

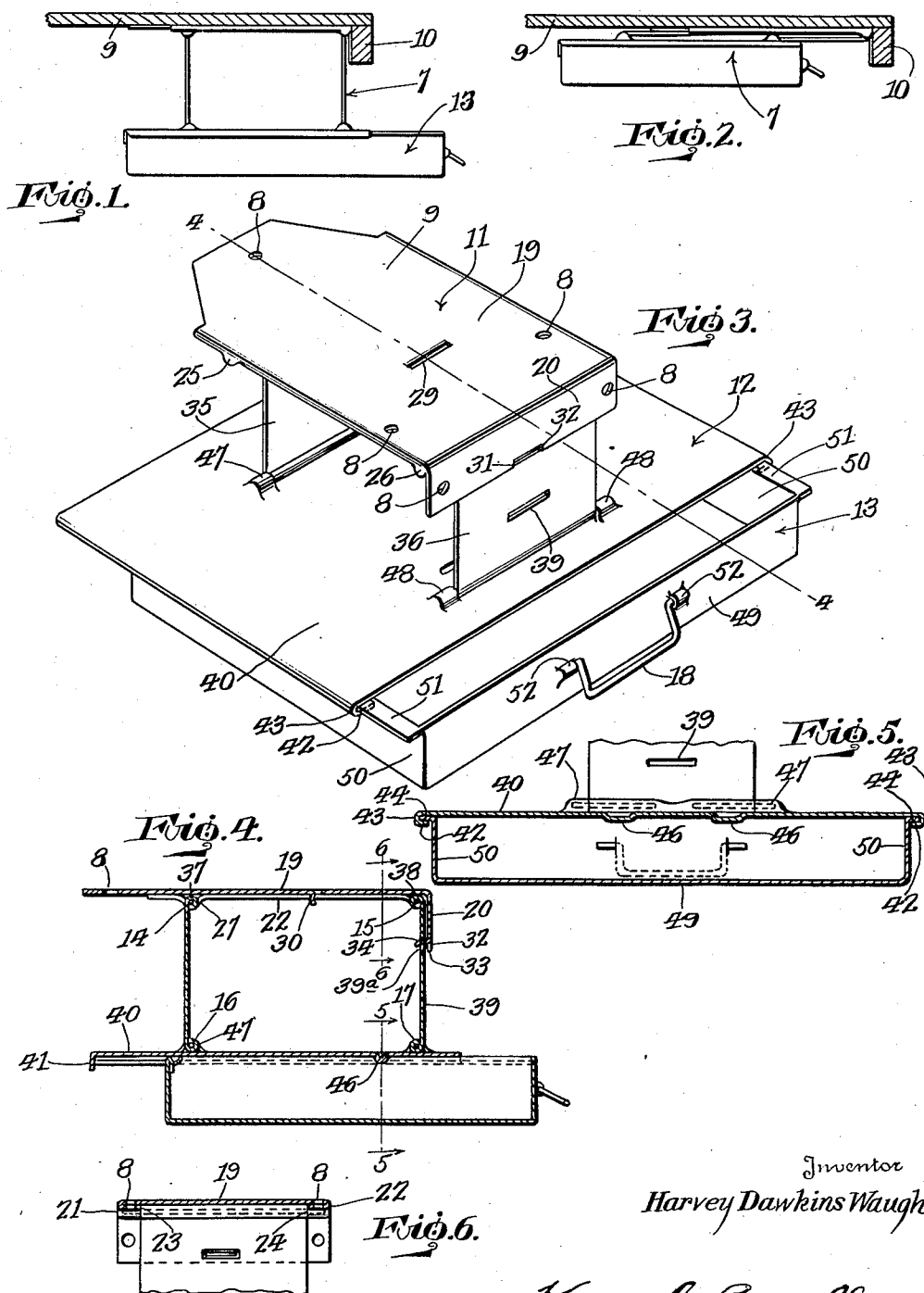
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FOLDABLE AND EXTENDIBLE DRAWER STRUCTURE

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FOLDABLE AND EXTENDIBLE DRAWER
STRUCTURE

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5 Claims. (Cl. 45—95)

This invention relates to a foldable and extendible drawer structure designed primarily for use in connection with card tables, but it is to be understood that a drawer structure, in accordance with this invention is to be employed in any connection for which it may be found applicable.

