I. L. VAN ETTEN.

HINGE.

APPLICATION FILED DEC. 13, 1920.

1,405,362. Patented Jan. 31, 1922.

2 SHEETS—SHEET 1.

Fig. 1.

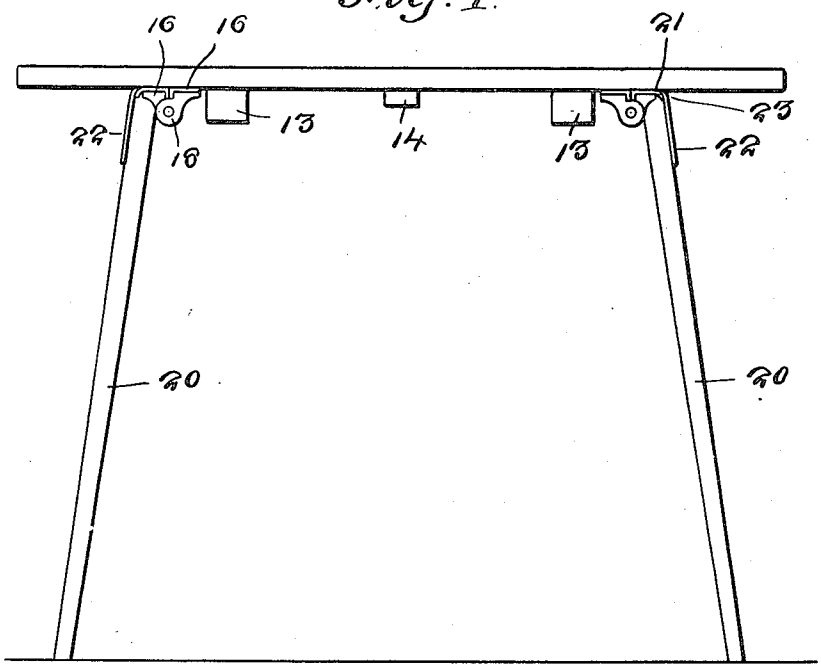


Fig. 5.

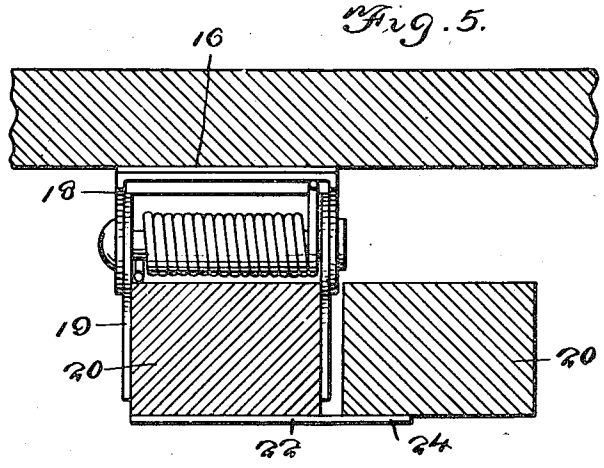
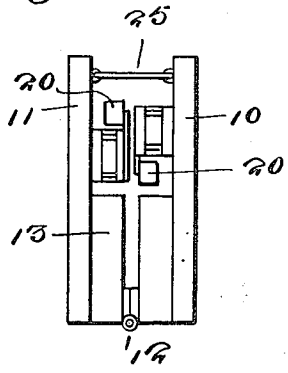


Fig. 8.



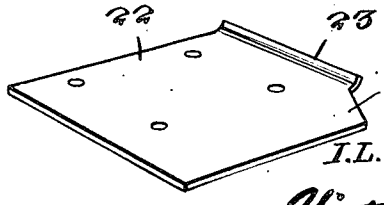


Fig. 7

I. L. Van Etten
INVENTOR

BY Victor J. Evans
ATTORNEY

E. R. Ruppert.
E. Yeager
WITNESS:

I. L. VAN ETTEN.

HINGE.

APPLICATION FILED DEC. 13, 1920.

1,405,362. Patented Jan. 31, 1922.

2 SHEETS—SHEET 2.

Fig. 3.

