

March 4, 1952

F. L. OLDAY
FUR SEWING MACHINE

2,588,281

Filed Sept. 23, 1950

3 Sheets-Sheet 1

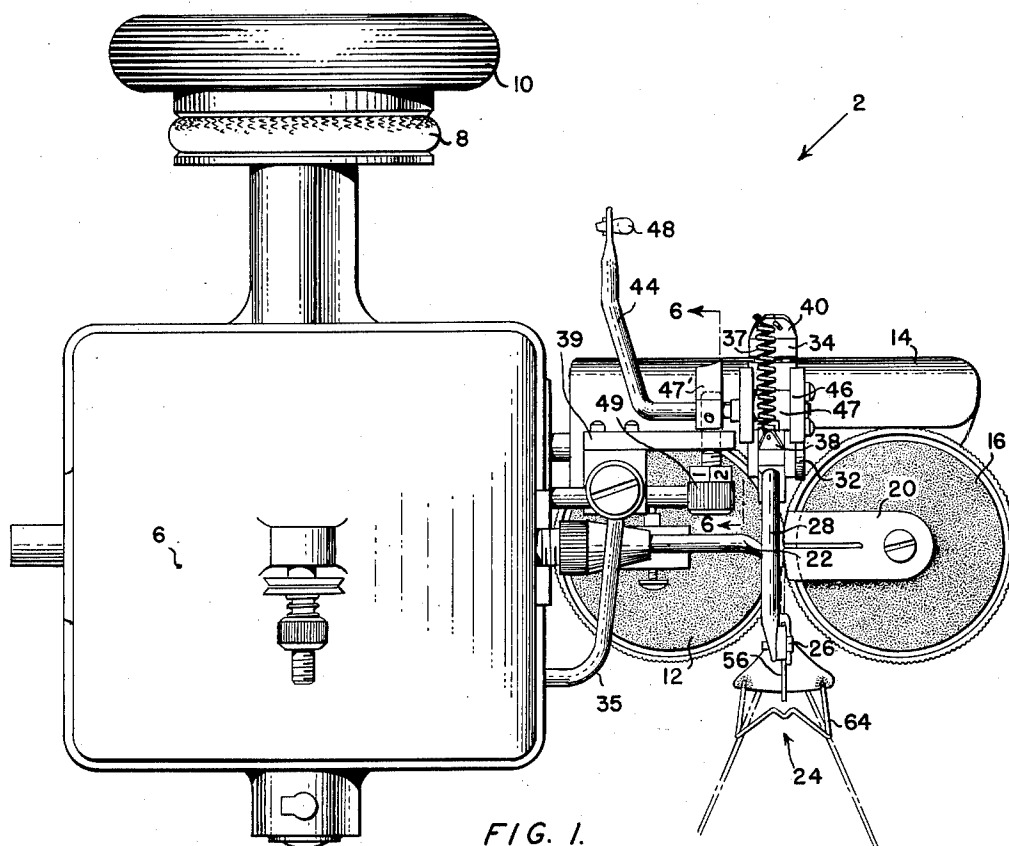


FIG. 1.

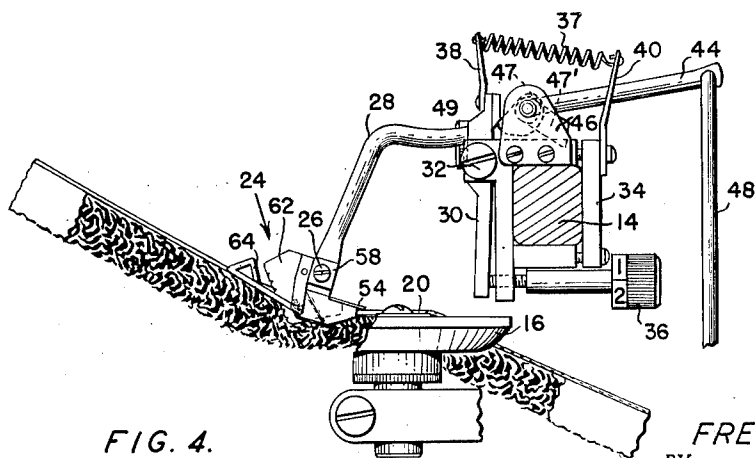


FIG. 4.