This invention has for its object to provide, in a manner as hereinafter set forth, a structure of the class referred to capable of being readily attached to the lower face of the top of a table adjacent the inner face of edge or rim of the latter, and including a drawer element which, when the structure is in its folded or non-extended position will be projected rearwardly to an extent to conceal it from ordinary observation, and which, when the structure is in extended position will be projected outwardly beyond the rim and arranged to permit of convenient access thereto.

A further object of the invention is to provide, in a manner as hereinafter set forth, a structure of the class referred to including means for latching it in its folded or non-extended position and for latching it in its extended position.

A further object of the invention is to provide, in a manner as hereinafter set forth, a foldable and extendible drawer structure capable of being readily attached to a support and including a drawer element and with the structure so formed that when extended easy accessibility may be had to said element.

A further object of the invention is to provide, in a manner as hereinafter set forth, a structure of the class referred to including means for latching it in its extended position whereby the drawer element of the structure may be opened and closed without liability of the folding or collapsing of the structure.

A further object of the invention is to provide, in a manner as hereinafter set forth, a structure of the class referred to including a slidably supported drawer element and means for limiting the opening and closing movements applied to said element.

A further object of the invention is to provide, in a manner as hereinafter set forth, a concealable or secret drawer structure of the foldable and extendible type capable of being secured to the lower face of the top of a foldable table and of a size as to not interfere with the folding of the legs of the table or when stacking foldable tables to which the structure is attached.

Further objects of the invention are to provide,

in a manner as hereinafter set forth, a foldable and extendible drawer structure which is simple in its construction and arrangement, strong, durable, compact when folded, thoroughly efficient for the purpose intended therefor, readily installed with respect to a support, conveniently extended and folded when desired, and inexpensive to manufacture.

With the foregoing and other objects which may hereinafter appear, the invention consists of such parts and such combination of parts, as hereinafter more specifically described and illustrated in the accompanying drawing, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawing:

Figure 1 is a fragmentary view in section of a table top showing the adaptation therewith of the structure in side elevation and extended.

Figure 2 is a view similar to Figure 1 with the structure in non-extended or folded position.

Figure 3 is a perspective view of an embodiment of the structure when extended.

Figure 4 is a section on line 4—4 Figure 3.

Figure 5 is a section on line 5—5 Figure 4, and Figure 6 is a section on line 6—6 Figure 4.

It is to be understood that the structure may be an original part of an article of furniture, such as a table or be built separately and secured by any suitable means at any suitable point to any article of furniture or support with which the structure may be adaptable. The embodiment of the invention as shown and indicated at 7 is of the form provided with openings 8 for the passage of holdfast devices (not shown) to anchor it against the lower face of a table top 9 and to the inner face of the rim 10 of the latter. The top 9 may form an element of a foldable or a non-foldable table.

The structure 7 includes a combined hanger, coupling and latching element 11, a carrier element 12, a drawer element 13, a series of pintles or pivot rods 14, 15, 16, 17 and a hinged handle 18.

The element 11 which preferably is constructed from a length of sheet metal of the desired gauge is of angle contour and consists of a horizontal leg 19 merging at its outer end into a depending vertically disposed leg 20. The openings 8 are formed in the legs 19, 20. The leg 19 is of materially greater length than that of leg 20 and is formed of a tapered part and a rectangular part. The forward or largest end of the tapered part merges into and is of less width

