Nov. 7, 1950 B. F. WILLIAMS 2,528,935

SEWING MACHINE MOUNTING

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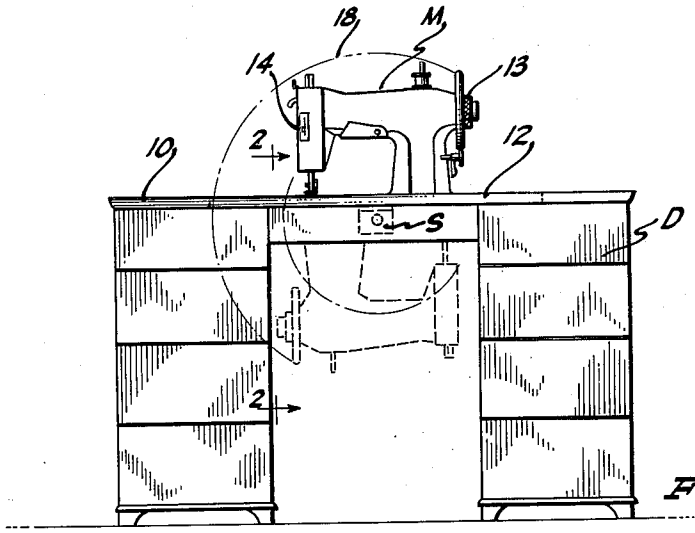


FIG. 1

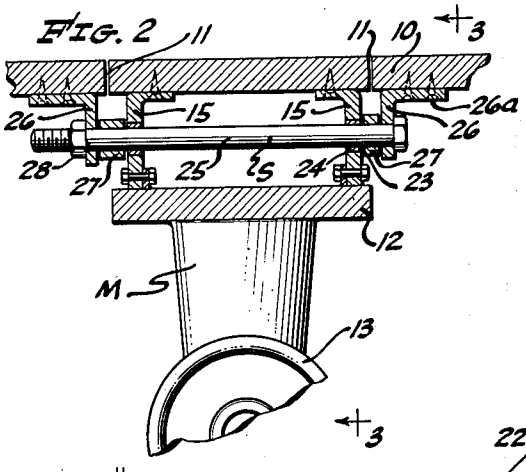


FIG. 2

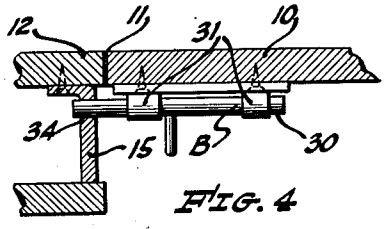


FIG. 4

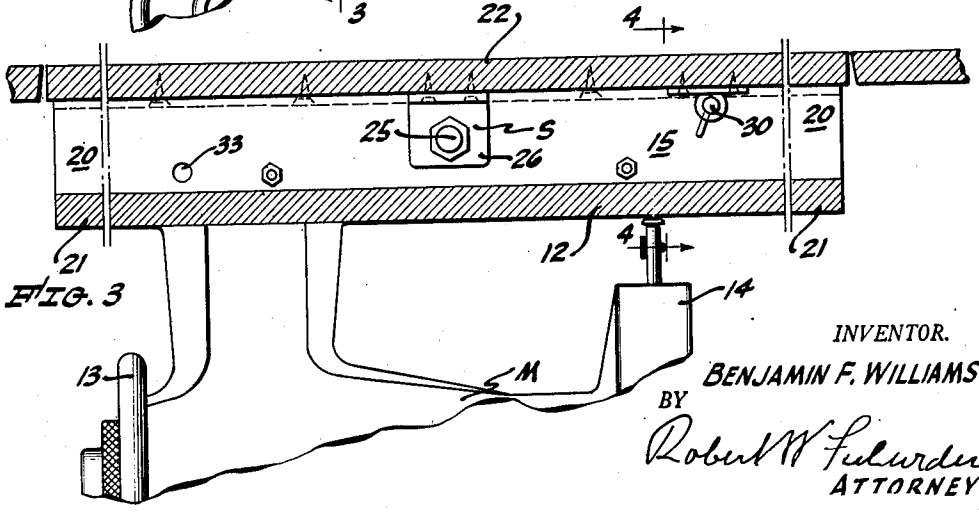


FIG. 3

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SEWING MACHINE MOUNTING

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3 Claims. (Cl. 311—12)

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My invention relates to the field of sewing machines, and more particularly to a desk or table having a sewing machine rotatably mounted thereon in such a manner that the machine can be placed in the concealed position or in a usable position without moving other portions of the table or desk structure into a supporting position.

In the conventional mounting of a sewing machine on a desk or table, the machine is rotatably supported on one of its longitudinal sides from a fixed portion of the structure, with the machine when not in use being rotated downwardly into a rectangular opening formed in the horizontal top portion of the desk or table. Upon it being desired to place the machine in a usable position, the machine is rotated upwardly on one of its longitudinal sides to a position where a second hinged member can be rotated under it to form a shelf for supporting one of the sides of the base of the machine, with the opposite side of the machine being supported on the hinges affixed to the base of the machine.

