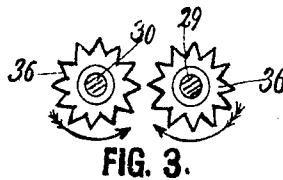
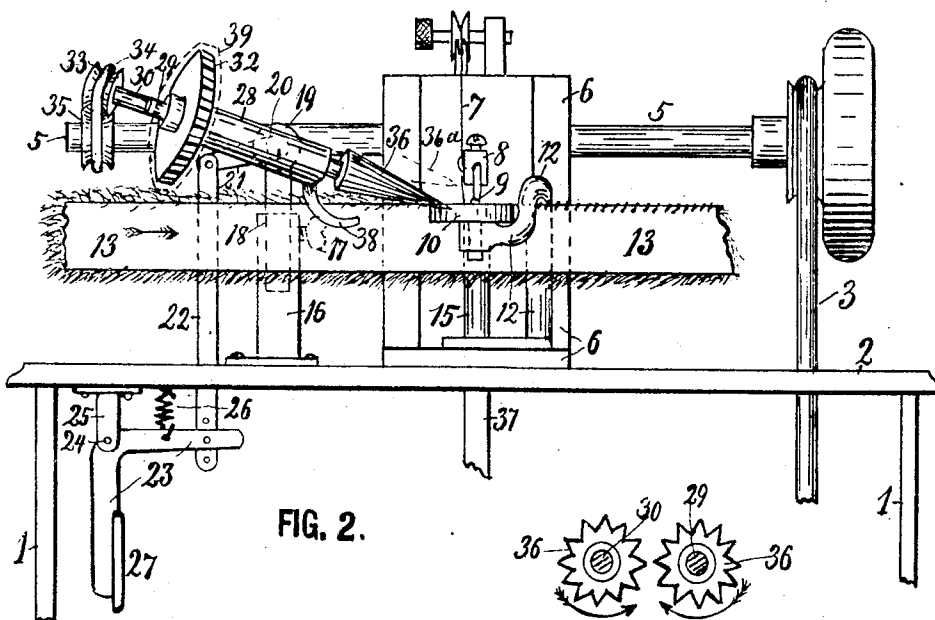
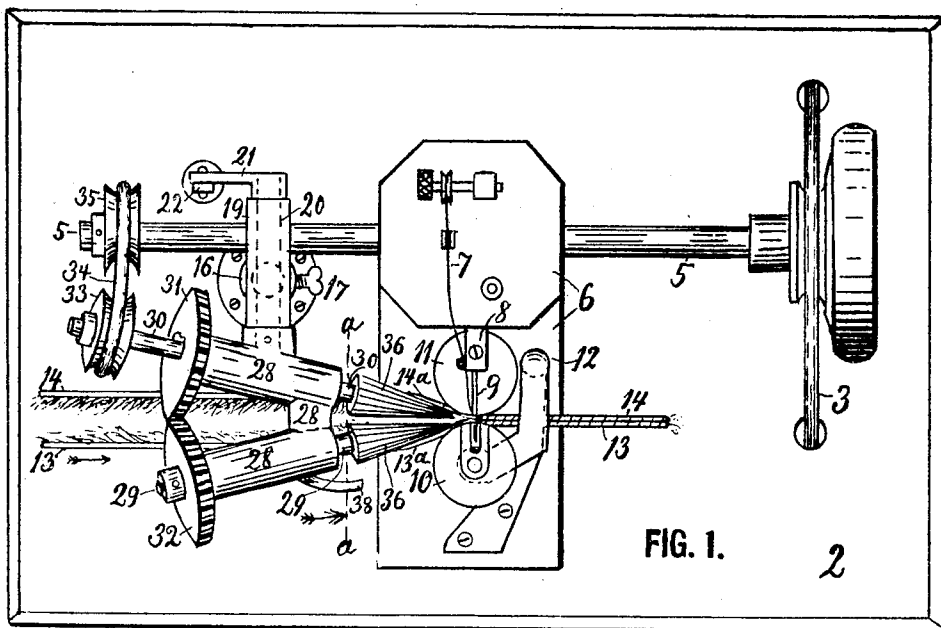


No. 809,265.

PATENTED JAN. 2, 1906.

C. B. JOHNSEN.
FUR SEWING MACHINE ATTACHMENT.

APPLICATION FILED MAR. 11, 1905.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES B. JOHNSEN, OF ST. PAUL, MINNESOTA, ASSIGNOR OF ONE-HALF TO JOHN W. STIEFEL, OF ST. PAUL, MINNESOTA.

FUR-SEWING-MACHINE ATTACHMENT.

No. 809,265.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed March 11, 1905. Serial No. 249,526.

To all whom it may concern:

Be it known that I, CHARLES B. JOHNSEN, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Fur-Sewing-Machine Attachments; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to attachments for sewing-machines of the class used for sewing furs; and the object of the invention is to provide such sewing-machines with an attachment which will automatically gather and push the fur, hair, or wool at the edges of the parts or strips being sewed together in between the fur sides of the strips, so that the needle and thread may have free action and the seam will look clean and neat at the flesh side of the parts thus sewed together. This object I attain by the novel construction and combination of parts illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a fur-sewing machine with my improvement applied thereto. Fig. 2 is a front elevation of the upper part of Fig. 1 with a slight modification in the position of the crank 21. Fig. 3 is an enlarged sectional view on the line *a a* in Fig. 1, showing the position of the corrugated rollers 36.

