Nov. 3, 1953 M. FOX 2,657,963

FOLDING LEG STRUCTURE

Filed Feb. 6, 1951 3 Sheets-Sheet 1

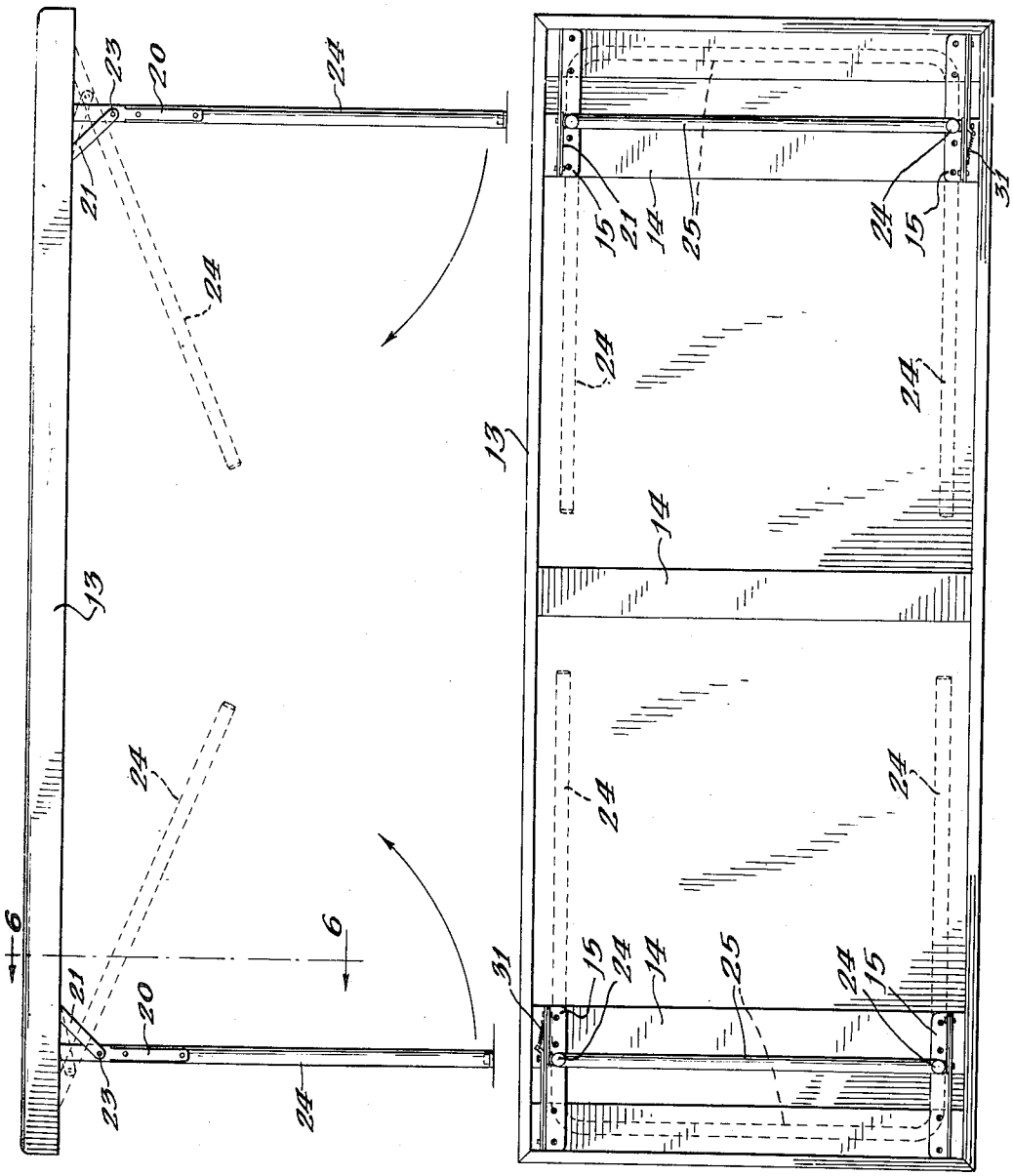


FIG. 1

FIG. 2

Inventor:
Martin Fox
By: Schroeder, Mariam, Hofgren & Brady
Attorneys

Nov. 3, 1953 M. FOX 2,657,963

FOLDING LEG STRUCTURE