INVENTOR
FRED L. OLDAY
BY *Bussard & Harding*
ATTORNEYS.

March 4, 1952

F. L. OLDAY
FUR SEWING MACHINE

2,588,281

Filed Sept. 23, 1950

3 Sheets-Sheet 2

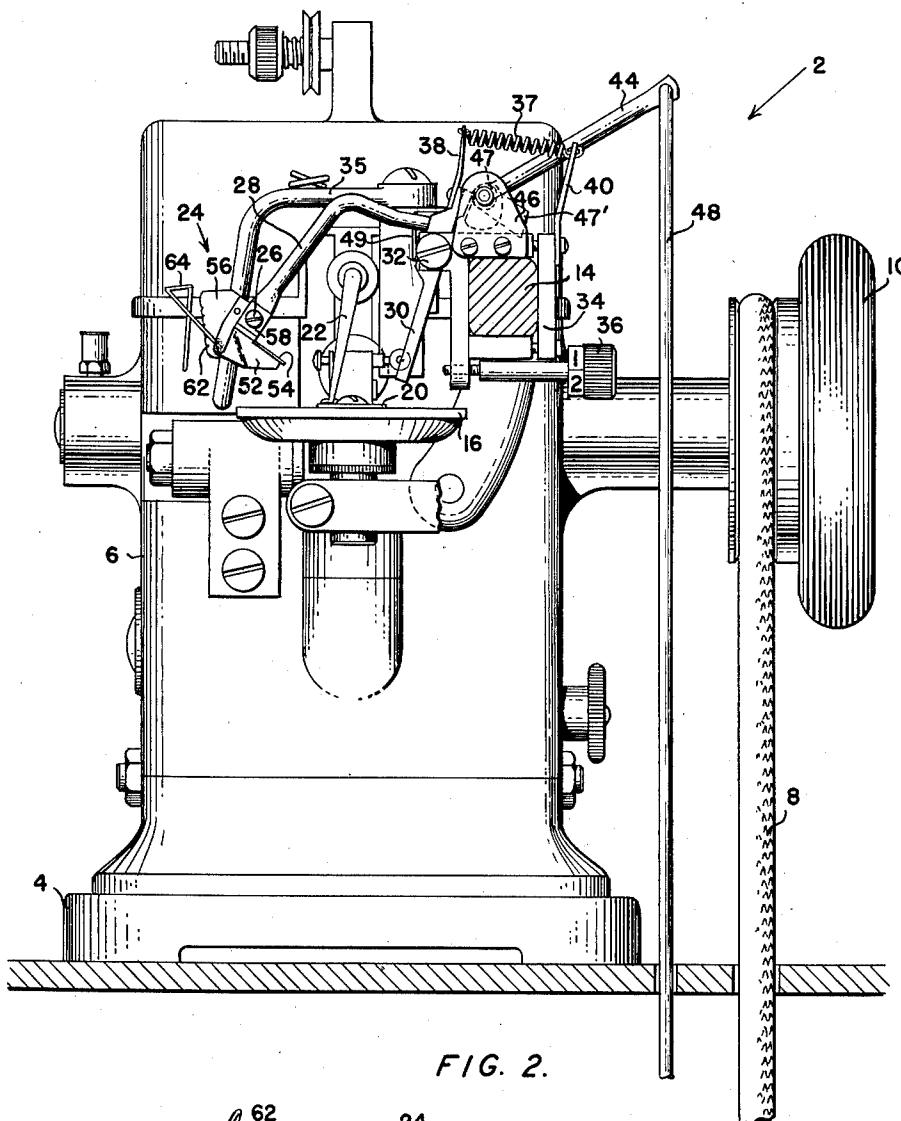


FIG. 2.

