July 15, 1958 N. H. FRANKS 2,843,436

WALL MOUNTED FOLDING TABLE

Filed April 17, 1957

Fig. 1

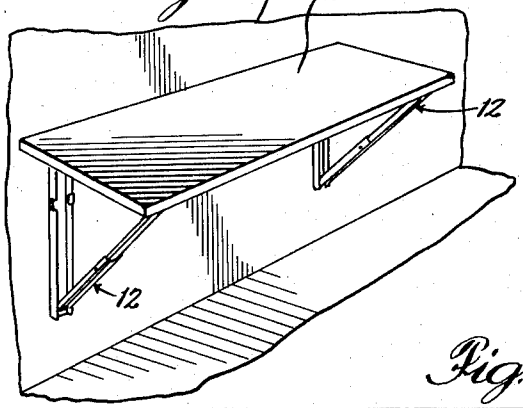


Fig. 2

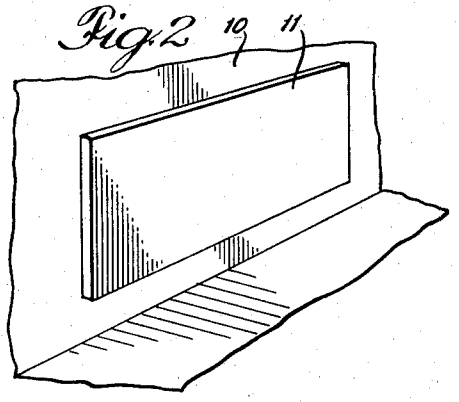


Fig. 3

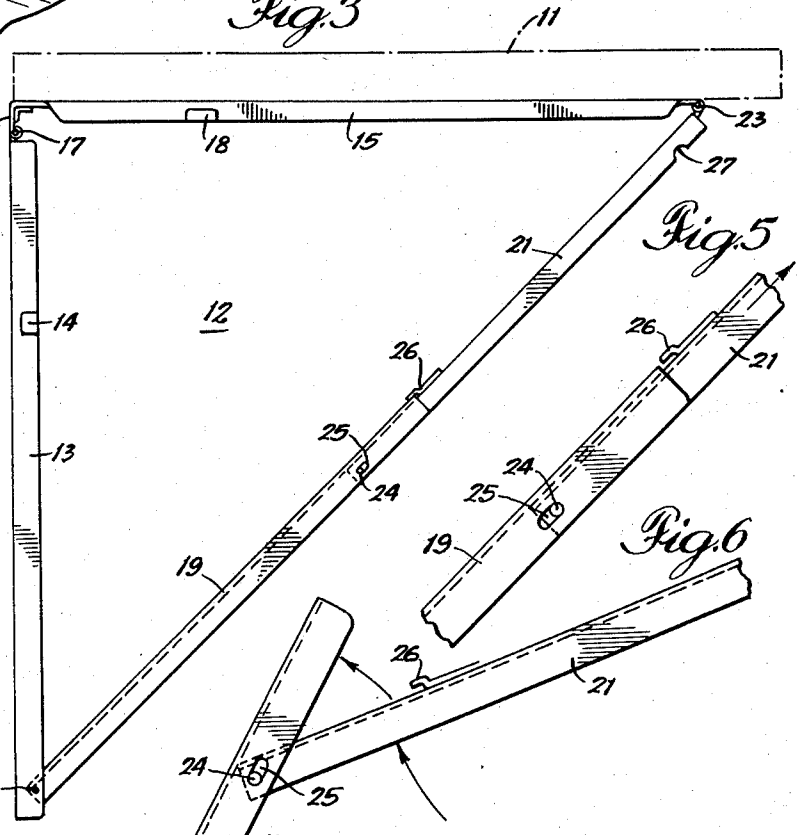


Fig. 4

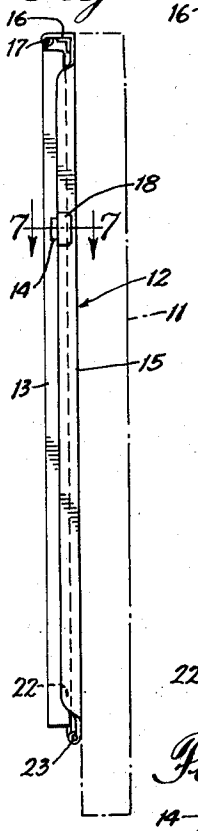
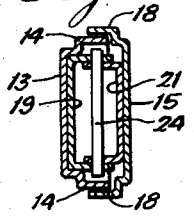


Fig. 5

Fig. 6

Fig. 7



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WALL MOUNTED FOLDING TABLE

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2 Claims. (Cl. 311—18)

This invention relates to wall mounted tables and more particularly to a table to be hingedly mounted on a wall and to a hinge bracket therefor.