than that of the rear end of the rectangular part. The forward end of the latter merges into the upper end of leg 20. The rectangular part is of materially greater length than said tapered part. The side marginal portions of the rectangular part and leg 20 from end to end thereof are bent inwardly to provide a pair of spaced parallel oppositely disposed angle-shape folds 21, 22 which abut the inner faces of said rectangular portion and leg 20. The folds 21, 22 have their free lengthwise edges 23, 24 respectively constituting stops. Each fold is provided with a pair of spaced offset portions to form sockets. The sockets on fold 23 are indicated at 25, 26 and those on fold 24 are designated 27, 28. The sockets 25, 27 are arranged in proximity to the rear ends of the folds and align with each other. The sockets 26, 28 are arranged at the bends in the folds and align with each other. The rectangular part of leg 19 has a U-shaped transversely extending slit 29 which is arranged between the transverse median and forward end of said rectangular part. The slit 29 is intersected transversely by the longitudinal median of said rectangular part. The material freed by slit 29 is bent downwardly and in a manner to provide a curved resilient latching tongue 30 for a purpose to be referred to. The lower portion of leg 20 is formed with a pair of slits 31, 32 which open at the lower edge 33 of said leg. The material freed by the slits 31, 32 is bent rearwardly and in a manner to provide a curved resilient latching tongue 34 for a purpose to be referred to.

Mounted at its ends in the sockets 26, 28 is the pintle or pivot rod 14. Mounted at its ends in the sockets 29, 30 are the ends of the pintle or pivot rod 15.

The carrier element 12 is formed preferably of sheet metal of the desired gauge and consists of a pair of suspension members 35, 36 of like form, spaced from each other and of rectangular contour. The upper ends of members 35, 36 are pivotally mounted, as at 37, 38 respectively upon the pintles or pivot rods 14, 15 respectively. The upper ends of the side edges of members 35, 36 are arranged between the stops provided by the edges 23, 24 of the folds 21, 22 respectively. The member 36 between its transverse median and its lower end is formed with a transverse slot 39 for a purpose to be referred to. The member 36 between its transverse median and upper end is formed with a transverse slot 39^a for a purpose to be referred to. Positioned below and of materially greater width than the members 35, 36 is a flat carrier 40 of plate like form provided at its rear with a depending flange 41 constituting a stop for purpose to be referred to. The side marginal portions of the carrier 40 are bent downwardly and inwardly to form a pair of oppositely extending folds 42 which are spaced from the inner face of the carrier 40. The folds 42 constitute supports and form in connection with the body of the carrier and the bends 43 a pair of oppositely disposed inwardly opening guide passages 44 extending from the flange 40 to the forward or front end of carrier 40. The supports and guide passages provide means for slidably connecting the drawer element 13 to the carrier element 12. The plate 40 between its transverse median and rear end is formed with a pair of spaced parallel depending portions to provide stops 45. The purpose of the said stops will be presently referred to. The plate 40 forwardly of and in proximity to the flange 41 is formed with a pair of spaced parallel upwardly

extending oppositely disposed hollow parts to provide a pair of sockets 47. The plate 40 rearwardly of and in proximity to the stops 45 is formed with a pair of spaced parallel upwardly extending oppositely disposed hollow parts to provide a pair of sockets 48. The lower ends of the members 35, 36 are formed with barrels 49, 50 respectively through which extended the pintles or pivot rods 17, 18 respectively whereby the pintles 17, 18 and members are connected together. The ends of the pintle or pivot rod 17 are mounted in the sockets 47. The ends of the pintle or pivot rod 18 are mounted in the sockets 48. Owing to the manner in which the members 35, 36 are connected to leg 19 and to the plate 40 it provides for element 12, when shifted in a rearward direction to extend rearwardly from and to fold against element 11 and when shifted in a forward direction to extend forwardly beyond and to be suspended from element 11.

The drawer element 13 includes a rectangular open top drawer 49 having the sides 50 thereof formed at their upper ends with outwardly directed oppositely disposed lateral flanges 51 which are slidably mounted in the guide passages 44 and coast with the folds 42 for the purpose of suspending drawer 49 from plate 40. The closing movement of drawer 49 is arrested by the rear wall of the latter abutting flange 41. The opening movement of drawer 49 is arrested by the rear wall of the latter abutting stops 45. The front wall of drawer 49 is formed with a pair of oppositely disposed spaced parallel hollow portions providing a pair of sockets 52 into which the ends of the handle 18 are pivotally mounted. The handle 18 is employed for moving the structure to and from extended position.