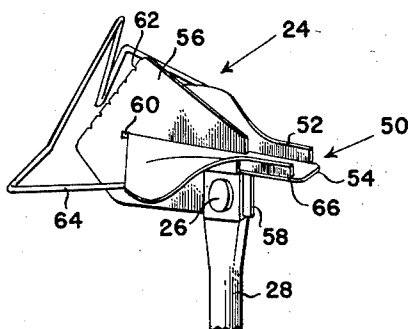


FIG. 5.

INVENTOR
FRED L. OLDAY
BY *Bussen & Harding*
ATTORNEYS.

March 4, 1952

F. L. OLDAY
FUR SEWING MACHINE

2,588,281

Filed Sept. 23, 1950

3 Sheets-Sheet 3

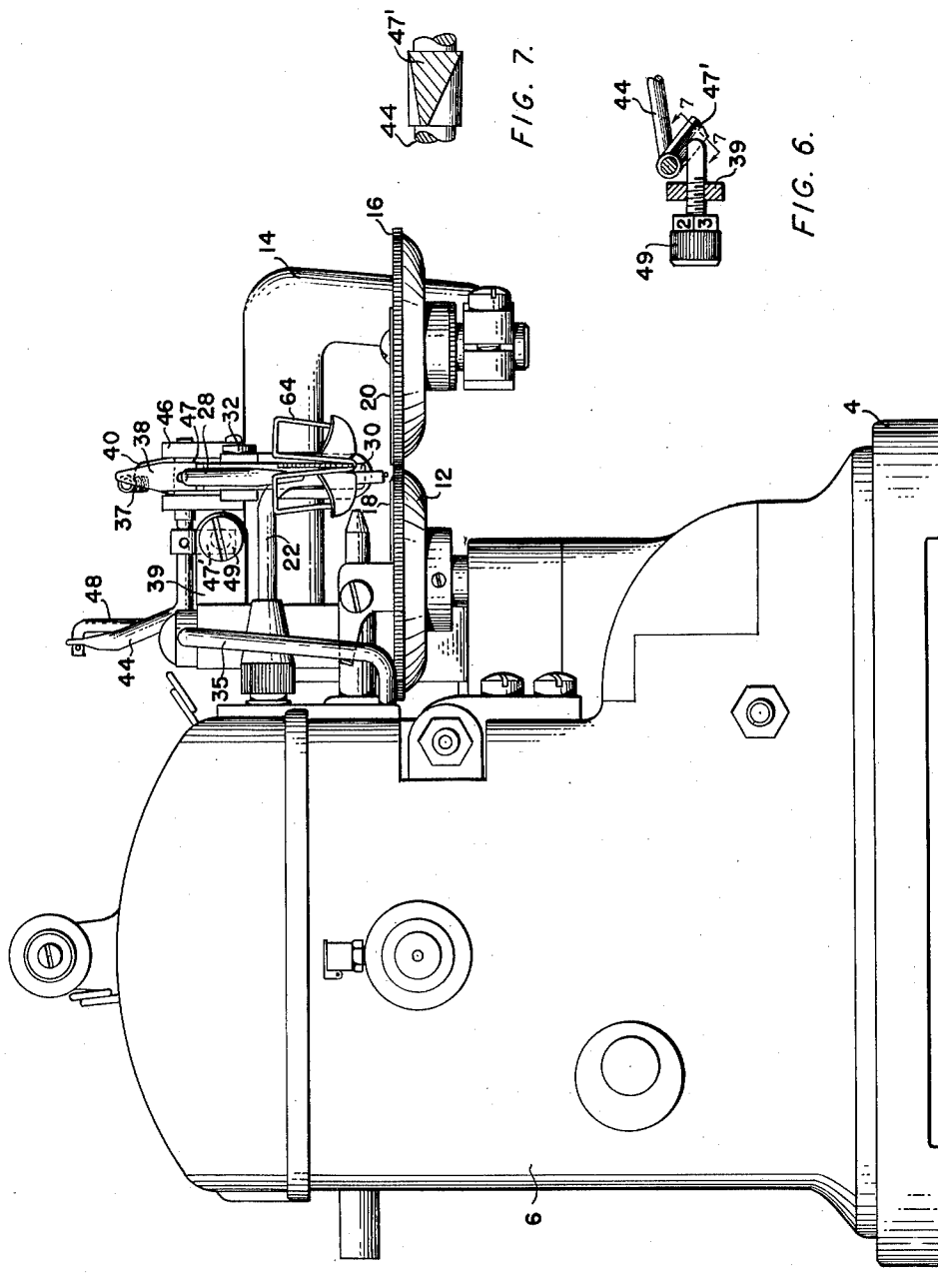


FIG. 3.