It is to eliminate the inconvenience of using the presently available mounting for a sewing machine which requires several operations to place the machine in or remove it from the usable position that I have devised my present invention.

A major object of my invention is to provide a mounting for a sewing machine which is adapted to rigidly maintain the machine in an operating position on a desk or table, but permitting the machine to be rotated lengthwise into a concealed or operating position.

Another object of my invention is to furnish a sewing machine mounting having an extremely simple mechanical structure, that can be operated with a minimum of effort, can be manufactured from standard commercially available material, and hence retailed at a price which will permit the use of my invention in movably supporting sewing machines installed in existing tables and desks as well as in new furniture in which a sewing machine is incorporated.

These and other objects and advantages of my invention will become apparent from the following description of a preferred form thereof, and from the drawing illustrating that form in which:

Fig. 1 is a side elevational view of a desk having a sewing machine rotatably supported thereon by the use of my mounting, with the location of the machine in a concealed non-operative position being indicated by phantom line;

Fig. 2 is a vertical cross-sectional view of the sewing machine in a concealed position taken on the line 2—2 of Fig. 1;

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Fig. 3 is a vertical longitudinal cross-sectional view of the mounting taken on the line 3—3 of Fig. 2, with the sewing machine being in the concealed position; and,

Fig. 4 is a vertical cross-sectional view of the bolt mechanism for holding the machine in an operating position taken on the line 4—4 of Fig. 3.

Referring now to Fig. 1 for the general arrangement of my invention it will be seen that a conventional power operated sewing machine M is supported in a rotatable position on a shaft mechanism S from the upper portion of a desk D, with the machine being held in an upright operating position by a slidably movable bolt B.

The supporting desk D is of a conventional design, and is formed with a substantially horizontal top 10 that has a rectangular longitudinally extending opening 11 formed therein as can best be seen in Fig. 2. A rectangular sewing machine base 12 that serves as a support for the sewing machine driving mechanism 13 and the needle bar holding head 14 is rotatably supported by the shaft mechanism S whereby the machine M can be rotated lengthwise in the opening 11 to place the machine in either an operating or concealed position. It will be noted in Fig. 2 that the base 12 is of such width as to bridge the opening 10, but is not of sufficient length to completely occupy the opening 11 as can best be seen in Fig. 3.

Two laterally spaced longitudinally extending ribs 15 are normally furnished on the lower face of the base 12, but should such ribs not be provided they are affixed thereto in a conventional manner. As the ribs 15 are used in rotatably supporting the machine M from the shaft mechanism S it will be apparent that an elongation of the ribs 15 must be provided at each end thereof in order that the base portion of the machine M will substantially fill the opening 11. The path of the upper portion of the driving mechanism 13 and the head 14 as the machine M is rotated is shown by the phantom line 18 in Fig. 1.

In Fig. 3 it will be seen that the elongation of the ribs 15 is accomplished by welding or otherwise securing a flange 20 to each end thereof whereby the resulting flanges extend substantially the entire length of the opening 11. A rectangular wooden member 21 is provided for each end of the machine base 12, with each of the members extending to the ends of the flanges 20 which it is supported between. Thus, upon the sewing machine M being disposed in the upright position shown in Fig. 1, the opening 11 is substantially closed by the base 12 together with the members 21. To provide for the opening 11 being closed when the machine M is in the inoper-

ative position shown by phantom line in Fig. 1 a rectangular member 22 is affixed to and extends the entire length of the ribs 15 and flanges 20, with the member 22 being positioned on the sides of the ribs and flanges opposite the base 12 as can best be seen in Fig. 3. The member 22 is preferably formed from the same material as the top 10 of the desk or table whereby it will blend therewith when the machine is in the inoperative position.

Each of the ribs 15 is formed with a centrally disposed horizontal bore 23 therein through which is inserted a bushing 24 formed from a soft material such as brass. A substantially horizontal bolt 25 extends through the bushings 24, with each end of the bolt being supported by an inverted L-shaped bracket 26 that is mounted by screws 26a on the under side of the top 10 adjacent the exterior face of one of the ribs 15. Situated on the bolt 25 between the exterior face of each of the ribs 15 and the interior face of one of the members 26 is an annular spacing ring 27 that prevents lateral displacement of the base 12 in the opening 11. Upon it being desired to demount the machine M the nut 28 on the bolt 25 is removed, and the bolt displaced from the members 26 and ribs 15.

The sewing machine M is maintained in the desired position by the use of the bolt mechanism S. In Fig. 4 it will be seen that the bolt B is formed from a horizontally disposed rod 30 having a conventional downwardly extending handle affixed thereto, with the bolt being slidably supported by two laterally spaced U-shaped members 31 which are affixed to the underside of the desk top 10. The inner portion of the rod 30 is adapted to engage a bore 33 formed in one of the ribs 15 whereby when the rod is so positioned the sewing machine M is held in an upright operative position. The bolt 30 is also adapted to engage a bore 34 formed in the opposite end of one of the ribs 15 to lock the machine M in the inoperative position shown by phantom line in Fig. 1.

