

(No Model.)

2 Sheets—Sheet 1.

J. STEWART, Jr.

METHOD OF SEWING SWEAT BANDS IN HATS.

No. 515,262.

Patented Feb. 20, 1894.

Fig. 1.

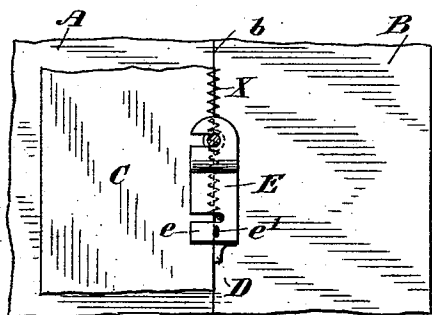
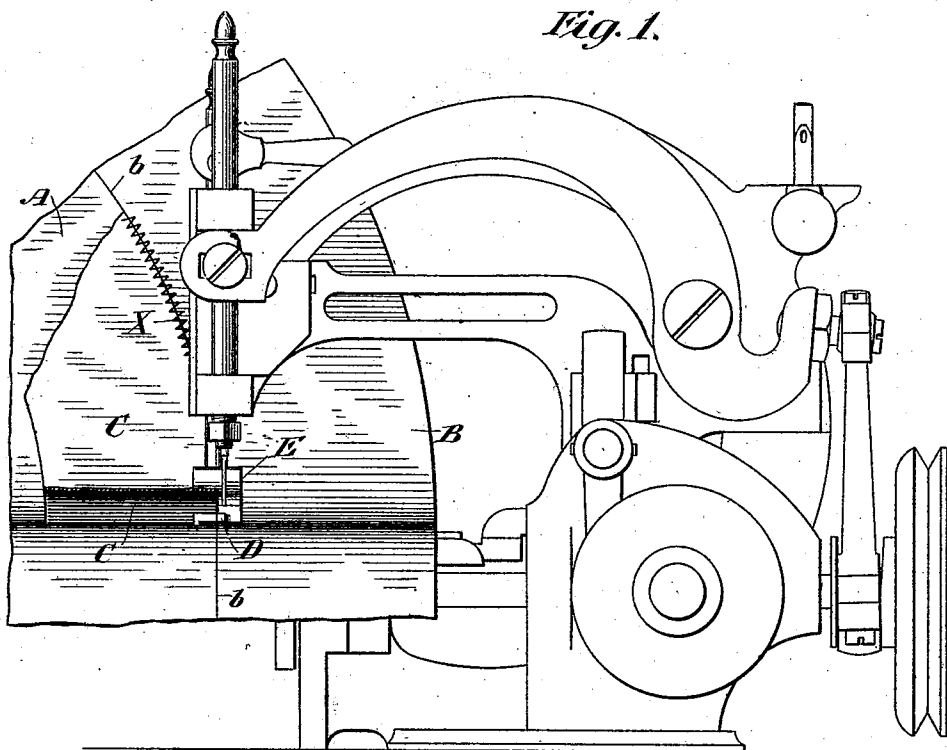


Fig. 2,

Fig. 3,

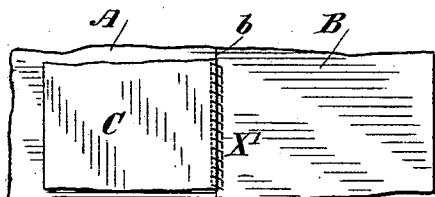
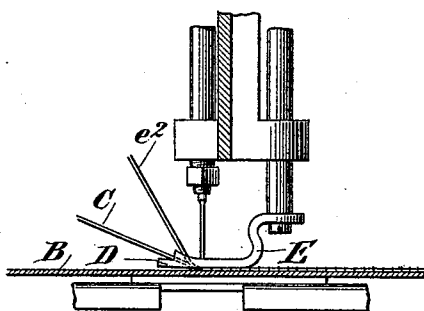


