No. 836,972. PATENTED NOV. 27, 1906.

P. HÉBERT.

METHOD OF MAKING BOOTS AND SHOES.

APPLICATION FILED AUG. 11, 1900.

2 SHEETS—SHEET 1.

Fig. 1.

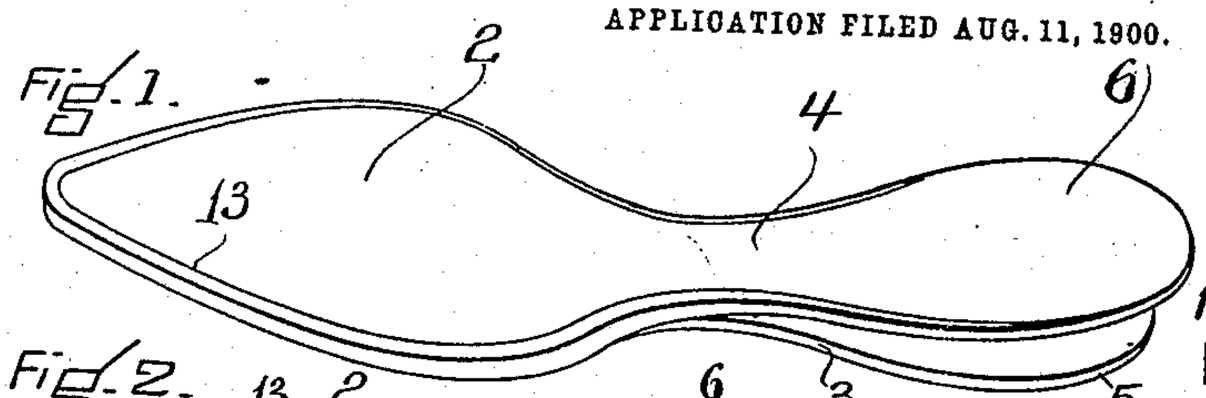


Fig. 2.

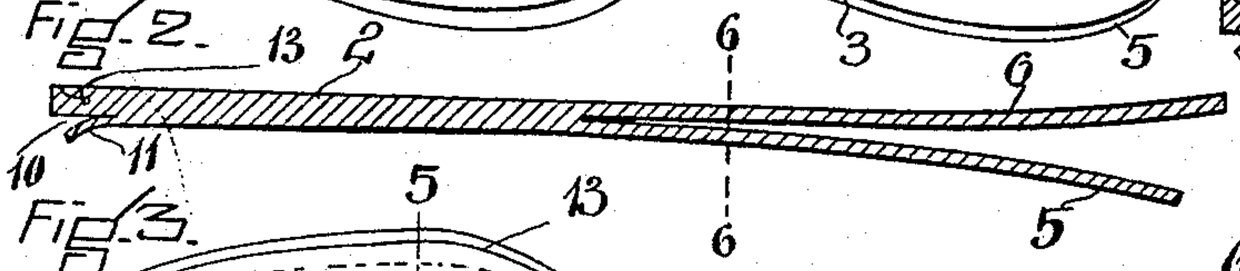


Fig. 3.

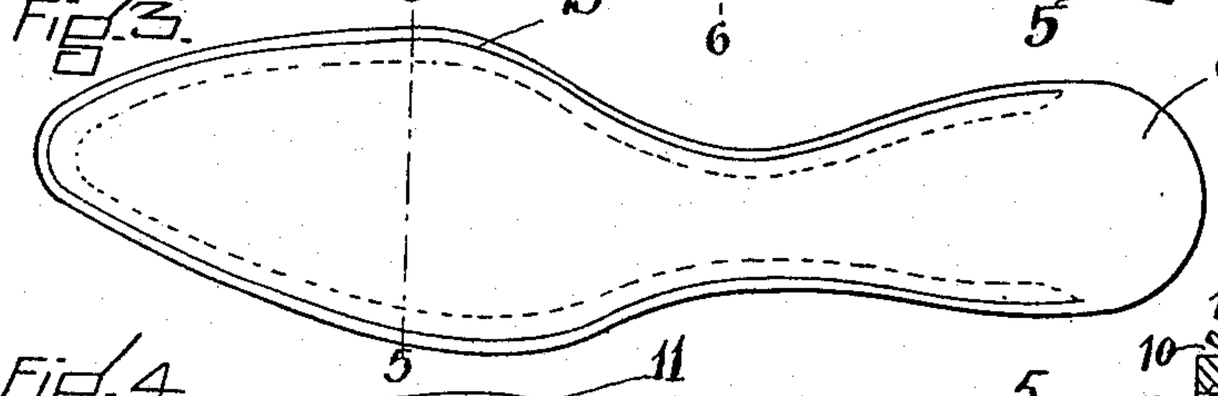


Fig. 4.

