This invention relates to a fastening means for securing legs either to household or store furniture. In other words, the device is applicable for use in securing legs to any article to be supported above the floor.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that, within the scope of what is claimed, changes in the precise embodiment of the invention shown can be made without departing from the spirit of the invention.

Figure 1 shows in elevation a device constructed in accordance with the invention, parts being in section;

Figure 2 is a vertical section of the structure shown in Figure 1;

Figure 3 is a horizontal section of the structure shown in Figure 1;

Figure 4 is a perspective view showing the anchor plate that is used in Figure 1;

Figure 5 is a horizontal section showing a modification.

Figure 6 is a perspective view showing the anchor plate used in Figure 5;

Figure 7 is a section showing a modified anchor plate;

Figure 8 is a section showing another modification in the anchor plate;

Figure 9 is a horizontal section showing another modification of the invention;

Figure 10 is a perspective view showing the anchor plate used in Figure 9;

Figure 11 is a vertical sectional view illustrating a further modification.

In Figures 1, 2, 3, and 4, the numeral 1 designates the top of a table secured to two rectangularly disposed frame members that are designated by the numeral 2, the inner ends of the frame members being spaced apart and being disposed at right angles to each other, as shown in Figure 3, to receive the leg 14 of the table, the leg 14 carrying an inwardly projecting threaded member 12.

Vertical slots or kerfs 4 are formed in the frame members 2. Anchor plates 5 are provided, each anchor plate having a foot 6 with a sharpened edge. The foot 6 stands about at right angles to the plate 5. The plate 5 has a rectangularly disposed flange 7 provided with a wing 8 disposed at an acute angle to the flange 7.

In practical operation, the anchor plates 5 are driven into the slots 4, the slots extending entirely across the frame members 2 from top to bottom. When the anchor plates 5 are driven into the slots 4, the sharpened feet 6 will cut a way for themselves in the frame members 2, as shown in Figure 3, a secure mounting for the anchor plates 5 thus being provided. The flange 7 lies along the inner surface of the frame members 2 and projects toward the leg 14.

A bridge plate 10 is provided, and has a raised transverse reinforcement 11 through which the threaded member 12 extends. The bridge plate 10 is provided along its edges with projecting ribs 9 which are received in sockets formed by the flanges 7 and the wings 8.

A nut 15 is threaded on the threaded member 12 and bears against the reinforcement 11 of the bridge plate 10. It will be obvious that when the nut 15 is tightened up, the leg 14 will be held securely in place against the ends 3 of the frame members 2.

In the modification shown in Figure 7, the bridge plate 16 has slanting sides 17 provided with ribs 18 corresponding in function to the ribs 9 of Figure 3. The hole 19 in the bridge plate 16 is for the passage of the threaded member 12.

In Figure 5, the table top is shown at 20, and to it are secured the frame members 21, the ends of the frame members being disposed at right angles to each other and being spaced apart, as shown at 22 to receive the leg 23. The anchor plates are shown at 24 and are driven into slots or kerfs 25 in the frame members 21, as heretofore described. The anchor plates 24 have feet 26 corresponding to the foot 6 of Figure 4. The feet 26 extend...
on both sides of the anchor plates 24, where as the feet 6 extend in one direction only with respect to the anchor plates 5. The anchor plate 24 has a flange 27, like the flange 7, and the flange 27 is provided with a wing 28, like the wing 8. The bridge plate 29 is raised in the center for reinforcement, and has ribs 30 received between the wings 28 and the flanges 27. A threaded member 31 is mounted in the leg 23 and extends through the plate 29. A nut 32 is threaded on the member 31 and bears on the bridge plate 29, the nut 32 corresponding in function to the nut 15.

In Figure 9, the table top is shown at 33. The frame members are shown at 34, and are secured to the top. The inner ends 35 of the frame members 34 are spaced apart and concaved to receive a round leg 36. Slots or kerfs 37 are fashioned in the inner sides of the frame members 34. Anchor plates 38 extend into the slots 37 and have flanges 39 that extend along the inner surface of the frame members 34. The flanges 39 are provided with acutely disposed wings 40 corresponding to the wings 8 of Figure 3. There are openings 41 in the flanges 39, and these openings are adapted to receive screws 42, or other securing devices, that enter the frame members 34.

The bridge plate 43 is of arched form and has a raised center part 44. The bridge plate 43 is provided along its edges with ribs 45, corresponding to the ribs 9, the ribs 45 being received in the sockets that exist between the wings 40 and the flanges 39 of the anchor plates 38. The threaded member is in the form of a screw 46 having a head 47 that bears upon the raised portion 44 of the bridge plate 43, the screw 46 being threaded into the leg 36.

In the modification shown in Figure 8, the bridge plate 48 has diametrically disposed strengthening ribs 49 at the intersection of which is located a hub 50, provided with a hole 51 for the reception of a threaded member such as the screw 46 on the threaded studs 12 or 31.

In the modification shown in Figure 11, the top of the table is designated by the numeral 52, and the frame members appear at 53. The leg is shown at 54, and carries a threaded stud 55 on which is mounted a nut 56 adapted to cooperate with a bridge plate 57. The bridge plate functions like the other bridge plates, but is corrugated for strength.

What is claimed is:

1. A device of the class described, frame members disposed at an angle to each other and having their inner ends spaced apart, the frame members having slots on their inner sides, a leg disposed between the inner ends of the frame members, anchor plates in the slots and provided with flanges extended along the inner surface of the frame members toward the leg, the flanges having inwardly projecting wings defining sockets, a bridge plate having ribs received in the sockets, and a threaded member extended through the bridge plate and having means for engaging the bridge plate, the threaded member being mounted in the leg.

2. A device of the class described, constructed as set forth in claim 1, and further characterized by the fact that the anchor plates are provided on their inner edges with laterally projecting sharpened feet that cut their way through the frame members when the anchor plates are inserted in the slots.

3. In combination with two rail members, one at right angles to the other, having their ends in spaced relation, and a leg received in the space between the ends of the rails, socket members on the inner faces of the rails, means for holding said socket members on the rails, a bridge plate having edges engaging the socket members and an adjustable tension member between the leg and the bridge plate to draw the leg in rigid contact with the ends of the rail members.

4. In combination, two rail members, one at right angles to the other, the rail members having kerfs and having their ends in spaced relation, a leg received in the space between the ends of the rails, socket members on the inner faces of the rails having flanges in the kerfs in the rail members, a separate bridge plate having edges engaging the socket members, and an adjustable tension member between the leg and the bridge plate to draw the leg in rigid contact with the ends of the rail members.

5. In combination, two rail members, one at right angles to the other, the rail members having kerfs and having their ends in spaced relation, a leg received in the space between the ends of the rail members, socket members on the inner faces of the rails having flanges in the kerfs of the rails, a separate bridge plate having edges engaging the socket members, a tension member securely mounted in the leg and projecting through the bridge plate, and a tensioning device on the tension member and cooperating with the bridge plate and with the socket members to draw the leg in rigid contact with the ends of the rail members.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

WILLIAM E. WILLIAMS.