## J. MITCHELL.

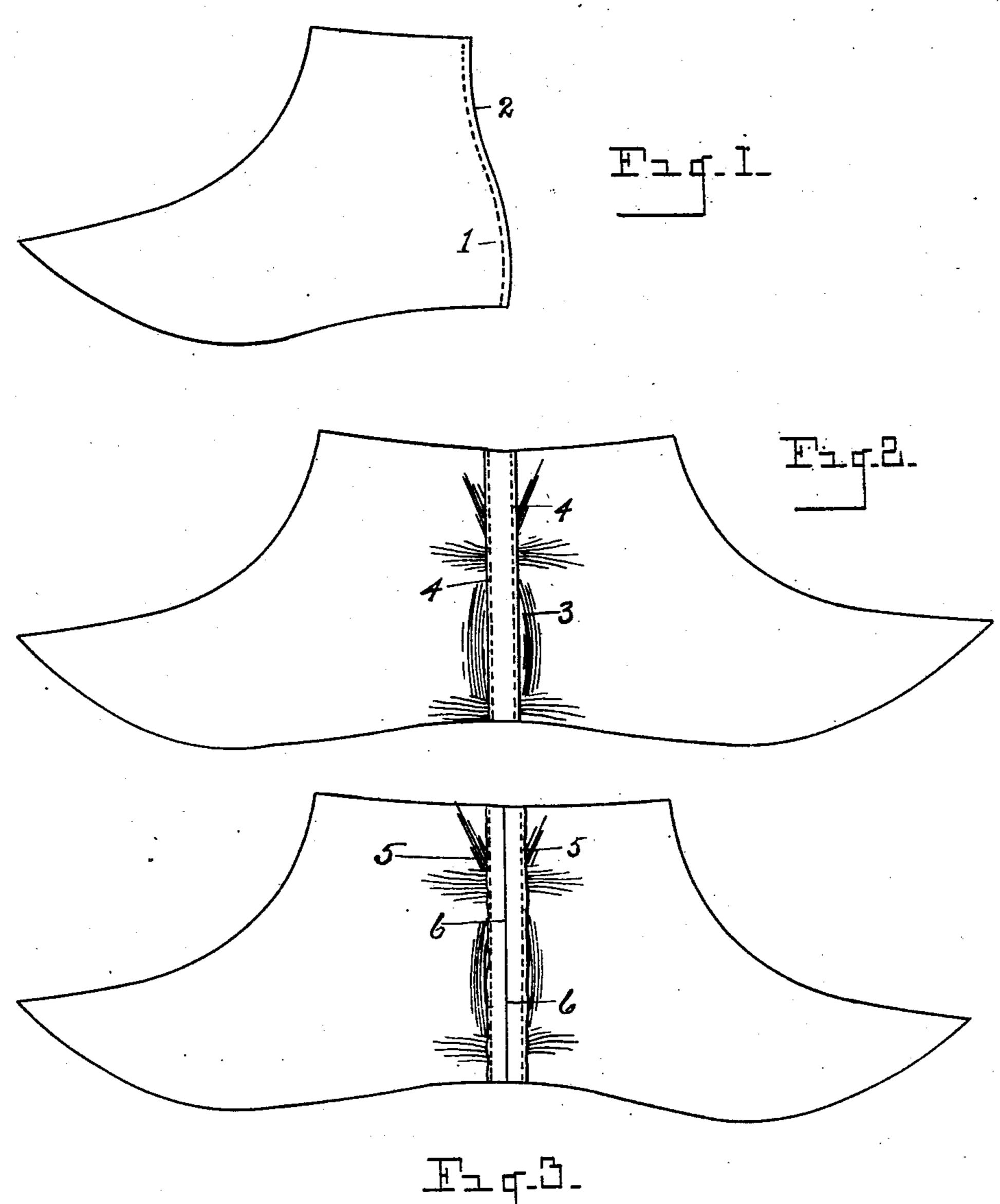
SHOE LINING.

APPLICATION FILED AUG. 12, 1907.

912,398.

Patented Feb. 16, 1909.

