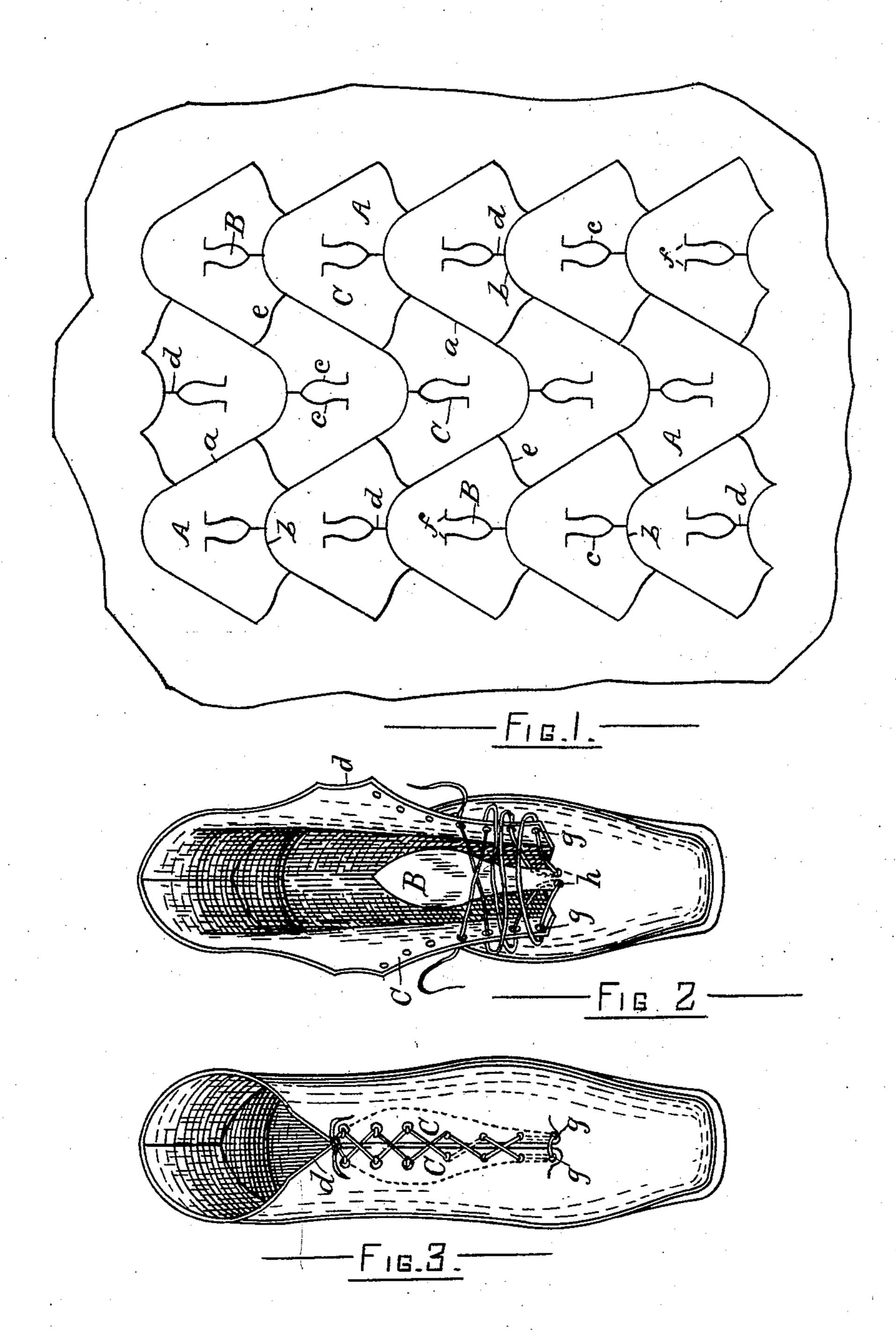
(No Model.)

## G. BOIVIN.

## MANUFACTURE OF BOOTS OR SHOES.

No. 321,182.

Patented June 30, 1885.



Mitnesses AlfCharbonneaus AMMont Inventor. G. Boivin, By Joursolle atty.

## United States Patent Office.

GUILLAUME BOIVIN, OF MONTREAL, QUEBEC, CANADA.

## MANUFACTURE OF BOOTS OR SHOES.

SPECIFICATION forming part of Letters Patent No. 321,182, dated June 30, 1885.

Application filed January 12, 1885. (No model.) Patented in Canada November 21, 1884, No. 20,607.

