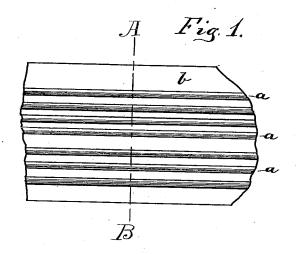
## A. P. NASH.

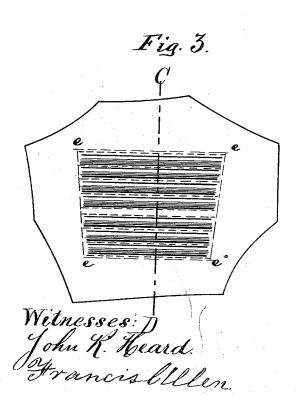
## Cording-Material for Boots and Shoes.

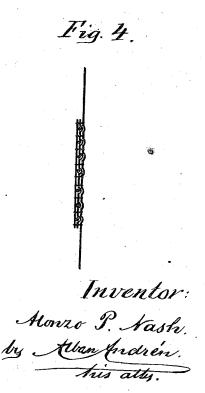
No. 161,434.

Patented March 30, 1875.









## UNITED STATES PATENT OFFICE.

ALONZO P. NASH, OF WEYMOUTH, MASSACHUSETTS.

## IMPROVEMENT IN CORDING MATERIALS FOR BOOTS AND SHOES.

Specification forming part of Letters Patent No. 161,434, dated March 30, 1875; application filed January 6, 1875.

To all whom it may concern:

Be it known that I, Alonzo P. Nash, of Weymouth, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Cording Uppers for Boots and Shoes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which

form a part of this specification.

My invention relates to improvements in cording uppers for boots and shoes, for the purpose of preventing the breaking or cracking of the upper, and consists in the employment of a prepared material having parallel ridges projecting on one side, which material, after being cut out to the required shape, is laid on the rear side of the upper, with the projecting parallel ridges facing the upper, after which the whole is pressed between a pair of dies, of which the one facing the outside of the upper is provided with parallel grooves, corresponding to the parallel ridges of the above-named material, and the one that comes in contact with the rear of the material is made perfectly plain. After the upper is thus corded I unite the cording material to the upper by means of rows of stitches, as usual.

On the accompanying drawings, Figure 1 represents a plan of my improved cording material. Fig. 2 represents a cross-section on the line A B, shown on Fig. 1. Fig. 3 represents a plan of the right side of an upper; and Fig. 4 represents a cross-section on the line C

D, shown in Fig. 3.

Similar letters refer to similar parts wher-

ever they occur on the drawings.

It has heretofore been customary to provide the instep of uppers for boots and shoes with parallel projecting ridges, serving both for ornament and for the purpose of preventing the upper from cracking as the shoe is bent during walking. Such ridges were pressed between suitable male and female dies before the boot or shoe was sewed together; but as no filling or cording was at first used on the rear side of the upper to fill up the concave

spaces of said ridges, they were liable to be flattened out and disappear, and thereby become useless for the purposes for which they were intended. To obviate this difficulty it became necessary to fill the said concave spaces on the rear side of the upper with cords, and it has heretofore been my custom to cut off short pieces of such cord and to lay them in the aforesaid spaces, after which a piece of cloth or leather was pasted, glued, or cemented over the cords on the rear side of the upper. This latter process was, however, very slow and costly, and therefore not destined to become of practical value and utility. Therefore, to render such cording of boot and shoe uppers durable, cheap, and practical, I have conceived the idea of making a prepared cording material, as shown in Figs. 1 and 2—that is, provided with parallel projecting ridges a a a. This prepared cording material I prefer to make of two pieces, b c, of cloth or suitable material, between which are laid the cords d d d, previous to the pasting or cementing together of the pieces b c. This material is made by being rolled between a pair of rollers, one of which is a plain cylinder, and the other one provided with longitudinal grooves on its circumference, corresponding in size and position to the projecting ridges a a a. This material may also be made by being pressed between a pair of dies, one of which is plain and the other one provided with suitable recesses.

To equal advantage I could cut, press, or roll out such a cording material from one solid piece of leather, pasteboard, rubber, or suitable material. After such a material is prepared I cut from it pieces of a shape similar to that shown by the dotted lines e e e e on Fig. 3. To cord an upper with this my prepared material, it is only necessary to lay a piece thereof on the rear side of the upper, so that the projecting ridges of the said piece lies in contact with the rear side of the upper, after which I press the whole between a pair of dies, of which the one that faces the right side of the upper is provided with parallel grooves, but the one opposite is made perfectly plain, by which I press the projections of the cording material into the upper, the outside of which will fill the grooves on the die, and thus produce projecting parallel ridges | therefore disclaim what is shown in said paton the outer side of the upper, as shown in Figs. 3 and 4. The cording material is afterward sewed to the upper in the usual manner.

It will thus be seen that by the employment of such a prepared cording material I am able to cord boots and shoes quicker, better, and cheaper than by the ordinary methods.

I am aware that a patent was granted on the 25th day of February, 1868, to George and Godfrey Smith for improvements in boots and shoes, in which pockets are made on the upper, in which cords are laid, and covered on the back by a piece of leather or suitable material; but this is not my invention, and I

ent; but

What I wish to secure by Letters Patent

and claim is-

The herein-described cording material for boots and shoes, having parallel projecting ridges a a a on one side of it, as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention, I have affixed my signature

in presence of two witnesses.

ALONZO P. NASH.

Witnesses:

ALBAN ANDRÉN, JOHN R. HEARD.