2 SHEETS-SHEET 1.



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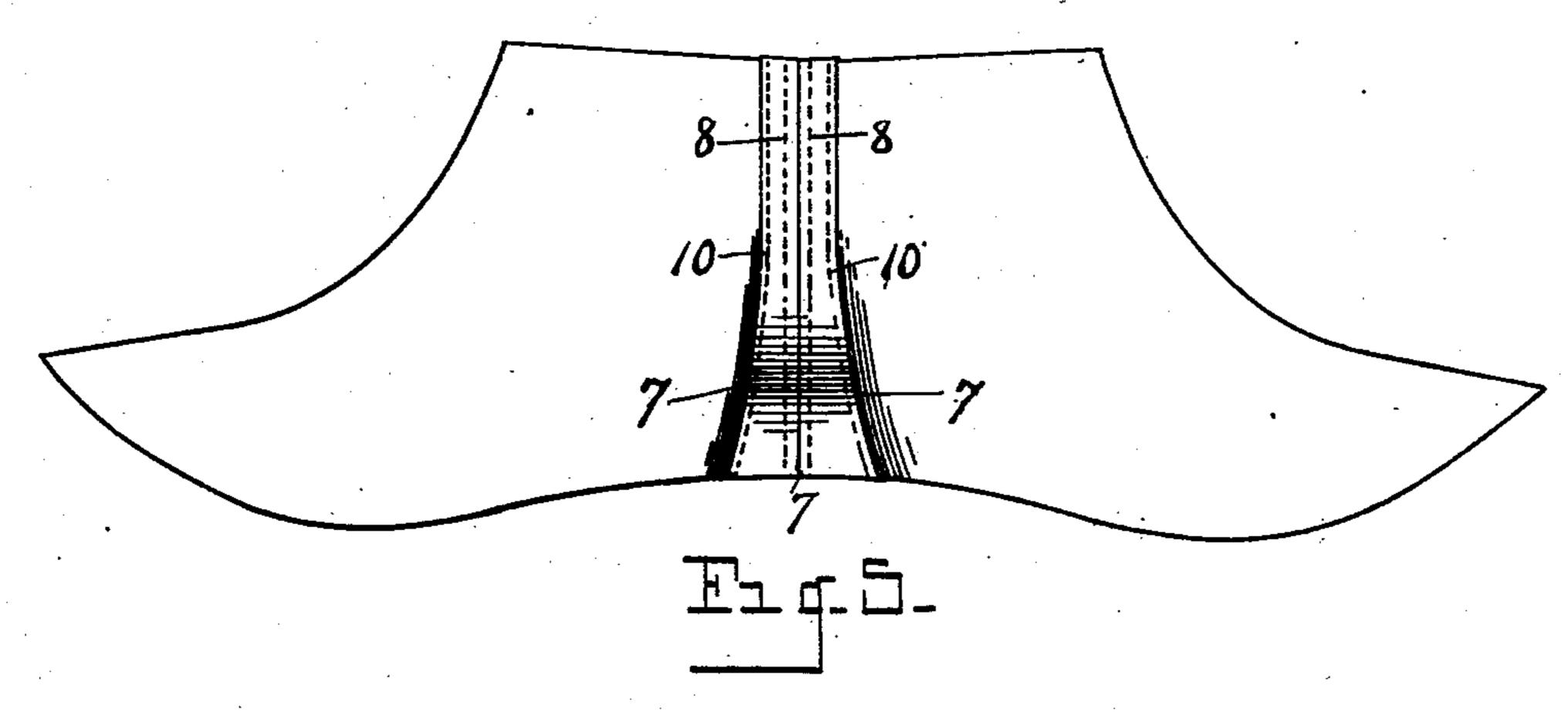
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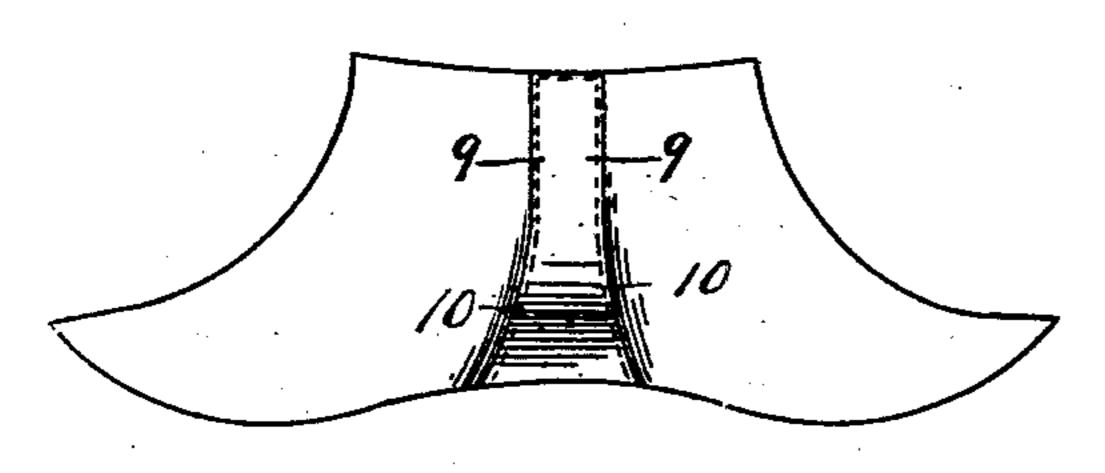
