Oct. 31, 1933. J. LAMBERT 1,932,744

DISAPPEARING MACHINE BED PLATE SUPPORT

Filed Jan. 23, 1932

Fig. 1.

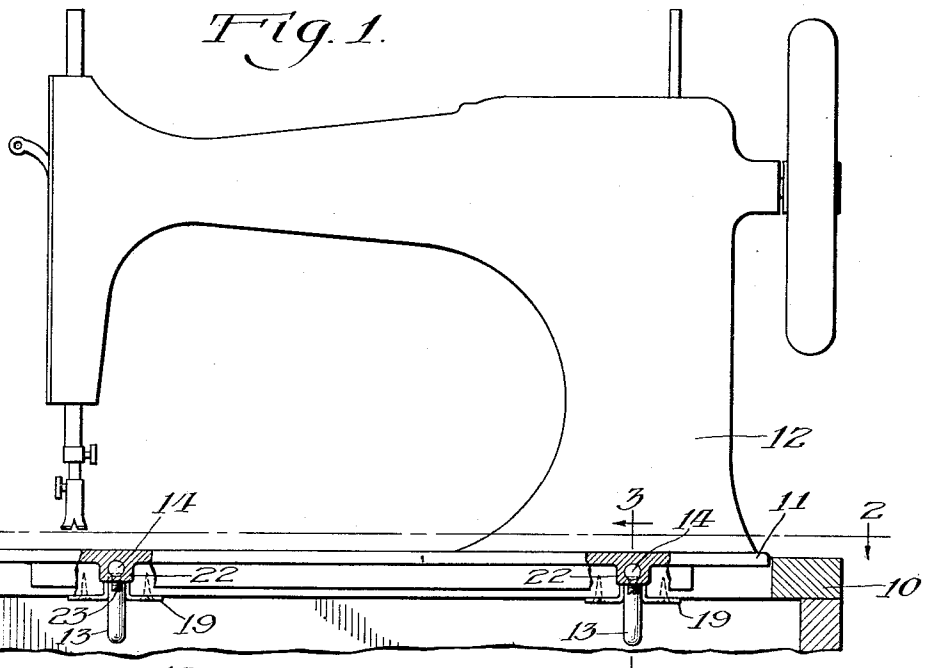


Fig. 2.

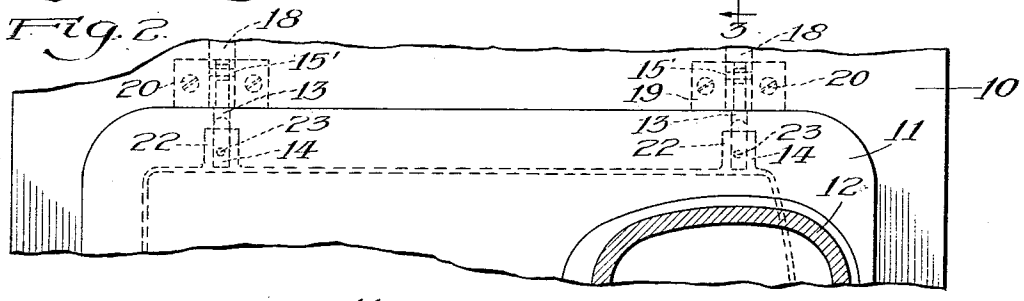


Fig. 3.

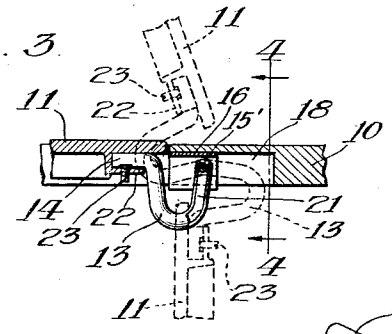


Fig. 4.

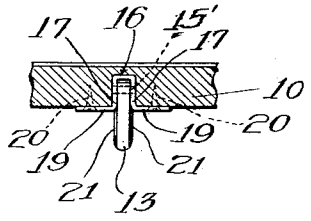
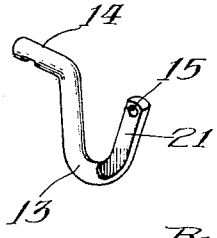


Fig. 5.



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DISAPPEARING MACHINE BED PLATE SUPPORT

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Application January 23, 1932. Serial No. 588,250

3 Claims. (Cl. 312—30)

This invention relates to sewing machines, and particularly to a sewing machine head hinge for hingedly connecting the head to the top of a drop head cabinet or other support.

The hinge herein shown and described is very strong and affords a steady, rigid mounting for the head on the support when the machine is in operative position. It also properly supports the head when it is lowered into a drop head cabinet or raised above the surface of the support for cleaning or oiling.

The hinge construction is such that it is unexposed and there is no possibility of injuring the material being sewn by reason of contact with any part of the hinge or the means for fastening the hinge to the support and to the bed plate of the head.