Filed Feb. 6, 1951 3 Sheets-Sheet 2

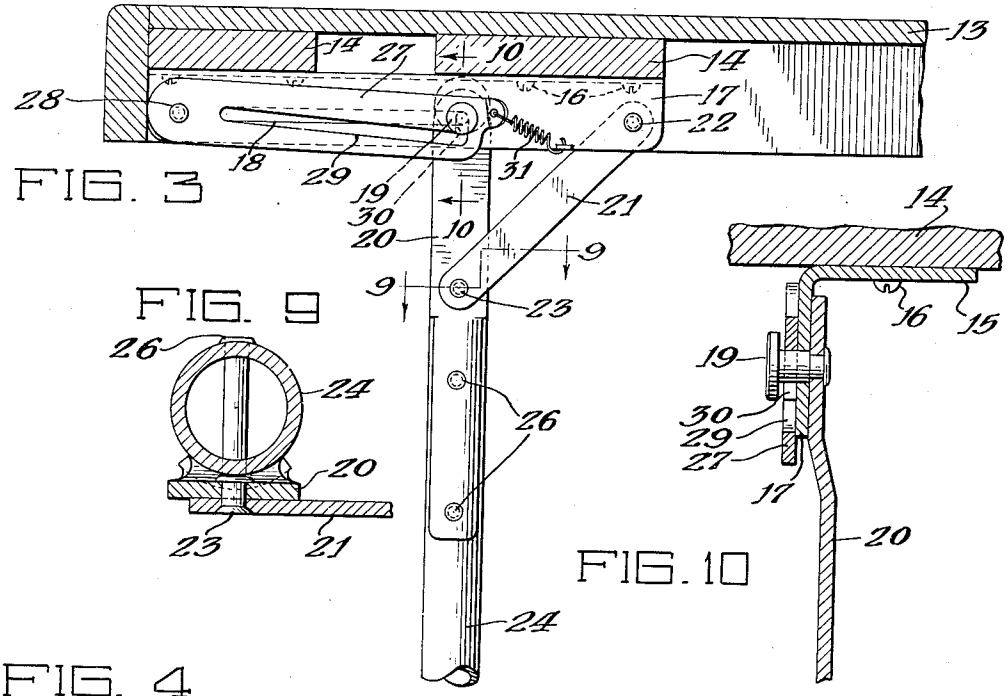


FIG. 3

FIG. 9

FIG. 10

FIG. 4

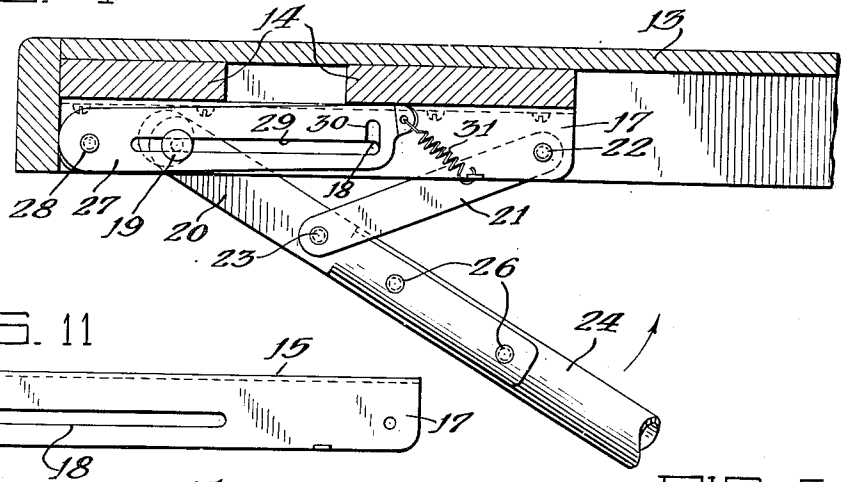


FIG. 11

FIG. 5

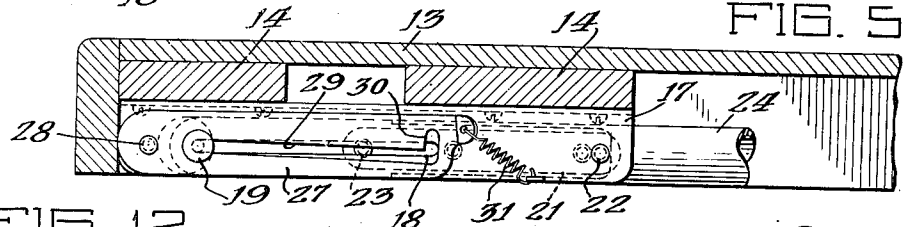
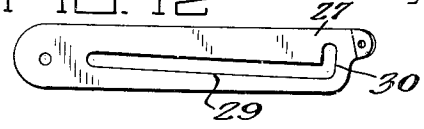