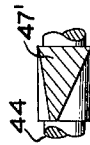


FIG. 7.

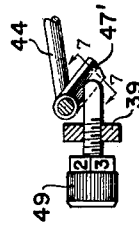


FIG. 6.

INVENTOR
FRED L. OLDAY
BY *Busser & Harding*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,588,281

FUR SEWING MACHINE

Fred L. Olday, Scranton, Pa., assignor to Olday
Fur Machine Co. Inc., Philadelphia, Pa.

Application September 23, 1950, Serial No. 186,453

5 Claims. (Cl. 112—20)

1

This invention relates to fur sewing machines of the type having material feeding discs and a horizontally operating needle. More particularly, this invention relates to novel guide means for feeding fur pieces to the material feeding discs and needle of such fur sewing machines.

The guide in accordance with this invention is particularly adapted for use in connection with the well-known fur sewing machines which utilize a horizontally operating needle to which the fur pieces to be sewn are fed by the use of opposed horizontal-toothed discs, one of which is driven intermittently to control the stitch and to allow a period of no motion while the needle is through the material and the other of which is free to revolve in mesh with the first disc. The freely moving disc is conventionally actuated by a foot pedal that allows it to move away from the driven disc in order to insert the material, a spring acting to bias it towards the driven disc during the sewing operation.

In utilizing such a fur sewing machine, a pair of fur skins are placed with the fur side of the skins together and the edges are sewn in such a manner as to leave a flat seam with the skin edges together after the material is placed in the normally flat condition of use.

This sewing operation requires a large amount of skill and experience on the part of the operator. Further, the numerous operations require much time even for the most experienced and skilled operators. It is necessary to maintain the edges of the two strips being sewn perfectly even. Further, the height of the edges to be sewn must be very accurately adjusted in relation to the position of the needle. Again, the operator must manipulate the strips to prevent the fur from being sewed in the seam, it being necessary to turn down the fur on each strip so that by the time the discs are reached the fur is out of the way of the stitching line.

It is, therefore, an object of this invention to provide means for guiding fur strips so that they will be accurately sewn.

It is a further object of this invention to provide a fur sewing machine having guiding means which eliminates the necessity for having highly skilled operators who have been trained for a long period of time and have had considerable experience.

It is an additional object of this invention to provide a fur sewing machine which produces a stronger and more uniform seam free from the unevenness inherent in hand-guiding the fur strips.

2

It is a still further object of this invention to provide a sewing machine which speeds up the sewing of fur strips by permitting the continuous sewing of such strips without the presently required interruptions for turning the fur away from the seam.

These and other objects of this invention will become apparent on reading the description in conjunction with the drawings in which:

Figure 1 is a plan view of a fur sewing machine in accordance with this invention.

Figure 2 is a front elevation of the fur sewing machine in Figure 1.

Figure 3 is a side elevation of the fur sewing machine in Figure 1.

Figure 4 is a front elevation, partly broken away, showing the guide in the operating position.

Figure 5 is a bottom perspective view showing the guide in accordance with this invention.

Figure 6 is a section taken on the plane indicated by the line 6—6 in Figure 1.

Figure 7 is a cross-sectional view taken on the plane indicated by the line 7—7, Figure 6, of the cam shown in Figure 6.

