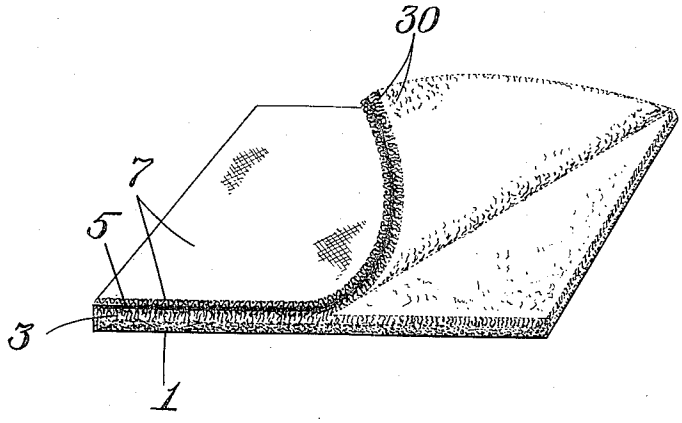
M. W. WHITE.

REINFORCED LEATHER AND PROCESS OF MAKING THE SAME.

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1,259,180. Patented Mar. 12, 1918.



WITNESSES.
Herbert W. Kenway.
Martha W. Coupe

INVENTOR.
Melbourne M. White

UNITED STATES PATENT OFFICE.

MELBOURNE W. WHITE, OF CLIFTONDALE, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

REINFORCED LEATHER AND PROCESS OF MAKING THE SAME.

1,259,180. Specification of Letters Patent. Patented Mar. 12, 1918.

Application filed February 23, 1915. Serial No. 10,090.

To all whom it may concern:

Be it known that I, MELBOURNE W. WHITE, a citizen of the United States, residing at Cliftondale, in the county of Essex and State of Massachusetts, have invented certain Improvements in Reinforced Leather and Processes of Making the Same, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to imitation ooze and patent leather, to a process of making the same and to a strengthened leather which results from certain steps of the process.

I have found that by vulcanizing a piece of fabric to the flesh side of a piece of sheepskin or other comparatively weak leather, the strength of the leather is increased to such an extent that it may be used for making uppers of boots and shoes in place of the usual more expensive leathers.

I have also found that if the fabric backing is torn from the body of the leather a layer of flesh adheres to the backing, the surface of the flesh having the appearance of ooze leather. There results, thus, an imitation ooze leather which differs from true ooze in that the grain has been replaced by a fabric backing. The formation of this imitation ooze leather in the manner indicated obviously accomplishes the fleshing of the original piece so that a double purpose is served when this procedure is carried out.

These and other features of the invention will be described in connection with an illustrative process and illustrative articles and pointed out in the appended claims.

Referring now to the accompanying drawing, the figure is a perspective greatly magnified of a piece of leather to the flesh side of which a piece of fabric has been vulcanized, one corner of the fabric having been torn from the leather to illustrate how the imitation ooze leather is produced.

The grain of the leather is indicated at 1, the flesh at 3, the vulcanizable substance at 5 and the fabric at 7.

An illustrative method of carrying out the method to produce the articles is as follows:

Upon a piece of rubberized fabric, for example "friction cloth", is spread a vulcanizable cement or other vulcanizable substance. The piece of fabric is next pressed upon the flesh side of a piece of sheepskin or other leather which has a considerable amount of flesh. The fabric with the leather attached is then put into a suitable oven and kept there until the cement or other substance is vulcanized.

By this procedure the fabric is very firmly attached at substantially every point to the flesh of the leather, and the strength of the finished article very greatly increased so that whereas the leather alone before treatment can easily be torn, the leather with the backing vulcanized thereto is very tough and can be subjected without injury to the strain of the pulling over and lasting operations and to the wear and tear of everyday use in a shoe.

If now the fabric is torn from the leather a layer of flesh adheres to it, as indicated at 30, whereby an imitation ooze leather is produced which presents upon one side the surface of the fabric and upon the other the characteristic soft surface of the flesh. This imitation ooze has much greater toughness and strength than that of the fabric alone or that of the flesh alone or the combined strength of the two, this strength and toughness being due, apparently, to the presence of the vulcanized substance which has been pressed into the meshes and pores of the fabric and leather and there hardened.

From this imitation ooze an imitation patent leather may readily be produced by coating the soft flesh surface of the ooze with suitable varnish and drying the varnish in the usual manner.

The various steps of the process result, therefore, first in strengthened piece of leather, second in an imitation ooze leather, and third in an imitation patent leather.

Having thus described my invention, I claim as new and desire to secure by Letters Patent of the United States:

1. That improvement in the art of treating leather which consists in firmly attaching to the flesh side of a piece of leather a sheet of fabric and then separating the fabric with its adhering flesh from the body of the leather.

2. That improvement in the art of treating leather which consists in vulcanizing to the flesh side of a piece of leather a sheet of

fabric whereby the fabric becomes firmly attached to the flesh and then separating the fabric with its attached flesh from the body of the leather.

3. That improvement in the art of treating leather which consists in vulcanizing to the flesh side of a piece of leather a sheet of fabric whereby the fabric becomes firmly attached to the flesh and then separating the fabric with its attached flesh from the body of the leather whereby the leather is fleshed and there results a flesh split attached to a fabric backing.

4. That improvement in the art of treating leather which consists in firmly attaching to the flesh side of a piece of leather a sheet of fabric, separating the fabric with its attached layer of flesh from the body of the leather, and then coating the surface of said layer with patent leather varnish.

5. That improvement in the art of treating leather which consists in vulcanizing to the flesh side of a piece of leather a sheet of fabric, separating the fabric with its attached layer of flesh from the body of the leather, and then coating the surface of said layer with patent leather varnish.

6. An article of manufacture comprising a piece of fabric having a thin layer of flesh leather firmly attached thereto.

7. An imitation ooze leather in which the grain side is replaced by a piece of fabric.

8. An imitation ooze leather in which the grain side is replaced by a piece of fabric vulcanized thereto.

9. An imitation patent leather comprising a fabric backing, a layer of flesh attached thereto and a coating of patent leather varnish.

10. An imitation patent leather comprising a fabric backing, a layer of flesh vulcanized thereto and a coating of patent leather varnish.

11. An article of manufacture comprising a natural piece of upper leather of comparatively little strength and a piece of fabric vulcanized to the flesh side thereof to reinforce it.

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

MELBOURNE W. WHITE.

Witnesses:
HERBERT W. KENWAY,
WILLIAM B. KING.