

E. L. WALES.  
FELT HAT.  
APPLICATION FILED FEB. 6, 1908.

941,746.

Patented Nov. 30, 1909.

FIG. 1.

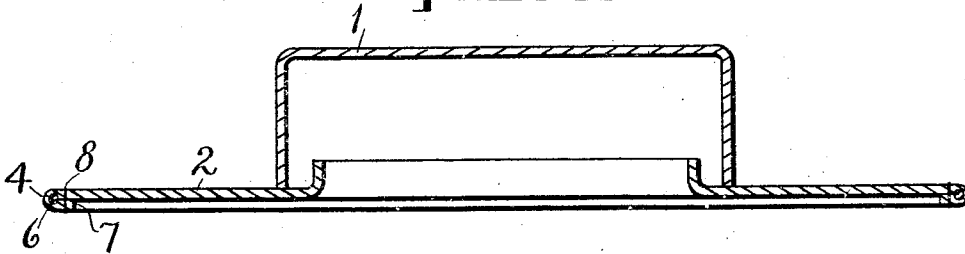


FIG. 2.

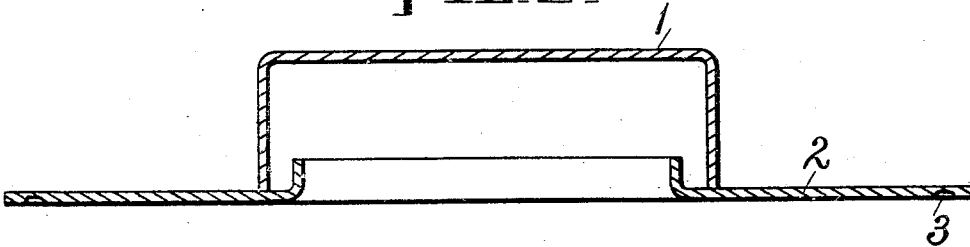
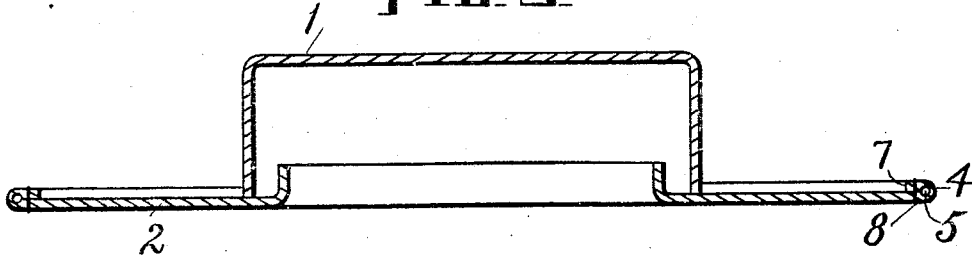


FIG. 3.



WITNESSES  
A. C. Fairbanks.  
H. J. Butler.

INVENTOR  
Elisha L. Wales,  
BY  
Webster & Co.,  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

ELISHA L. WALES, OF MONSON, MASSACHUSETTS, ASSIGNOR TO HEIMANN & LICHTEN, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

## FELT HAT.

941,746.

Specification of Letters Patent.

Patented Nov. 30, 1909.

Application filed February 6, 1908. Serial No. 414,470.

*To all whom it may concern:*

Be it known that I, ELISHA L. WALES, a citizen of the United States of America, residing at Monson, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Felt Hats, of which the following is a specification.

My invention relates to improvements in the welt edge construction of felt hats.

The objects of my invention are to lessen the cost of manufacture of welt edge felt hats, produce a superior welt edge, and lessen the time and labor necessary to produce the welt edge of a felt hat.

I attain the objects of my invention by the construction herein shown.

In the accompanying drawings, in which like numerals of reference indicate like parts, Figure 1 is a vertical sectional view of a hat embodying my invention; Fig. 2 is a similar view showing the brim before being folded over at the edge, and, Fig. 3 is a like view showing the fold at the edge of the brim turned upwardly instead of downwardly, as shown in Fig. 1.

In detail, 1 indicates a hat body, 2 the brim, 3 a channel, and 4 a stiffening piece in the channel.

In the manufacture of welt edge felt hats in accordance with my invention, the brim is trimmed to the desired size and I then form a channel in either the upper or lower sides of the brim adjacent to the edge. I prefer to form this channel by the employment of a rotary cutter in connection with suitable feeding mechanism. The method of forming the channel, however, is not a part of the invention sought to be protected by this application, but forms the subject-matter of another application, and is not, therefore, further referred to herein. A suitable stiffening material which may comprise a reed, wire, or other suitable stiffener, is laid in the channel and the outer portion of the brim is lapped over the stiffener and secured to the contiguous portion of the brim by any suitable means, the usual method being by stitching. It will readily be observed that the channel renders the remaining portion of the brim between the channel and the opposite face easy to bend over the stiffener and that the turned-over

portion may be readily stitched or otherwise secured in place without the laborious methods heretofore employed, and that a uniform edge will thus be produced with very much greater ease than heretofore, and it will also be observed that the objectionable bulging and unevenness at the welt edge, such as commonly obtains when the edge is folded over without the channel or groove, will be avoided.

The advantages of my invention will become more apparent when it is considered in connection with the manufacture of welt edge felt hats as produced before my invention, the old and common method being to place a partly shaped blank between two hot dies or blocks with the brim projecting beyond the edges, and to turn the edge of the brim over the outer edge of the upper block and hold it by engaging with pins, then to draw a cord around the pins and secure it to aid in holding the portion turned over smoothly in place, then after the felt had become dry and therefore set the cord was released, the material removed from engagement with the pins, the hat removed from the blocks, the edge was then roughly trimmed, and then the partly formed hat was again placed in the blocks and pressed. The hat was then removed from the blocks, the edge carefully trimmed and stitched. It will be observed that at this time the folded-over edge had become set by the preceding folding and pressing so that the edge could be stitched. It will also be observed that all this preliminary labor and expense involved in placing the edge in condition to have the folded-over portion properly secured in place is avoided by my invention, so that, while the resulting product is superior in appearance, the expense and time involved in its manufacture is greatly lessened so that a superior product at less expense is produced. It will also be observed that the full thickness of the material at the edge is preserved and that the welt edge, while being of uniform appearance, is double the thickness of the brim.

It will of course be understood that the groove or channel may be formed in either the upper or lower surface and that the depth of the channel should be one-half the thickness of the stiffening material.

Having therefore described my invention,  
what I claim and desire to secure by Letters  
Patent, is—

A welt edge felt hat having a channel in  
5 the brim adjacent the outer edge, the brim  
being of like thickness both sides of the  
channel, a stiffener in the channel, the por-

tion of the brim outside the channel being  
folded over the stiffener and fastened, sub-  
stantially as shown.

ELISHA L. WALES.

Witnesses:

ALFRED C. FAIRBANKS,  
F. A. CUTTER.