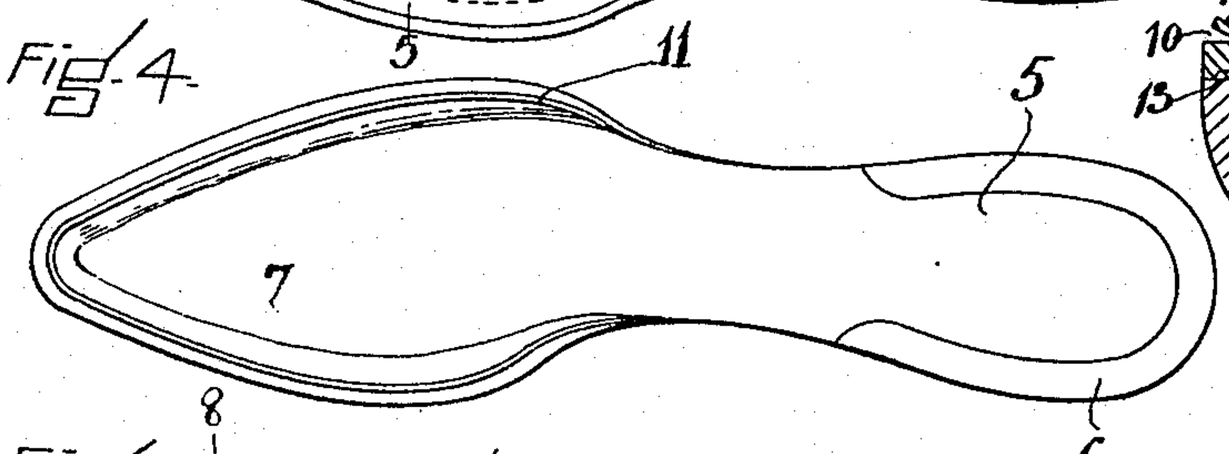


Fig. 5.

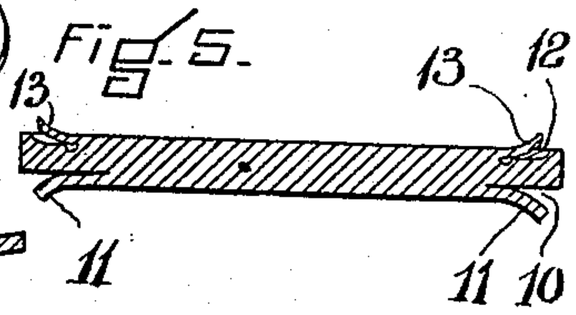


Fig. 8.

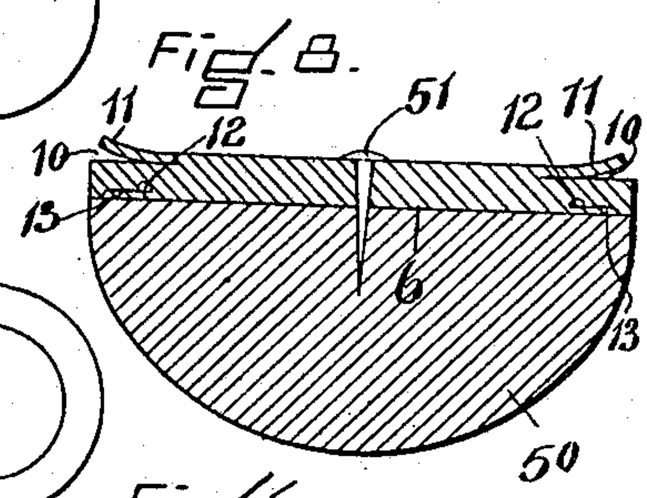


Fig. 6.