To all whom it may concern:

Be it known that I, Guillaume Boivin, a citizen of Canada, residing at Montreal, in the Province of Quebec, have invented certain new and useful Improvements in the Manufacture of Boots or Shoes, open in front, and said fronts united or held together by lace, strap, or other approved device, (for which I have obtained a patent in Canada, No. 20,607, bearing date November 21, 1884,) of which the fol-

lowing is a specification.

My invention relates to a scheme for cutting out the uppers of boots, the invention being adapted for use in the manufacture of buttoned as well as laced shoes; and it consists in the art of shaping or cutting the uppers of boots and shoes from a sheet of leather or other material in such a manner that there will be absolutely no waste except the margin of the sheet, or what is cut from the outer edge of the outermost patterns or uppers in the sheet, as hereinafter described, reference being had to the annexed drawings, in which—

Figure 1 represents a sheet of leather or other suitable material marked off or divided into uppers. Fig. 2 is a top front view, in which the lace fronts are represented as opened back, so as to show the tongue and how the application of the lace helps to keep the boot in shape.

30 Fig. 3 is a top front view of the boot as worn.

The pattern-lines shown in Fig. 1 indicate where the cuttings are to be made. They also show that each upper is only divided from those adjoining it by a single course of the cutting instrument; that some part of each upper fits accurately into some portion of another upper, and that therefore there is no loss of material whatever.

While in the use of my invention only one size of uppers may be cut from the same sheet, this system of cutting the uppers is nevertheless equally available for all sizes, and for both high and low shoes, whether to be provided with lacings, buttons, or other fastenings.

In Fig. 1, A indicates the upper of the boot, its outline being formed by the several lines shown, of which the straight lines a a mark the bottom edge of the sides of the uppers; the circular line b, the toe of one upper and the top edges of another; the curved lines c, the edges both of the tongue B and of the lace-

fronts C. The short line d shows the division of the two sides of the upper between the upper ends of the lace fronts to the top of the boot, and the curved lines e define the back 55 edges of the upper, which, when brought together and sewed from the heel to the top, form the only seam in the entire upper.

In making up these boots, after the backseam has been completed and the heel-stiffener 60 secured in place and the lace-holes formed in the fronts, the lace-fronts are brought together and so held by temporary laces or ties. The lower corners, f, are then drawn down toward the toe, so as to overlap the upper in that di- 55 rection, in which position they are held by a lace or tie passed through the lower lace-holes, g, in the lace-fronts C, and thence through holes h formed in the upper A underneath the overlapping corners, but slightly nearer 70 to the toe of the boot than the holes g. This drawing of these parts causes a crease to be formed in the leather on each side of the root of the tongue. Such creases are, however, easily worked out by suitable manipulation 75 either before or after the upper has been drawn tightly over the last and fastened to the insole in the usual manner, and thus a permanent set is given to these parts in the desired shape. The lace in the finished boot, as shown in Fig. 80 3, passing from the holes g through the laceholes h, and thence back through the upper lace-holes of the boot, will tend to hold the corners of the lace-front down in place and tightly against the uppers A.

The manner of forming the shoe constitutes no part of the present invention, and is illustrated herein simply for the purpose of giving a clear understanding of the manner of utilizing the products of my invention.

It is of course to be understood that the blanks may be incorporated or made up in shoes in any manner for which they are adapted, and that their marginal forms and the form of the central incision may be modified at will 95 according to the style or pattern of the shoe demanded, provided my system of cutting the blanks side from side and end from end is re-

Among the many advantages of my art or 100 system of cutting out the uppers of boots from the hide or sheet over any other system here-

tofore known it will be seen that by its use not only is much of the best of the leather saved, but that much time is also saved, by the fact of the outlines of two uppers being formed by a single stroke of the knife, and, further, that in the finished boot the corners of the lace-fronts being held by the lace close against the upper, as above described, together with the avoidance of all side or top seams, so combine to form a neat, cheap, and comfortable boot.

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

1. The improvement in the art of dividing sheet-leather or other material into uppers for boots or shoes, consisting in dividing the same by waved lines a and transverse lines e,

in the manner described and shown, thereby forming each upper in a single piece and sep- 20 arating them from each other without waste.

2. The improvement in the art of dividing sheet leather into uppers for boots or shoes, consisting in dividing the toe of one upper from the top edge of another, the outer edge 25 of one from the outer edge of another, and the back or heel edge of one from the heel edge of another, in the form and manner herein described.

Signed at Montreal this 12th day of Decem- 30 ber, 1884.

G. BOIVIN.

In presence of—O. LAMBERT,

P. ALEX. BOIVIN.