Aug. 28, 1962 J. T. PARSONS 3,051,538

SEWING MACHINE CABINET

Filed Sept. 19, 1960 2 Sheets-Sheet 1

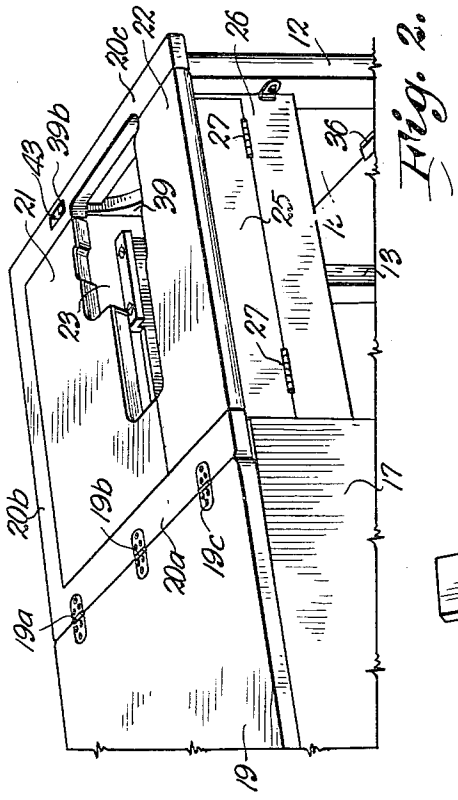


Fig. 2.

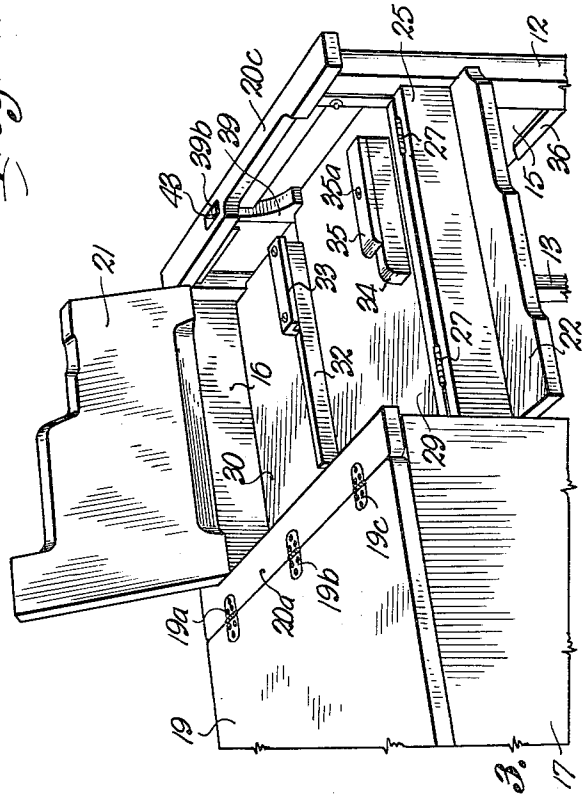


Fig. 3.

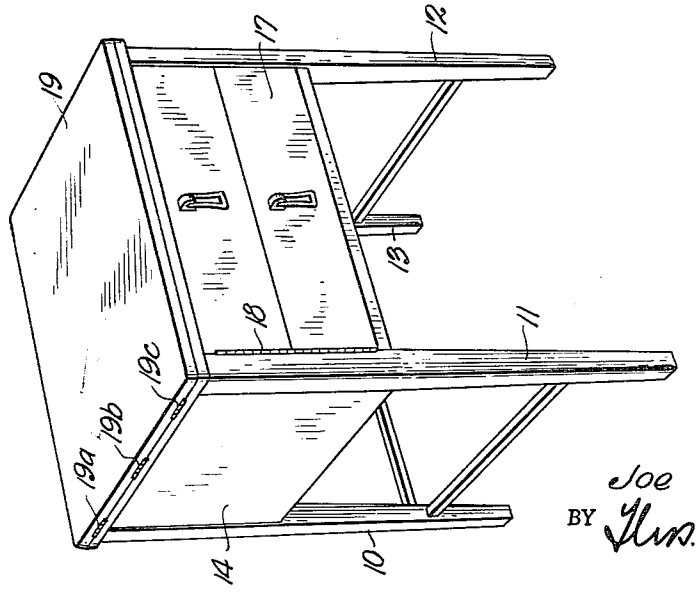


Fig. 1.