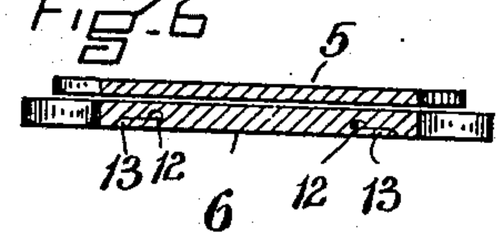


Fig. 7.

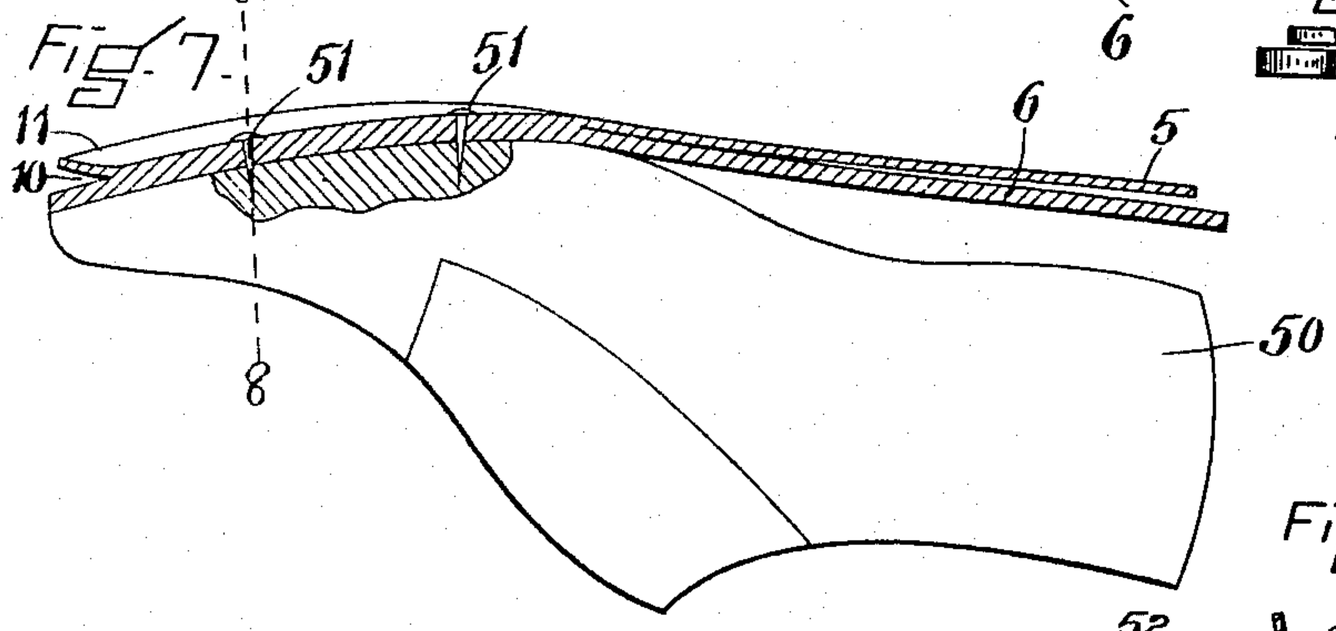


Fig. 10.