When the structure is in folded or non-extended position the tongue 30 is extended through and coacts with the edge of slot 39 whereby the members 35, 36 are latched in abutting engagement with the inner face of leg 19 and the plate 40 is latched to the members 35, 36, and the structure will be in the position as shown in Figure 2. When the structure is extended it will appear as shown in Figures 1, 2, and 3. When the structure is in its extended position the tongue 34 extends through and coacts with the edges of slot 39^a whereby elements 11 and 12 are latched together for the purpose of maintaining the structure extended. The tongues 30, 34 and edges of slots 39, 39^a provide means for automatically latching the structure in non-extended and extended positions. The carrier 12 when the structure is extended acts as a suspension for element 13. The leg 20 limits the movement of the member 36 when section 12 is moved to extended position.

What I claim is:

1. A foldable and extendible drawer structure comprising a combined hanger, coupler and latch element adapted to be anchored stationary and a carrier element pivotally connected to, foldable against and extendible from the said other element and adapted to bodily carry therewith a drawer, one of said elements having spaced slots constituting a pair of keepers and the other of said elements having spaced inherent parts constituting latching members, one of said members for engaging in one of the keepers and the other engaging in the other of the keepers respectively for automatically latching said carrier element in folded and extended positions.

2. A foldable and extendible drawer structure

comprising a combined hanger, coupler and latch element adapted to be anchored stationary, a carrier element pivotally connected to, foldable against and extendible from the said other element, a shiftable drawer connected to, bodily moving with and slidably supported from said carrier element, said carrier element being formed with a pair of spaced parallel slots, said combined hanger, coupling and latch element being formed with a pair of spaced resilient latching tongues disposed in planes at right angles, one of said tongues automatically coacting with one of said slots and the other automatically coacting with the other of said slots for respectively latching said carrier element folded against and extended from the other of said elements.

3. A foldable and extendible drawer structure comprising a combined hanger, coupler and latch section adapted to be anchored stationary to a support and formed of a horizontal and a vertical leg, a front and a rear suspension member arranged in spaced relation, pivotally supported at one end from said horizontal leg rearwardly of the vertical leg and simultaneously movable to abut and to extend from said horizontal leg, said vertical leg coacting with said forward member for limiting the movement of said members when extended from the horizontal leg, a carrier of greater width than said members, said members being pivotally connected at their other ends to said carrier adjacent the sides of the latter, a drawer, and said carrier and drawer having coacting parts for suspending the drawer from the carrier, to provide for the drawer being bodily moved with the carrier and for slidably connecting the drawer to the carrier.

4. A foldable and extendible drawer structure comprising a combined hanger, coupler and latch section adapted to be anchored stationary to a support and formed of a horizontal and vertical leg, a front and rear suspension member arranged in spaced relation, pivotally supported at one end from said horizontal leg rearwardly of the vertical leg and simultaneously movable to abut and to extend from said hori-

zontal leg, said vertical leg coacting with said forward member for limiting the movement of said members when extended from the horizontal leg, a carrier of greater width than said members, said members being pivotally connected at their other ends to said carrier adjacent the sides of the latter, a drawer, and said carrier and drawer having coacting parts for suspending the drawer from the carrier, to provide for the drawer being bodily moved with the carrier and for slidably connecting the drawer to the carrier, said legs and said forward member having coacting parts for automatically latching said members in abutting engagement with the vertical leg and automatically latching said members in extended position with respect to said vertical leg.

5. A foldable and extendible drawer structure comprising a combined hanger, coupler and latch section adapted to be anchored stationary to a support and formed of a horizontal and vertical leg, a front and rear suspension member arranged in spaced relation, pivotally supported at one end from said horizontal leg rearwardly of the vertical leg and simultaneously movable to abut and to extend from said horizontal leg, said vertical leg coacting with said forward member for limiting the movement of said members when extended from the horizontal leg, a carrier of greater width than said members, said members being pivotally connected at their other ends to said carrier adjacent the sides of the latter, a drawer, and said carrier and drawer having coacting parts for suspending the drawer from the carrier, to provide for the drawer being bodily moved with the carrier and for slidably connecting the drawer to the carrier, said legs each provided with a resilient latching tongue, and said forward member being provided with a pair of spaced slots, said tongues selectively coacting with said slots for automatically latching said members in abutting engagement with and in extended position relative to said horizontal leg.

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