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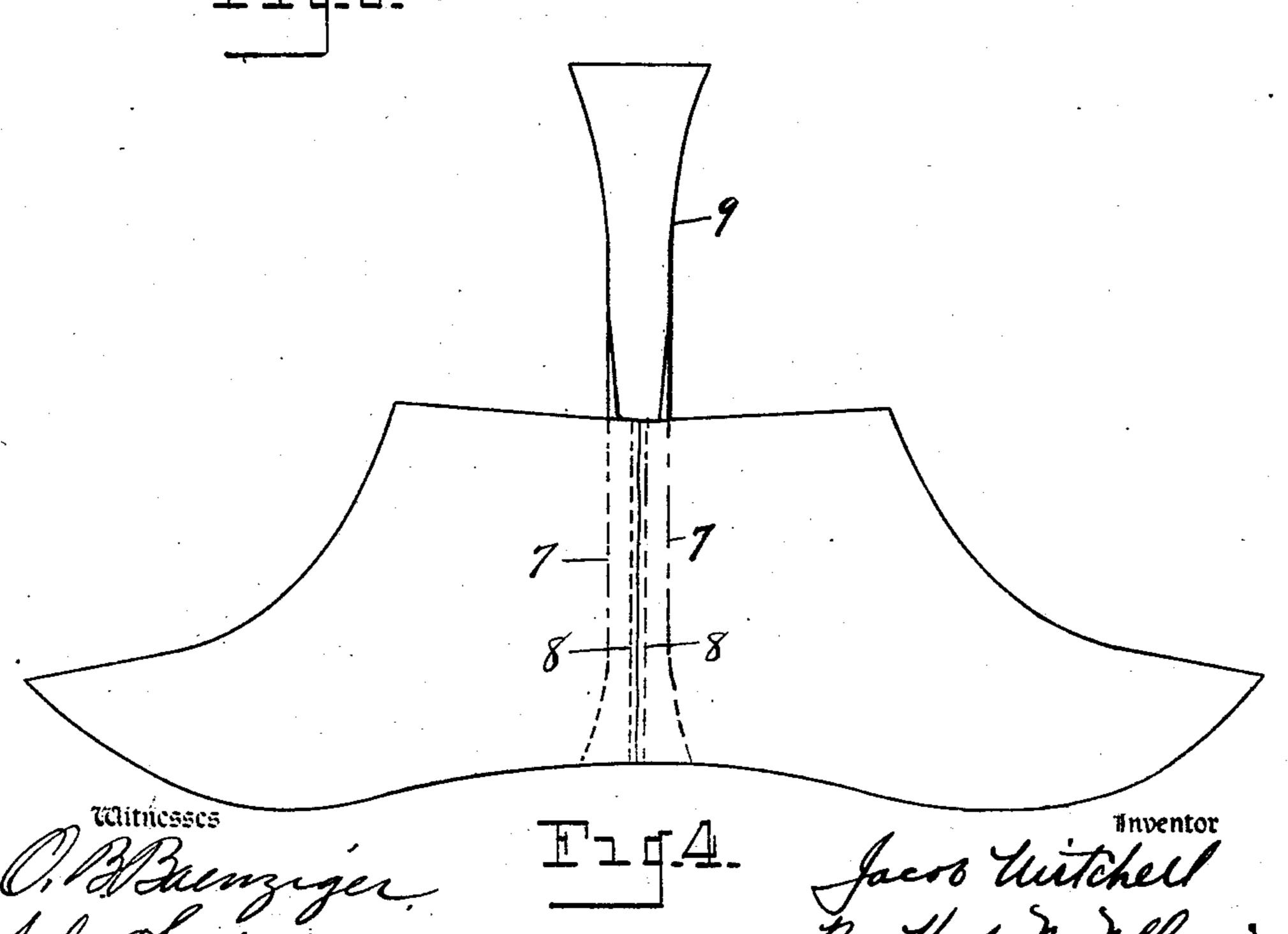
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2 SHEETS-SHEET 2.