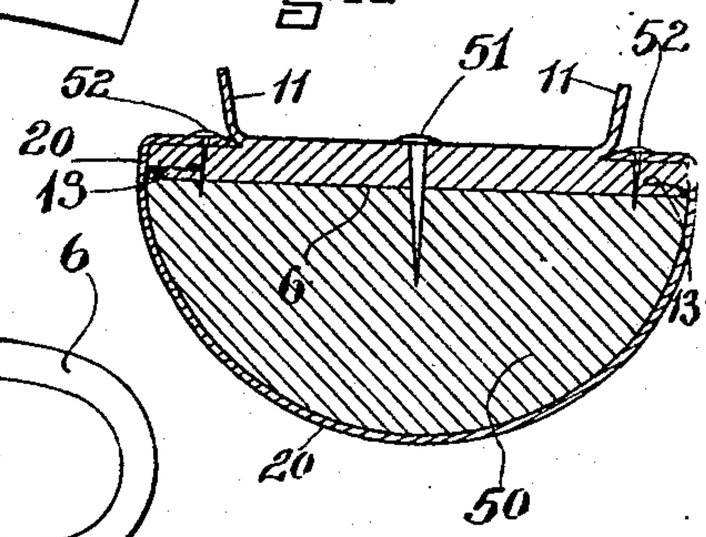
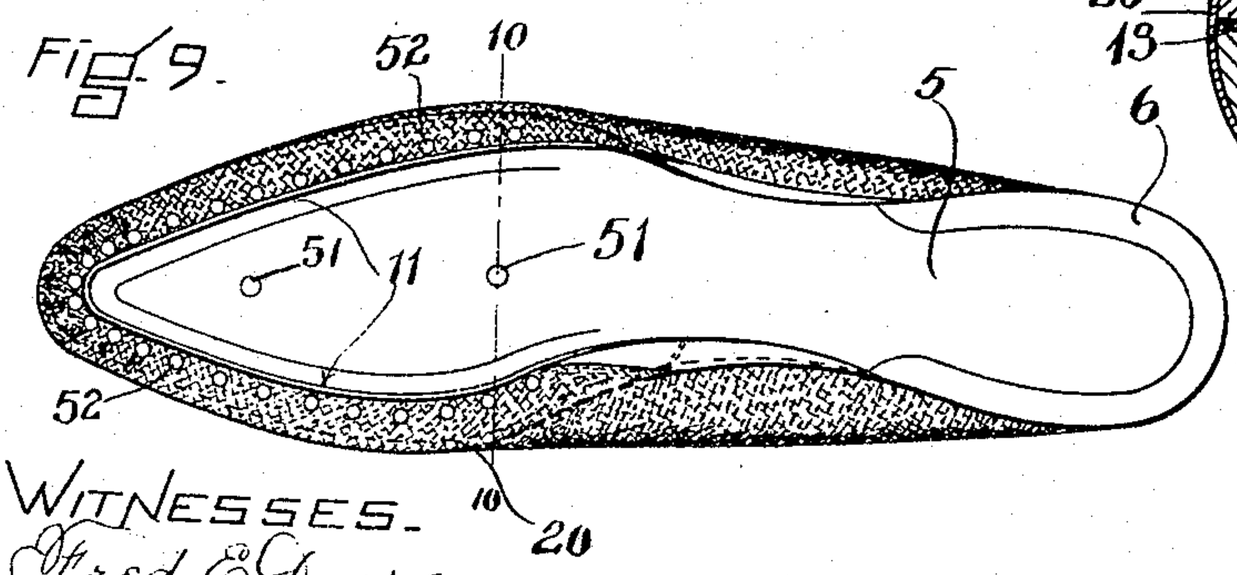


Fig. 9.



WITNESSES.
Fred C. Dorr.
O. M. Pezzeth

INVENTOR.
Placide Hébert
by Knight. Brown & Mundy
Attys.

No. 836,972. PATENTED NOV. 27, 1906.

P. HÉBERT.

METHOD OF MAKING BOOTS AND SHOES.

APPLICATION FILED AUG. 11, 1900.