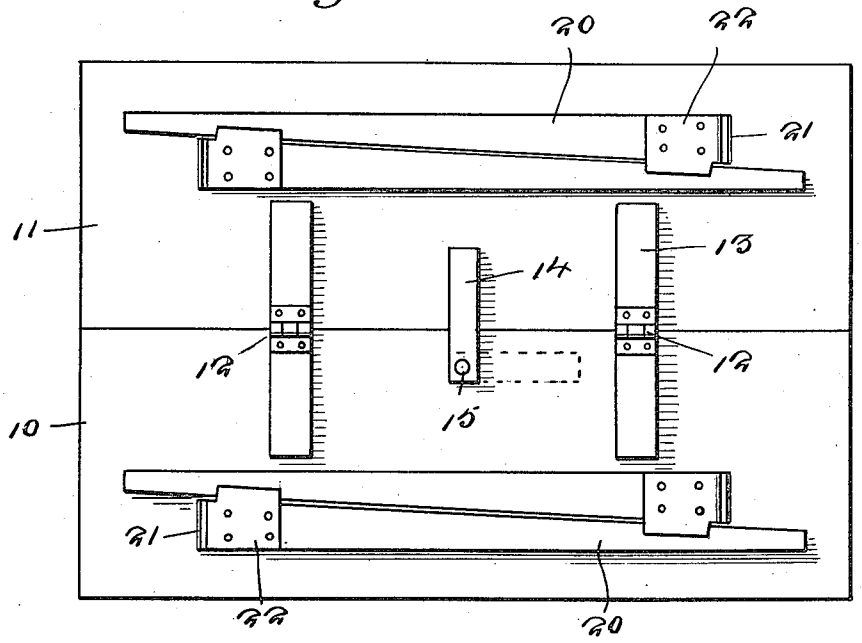


Fig 4.

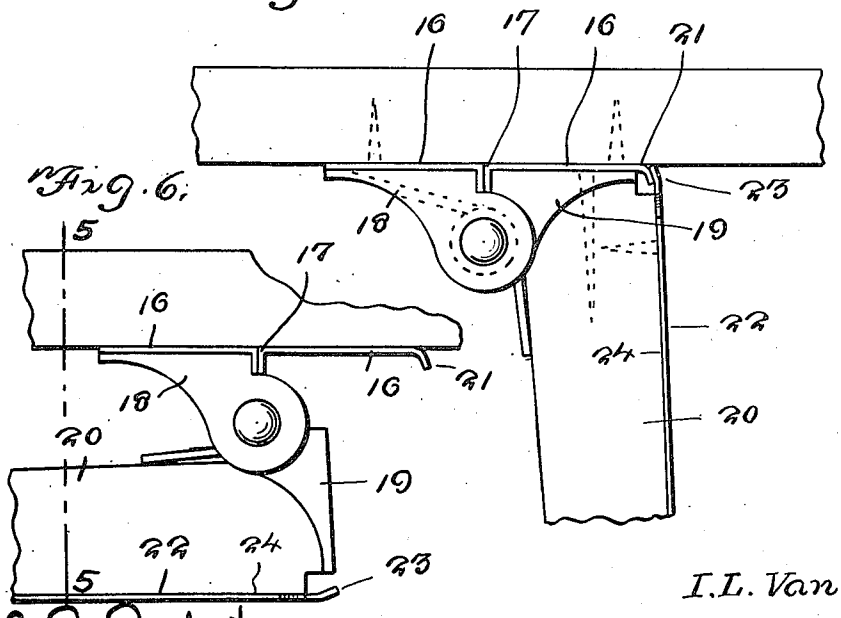


Fig. 6.

E. Q. Dupfont.

E. Yeager

WITNESS:

I.L. Van Etten

INVENTOR

BY Victor J. Evans

ATTORNEY

UNITED STATES PATENT OFFICE.

IRVING L. VAN ETTEN, OF NEW YORK, N. Y.

HINGE.

1,405,362. Specification of Letters Patent. Patented Jan. 31, 1922.

Application filed December 13, 1920. Serial No. 430,316.

To all whom it may concern:

Be it known that I, IRVING L. VAN ETTEN, a citizen of the United States of America, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Hinges, of which the following is a specification.