Fig. 4,

Witnesses

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Fig. 5,

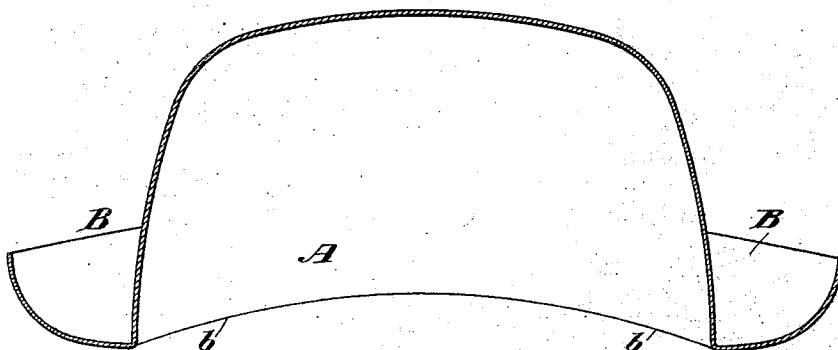


Fig. 6,

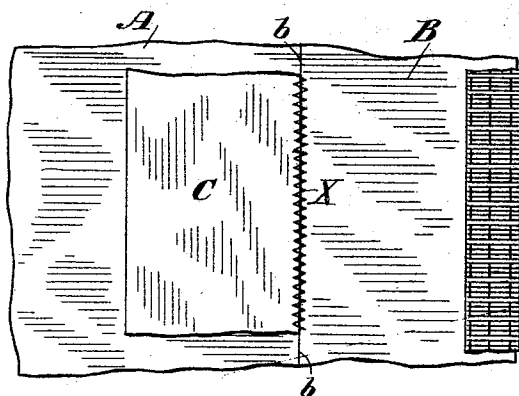
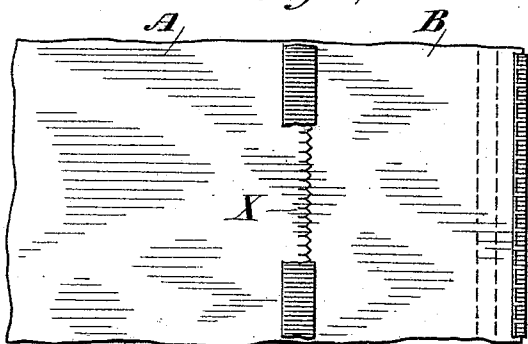


Fig. 7,



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES STEWART, JR., OF YONKERS, NEW YORK.

METHOD OF SEWING SWEAT-BANDS IN HATS.

SPECIFICATION forming part of Letters Patent No. 515,262, dated February 20, 1894.

Application filed April 15, 1892. Serial No. 429,312. (No specimens.)

To all whom it may concern:

Be it known that I, JAMES STEWART, Jr., a citizen of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented an Improvement in Methods of Sewing Sweat-Bands in Hats, of which the following is a specification.

If sweat-bands were sewed into hats, without being previously prepared with an attaching strip, by a machine having a flat bed plate, the brim and side of the crown would have to be flattened out, *i. e.*, when laid upon the bed-plate they would lie flat in the same plane, and the indication of the angle where the brim and side of the crown unite would be practically obliterated. Owing to the flexible nature of the felt and the difficulty of cutting the brim with perfect accuracy, the use of a gage or guide against which the edge of the brim may bear is unsatisfactory and impracticable. For these reasons, even if the sweat were secured by a straight line of stitching, imperfect uneven work would necessarily result, because the operator would be practically guided by his judgment only. Should an attempt be made to sew the sweat in by a machine having a zig-zag or forward and back stitch, the difficulty of turning out perfect work would be largely increased, because the operator would become confused by the lateral or forward and back movement of the needle, and no longer have even the regular reciprocation of the needle in the same plane to guide him. This character of stitching and a machine adapted for such work are shown in my Patent No. 432,449, dated July 15, 1890. A like difficulty arises when attempt is made to secure the sweat in place by the stitching of two needles reciprocating in different vertical planes, the stitches showing parallel, in imitation of hand work as is well understood. Heretofore, in view of these difficulties, where the sweat has been sewed in by a machine, it has been necessary to stitch the sweat to an attaching strip with a machine having the desired style of stitching and then sew the attaching strip to the side of the crown by hand or a machine, or to provide a special holding clamp or device arranged within the hat opening as shown for instance in the patent of Bigelow, No. 198,868, dated January 1, 1878. I overcome all these difficulties and am enabled

to stitch the sweats directly to the hats by the following method of operation. Taking the hat with its brim in proper position, *i. e.*, at right angles to the side of the crown I make a readily observable mark upon the inside of the angle. This may very conveniently be done by running a chalk crayon around the inside edge or angle of the brim. When the brim and side of the crown are then flattened out there is a well defined line to guide the operator. On the presser foot or presser bar of the sewing machine is formed or mounted a guide or indicator that may be adjustable and which the operator keeps in line with the line upon the hat and the needle or needles being properly related to this indicating guide the stitching will be perfectly done, however irregular may be the motion of the needle or needles.