2 SHEETS—SHEET 2.

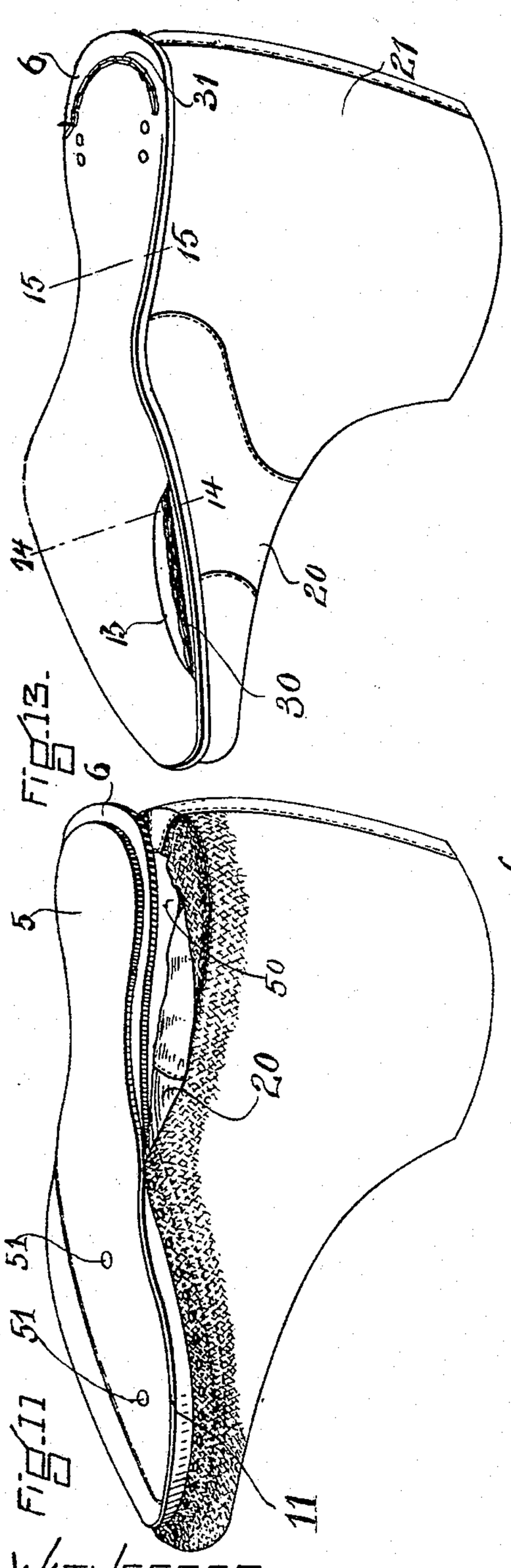


FIG. 13.

FIG. 11.

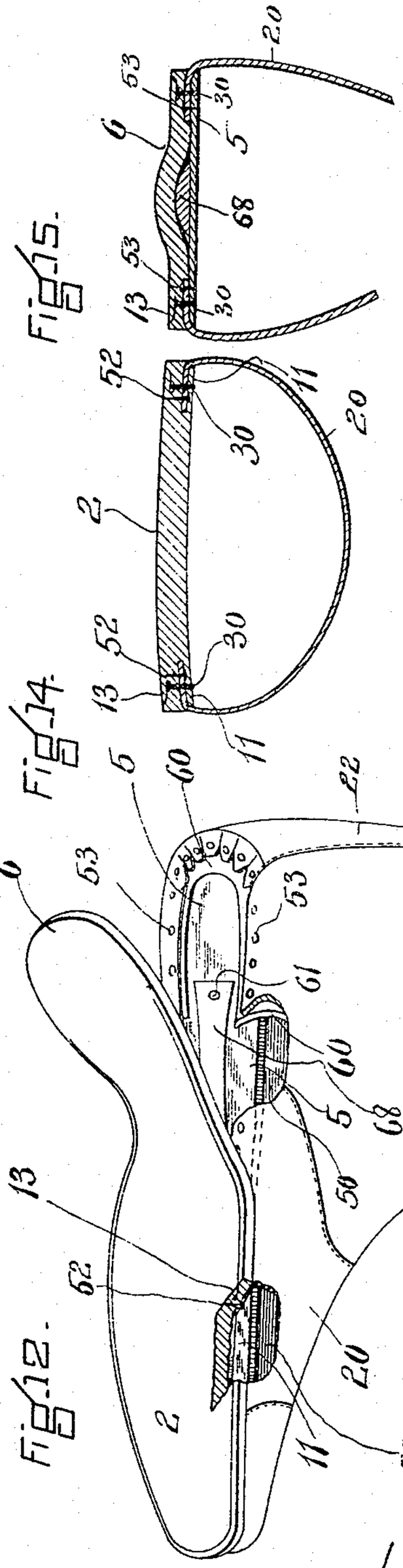


FIG. 15.

FIG. 14.

FIG. 12.

WITNESSES.
Fred E. Dorr.
O. F. Pezzetti.

INVENTOR.
Placide Hebert
by Wright Brown & Quinby
Attys.

UNITED STATES PATENT OFFICE.

PLACIDE HÉBERT, OF LYNN, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO GEORGE H. CUSHMAN, OF LYNN, MASSACHUSETTS.

METHOD OF MAKING BOOTS AND SHOES.

