connect the side rails of the table frame and to provide for fastening the legs between the adjacent spaced ends of the rails by means of a bolt which serves as the pivot by a cam lever that impinges or rides against segmental cam faces on the corner iron or bracket; but in my improvement I construct the bracket and arrange the parts in a manner to secure a wedging action as the table-leg is moved endwise into position between the adjacent spaced ends of the table rails so that it is only necessary for the dealer to place the legs in position in order to securely fasten them to the table frame and at the same time secure the necessary brace to the rails of the table frame and to the leg, the operation being easily and quickly accomplished by an unskilled person and the device being simple and cheap.

With these ends in view, I employ a cast metal corner bracket or angle iron formed with a longitudinal vertical slot and inclined bearing surfaces or ways on opposite sides of the slot, said ways being tapered or projected from the lower end of the slot toward the up-

per end thereof, and the bracket is further provided at its lower end with a transverse web which stands out from faces of the angle iron and the inner edge of said web is recessed or constructed to form an opening through which the bolt head and the washer on the leg can be easily passed in order to adjust the bolt head and washer into position to ride against the tapered or inclined ways on the angle iron when the leg is shoved into place between the adjacent ends of the table frame.

The invention further consists in the combination and construction of parts as will be hereinafter fully described and particularly pointed out in the claims.

The accompanying drawings fully illustrate my improvement, in which—

Figure 1 is an elevation. Fig. 2 is a vertical sectional view on the line $x-x$ of Fig. 1. Fig. 3 is a horizontal sectional view on the plane indicated by the dotted line $y-y$ of Figs. 1 and 2. Fig. 4 is a detail perspective view of the metallic bracket or corner iron.

Like letters of reference denote corresponding parts in all the figures of the drawings.

A designates the corner iron or bracket which is made or cast in a single piece of metal. This bracket has the flanges B, B, on opposite sides of, and at different angles to, the plate C and the web D which unites the lower edge of the plates and the flanges B. The lower edge of the plate C is cut away to provide the opening c , and the inner edge of the web D adjacent to the plate C is recessed as at d so that an enlarged opening is provided at the inner lower edge or angle of the bracket A for the purpose of readily passing the bolt head and washer through the bracket in the act of adjusting and fastening the table leg to the frame, as will be more fully described hereinafter.

The plate C of the bracket or corner-iron is further provided with a longitudinal vertical slot E which opens at its lower end into the opening provided at the inner angle or edge of the bracket or corner iron, and on opposite sides of this slot are formed integral ways or bearing surfaces F, F, that extend longitudinally of the plate alongside of the slot E therein, said ways or bearing surfaces being

tapered so that they incline gradually outward from the lower end of the slot toward the upper end thereof as indicated very clearly by Fig. 4. The flanges B of the bracket or corner iron are pierced transversely to provide the holes through which pass the screws that fasten the corner iron to the side rails.

The table frame has the usual side rails G, G, which are so arranged that their inner ends are separated or spaced sufficiently to accommodate the leg H which is made square in cross section, or of other desired shape, so as to fit snugly between and abut squarely against the adjacent ends of the rails.

I is the bolt or lag screw which is fixed in the table leg H at such an angle that the inner surface of bolt-head *i* will be parallel to the inclined surfaces F, F, and at the proper height so that the head *i* and the washer lies at such a distance from the leg that it will pass into the opening and slot of the corner bracket or iron; and on this bolt is fitted the washer J that rides against the inclined ways or bearing faces F of the bracket or corner iron.

K is the usual top which is fixed to the table frame so that its angles or corners lie over the adjacent ends of the rails G and conceal the spaces between them.

The table is made up at the factory by fastening the corner irons or brackets to the side rails in a manner to leave the adjacent ends of the rails out of contact, the top K is fastened to the frame, and the bolts or lag screws properly fastened to the legs; but for compact arrangement of the parts, the legs are stored within the table frame in the usual manner so that the table can be transported. To connect the legs to the frame and complete the article, it is only necessary for the dealer to remove the legs from the frame, and then each leg is fastened in place simply by adjusting the legs between the adjacent ends of two rails, with the bolt in the opening and slot of the corner iron or bracket, and then shoving the leg up into position and against the top, during which adjustment the washer rides on the tapered ways F and secures a wedging action between the bolt and the corner iron which serves to draw the leg into position against the ends of the rails G, G, and firmly fasten the leg in place. It is evident that the weight of the table serves to press the corner iron so that the inclined ways properly clamp and confine the bolt and also the leg; but if

it is desired to increase the friction between the inclined ways of the bracket and the washer, it is only necessary to give the bolt or lag screw a fraction of a turn and thus draw the washer against the inclined ways.

It will be readily seen that the table leg can be easily fastened to the frame and be securely braced thereto, and that the leg can be clamped by shoving or forcing the same endwise into position between the rails of the frame, thus dispensing with the separate clamping devices which have to be manipulated by hand, thus materially simplifying the device and making it cheaper of manufacture.

What I claim is—

1. In a knockdown table, the bracket or corner iron having its flanges joined by the vertical and horizontal webs and provided with the enlarged bolt-opening *d* at the inner lower corner where said webs join each other, the longitudinal slot E in the vertical web having its lower end opening into said bolt-hole, and the tapered ways or bearings F on opposite sides of the slot E, combined with a table frame to which the bracket or corner iron is fastened, and a leg provided with a bolt adapted to pass through said bolt-opening and to bind on the inclined ways F as the leg is forced endwise into position between the rails of the table frame, substantially as and for the purposes described.

2. In a knockdown table, the bracket or corner iron having its right angled sides joined by the vertical and horizontal webs and provided with the bolt-opening *d* at its inner lower corner, the single continuous slot E that extends from the bolt-hole up into the vertical web, and the tapered ways or bearings integral with the vertical web on opposite sides of the slot therein, combined with a table frame to the rails of which the sides of the bracket are fixed, the leg, and the inclined bolt or lag screw fixed in the leg and adapted to bind on the inclined ways as the leg is forced into position between the rails of the table frame, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES RITCHEY.

Witnesses:

ROBERT D. RICHARDSON,
WINNIE M. MURPHY.