INVENTOR.
Joe T. Parsons
BY Wm. E. Seefield
ATTORNEY.

Aug. 28, 1962 J. T. PARSONS 3,051,538

SEWING MACHINE CABINET

Filed Sept. 19, 1960 2 Sheets-Sheet 2

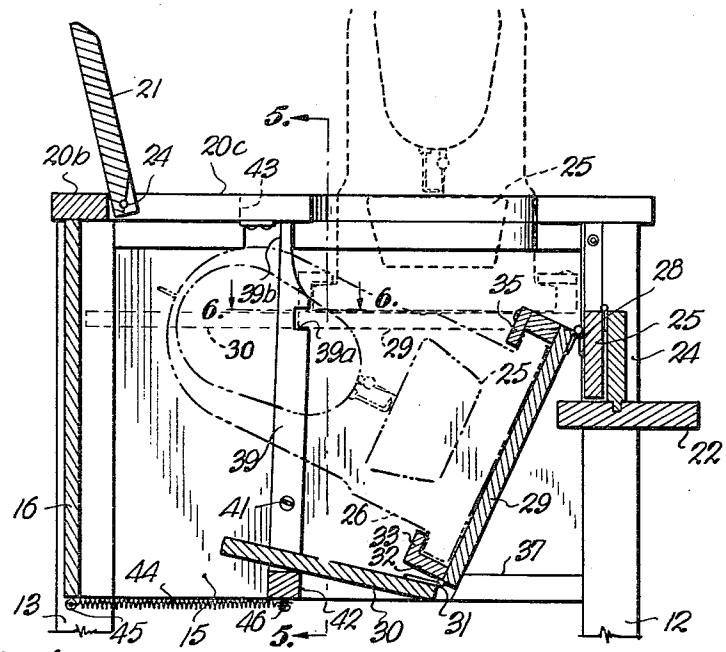


Fig. 4.

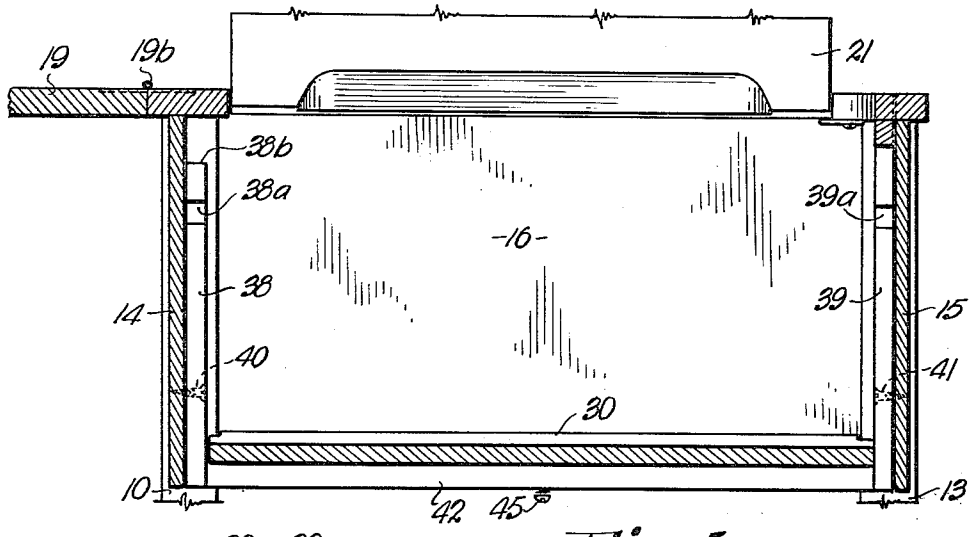


Fig. 5.

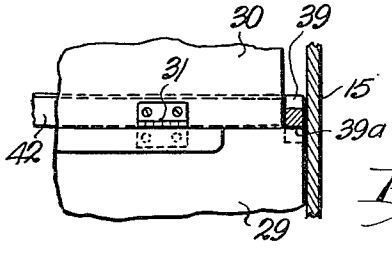


Fig. 6.

INVENTOR.
Joe T. Parsons
BY Geo. E. Seefeld
ATTORNEY.

United States Patent Office 3,051,538 Patented Aug. 28, 1962

3,051,538

SEWING MACHINE CABINET

Joe T. Parsons, Box 212, Osceola, Ark.

Filed Sept. 19, 1960, Ser. No. 56,796
2 Claims. (Cl. 312—30)

This invention relates to cabinets for sewing machines and has particular applicability to cabinets for sewing machines of the free-arm type.