In the accompanying drawings—Figure 1 is a side elevation of a machine such as shown in my patent above mentioned and a section of a hat and sweat-band in position on the bed-plate of the machine. Fig. 2 is a plan view of a section of a hat and sweat-band showing the presser foot in place thereon; Fig. 3 a detail view showing the presser foot, needle, guide and bed-plate, and a section of a hat and sweat-band; Fig. 4 a detail view indicating the style of stitching done by a two-needle machine in imitation of hand stitching. Fig. 5, shows a section of a soft hat with the brim in normal position; Fig. 6 a detail view of a section of a hat having the sweat stitched according to my invention and showing the sweat and the securing stitches; and Fig. 7 is a view of the opposite side of the same, showing the stitches interlocked on the outside of the hat.

A represents the side of the hat crown and B the brim. As seen in Fig. 5 the inner angle or edge of the brim is marked by a well defined line *b*, that may be produced by passing a chalk crayon around the opening of the hat. When the brim and side are flattened out as in the other figures this well defined line remains.

C is the sweat-band, and X the zig-zag stitching made by the machine shown. An indicating guide D is formed on the end of the presser foot. In sewing a sweat into a hat the line *b* in the hat is kept in proper align-

ment with the guide D. The presser foot E is provided with the usual guide *e* for the edge of the sweat. A hole *e'* may be made in the upper side of this guide to receive a finishing cord *e''* that lies along the lower or outer edge of the sweat as is well understood (Fig. 3).

It is desirable that the edge of the sweat should encroach slightly upon the brim so as to give it a little flare to form a comfortable seat for the head of the wearer. When the line on the hat, the indicator or guide on the presser foot, and the sweat are properly related the sweat will be properly secured by the transverse zig-zag stitches. The indicator or guide D is arranged in proper parallelism or alignment with a central line that may be drawn between the opposite series of punctures of the needle and across which the stitches would transversely lie. These stitches as shown, alternately enter the sweat, (the needle and thread passing through the sweat and hat body) and the brim beyond the sweat (the needle and thread passing through the brim). This is the manner of stitching that I prefer—though, of course, with my invention the needle might pass through the sweat each time, alternately very near and farther from the edge of the sweat. The thread that passes with the needle through the hat is interlocked on the outside of the hat and the interlocked thread or stitches should by preference lie in the angle of the brim and side of the crown, or on the side of the crown so as to be concealed by the hat band as shown in Fig. 7.

In Fig. 4 a different style of stitching *X'*, is shown. It is produced by a double-needle machine. The defined line *b* on the hat is indicated in a proper relation to this stitching. The hat being fed to the machine with this line in proper relation to the guide D and the sweat being properly fed through its guide *e*, the stitching of the sweat will be accurately done, the result being, generally, that above described.

My improved method of operation, therefore, consists in marking upon the angle or inner edge of the hat brim, while the brim is in the normal position a defined line to guide the operator, then flattening the side of the crown and brim, and feeding the hat and sweat to the machine with the defined line in proper relation thereto while the sweat is stitched to the hat by stitches lying transversely to the line of feed.

By my invention I am enabled to sew in sweats by a machine in a better, more uniform and ornamental manner than can be done by hand, and the stitches may be made in imitation of hand work. No preparation of the sweat with a strip that is subsequently to be sewed to the hat is required, and in addition to the advantages mentioned my invention results in a very marked economy in the manufacture of completed hats.

I claim as my invention—

1. The herein described method of stitching sweat-bands in hats by stitching lying transversely to the line of feed of the hat to the machine, which method consists in the following steps: (first) producing a defined line upon the inner edge of the brim, *i. e.*, upon the angle or edge formed by the junction of the brim and side of the crown, while the brim is in the normal position; (second) flattening the side of the crown and brim and feeding the hat to the machine with said line in proper relation to a guide on the machine; (third) simultaneously feeding the sweat-band to the machine in proper relation to the hat brim; and (fourth) stitching the sweat to the brim while they are passing through the machine by stitches lying transversely to the line of feed, all these operations being substantially as set forth.

2. The herein described method of stitching sweat-bands in hats by stitching lying transversely to the line of feed of the hat to the machine, which method consists in the following steps: (first) producing a defined line upon the inner edge of the brim, *i. e.*, upon the angle or edge formed by the junction of the brim and side of the crown, while the brim is in the normal position; (second) flattening the side of the crown and brim and feeding the hat to the machine; (third) simultaneously feeding the sweat-band to the machine in proper relation to the hat brim; and (fourth) stitching the sweat to the brim while they are passing through the machine by stitches lying transversely to the line of feed, all these operations being substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

JAMES STEWART, JR.

Witnesses:

EDWARD C. DAVIDSON,
HARRY H. STARRETT.