It will be apparent that due to the rotation of the sewing machine M in moving from the operative to the inoperative position that the end 40 of the opening 11 is preferably beveled slightly vertically to permit such movement, with a crack of minimum width being visible between the end 42 of opening 11 and the ends of members 21 and 22.

The operation of my invention is extremely simple. With the sewing machine in the operative position shown in Fig. 1, and it being desired to place the machine in the inoperative concealed position, the bolt 30 is moved outwardly by a downwardly extending handle extending therefrom to permit the machine M to be rotated in a counterclockwise direction on the bolt 25 until the machine M is in the position shown in Fig. 4. It will be apparent that during this operation the sewing machine M must be held by the hands to prevent a violent downward swing of the machine which could do irreparable damage thereto.

With the sewing machine M in the inoperative position the bolt 30 is moved forwardly whereby the inner end thereof engages the bore 34, and the machine is locked in the inoperative position. Of course, prior to the sewing machine M being rotated downwardly from its normal operative position the insulated flexible conductor which carries electrical power to the machine M is disconnected therefrom, and reconnected when the machine is returned to the operative position.

To place the machine M in the operative position the above described operation is simply reversed, and the bolt 30 caused to engage the bore 33 to hold the machine in the upper position as shown in Fig. 1.

While the above device herein described is fully capable of attaining the objects and providing the advantages hereinbefore stated, it is to be understood that it is merely illustrative of the presently preferred form of my invention, and that I do not mean to limit myself to the details of construction herein shown and described other than as defined in the appended claims.

I claim:

1. A support for a sewing machine having two longitudinally extending ribs formed on the under side of the base thereof which includes: a plurality of flanges, with each of said flanges extending outwardly from one of the ends of one of said ribs and affixed thereto; a rectangular member affixed to the lower edges of said ribs and flanges and extending substantially the longitudinal length thereof; two rectangular members, with each of said members affixed to the upper edges of two of said adjoining flanges, and extending from one of the ends of said base to the ends of said adjoining flanges; a desklike structure, with said structure having a substantially horizontal top, and said top having a longitudinally extending rectangular opening formed therein; two oppositely disposed brackets mounted on the under side of said top and on each side of said opening; a shaft extending through said brackets and said ribs, with said shaft pivotally supporting said sewing machine in said opening; and means to maintain said machine in an upright operating position and a concealed position, with said machine when in an operating position substantially closing said opening with said base and said two members disposed on each end thereof, and said machine when in an inoperative position closing said opening by said member which extends the longitudinal length of said ribs and flanges.

2. A support for a sewing machine having two longitudinally extending ribs formed on the under side of the base thereof which includes: a plurality of flanges, with each of said flanges extending outwardly from one of the ends of one of said ribs and affixed thereto; a desklike structure, with said structure having a substantially horizontal top, and said top having a longitudinally extending rectangular opening formed therein; a rectangular member affixed to the lower edges of said ribs and flanges and extending substantially the longitudinal length thereof; two rectangular members, with each of said members affixed to the upper edges of two of said adjoining flanges, and extending from one of the ends of said base to the ends of said flanges; two oppositely disposed brackets mounted on the under side of said top and on each side of said opening; pivotal supporting means engaging said brackets and said ribs; and adjustable bolt means capable of maintaining said sewing machine in an upright position substantially closing said opening with said base and said two members, and said machine when in a concealed position substantially closing said opening by said members that extends the longitudinal length of said ribs and flanges, with said member and top providing a desk surface.

3. A support for a sewing machine having two longitudinally extending ribs formed on the under side of the base thereof which includes;

a plurality of flanges, with each of said flanges extending outwardly from one of the ends of one of said ribs and affixed thereto; a desklike structure, with said structure having a substantially horizontal top, and said top having a longitudinally extending rectangular opening formed therein; a rectangular member affixed to the lower edges of said ribs and flanges and extending substantially the longitudinal length thereof; two rectangular members, with each of said members affixed to the upper edges of two of said adjoining flanges, and extending from one of the ends of said base to the ends of said flanges; two oppositely disposed brackets mounted on the under side of said top and on each side of said opening; pivotal supporting means engaging said brackets and said ribs; and a slidable bolt capable of engaging openings formed in said ribs, with said bolt when engaging one of said openings maintaining said machine in an upright operative position, and when engaging another

of said openings maintaining said machine in a concealed position, and said machine when in an operative position closing said opening with said base and two members and when in an inoperative position closing said opening with said longitudinally extending member whereby a continuous horizontal surface is provided by the top of said structure.

BENJAMIN F. WILLIAMS.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
139,805	Morrison	June 10, 1873
961,525	Baltzley	June 14, 1910
1,084,387	Baltzley	Jan. 13, 1914
2,079,737	Greenway	May 11, 1937
2,240,395	Evans	Apr. 29, 1941