As will be known to those familiar with the sewing machine art, most free-arm machines are sold as portable units. When sold in this manner the machines are accompanied by a carrying case having removable sides so that the machine can be uncovered for use. If the machine is to be used for work in which the free-arm is necessary (for example, the forming of any hollow tubular element such as a sleeve) satisfactory results can be obtained by merely placing the uncased machine on a table or other work bench. However, in situations where it is desired to employ the machine for conventional flat bed sewing, the small surface area of the bed coupled with the awkward spacing of the bed high above the base of the machine, makes the use of the machine for such purposes difficult. There is no support for the fabric adjacent the bed and, consequently, it is not an easy task to maintain free feed of the material through the machine.

Accordingly, there have been provided cabinets designed to provide removable support surfaces adjacent the free-arm so that at the selection of the operator the sewing machine can be used either for flat bed or free-arm work. The machine is carried by a shelf or supporting platform located within and below the level of the top of the cabinet. The platform is hinged so that when not in use the platform can be lowered in the cabinet to bring the machine fully therein.

The present invention has for one of its principal objects the provision of a unique latching arrangement for releasably engaging and holding the machine supporting platform in its elevated or normal working position. One of the principal advantages of the invention is that it provides a latch mechanism so constructed as to permit disengagement of the latch mechanism from the shelf with much greater ease and facility than is the case in presently known cabinets of this type. A feature of the invention in this respect is that the latch operating element is readily accessible to the operator, being located so as to be capable of manipulation without placing the hand inside the cabinet. This facilitates the handling of the machine during its retraction into the cabinet and assists in preventing any injury to the operator in the event the operator should lose his grip on the machine during retraction.

Another object of the invention is to provide a cabinet and shelf latching arrangement therefor in which the shelf is firmly supported in the elevated position and in which the shelf is automatically latched in the elevated position as it is moved upwardly from the retracted position.

A further object of the invention is to provide a cabinet in which the latch mechanism is so constructed as to support a part of the shelf in the retracted position of the latter, thus simplifying the over-all structure and reducing the over-all cost of same.

Still another object of the invention is to provide a cabinet and shelf latching mechanism therefor which is designed to provide an optimum of leg room beneath the cabinet even when the shelf is in the retracted position.

Other and further objects of the invention together with the features of novelty appurtenant thereto will appear in the course of the following description.

In the accompanying drawings, which form a part of

the instant specification and are to be read in conjunction therewith and in which like reference numerals indicate like parts in the various views;

FIG. 1 is a front perspective view of a cabinet incorporating the features of the invention, the cabinet being shown in the completely closed condition;

FIG. 2 is a fragmentary enlarged front perspective view of the upper portion of the cabinet, the top cover and front cover shown in their open positions;

FIG. 3 is a view similar to FIG. 2 but showing the sectional components of the top moved to the open position permitting mounting of a machine on the inner support shelf;

FIG. 4 is an enlarged fragmentary cross-sectional view taken along a vertical fore-to-aft plane bisecting the main body of the cabinet;

FIG. 5 is a fragmentary section taken along the line 5—5 of FIG. 4 in the direction of the arrows; and

FIG. 6 is a fragmentary section taken along the line 6—6 of FIG. 4 in the direction of the arrows, the shelf in this instance being shown in its elevated horizontal position.

Referring to the drawings and initially to FIGS. 1, 2 and 3, in the preferred embodiment of my invention the cabinet is rectangular in configuration, being supported on legs **10**, **11**, **12** and **13**. Rigidly secured to these legs and forming the casing or housing for the machine are the opposite end walls **14** and **15** and a back wall **16** (FIG. 3). The front of the upper portion of the cabinet is covered by a swinging door **17**, which in this case is shaped to resemble a pair of outer drawer surfaces. As is believed evident from the drawings, door **17** is mounted for swinging movement about a vertical axis, preferably being connected to leg **11** by hinge **18**. The hinge permits the door **17** to be swung from the closed position illustrated in FIG. 1 through 180° to the open position illustrated in FIGS. 2 and 3.

The top of the cabinet is covered by an outer cover or lid **19** which, like door **17**, is hinged along one edge. The hinges are shown at **19***a*, **19***b* and **19***c*. Thus the lid **19** can be swung sideways from its covering position, as illustrated in FIG. 1, to the side extended position illustrated in FIGS. 2, 3 and 5. In the latter position, it forms a continuation of the working surface or top of the cabinet.