## UNITED STATES PATENT OFFICE.

JACOB MITCHELL, OF DETROIT, MICHIGAN, ASSIGNOR TO MITCHELL SHOE LINING COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

## SHOE-LINING.

No. 912,398.

Specification of Letters Patent.

Patented Feb. 16, 1909.

Application filed August 12, 1907. Serial No. 388,254.

To all whom it may concern:

Beitknown that I, JACOB MITCHELL, acitizen of the United States, residing at Detroit, in the county of Wayne and State of Michi-5 gan, have invented a new and useful Improvement in Shoe-Linings; and I do hereby 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 10 it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in the construction of shoe 15 linings, preparatory to entering into the making of articles of apparel called shoes, and it consists in the construction and arrangement of the several parts, as herein-

after described and claimed.

20 The object of the invention is to do in one operation work which now requires three operations and to simplify and improve the construction in two important particulars: first, by shaping the lining, as sewed, thus 25 preventing straining or bulging, after wear has commenced, and second, by strengthening the seam and preventing liability to rip and tear out at the heel.

In the accompanying drawings: Figure 1 30 illustrates the appearance of an ordinary shoe-lining, as at present manufactured, sewed together at the heel; Fig. 2 illustrates the same lining with the seam rubbed down and sewed under the tape-stay or "back-35 stay", as it is sometimes called; Fig. 3 is the reverse side of Fig. 2; Fig. 4 illustrates the first appearance of the lining sewed under my method and corresponds to Figs. 1 and 2 under the old methods of manufacture, sup-40 posing my tape-stay to be sewed on one side only; Fig. 5 illustrates the shoe-lining complete, inside view; and Fig. 6 is the outside view of Fig. 5.

Referring to the numerals of reference: 1 45 refers to the sewing-line; 2, the extension be- | and sewed, 10, through the lining and its 100 attached tape as at present used; 4, the sewing lines through the tape and lining, as at present employed; 5, the sewing-lines on 50 the reverse side of the lining and the tapestay, as at present employed (see the raw edges of the shoe-lining outside of the sewing lines); 6, the exposed joined or seam edges of the lining, as at present made; 7-9, 55 my extension tape-stay; 8, the lines of the lining to begin with.

stitching under my first operation; 9, my tape-stay sewed to the lining in the final operation, outside view; 8, 10, lines of stitching or sewing as they finally appear in my ar-

ticle of manufacture, inside view.

In the manufacture of linings, as at present in shoe-factories, the halves of the lining are placed evenly together and attached with a row of stitching, 1; following this operation, the extension beyond the seam, 2, 65 is flattened diametrically ("rubbed down"), and the tape, 3, sewed thereon by the lines of stitching, 4. By this method, three operations are required, the seam is only protected on one side, and, as the tape-stay is 70 sewed flat upon the seam, there is a tendency in the lining to bulge, draw unevenly, and, under strain, to quickly rip. My construcsion overcomes these defects in the following manner: I place my tape-stay, 7 or 7—9 on the 75 machine and put a shoe-lining half upon the tape-stay and sew, 8. The shoe-lining half is held as it is sewed, so that its curved contour follows a straight invisible line lengthwise on the tape-stay, thus naturally shaping 80 the tape-stay to the contour of the entire heel of the shoe-lining. This is easily done, as the needle can be run up the tape-stay on the one half and down the tape-stay on the other half lining. This operation contemplates the 85 use of a one-needle machine. With a twoneedle machine, both halves are simultaneously sewed, edge to edge, to the tape-stay, producing the same result. If it is intended to sew the tape-stay on one side only, the 90 operation is now complete, and the lining with the tape-stay naturally formed presents the contour of the heel, ready for use. In this case, my tape-stay may be of the length and shape at present used. If addi- 95 tional strength is required, however, the extension-half of the tape-stay is folded upon the exposed edges of the lining on the reverse side 9; placed underneath on the machine yond the seam line, as at present left; 3, the other half above, all being done without removing the lining or the tape-stay from the machine. In this manner, I protect both sides of the seam and naturally shape the lining to the form of the heel. It is prac- 105 tically impossible to tear the lining, it will not bulge, or be uneven, and the heel and heel-seam are greatly strengthened and supported, because of the natural shape given

