This invention relates to folding table legs. One object of the invention is to improve generally upon folding table structures whereby to secure compactness and minimal weight without detracting from the requisite rigidity and durability thereof. Another object is to provide a practical sheet metal leg structure and locking element.

With the foregoing and other objects and advantages to be attained, as will hereinafter more fully appear, the invention consists in the novel general structure and parts and combinations of arrangements of parts thereof as hereinbefore described and set forth in the appended claims, reference being had to the accompanying drawing forming a part of this specification, and in which

Figure 1 is a fragmentary section of the top portion of a table equipped with a folding leg structure in accordance with a practical embodiment of the present invention, the leg being shown in locked open position;

Figure 2 is a similar view, with the leg folded into closed position;

Figure 3 is a sectional view, on an enlarged scale, at right angles to that shown in Figure 1;

Figure 4 is a detail view of the locking element for the table leg;

Figure 5 is a horizontal section taken on or about the line 5—5 of Figure 3; and

Figure 6 is a detail view of the escutcheon plate detached.

Referring now to the drawing, the numeral 10 designates a table top which is mounted on vertical apron members 11 at the opposite sides and ends of the table constituting a rectangular frame, to which members the table top is secured by angle brackets 12.

The table leg as shown in the drawing and designated generally by the numeral 17 is preferably constructed of sheet metal. The leg is provided at its upper end portion 18 and on one side thereof with a hinge 19 which is attached by screws 20 to a cleat 21 extending crosswise on the under side of the table top 10 adjacent to a side frame member 11. In the vertical opened position of the leg its square end portion 22 abuts the under side of the cleat 21 so as to limit the outward swing of the leg and afford a steady support for the table.

Associated with the table leg 17 is a locking member 23 which is hinged to the under side of the table top 10, as at 24, to swing in a direction transversely of that in which the leg swings on its hinge 19. This locking member preferably comprises a flat metal plate rolled at one end, as at 25, to provide its hinge attaching portion, said plate being reduced in width towards its opposite end portion with one straight side 26 and an inclined opposite side 27, and both sides being flanged as at 26', 27', respectively, to stiffen the structure (see Figure 4). Adjacent the narrow end of the plate 23 the flanged portions 26' and 27' are of increased height dimensions and they are reent, as at 28 and 29, and provided with transverse aligned apertures in which a latching element 30 is pivotally mounted. Preferably, the latching element 30 comprises a single piece of wire looped at its middle portion, as at 31, to produce a retainer head, the two adjacent arms of the wire being extended in close parallel relation to each other, as at 32, to provide the shank portion of the element, and the extreme end portions being turned outwardly in opposite directions to each other and at right angles to the shank portion 32, as at 33, and inserted pivotally in the apertures provided therefor in said retent flanged portions 28 and 29 of the locking plate 27.

In the folded or closed position of the leg 17, said locking plate 23 is folded up close to the under side of the table top 10 between the table top and the folded leg as shown in Figure 2, but in the vertical opened position of the leg 17, as shown in Figures 1 and 3, said locking plate 23 is swung downwardly against the inner side of the adjacent side frame member 11, in which position of the plate the lower ends of the retent flanged portions 28 and 29 are disposed across a horizontal shoulder portion 34 provided on the adjacent portion of the leg 17, and offset from its axis.

When the plate 23 is in its locking relation to the table leg the latching element 30 is projected through an opening 35 in the adjacent side frame member 11 of sufficient size for the ready passage of the retaining head 31 of the latching member therethrough, and an escutcheon plate 36 is provided on the adjacent outer side portion of said frame member 11 to cover said opening 35.

For the releasable interlocking engagement of the latching element 30 with said escutcheon plate, the latter is provided with a T-shaped opening 37 through the cross portion of which the retaining head 31 of said latching element 30 is passed and the shank portion 32 of said element then dropped into the stem portion of the slot so that the retaining head of the element 30 is locked in engagement with the adjacent face portion of the escutcheon plate.
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While the locking plate 23 may rest against the adjacent side frame member 11 in its lowered position it is preferable to provide the plate with a lip 39 to engage behind the ledge or shouldered portion 34 of the table leg, by which provision there is a tight tying effect between said lip 39 so engaged with the leg 11 and the retaining head 31 of the latch element in its interlocked engagement with said escutcheon plate 35. It is also noted that the locking plate 23 may be formed in any desirable manner from sheet metal.

By the foregoing it is seen that a practical lightweight sheet metal table leg of a foldable character is produced with a simple and effective locking element also of sheet metal, and affording ample stability for the table when set up for use, as well as facilitating the folding of the legs into close compass under the table top when not in use.

Obviously, the structure admits of considerable modification within the spirit of the invention as defined by the appended claims. The invention, therefore, is not limited to the specific construction and arrangements shown in the accompanying drawing.

What is claimed is:

1. In a table including a top and a rectangular frame having its side members supporting a depending marginally from the top, one of said frame members having an opening therein and an escutcheon plate mounted thereon and covering the opening, said plate having a T-shape slot coincident with said opening, a leg member hinged mounted transversely near its upper end to the underside of the top adjacent and swingable in parallel relation to said frame member having the opening, said leg member being also located adjacent a right-angular side member of the frame so as to swing to opened position in abutting relation to said last named frame member and with its upper end abutting a stop portion on the underside of the table top, a locking member hinged mounted beneath the table top and contiguous to the frame side member having the escutcheoned opening, the axis of its hinge being at a right angle to the axis of the leg hinge, said locking member in its opened position abutting its contiguous frame side member and lockingly overlapping the adjacent side portion of the opened leg member away from the frame side member which the leg member abuts, and a latch element hingedly attached at one end to said locking member and having a shank portion with a transverse enlargement to enter through the opening of the contiguous frame side member and into releasable interlocking engagement in the slot of the escutcheon plate covering said opening.

2. A table including a top, a folding leg hingedly mounted beneath the top and opening to a vertical supporting position in abutting relation to stops at the end thereof and at one side parallel to the axis of its hinge, a locking member hingedly mounted beneath the top to swing from an axis at a right angle to that of the leg hinge, said locking member being swingable across the opened leg to an opened position in abutting relation to a stop parallel with the axis of the locking member hinge and lockingly overlapping the opened leg, the stop for said locking member having an opening therein, an escutcheon plate located on the outside of the said last named stop and covering the opening of the stop, said escutcheon plate having a latching slot coincident with the opening of the stop, said slot having a latch-holding portion and a communicating latch-entering enlargement, and a latch element comprising a shank hingedly attached to said locking member and having an enlargement to enter the enlargement of of the escutcheon plate slot and movable into holding engagement with said escutcheon plate in the region of the latch-holding portion of the latching slot.

3. A table including a top and a pair of depending correlated stop members disposed at right angles to each other, one of said members having a T-slotted latch receiving and holding portion, a leg member hingedly mounted beneath the table top to swing across said slotted stop member to an opened vertical supporting position in abutting relation to the correlated other stop member, said leg member having a projected shoulder portion at its side remote from that abutting its correlated stop member and adjacent the slotted stop member, a locking member hingedly mounted beneath the table top to swing about an axis parallel to the slotted stop member and across the leg member to opened position in abutment relation to said slotted stop member, said locking member having a lipped extension at its free end portion engaging and overhanging the shouldered portion of the leg member in the opened position of the locking member, and a latch element comprising a shank hingedly attached at one end to said locking member and having a crosshead at its free end to enter and holdingly engage in the T-slotted stop member.

ALPHA O. HENDRICKS.