No. 836,972. Specification of Letters Patent. Patented Nov. 27, 1906.

Application filed August 11, 1900. Serial No. 26,604.

To all whom it may concern:

Be it known that I, PLACIDE HÉBERT, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Methods of Making Boots and Shoes, of which the following is a specification.

This invention has for its object the production of a new and improved shoe; and it consists in the method of making the same, substantially as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

Figure 1 represents in perspective view my combined inner and outer sole looking down upon the bottom side. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a bottom plan view thereof. Fig. 4 is a top plan view thereof. Fig. 5 is a cross-sectional view on the line 5 5 of Fig. 3, showing the top and bottom channels and their relation to each other and to the rest of the sole. Fig. 6 is a like view taken on the line 6 6 of Fig. 2, showing the relation of the sections to the fore part of the sole. Fig. 7 represents in side elevation a last with my combined sole attached thereto ready for the application of the upper. Fig. 8 is a cross-sectional view on the line 8 8 of Fig. 7. Fig. 9 represents in bottom plan view the vamp lasted to the fore part of my combined sole. Fig. 10 is a cross-sectional view on the line 10 10 of Fig. 9. Fig. 11 represents in perspective the parts represented in Fig. 9. Fig. 12 represents in perspective a shoe at the completion of the lasting operation, the under flap being tipped up to show the relation of the vamp, quarter, and sole and the manner of the attachment of the vamp and the quarter and stay-piece to the sole. Fig. 13 represents a view of the shoe after the sole has been sewed to the vamp and quarter. Fig. 14 represents a cross-sectional view on the line 14 14 of Fig. 13. Fig. 15 represents a like view on the line 15 15 of Fig. 13.

My combined sole consists of a fore part 2 and a divided shank 3 and 4, terminating in the heel members 5 and 6.

The fore part is formed with a top channel 10, a top-channel flap 11, and with a bottom channel 12 and bottom-channel flap 13.

Beginning with the heel part, the sole is, as shown, divided into an upper flap 3 and a lower flap 4 by a cut extending through the heel and shank of the sole up to the fore part. (See Fig. 7.) The top flap 3 at the heel part is made narrower than the bottom flap (see Figs. 2, 4, 6, 7, and 11) in order to provide room for the application of the counter and quarter. (See Figs. 11 and 12.) The sole as thus constructed serves as a combined inner and outer sole, the channels 10 serving for the lasting of the vamp 20, the counter 60, and quarter 21, and the stay-piece 22 being lasted to the reduced end of the upper heel-piece 5. The channel 12 provides for the stitches 30, that permanently unite the fore part to the vamp and the fore part to the quarter 21, the rear part of the quarter and the counter and stay-piece being connected by stitches 31, that pass through the edge of the heel-piece 6, edge of the quarter, stay-piece, and counter, and edge of the heel-piece 5, thus securing the two parts together with the edge of the quarter, stay-piece, and counter between them. It will be observed that the channel 12 and flap 13 extend rearwardly to the heel portion of the shoe. (See Figs. 3 and 13.)

In lasting a shoe where my improved sole is employed the sole is first secured to the bottom of the last 50 by tacks 51. The vamp is then stretched about the last by any preferred method, the edges thereof being brought into the channel 10, where they are secured by tacks 52. (See Figs. 9, 10, and 11.) After the shoe has been lasted, as shown in Fig. 11, it is removed from the last and the shoe turned and replaced upon the last. The edges of the counter 60, quarter 21, and stay-piece 22 are then stretched in place upon the edge of the reduced upper heel-piece 5 (see Fig. 12) and secured in place by tacks 53. The shank-piece 68 is inserted between the flaps 5 and 6 and secured in place by a tack 61. (See Fig. 12, in which figure a part of the quarter is broken away in order to show the arrangement of the quarter with respect to the reduced part of the heel-piece 5, a portion of the vamp and