Referring to the drawings by reference-numerals, 1 designates the legs, 2 the table, 3 the belt, and 5 the main operating-shaft, of a common fur-sewing machine, which in itself forms no part of my invention, but is shown for the purpose of illustrating the utility, operation, and combination of my invention in connection therewith. For said purpose I have also indicated the frame 6, thread 7, needle-bar 8, needle 9, and common feed-wheels 10 11. The wheel or roller 10 is mounted on a standard 12, which is arched upward to allow the sewed strips of fur 13 14 to pass along from the feed-wheels, while the roller 11 is usually revolved by the upright shaft 15, to the upper end of which it is secured.

Upon the table 2 is secured an upright socket 16, in which is held by a thumb-screw

17 a standard 18, whose top end is formed with a horizontal sleeve 19, in which is journaled a rock-shaft 20, having at its rear end a rocker-arm 21, pivoted to a vertical rod 22, extending downwardly through the table, and is operated by a bell-crank lever 23, pivoted at 24 to a bracket 25. The horizontal arm of said lever is normally held upward by the spring 26, but may at any time be swung downwardly by a side pressure of the operator's knee against the plate 27 of the lower arm of the lever. On the front end of the shaft 20 is secured a V-shaped frame 28, in whose arms are journaled two shafts 29 and 30, geared together by the bevel-gears 31 32, secured one on each shaft. One of said shafts is provided with a fixed pulley 33, driven by a belt 34 and pulley 35, secured on the shaft 5 of the machine.

Upon the converging and normally downward slanting ends of the shafts 29 30 are fixed cone-shaped corrugated slightly-separated rollers 36, which, revolving in the directions of the arrows in Fig. 3 and having their pointed ends inserted between the strips to be sewed together, constantly brush the fur inward and downward between the strips, as will be readily understood by observing the position of the strips at the points 13^a and 14^a in Fig. 1. Said rollers 36 may therefore be termed the "brushing-rollers."

When strips or parts to be sewed are to be placed in position and entered between the rollers 10 and 11, said rollers are spread by the rod 37 and a pedal and mechanism, (not shown,) and the brushing-rollers are elevated or tilted upward to the position indicated by dotted lines 36^a in Fig. 2, said tilting being performed by a touch against the plate 27, as already described, whereby the frame 28 is tilted by the crank or rocker-arm 21. When the fur strips are thus inserted in a partly-separated position, the spring 26 is allowed to tilt the pointed ends of the brushing-rollers downward between the fur strips, and then the feed-rollers 10 and 11 are allowed to close in and bring the strips together ready for sewing at the point where the needle works, which is slightly beyond the free ends of the brushing-rollers.

38 is a guarding-arm to help the operator keep the fingers from getting caught between the brushing-rollers. Similar precaution is taken with the gears 31 32, which

are properly covered by an inclosure. (Simply indicated by the dotted lines 39 in Fig. 2.)

The set-screw or thumb-screw 17 makes the standard 16 18 extensible vertically, so that the brushing-rollers may readily be adjusted vertically with relation to the feeders.

In Fig. 1 the sleeve 19 extends rearwardly above the shaft 5 of the machine, while in Fig. 2 is indicated that it may terminate in front of the shaft 5. Such and many other variations I am aware may be made without diverging from the scope and spirit of my invention, which is defined in the following claims.

What I claim is—

1. A sewing-machine attachment comprising a pair of longitudinally grooved or corrugated rollers operatively connected with the machine and being arranged longitudinally at opposite sides of the line of feed toward the needle, and means for rotating the rollers in opposite directions.

2. A sewing-machine attachment comprising a pair of longitudinally grooved or corrugated rollers operatively connected with the machine and being arranged longitudinally at opposite sides of the line of feed toward the needle, and means for rotating the rollers in opposite directions, and an adjustable support for said rollers.

3. A sewing-machine attachment comprising a pair of longitudinally-corrugated conical rollers; an adjustable support for the rollers, means for effecting the rotation of said rollers in opposite directions, and a rod-and-lever mechanism for tilting the rollers upward, substantially as and for the purpose set forth.

4. A sewing-machine attachment comprising a standard or support securable to the machine, a tilting head carried by the support, a pair of shafts journaled in said head and geared together to rotate in opposite directions, a pair of longitudinally-corrugated rollers extending from the ends of said shafts approximately along the line of feed

toward the needle, a rocker-arm on the tilting head, a rod extending from the rocker-arm and having below the table a lever adapted to be operated by the lower limbs of the operator so as to tilt the rollers upward away from the work when so desired.

5. The combination with the feeders of a fur-sewing machine; of separators comprising longitudinally-corrugated conical rollers adapted to project between the feeders; means for supporting said rollers; and means for rotating the same in opposite directions, for the purpose set forth.

6. The combination with a fur-sewing machine, of an attachment comprising a standard securable upon the machine, a tilting frame mounted on the standard, a pair of converging shafts journaled in the frame, corrugated conical rollers fixed upon the converging ends of the shafts, two meshing gears secured one on each of said shafts, one of said shafts being operatively connected with a shaft of the sewing-machine, and means for tilting said frame and for holding it in normal position.

7. The combination with a fur-sewing machine, of an attachment comprising a standard securable upon the machine, a tilting frame mounted on the standard, a pair of converging shafts journaled in the frame, corrugated conical rollers fixed upon the converging ends of the shafts, two meshing gears secured one on each of said shafts, one of said shafts being operatively connected with a shaft of the sewing-machine, and means for tilting said frame and for holding it in normal position, and means for vertically adjusting said tilting frame, and tilting means, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES B. JOHNSEN.

Witnesses:

HAROLD HARRIS,

A. M. CARLSEN.