There are many environments in which it is desirable to have a table top hingedly connected to a wall to be folded to a closed position adjacent and parallel to the wall or to an open position projecting horizontally from the wall. To be satisfactory, such a table must be easy to fold from one position to the other, sturdy and rigid when in open position and secure against accidental movement from open to closed position. It is a primary object of the present invention to provide a wall mounted table which satisfies these several requirements.

Another object is to provide a wall mounted table in which the table top is supported on brackets adjacent opposite ends thereof and each of the brackets includes pivotally and telescopically connected links and latch means engaged by longitudinal collapsing movement of the links to hold the links against pivoting.

With this construction, both brackets must be raised and folded simultaneously to release the latches so that accidental release of the table is extremely unlikely and the latches can be engaged simply by raising the table top to open position.

Another object is to provide a bracket for a wall mounted table which is formed to hold into an extremely compact structure and which provides a rigid support for the table top when it is open.

According to a feature of the invention, the bracket is formed of channel section mounting and supporting strips and channel section links all of which nest when folded to closed position to occupy a minimum amount of space.

The above and other objects and features of the invention will be more readily apparent from the following description when read in connection with the accompanying drawing, in which:

Figure 1 is a perspective view of a foldable table embodying the invention in open position.

Figure 2 is a similar view showing the table in closed position;

Figure 3 is an end view in open position;

Figure 4 is an end view in closed position;

Figures 5 and 6 are partial views of the bracket links illustrating the latching operation; and

Figure 7 is a section on the line 7—7 of Figure 4.

The folding table of the present invention is adapted to be pivotally secured to a vertical wall **10** which may be the wall of a room and may be formed of wood, masonry, or plaster construction. The table includes a top **11** which may be made of any desired size and which is adapted to be folded from an open position, as shown in Figure 1, in which it projects outward at right angles from the wall **10** to closed position, as shown in Figure 2, in which it lies closely adjacent and parallel to the wall **10**. When open, the top **11** may serve as a rigid wall mounted table for work shop, decorative or other purposes, and when it is closed lies closely adjacent to the

wall where it occupies a minimum amount of space and is out of the way.

The table is supported at its opposite ends on folding brackets indicated generally at **12** which are secured to the wall and to the table top. As best seen in Figures 3 and 4, the brackets comprise a mounting strip **13** of channel section which is rigidly secured to the wall by screws, or similar suitable fastenings. The web of the channel lies flat against the wall with the flanges projecting outward therefrom, as seen in Figure 7, and at a point intermediate their ends the flanges may be pressed outward, as shown at **14**, to provide space for pivot pins, as described hereinafter.

The upper ends of the mounting strips **13** are pivotally connected to channel section supporting strips **15** which lie flat against the underside of the table top **11** and are permanently secured thereto by screws or similar fastenings. As shown in Figures 3 and 4, the web portion of the supporting strips **15** is bent over at an angle at **16** and is pivoted to the upper end of the mounting strip by a pivot pin **17**. With this construction, the bent-over portion **16** of the supporting strip will lie flat against the wall when the table is open, as shown in Figure 3, and will space the supporting strip outward slightly from the mounting strip when the table is closed, as shown in Figure 4. The supporting strips **15** are slightly wider than the mounting strips **13** to nest over them when the table is closed, as shown in Figures 4 and 7, and are formed in their flanges with outwardly extending projections **18** to register with and fit over the projections **14** on the mounting strips.

Each bracket is completed by a pair of channel section links **19** and **21** pivoted respectively to the lower end of the mounting strip **13** and the outer end of the supporting strip **15**. The lower link **19** may fit relatively closely within the mounting strips **13**, as shown in Figure 7, and may be pivoted thereto by a pin **22** extending through the flanges of the strips. The strip **19** is so positioned that when the table is folded, its channel will open outwardly.

The strip **21** is pivoted at its upper end on a pivot pin **23** carried by the free end of the supporting strip **15** and is positioned so that its channel will open in the same direction as the supporting strip **15** when the table is closed. The link **21** is slightly narrower than the link **19** to nest into it when the table is closed, as shown in Figure 7.