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My tape-stay may be either ordinary soft tape, or may be reinforced, and can be made of cloth, leather, or any other suitable material.

I preferably make my extension tape-stay wider at each end than in the middle to give increased support to the heel seam toward the bottom, where most strain occurs.

The important features of my invention are: sewing the curved heels of the linings in a straight line on a tape-stay resulting in a perfect adjustment of the tape-stay and the lining, producing a superior article of manufacture; and, if desired, strengthening and improving the lining by attaching the tape-stay both inside and outside the heel-seam, instead of inside only, as at present done.

Having thus fully described my invention, what I claim as new and desire to secure by

20 Letters-Patent is:

1. As a new article of manufacture, an improved lining for shoes, consisting of two halves disposed with their rear edges in contact with each other, said meeting edges being curved, and means for holding said halves against separation, consisting of a tape-stay disposed under said meeting edges and sewed to the lining by stitching following straight lines on the tape-stay and curved step of first sewing the meeting edges of the two halves together, before sewing the tape-stay to the lining, is obviated.

2. As a new article of manufacture, an improved lining for shoes, consisting of two halves disposed with their rear edges in contact with each other, said meeting edges being curved, and means for holding said halves against separation, consisting of a tape-stay

disposed over said meeting edges on both sides of the lining and sewed to the lining by stitching following straight lines on the tapestay and curved lines on the lining, whereby the usual step of first sewing the meeting edges of the two halves together, before sew-

ing the tape to the lining, is obviated.

3. As a new article of manufacture, an improved lining for shoes, consisting of two halves disposed with their rear edges in contact with each other, said meeting edges being curved, and means for holding said halves against separation, consisting of a tape-stay disposed under said meeting edges and sewed to the lining by stitching following straight lines on the tape-stay and curved lines on the lining above, whereby the usual

step of first sewing the meeting edges of the two halves together, before sewing the tape to the lining, is obviated, said tape being wider toward the bottom than at the top.

4. As a new article of manufacture, an improved lining for shoes, consisting of two halves disposed with their rear edges in contact with each other, said meeting edges being curved, and means for holding said 65 halves against separation, consisting of a tape-stay disposed under said meeting edges and sewed to the lining by stitching following straight lines on the tape-stay and curved lines on the lining above, whereby the usual 70 step of first sewing the meeting edges of the two halves together, before sewing the tape to the lining, is obviated, and strengthening stitching through the tape-stay and lining disposed along the outer edges of the tape- 75 stay.

5. As a new article of manufacture, an improved lining for shoes, consisting of two halves disposed with their rear edges in contact with each other, said meeting edges 80 being curved, and means for holding said halves against separation, consisting of a tape-stay disposed over said meeting edges, on both faces of the lining, and folded over the top thereof, and sewed thereto by stitch-85 ing following straight lines on the tape-stay and curved lines on the within-contained lining, whereby the usual step of first sewing the meeting edges of the two halves together, before sewing the tape-stay to the lining, is 90

obviated.

6. As a new article of manufacture, an improved lining for shoes, consisting of two halves disposed with their rear edges in contact with each other, said meeting edges 95 being curved, means for holding said halves against separation, consisting of a tape-stay disposed over said meeting edges, on both faces of the lining, and folded over the top thereof and sewed thereto by stitching fol- 100 lowing straight lines on the tape-stay and curved lines on the within-contained lining, whereby the usual step of first sewing the meeting-edges of the two halves together, before sewing the tape-stay to the lining, is 105 obviated, and strengthening stitching through the tape-stay and lining, disposed along the outer portions of the tape-stay.

Witnesses:

THOMAS ALGER,
SARA WEBER-McCormick.

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