FIG. 12



Inventor:
Martin Fox
By: Schroeder, Merriam, Hoffgren & Brady
Attorneys

Nov. 3, 1953 M. FOX 2,657,963

FOLDING LEG STRUCTURE

Filed Feb. 6, 1951 3 Sheets-Sheet 3

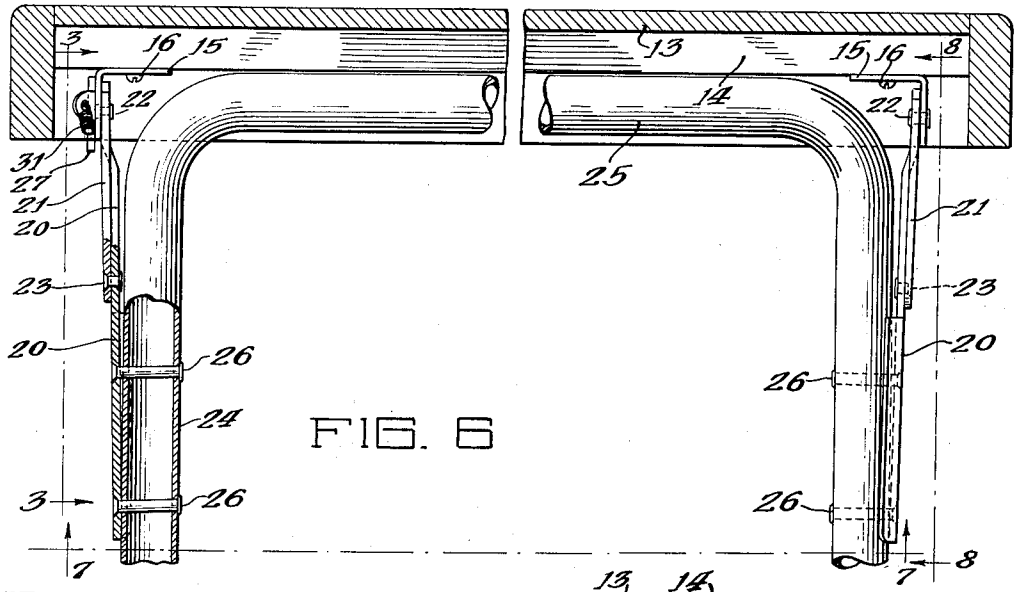


FIG. 6

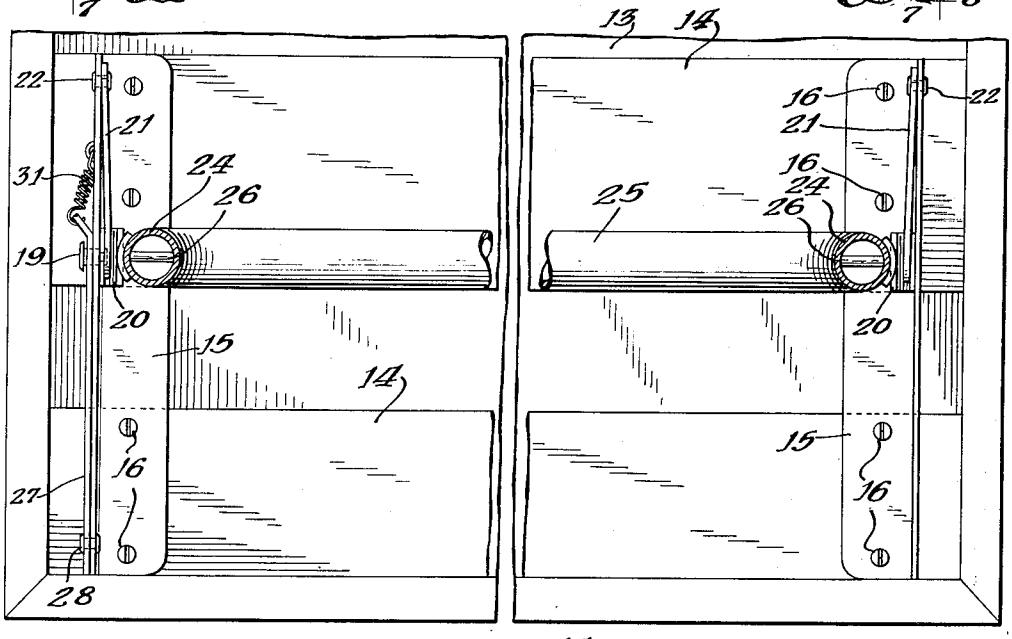


FIG. 7

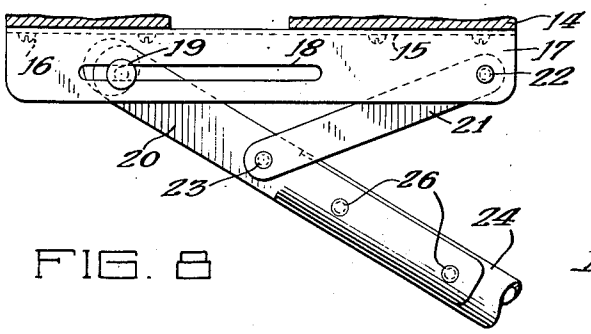


FIG. 8

Inventor:
Martin Fox

By: Schroeder, Merriam, Hofgren & Brady
Attorneys

Patented Nov. 3, 1953

2,657,963

UNITED STATES PATENT OFFICE

2,657,963

FOLDING LEG STRUCTURE

Martin Fox, Chicago, Ill., assignor to The Seng Company, a corporation of Illinois

Application February 6, 1951, Serial No. 209,612

1 Claim. (Cl. 311—99)

1

This invention relates to folding leg structure adapted for attachment to table tops, and the like.

The primary object of the invention is to provide an improved foldable leg structure which is strong and automatically locks in open position.

A further object of the invention is to provide a foldable leg structure which has a minimum of parts which must be attached to the underside of a table top.

Another object of the invention is to provide a simple and dependable latch which may be released without danger of pinching the operator's fingers.

The invention is illustrated in a preferred embodiment in the accompanying drawing, in which—

Figure 1 is an elevational view of a table showing the improved foldable leg structure in open position; Fig. 2 is a bottom plan view of the same, with dotted lines indicating the closed position of the legs; Fig. 3 is a fragmentary vertical sectional view, taken as indicated at line 3—3 of Fig. 6; Fig. 4 is a view similar to Fig. 3, but showing the legs in unlatched and partly folded position; Fig. 5 is a view similar to Fig. 3, showing the legs in folded position; Fig. 6 is a fragmentary vertical sectional view, taken as indicated at line 6—6 of Fig. 1; Fig. 7 is a fragmentary plan sectional view, taken as indicated at line 7—7 of Fig. 6; Fig. 8 is a fragmentary vertical sectional view, taken as indicated at line 8—8 of Fig. 6; Fig. 9 is a vertical sectional view, taken as indicated at line 9—9 of Fig. 3; Fig. 10 is a fragmentary vertical sectional view, taken as indicated at line 10—10 of Fig. 3; Fig. 11 is an elevational view of one of the supporting brackets; and Fig. 12, an elevational view of the latch.