The links **19** and **21** are connected together for pivotal and for limited longitudinal movement. For this purpose, the link **21** carries a cross pin **24** at its free end which extends through elongated slots **25** formed in the flanges of the link **19** spaced from its free end. With this type of connection, the links **19** and **21** can pivot relative to each other between the open and closed positions of the table and can slide lengthwise relative to each other through a limited amount of movement. The slots **25** are of such length and are so positioned that when the pin **24** seats against the lower ends of the slots, as shown in Figure 3, the table top will be in a horizontal position at right angles to the wall **10**.

To hold the links against relative pivotal movement, the upper link **21** carries a latch member **26** which may be in the form of a flat strip welded to the outside of the web of the link and spaced above the surface of the link at its lower end. The latch member **26** is so positioned that when the pin **24** is in the lower end of the slots **25**, the upper end of the link **19** will slip beneath the latch member **26** and will hold the links securely against relative pivotal movement.

To raise the table top from its closed to its open position, it is necessary only to grasp the table top and elevate it about the pivot pins **17** to a position slightly

higher than horizontal. During this movement, the links **19** and **21** will unfold and will fall by gravity to the position shown in Figure 5. It will be noted that in this position the links are in alignment and the pin **24** engages the upper ends of the slots **25** with the latch member **26** spaced above the upper end of the link **19**. When the table top is lowered, the pin **24** will move to the lower ends of the slots **25** and the latch member **26** will engage the upper end of the link **19** to secure the links rigidly in alignment against any possible accidental folding or displacement.

With the table open, it will be seen that it will not readily be released to fold to closed position. If the table top should be raised accidentally at this time, the links will move back to the position shown in Figure 5 and when the table top is again lowered they will return automatically to their latched position, as shown in Figure 3. To fold the table from open to closed position, it is necessary not only to raise the table top slightly above horizontal, but also simultaneously to bend the links inward and upward so that when the table top again moves down, the latch will not automatically re-engage. When two brackets, as shown, are employed they must be released simultaneously in order to fold the table to its closed position and if more than two brackets were used, it would still be necessary to release all of the latches simultaneously to fold the table to its closed position.

Once the brackets have been bent inward and upward slightly the table top may continue to move downward with the brackets at this time occupying a position approximately as illustrated in Figure 6. During this movement, the link **19** will swing inward about the pivot **22** and the outer and upper end of the link will swing downward and inward with the free end of the supporting strip **15**. As the movement continues, the link **19** will nest within the mounting strip **13**, the link **21** will nest within the link **19** and the supporting strip **15** will nest over the mounting strip **13**. The pivot pin **24**, which may project beyond the flanges of the link **19**, for safety is received in the recesses **14** and **18** and the link **21** may be notched, as shown at **27**, to fit over the pivot pin **22**. Thus the entire bracket linkage will collapse into a very small, compact structure allowing the table top **19** to lie closely adjacent to the wall **10** where it is out of the way.

While one embodiment of the invention has been shown and described herein, it will be understood that it is illustrative only and not to be taken as a definition of the scope of the invention, reference being had for this purpose to the appended claims.

What is claimed is:

1. A wall mounted table comprising a table top and a pair of folding brackets secured to the table top adjacent to the opposite ends thereof and adapted to be secured to a wall to support the top for folding between a closed position adjacent and parallel to the wall to an open position projecting horizontally from the wall, each of the brackets including a vertical channel section mounting strip to be secured to a wall with the channel opening outward, a channel section supporting strip secured to the top with its channel opening downward and of a different width than the mounting strip to interfit with the mounting strip one within the other and hinged to the upper end of the mounting strip, a pair of channel section links hinged respectively to the lower end of the mounting strip and the outer end of the supporting strip, a pivotal and sliding connection between the end of one link and a point spaced from the end of the other link, and a latch member on said one link engageable with the end of the other link when the links are aligned and moved together to hold the links against relative pivotal movement, the links being narrower than the strips and being of different widths and fitting one within the other to be enclosed by the strips when the table is in its closed position.

2. In a wall mounted table, a folding bracket comprising channel section mounting and supporting strips hinged together at one end with the channels facing and of different widths to fit together one within the other, a pair of channel section links hinged to the free ends of the strips respectively to nest into the strips and of different widths to fit together one within the other and to be enclosed by the strips, a pin at the free end of one of the links fitting in a slot spaced from the free end of the other link to connect the links for relative pivotal and limited lengthwise movement, and a latch member on said one of the links spaced from its free end to engage the free end of the other link when the links are aligned and moved toward each other to latch the links against relative pivotal movement.

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