As shown in Figures 1 through 3, a fur sewing machine 2 in accordance with this invention has a base 4 supporting a frame 6. A belt 8 driven by a motor (not shown) in turn drives a pulley 10. Pulley 10 is connected to and drives a disc 12 which is horizontally mounted for rotation on frame 6. An arm 14 which is mounted on frame 6 carries a freely rotatable horizontal disc 16. Arm 14 can be manipulated so as to carry the disc 16 away from disc 12 for the purpose of inserting fur strips between the discs. A horizontally-operating needle, as shown at 18, is adapted to be received in needle guide 20. A looper 22 extends from frame 6 to a position adjacent needle 18 with which it coacts.

The above description is abbreviated since all of the mechanism therein described is widely known in the fur sewing art. Additional information regarding the well known fur sewing machine described above can be obtained by referring to Patent No. 2,132,379, issued October 11, 1938, to C. Bonis.

The particular features of this invention as embodied in the fur sewing machine 2 will now be specifically described by way of illustration.

A guide 24 is secured at 26 to an angled lever 28. Lever 28 has a downwardly extending arm 30 which is pivotally connected at 32 to a frame 34 which is secured to arm 14. A brace 35 is connected to frame 6 and a bracket 39 adjacent

3

frame 34. A stop member 36 is threadably secured to frame 34 and acts to limit the travel of arm 30 to the right as viewed in Figures 2 and 4.

Lever 28 is biased in the clockwise direction as we view Figures 2 and 4 by a coil spring 37 which has one end secured to a strip 38 which is secured to lever 28 and the other end secured to a strip 40 which is secured to frame 34.

A lever 44 is pivotally secured to a bracket 46 mounted on frame 34. Lever 44 has secured thereto a cam 47 which coacts with lever 28 to cam it downwardly into operating position against the bias of spring 37. An operating lever 48 is pivotally connected to lever 44 and may be connected to an operating foot pedal (not shown). The guide 24 is shown cammed down into the operating position in Figure 4.

Lever 44 is provided with a cam member 47' which coacts with a set screw 49 secured to bracket 39. When stop member 33 is in contact with arm 30, set screw 49 is adjusted to be in contact with cam 47'. When arm 14 is moved outwardly from frame 6 incident to an increase in the thickness of the strips being sewn, forcing disc 16 away from disc 12, cam 47' is carried to the right as viewed in Figure 2 and lever 44 is moved upwardly. This causes cam 47 to move away from arm 28 and permits guide 24 to be raised. This arrangement takes care of the requirement that thin skins must be sewed closer to the top edges of the strips than thick skins.

Referring now more particularly to Figures 4 and 5, the guide 24 has a flared shoe 50. The flared shoe 50 has sides 52 which are substantially vertical near the front end 54 and flare outwardly as they extend rearwardly, the top plan view giving an appearance similar to a bicycle seat. A separating blade 56 is secured to the shoe 50 by a clip 58 which also provides a means for securing the shoe to arm 28. Blade 56 has a slot 60 which permits the blade to embrace the shoe 50 at its center line and yet gives the blade freedom of lateral movement. Blade 56 is provided with small notches on its rear edge as shown at 62.

A separating guide 64 is formed of a piece of wire having its two ends secured, as by soldering, to the top of shoe 50, as shown most clearly in Figure 1. Separating guide 64 extends downwardly in advance of blade 56 and in planes lying to either side of the blade to a point below the bottom of the blade.

Sides 52 are slotted at 56 to provide play for the accommodation of combined fur strips having different thicknesses.

In the operation of the fur sewing machine of this invention the leading end of the fur strips to be sewn are brought together with the fur sides facing and hand-fed between discs 12 and 16 and a few stitches are taken. The guide 24 is then cammed into the operating position shown in Figure 4 in the operation of lever 48 and its associated mechanism. The sewing operation can now be started and continued until the strips are sewn together along their full lengths. The fur is parted and partially turned down by the separating guide 64. The blade 56 further turns the fur down and insures that it is turned away from the skin edges of the strips. The top of shoe 50, as previously described, acts as a guide to insure that the edges of the strips are evenly aligned at the proper height. As set forth above, the slots 66 provide play in sides 52 providing for the accommodation of strips of different thicknesses and insuring that the edges

4

of the strips are held close together for sewing.

