

UNITED STATES PATENT OFFICE.

JOSEPH K. FEICK, OF REED CITY, ASSIGNOR TO ELBRIDGE G. STUDLEY, OF
GRAND RAPIDS, MICHIGAN.

PROCESS OF MANUFACTURING FELT BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 260,554, dated July 4, 1882.

Application filed March 11, 1881. (No specimens.)

To all whom it may concern:

Be it known that I, JOSEPH K. FEICK, a citizen of the United States, residing at Reed City, in the county of Osceola, State of Michigan, have invented a new and useful Improvement in the Process of Manufacturing Felt Boots and Shoes, of which the following is a full, clear, and exact description.

This invention relates to the manufacture of seamless felt boots and shoes. Heretofore such articles have been made by forming them about one-third larger than the size the finished article was to possess, then "fulling" the same into the required size, and finally shaping the article by means of the ordinary last and tree. According to such process, it has been found necessary to saturate the felt with a solution of shellac or other stiffening material for the purpose of retaining the boot or shoe in the proper form or shape. Boots and shoes so made are open to a serious objection, in that when subjected to the action of snow or water the shellac is washed or worn out, and the boot or shoe soon loses its shape, and, besides, the texture of the felt is not of that firm and compact character which is desirable in a felt boot or shoe.

The objects of my invention are to overcome such objections and to provide a seamless felt boot or shoe in which the texture of the felt is rendered firm, closely compressed, and compact, and which will retain its original size and shape when worn without the necessity of saturating the felt with shellac or other sizing material.

According to my invention, a seamless felt boot or shoe is made by fulling the material to about one-third of the size of the boot or shoe required, after which it is steamed or otherwise

moistened to enable it to be uniformly stretched in length and breadth to about two-thirds of the size the finished article is to possess. The article is then placed on a last and tree and subjected to the action of hot air until thoroughly dried; but it is obvious that it can be dried by other means. The uniform stretching of the reduced article can be effected through the medium of a three-part expansible last or by means of any other mechanical appliance which will stretch the article equally throughout its length and breadth.

By my improved process of making seamless felt boots or shoes a firm, closely-compressed, and compact texture is provided, the article is rendered exceedingly substantial and serviceable, and it will retain its original shape and size without the necessity of employing a sizing or stiffening compound, such as shellac.

I do not wish to be understood as broadly claiming seamless felt articles made by shrinking the same and then shaping and drying them on a block; but,

Having thus described my invention, what I do claim is—

The process herein described of making felt boots or shoes, which consists in fulling the same to a reduced compass, then steaming or otherwise moistening them, then stretching or expanding the same to the required size, and finally lasting and treeing the article, substantially as described.

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

JOSEPH K. FEICK.

Witnesses:

HENRY AUER,
J. E. GRAHAM.