While more will be said of the top later, it will be noted at this point that the top includes rigid marginal portions having contiguous sections **20***a*, **20***b* and **20***c* which are supported by and firmly secured to the main body of the housing. Located within the marginal surfaces just described and coplanar therewith are a pair of top forming elements **21** and **22**. The adjoining edges of these surfaces are cut out to form an aperture **23** which conforms in outline with the outline of the conventional free arm of a free-arm sewing machine. Since the sewing machine plays no part in the present invention, it is not shown other than in broken lines in FIG. 4. There the free arm is indicated generally by reference numeral **25** and the base or pedestal by reference numeral **26**.

It will be noted that top portion **21** is mounted for upward swinging movement about a hinge axis **22** (FIG. 4). The portion **22** of the top is secured to a vertical front member **24**. The lower edge of member **24** is secured to the stationary front piece **26** by means of hinges **27** so that when desired the top portion **22** can be swung downwardly to the position illustrated in FIGS. 3 and 4.

Referring now more particularly to FIGS. 3, 4 and 5, located below the top of the cabinet and hingedly connected to the inner front member **25** by hinge **28** is a two-part shelf having the forward portion **29** and rearward extension **30**. The combined area of the shelf is

such that when the parts **29** and **30** are in the horizontal position shown in FIG. 3, the shelf substantially fills the inside cross section of the casing. As is shown in FIG. 4, the rear extension **30** of the shelf is hingedly connected by hinge **31** to the rearward edge of shelf portion **29**.

The shelf portion **29** is provided with mounting attachments for the sewing machine, these comprising the bar **32** with offset flange **33** near the rearward edge of portion **29** and the bar **34** having the pivotal latch **35** near the forward edge. Latch **35** is pivoted as at **35***a* to bar **34**.

As can best be seen in FIG. 4, the offset flange **33** and pivotal latch **35** are designed to overlie and engage the opposite edges of the pedestal to hold the machine to the shelf portion **29**. It will be evident, of course, that other means of securing the machine to the shelf may be employed.

In the lower or inoperative position of shelf **29–30**, that is, the position illustrated in FIG. 4, the portion **29** thereof rests in an inclined disposition upon suitable stop members **36**, secured to the inside surfaces of the opposite end walls **14** and **15**. While only one such stop **36** is shown, it will be understood that a like stop is found on end wall **14**.

In order to latch the shelf in the elevated working position illustrated in FIG. 2, there is provided a pair of upright latching members **38** and **39** which are respectively located adjacent the inside surfaces of the end walls **14** and **15**. Each latching member is pivoted near its lower end to the adjoining end wall as by screws **40** and **41**, respectively. The screws are located on a common horizontal axis. The lower ends of the latching members are connected rigidly with one another by a cross bar **42**.

It will be noted that near their upper ends the latching members **38** and **39** are provided on the forward edges with notches **38***a* and **39***a* which are so dimensioned as to receive therein portions of the rear edge of shelf part **29** adjacent the opposite sides thereof when the shelf is in its elevated or horizontal position. The width of the rear shelf extension **30** is less than that of the part **29** whereby to expose those portions of the rearward edge of the latter in the zone of the latching members so that they may be received in the notches **38***a* and **39***a*.

While the left-hand latching member **38** (as viewed in FIG. 5) terminates at its upper end within the casing, the upper end being indicated at **38***b*, the right-hand latching member has an upwardly tapered extension **39***b* which extends upwardly through an aperture **43** (see FIGS. 2 and 3) formed in the marginal section **20***c* of the top of the cabinet. Aperture **43** is elongated in the fore and aft direction so as to provide sufficient freedom of movement of extension **39***b* to permit the latching member to move rearward far enough to disengage notch **39***a* from the shelf. The upper end of extension **39***b* is made flush with the upper surface of section **20***c* so as to permit complete closing of cover **19**.

The upper ends of the latching members **38** and **39** are biased toward shelf part **29** by a tension spring **44** having one end secured as at **45** to the lower edge of the back **16** of the cabinet and the other end as at **46** to the underside of the latch cross bar **42**. It will be noted that the latching members are so disposed that as the shelf part **29** is raised from the solid line position of FIG. 4 to the horizontal position, the rearward edge portions of the part **29** will engage and displace the latching members until the part **29** reaches the horizontal whereupon the rear edge comes into alignment with the notches. Spring **44** then causes the latching members to return toward the shelf part **29** to engage the notches therewith.