This invention relates to articles of furniture which are susceptible of being folded, the invention providing a construction which can be folded into a comparatively small article so as to occupy a minimum of space when not in use.

The chief characteristic of the invention resides in providing a construction wherein the supporting legs when released from their folded positions, are automatically moved to their active positions and equipped with an interlocking hinge or the like which holds the legs immovable in their position for use.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the combination, construction and arrangement of parts as claimed.

In the drawings forming part of this application like numerals of reference indicate the similar parts in the several views and wherein:—

Figure 1 is a side elevation of a table in its set up position.

Figure 2 is a view showing the same folded.

Figure 3 is a bottom plan view showing the legs in folded positions.

Figure 4 is an enlarged fragmentary view showing the legs in open position.

Figure 5 is a sectional view taken on the line 5—5 of Figure 6.

Figure 6, is an enlarged fragmentary view showing the legs in folded position.

Figure 7 is a detail perspective view of one of the plates.

While the invention is shown and described in connection with a table, I desire to have it understood that it is intended for other articles of furniture, such as stands, chairs, benches or the like, and that a general application of the invention is contemplated by the claim.

In the drawings, the top of the table is made in two sections 10 and 11 respectively which are hingedly connected together as at 12 along the longitudinal center, the hinge being secured to removing elements 13.

The sections 10 and 11 may be folded one on top of the other as will be readily understood, but to afford the said table top the proper rigidity when in use, I provide a bar 14 which is pivoted as at 15 on the section 10 and adapted to be arranged transversely of the top to bridge the meeting ends of the sections as clearly illustrated.

Secured to the underside of each section of the table top is a pair of spaced plates 16, each being provided with a flange 17 for a purpose to be hereinafter described. Secured to each plate 16 is one section 18 of a spring hinge, the other section of which is indicated at 19 is secured to the adjacent leg 20 of the table. Each plate 16 has its outer edge curved downwardly as at 21 to form a part of an interlocking means for holding the adjacent leg immovable when in position for use. This means embodies a plate 22, there being one of these plates secured to each leg of the table. Each plate 22 has one edge curved as at 23, the curvature being reversely disposed with regard to the curvature 21 of the adjacent plate 16 which as above stated is secured to the side of the table top. The plate 22 is wider than the corresponding dimension of the leg to which it is secured, and projects beyond one of the longitudinal edges thereof as at 24. When the legs of the table are folded in the manner illustrated in Figure 2, they are arranged in pairs, with the legs of each pair in juxtaposition. One leg of each pair is arranged beneath the projection 24 of the plate 22 carried by the other leg, and in this manner the legs are retained in their folded positions against the influence of the spring hinges above described. Subsequent to the folding of the legs in this manner the table top sections may be arranged in parallel relation and held in this position by means of a hook and eye or any other suitable fastening means indicated generally at 25.

When use of the table is desired, the sections 10 and 11 of the table top are first extended to the position shown in Figure 2, after which the legs 21 are released from the retaining plates 22, being automatically moved to the active positions by means of the spring hinges. After each leg assumes

its active position, the curved edge 23 of the associated plate 22 rides over the curved edge 21 of the adjacent plate 16, and is impinged between the curved edge 21 of the plate 16 and the underside of the table top. In this manner the plate 16 and the adjacent plate 22 cooperates to provide an interlocking means to hold the legs immovable in a set up position. Manifestly, I have provided a construction which can be folded into a very small article when not in use, and easily and quickly set up in position for use when desired, the parts being associated to afford the structure the desired rigidity.

While it is believed that from the foregoing description the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

What I claim is:—

The combination with a hinged top and supporting legs therefor, of a pair of spaced plates secured to each section of said top and provided with abutting flanges, spring hinges secured to said plates and to the top of said legs and adapted to engage said abutting flanges, depending curved flanges extending from said plates, plates secured to said legs adjacent the top thereof and provided with upstanding curved flanges adapted to engage said depending flanges and lateral extensions projecting from the last mentioned plates and adapted to engage said legs.

In testimony whereof I affix my signature.

IRVING L. VAN ETTEN.