Another important advantage of my construction lies in the fact that the table or cabinet top is entirely smooth and the appearance of the cabinet or support is not marred by the presence of exposed hinges. The construction is very simple and economical to manufacture.

In the drawing:—

Fig. 1 is a front elevation, partly in section, showing a sewing machine head connected to the top of a drop head cabinet by hinges embodying my invention.

Fig. 2 is a plan view taken on the line 2—2 of Fig. 1.

Fig. 3 is a transverse vertical sectional view taken on the line 3—3 of Fig. 1; the solid lines indicating the position of the hinge when the head is in its operative position on the support, and the dotted lines showing the positions of the hinge when the head has been raised and when it has been lowered.

Fig. 4 is a longitudinal, vertical sectional view taken on the line 4—4 of Fig. 3 but showing only the full line position of the hinge.

Fig. 5 is a perspective view of the hinge member.

In that embodiment of the invention shown in the drawing, 10 indicates the top of a drop head cabinet or other support, cut out to receive and support the bed plate 11 of a sewing machine head 12 in a manner well known in the art.

The bed plate 11 is preferably hinged to the support 10 by a plurality of hinges secured to the support and to the rear, longitudinal margin of the bed plate, so that the head may be raised upwardly at the front to expose the mechanism beneath the bed plate to the operator. In the present embodiment two hinges are shown.

The construction of the hinge is as follows: a U-shaped member 13, shown detached in Fig. 5, is made of metal and is preferably circular in cross section. One of the arms of the U-shaped member is extended horizontally outwardly from its upper end as indicated at 14. The other upright member is horizontally bored at 15 to receive a pin 15′ by which the U-shaped member is pivotally connected to a strap 16 best shown in Fig. 4. The width of the strap 16 is indicated by the transverse sectional view in Fig. 3, and it is bent between its ends into a form shown in Fig. 4. The apertured upright portions 17 of the strap 16 provide bearings for the pin 15′. The support 10 is cut away beneath its upper surface, adjacent the bed plate 11, as indicated at 18, to receive the strap 16 and connected hinge member 13. The horizontal arms 19 of the strap 16 are secured to the bottom of the bed plate adjacent said cut away portion, by screws 20. The apertured arm of the hinge member 13 is preferably flattened on its sides as indicated at 21, to fit snugly between the upright members 17 of the strap 16, and to permit pivotal movement of the hinge member 13 on the pin 15′.

The bed plate 11 is usually a casting, and as shown, has integrally cast on its under surface, adjacent its rear, longitudinal margin, and opposite the member 13 connected to the support 10, a horizontally apertured lug into which the horizontal extension 14 of the member 13 is adapted to fit, the axis of the aperture in the lug 22 being transversely of the machine. Preferably the extension 14 is recessed on its under surface and the lug 22 is provided with a vertically extending aperture for the reception of a set screw 23 which securely holds the arm 14 in the lug 22. Any other suitable means for connecting one end of the hinge member 13 to the bed plate 11 may be employed without departing from the scope of my invention.

In Fig. 3, one dotted line position shows the location of the parts when the head has been raised, and the other dotted line position shows the location of the parts when the head has been dropped into a drop head cabinet. It will be noted that the recess 18 in the support 10 extends sufficiently rearwardly to accommodate the member 13 when the head has been dropped.

Changes may be made in details of construction without departing from the scope of my invention, and I do not intend to be limited to the

exact form shown and described, except as set forth in the appended claims.

I claim:—

1. In a disappearing instrument cabinet including a horizontal support and a machine bed plate, a concealed hinge including a substantially U-shaped portion connecting the bed plate to the support, the support being recessed beneath its top surface, inwardly from the margin adjacent the bed plate a substantial distance beyond the connection of the hinge with the support, and the hinge member being pivotally mounted in said recess in the support, and rigidly connected to the bed plate below the surface thereof, whereby said bed plate may be swung to either side of said support.

2. A disappearing instrument cabinet including a horizontal support and a machine bed plate hingedly connected together, the support being recessed beneath its upper surface, inwardly from the margin adjacent the bed plate, a substantial distance beyond the connection of the hinge with the support, a U-shaped hinge, and a pin extending longitudinally of the support across said recess intermediate the ends thereof, the hinge member being pivotally mounted on said pin and rigidly connected to the underside of said bed plate, whereby the bed plate may be swung to either side of the support.

3. A disappearing instrument cabinet including a horizontal support and a machine bed plate hingedly connected together, the support being recessed beneath its upper surface, inwardly from the margin adjacent the bed plate a substantial distance beyond the connection of the hinge with the support, a U-shaped hinge having a horizontal extension at one end, a pin extending longitudinally of the support across said recess intermediate the ends thereof, the hinge member being pivotally mounted on said pin, and means on the under surface of the bed plate for rigidly connecting the hinge member to said bed plate, said last mentioned means consisting of an apertured lug on the bed plate adapted to receive the horizontal extension of the hinge member, and a set screw extending through said lug into engagement with said extension.

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