In the embodiment illustrated, a table top 13, having cross bars 14 is provided at each end with metal leg structure which is the subject of the present invention.

As the mechanism is the same at each end of the table, only one will be described. A pair of metal brackets are formed of angle iron, and each has a horizontal leg 15 which is adapted to be secured to the cross bar 14 by means of four screws 16. A vertical leg 17, as best shown in Fig. 11, is provided with a horizontal slot 18 to receive a headed stud 19 provided at the top of a leg extension 20.

A bracing link 21 is pivotally connected to the inner end of the bracket 17, as indicated at 22, and is pivotally connected with the leg extension, as indicated at 23.

2

The table legs 24 are preferably integrally formed from tubular stock, so as to form an inverted U-shaped member 25, and the leg extensions 20 are riveted to the legs, as indicated at 26.

A latch member 27 is provided on one side of the structure, to hold the legs releasably in open position, as shown in Fig. 3. The latch is pivoted to the right-hand bracket, as indicated at 28, and has an L-shaped slot which is impaled by the headed stud 19 secured to the extension member 20. The slot has a horizontal portion 29 which is substantially coextensive with the slot 18 in the bracket 17. The slot has a turned-up portion 30 which will drop into engaging position with the stud 19 when the legs are swung to open position. The latch is urged downwardly by gravity, but preferably a tension spring 31 is provided between the free end of the latch and the bracket, to make the latching movement more positive. It will be noted that the latch may be released conveniently, when it is desired to fold the legs to closed position, by merely reaching under the corner of the table top and raising it into alignment with the lower edge of the bracket. At the same time, the table may be raised slightly from the floor and the legs pushed inwardly towards closed position by the operator's foot. If the legs are not connected at their central portions, a latch will be required for each leg, but in the embodiment illustrated, the legs are integrally formed, and only one latch is required.

To open the legs, the table top is normally turned up on its side and each pair of legs turned to open position where they will be latched automatically. The table may then be turned up on its four legs. The structure is very strong and will support the weight of a man without difficulty. To return the legs to closed position, it is merely necessary to raise the latch and push the legs inwardly. This will cause the headed stud 19 to slide along the slots 18 and 29, and the legs may be swung into closed position. If desired, a spring latch, not shown, may be added to hold the legs in closed position.

The foregoing detailed description is given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, for some modifications will be obvious to those skilled in the art.

I claim:

Foldable leg structure for a table top comprising: a pair of spaced angle brackets adapted to be secured to the underside of a table top, said

brackets having upright portions provided with substantially horizontally extending slots; an inverted U-shaped tubular member forming a pair of connected integral leg members, each of said leg members having a rigid top extension which is provided at its upper end with a headed stud slidably mounted in one of said slots; a pair of separate bracing links each pivotally connecting the inner end of the upright portion of one of the brackets to the upper portion of one of the leg members; an elongated latch plate pivotally connected by its extreme outer end portion to the outer end of the upright portion of one of said brackets, said latch plate lying immediately against a surface of said upright bracket portion and having an L-shaped slot impaled by the headed stud in the adjacent leg member, the major portion of said slot being substantially horizontal and terminating at the end remote from the pivotal connection in an upwardly extending

portion adapted to hold the stud releasably in open leg position, said latch plate having a portion projecting below the bottom margin of the bracket; and a tension spring connecting the inner end portion of the latch plate to said bracket.

MARTIN FOX.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,291,304	Warren	Jan. 14, 1919
1,933,882	Turner	Nov. 7, 1933
2,075,778	Johannsen	Mar. 30, 1937
2,178,248	Bristow	Oct. 31, 1939
2,202,624	De Saussure	May 28, 1940
2,374,670	Duke	May 1, 1945
2,495,965	Gustaveson	Jan. 31, 1950