(No Model.)

G. HAWKES.

PROCESS OF LASTING BOOTS AND SHOES.

No. 261,602.

Patented July 25, 1882.

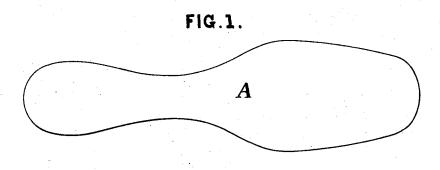


FIG. 2

Sommenter Lilbert Howker by J. H. Adams Alty.

## UNITED STATES PATENT OFFICE.

GILBERT HAWKES, OF LYNN, MASSACHUSETTS.

## PROCESS OF LASTING BOOTS AND SHOES.

SPECIFICATION forming part of Letters Patent No. 261,602, dated July 25, 1882.

Application filed January 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, GILBERT HAWKES, of Lynn, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in the Process of Lasting Boots and Shoes, of which the following is a specification.

My invention relates to an improvement in means employed for securing the uppers of 10 boots and shoes to the inner soles in the process of lasting.

Heretofore in the practice of the art the upper has been attached to the inner sole by stitching the two together. Nails and pegs 15 have also been used for the same purpose. As an improvement upon this method of attaching the upper to the inner sole, an adhesive substance has been employed, which is spread upon the portion of the upper surface of the 20 inner sole which comes in contact with the upper, and also upon the corresponding overlying edge of the upper, this being done during the operation of lasting, and the adhesion of the parts so prepared being effected by means of 25 pressure. Another means of connecting the upper to the inner sole consists in the employment of a binding piece or pieces of some thin material, which piece is forcibly pressed down upon the inner sole and the inner edge of the 30 upper, upon each of which (of the two latter) has been spread some suitable adhesive mixture—like hot glue, for instance—the parts being held together until the adhesive material

The processes above described occupy considerable time in the operation of lasting, the evaporation of the solvents being requisite in order to effect the proper setting of the adhesive material.

My invention consists in the process of lasting boots and shoes in which I employ a textile or other suitable material, such as paper

or leather, upon one surface of which is spread a coating of cement of such a nature that when prepared the material will not adhere to any- 45 thing with which it comes in contact, and is rendered adhesive only when subjected to heat sufficient to fuse the cement. The cement employed consists of a combination of shellac and india rubber; or it may be composed of other 50 ingredients which, when used under like conditions, will effect the same purpose. When used in the operation of lasting, the material, being cut to the proper size, is placed with its cemented surface upon the inner sole and the 55 overlying edge of the upper. A heated pressing-tool is then applied to the material, causing the cement to fuse and effecting an instant adhesion of the parts to be united. The material thus prepared may be manufactured 60 and sold in the form shown in Figure 1, adapted for immediate use.

Fig. 2 is a section of the material on an enlarged scale, B representing the coating of cement, and C the textile or other material upon 65 which the cement is spread.

What I claim as my invention is-

That improvement in the art of lasting boots and shoes which consists in turning the edge of the upper over upon the inner sole, then applying a fabric coated with a fusible cement adhesive from the action of heat, and attaching the fabric to the inturned edge and to the inner sole by applying heat while the parts are under pressure, all substantially as set 75 forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GILBERT HAWKES.

Witnesses:

W. B. HASELTINE, Jos. H. ADAMS.