sole being broken away in order to show the relation of the latter to the flap 11.) The shank-piece 68 when the two flaps of the sole are united by the stitches 30 and 31 serves to stiffen the shoe and support it, the instep particularly, as in the case of the so-called "McKay" or "welt" shoe. Heretofore turned shoes when equipped with a shank-piece have had said shank-piece applied on the inside of the shoe to the top of the sole, resulting in very little if any material advantage, whereas by my method the shank-piece is incorporated inside the top portion of the sole itself along the instep or shank portion, thereby giving the sole at that part the support it would have were the inner and outer sole employed with the shank-piece, as in the old method of the McKay or welt shoe. From inspection of Fig. 12 it will be seen that the vamp is lasted in the channel 10 and secured in place by tacks 51, extending toward the bottom of the sole, while the counter, stay-piece, and quarter are lasted upon the edge of the reduced heel-piece 5, secured in place by tacks extending toward the last or the top of the sole. Of course it is understood that in place of employing tacks in the lasting operation I may employ a string or any other securing devices as may be preferred, the tacks simply being shown for purposes of illustration.

The shoe being lasted as described, the last is then removed and the sole permanently united to the vamp by stitches 30 passing down through the sole in the channel 12, under the flap 13, and through the flap 11. (See Figs. 14 and 15.) The stitches 31 permanently secure the flap 11 to the sole with the edge of the vamp and part of the quarter between them. The rear part of the counter, the quarter, and stay-piece are permanently secured to the sole by stitches 31, passing down through the rear end of the heel-pieces 5 and 6. (See Fig. 13.) After the shoe has been sewed the flap 13 is rubbed down upon the stitches 30, and by the leveling or other operation the various parts of the sole are consolidated and put into the form and shape desired.

By my invention I am enabled to do away with the two separate soles and the labor attendant upon the manipulation of such separate pieces, besides providing for a large saving in the cost and manufacture of the shoe. Furthermore, by making the shoe with one sole instead of an inner and outer sole sewed together I provide a shoe whose sole is flexible, as in the case of the turned shoes, which is not liable to squeak, and has none of the objections inherent to shocs constructed with two independent sole-pieces sewed together. In my shoe there can be no play of one sole upon the other to cause squeaking and the more serious objection of a sawing action on the stitches to cut them. Further, the fore part of my sole is practically uninjured and secured upon the shoe with its original strength practically unimpaired, not having been cut, as in the case of the turned shoe with the top slip required in such shoes in the sewing operation. Further, the action of the free edge of the flap 11 upon the upper is that of a shoulder and prevents the upper or vamp from being pulled up to show the stitches, causing what is known in other styles of shoes as "grinning." In the manufacture of turned shoes it is necessary to provide a filler on the top of the sole between the lines of stitches in order to equalize the ridge made by the stitched lines. Where my invention is employed, the sole of the completed shoe is level and smooth. Moreover, inasmuch as the upper is not cut away the shoe can be repaired without difficulty at any time.

In place of the stitches 30 and 31 I may employ slug-nails or wire or any desired form of fastening means.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all the forms in which it may be made or all the modes of its use, what I claim, and desire to secure by Letters Patent, is—

1. The method of making a shoe which consists in taking a sole having a channel in the upper side of its fore part and an upper channel-flap and having its heel and shank divided into upper and lower flaps, applying the sole to a last with the channel-flap outward, stretching the vamp of an upper turned inside out about the last and over the edge of the sole, fastening the vamp to the sole securely enough so that it can be turned, laying the channel-flap over the edge of the vamp, turning the partially-lasted shoe, relasting and securing the counter and quarter of the upper to the upper flap of the sole, laying the lower flap over the edges of the quarter, and stitching through and through the sole, the flaps of the sole, and the edges of the upper entirely around the fore part and sides of the shank and heel part of the shoe by a continuous operation.

2. The method of making a shoe which consists in taking a sole having a channel in the upper side of its fore part and an upper channel-flap and having its heel and shank divided into upper and lower flaps, applying the sole to a last with the channel-flap outward, stretching the vamp of an upper turned inside out about the last and over the edge of the sole, fastening the vamp to the sole securely enough so that it can be turned, laying the channel-flap over the edge of the vamp, turning the partially-lasted shoe, relasting and securing the counter and quarter of the

upper to the upper flap of the sole, laying the lower flap over the edges of the quarter, securing the edges of sole, sole-flaps and upper together by a series of fastenings, and separately stitching through the rear ends of the sole-flaps and the interposed edges of the counter and quarter.

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

PLACIDE HÉBERT.

Witnesses:
A. D. HARRISON,
H. L. ROBBINS.