It will, of course, be understood that the above described fur sewing machine is merely illustrative of the invention and applicant does not desire to be limited except as set forth in the claims.

What is claimed is:

1. In combination with a fur sewing machine which comprises a horizontally actuated needle, a pair of material feeding discs below said needle and adapted to feed fur strips by the needle, a guide adjacent the material feeding discs, said guide having a shoe with flared sides, said sides at the discharge end of the shoe being substantially vertical and extending to a position adjacent the top of the shoe to form a slot between each side and the top of the shoe adjacent the discharge end of the shoe, the top of said shoe being at the height, above said feeding discs, at which it is desired to have the edges of the fur strips for sewing, a substantially vertical blade centrally located in said shoe and mounted to provide for free lateral movement of the blade and a separating member in line with said blade and adapted to part and turn down the fur before it reaches the blade, said separating member being of greater width than the blade and extending downwardly below the blade.

2. In combination with a fur sewing machine which comprises a horizontally actuated needle, a pair of material feeding discs below said needle and adapted to feed fur strips by the needle, a guide adjacent the material feeding discs, said guide having a shoe with flared sides, said sides at the discharge end of the shoe being substantially vertical and extending to a position adjacent the top of the shoe to form a slot between each side and the top of the shoe adjacent the discharge end of the shoe, the top of said shoe being at the height, above said feeding discs, at which it is desired to have the edges of the fur strips for sewing, a substantially vertical blade centrally located in said shoe and mounted to provide for free lateral movement of the blade, a separating member in line with said blade and adapted to part and turn down the fur before it reaches the blade, said separating member being of greater width than the blade and extending downwardly below the blade and means to retract the guide in a vertical plane to a position remote from the material feeding discs.

3. A fur sewing machine which comprises a horizontally actuated needle, a pair of material feeding discs below said needle and adapted to feed fur strips by the needle, one of said feeding discs being mounted on an arm for movement away from the other disc in response to an increase in thickness of the fur strips, a guide adjacent the material feeding discs and mounted on said arm, said guide having a shoe with flared sides, said sides at the discharge end of the shoe being substantially vertical and extending to a position adjacent the top of the shoe to form a slot between each side and the top of the shoe adjacent the discharge end of the shoe, the top of said shoe being at the height, above said feeding discs, at which it is desired to have the edges of the fur strips for sewing, a substantially vertical blade centrally located in said shoe and mounted to provide for free lateral movement of the blade, a separating member in line with said blade and adapted to part and turn down the fur before it reaches the blade, said separating member being of greater width than the blade and extending downwardly below the blade and cam means to elevate the guide as the discs are moved apart.

5

4. A fur sewing machine which comprises a horizontally actuated needle, a pair of material feeding discs below said needle and adapted to feed fur strips by the needle, an arm carrying one of said feeding discs and adapted to move the carried feeding disc away from the other feeding disc in response to an increase in thickness of the fur being sewn, a lever having one end adjacent the material feeding discs and the other end pivotally mounted on said arm, a guide secured to the end of the lever adjacent the feeding discs, said guide having a shoe with flared sides, the top of said shoe being at the height, above said feeding discs, at which it is desired to have the edges of the fur strips for sewing, a substantially vertical blade centrally located in said shoe, a separating member in line with said blade and adapted to part and turn down the fur before it reaches the blade, and cam means operatively engaged with said lever to pivot the lever and elevate the guide as said arm moves the discs apart.

5. In combination with an overedge fur sewing machine, a guide having at the discharge end

6

thereof a substantially horizontal top and substantially vertical sides, said sides being flared to lie at the rear of said guide in substantially a single plane rotated about 90° to said vertical planes in which said sides lie, a blade centrally located in said guide and extending from a point beyond the input end of said guide to a point short of the discharge end thereof and a separating guide member mounted adjacent to the input end of said blade, said separating guide member being of greater width than the blade and extending downwardly below the blade.

FRED L. OLDAY.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
571,323	Klemm -----	Nov. 10, 1896
770,678	Cunningham -----	Sept. 20, 1904
2,531,766	Burns et al. -----	Nov. 28, 1950