To lower or retract the shelf from the horizontal position, the operator grasps the sewing machine, and while pulling forwardly or upwardly with one hand thereon, pushes the extension **39***b* rearwardly in aperture **43** until the notches **38***a* and **39***a* are disengaged from the corresponding portions of shelf part **29**. Of course, it will

be evident that any movement of latching member **39** is accompanied by corresponding movement of latching element **38**, because of the tie therebetween afforded by the cross bar **42**. The holding pressure on the machine is then relaxed slightly to permit the shelf to drop below the plane of the notches. Thereupon, both hands can be used for further lowering of the machine, it no longer being necessary to apply unlatching pressure to extension **39***b*. Lowering of the machine continues until shelf part **29** strikes the ends of the stop blocks **37**.

As the shelf is lowered, shelf extension **30** remains in the same plane as part **29**, until the former strikes the cross bar **42**. Thereafter, the shelf extension will be folded toward shelf part **29**, being supported by the cross bar **42**. This arrangement maintains the entire operating mechanism within the upper and lower edges of the walls of the casing, adding to the attractiveness and neatness of the unit, as well as preserving leg room thereunder.

Depending on the use to which the machine is to be put, the movable components **21** and **22** of the top can be placed either in the closed position illustrated in FIG. 2 or open position illustrated in FIG. 3. The latter will employed when the machine is being utilized for free-arm sewing. When it is desired to use the machine as a conventional sewing machine, portions **21** and **22** will be brought into coplanar relationship with the bed of the sewing machine, which is the disposition shown in FIG. 2. Of course, during raising and lowering of the machine the movable top components **21** and **22** must be so disposed of as to be out of the way of the machine, which is the configuration illustrated in FIG. 3.

Once the machine is lowered into the casing, top portions **21** and **22** are returned to the position of FIG. 2. The cabinet is finally closed by swinging cover **19** over to its top covering position and closing the front swinging door **17**.

From the foregoing it will be seen that my invention is one well adapted to attain all of the ends and objects hereinabove set forth together with other advantages which are obvious and which are inherent to the structure.

It will be understood that certain features and subcombinations are of utility and may be employed without reference to other features and subcombinations. This is contemplated by and is within the scope of the claims.

As many possible embodiments may be made of the invention without departing from the scope thereof, it is to be understood that all matter herein set forth or shown in the accompanying drawings is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim:

1. In a sewing machine cabinet of the type having a hollow housing with a top, a pair of opposed side walls, a front wall, a back wall and an opening in the top, a shelf within the housing having one edge pivotally connected with the inside of the front wall of the housing for swinging movement of the shelf about a first horizontal axis located adjacent said front wall from a horizontal position to a downwardly inclined retracted position, said shelf, when in said horizontal position, substantially filling the inside horizontal cross sectional area of said housing, means for securing a sewing machine to said shelf so that in the horizontal position of the shelf the machine extends upwardly through said opening and in the retracted position of the shelf is below the top, a pair of elongate substantially upright latching members each pivoted respectively to the opposed side walls of the housing for movement about a common, second horizontal axis parallel with but spaced from said first axis, said latching members spaced from one another to lie near said opposed side walls and having latching recesses adapted to engage the shelf at edge locations remote from the first axis and intermediate the front and rear edges of the shelf whereby to releasably support same in said horizontal position, tie means tying said latching mem-

bers together for simultaneous movement, resilient means urging the said latching members into the position wherein said latching portions engage said shelf, one of said latching members extending upwardly past the upper surface of said shelf and through a second opening in said cabinet top for access thereto, said opening being of a size sufficient to permit sufficient pivotal movement of the latching members away from said shelf as to permit disengagement of the latching portions from the shelf whereby said shelf may be lowered to its retracted position, said shelf having openings adjacent said latching members constructed to permit said pivotal movement of said latching members and subsequent downward movement of the shelf without interference with the latching members.

2. A sewing machine cabinet as in claim 1 wherein said shelf is formed as a main body hinged to said front wall and extension portion hinged to said main body for movement about a third horizontal axis, said extension adapted to fold toward said main body and rest upon the tie means when the shelf is in the retracted position.

References Cited in the file of this patent

UNITED STATES PATENTS

740,434	Howe	Oct. 6, 1903
2,247,380	Hohmann	July 1, 1941
2,527,319	Marsac	Oct. 24, 1950

FOREIGN PATENTS

74,452	Austria	July 25, 1918