H. E. ENSLIN.

ORNAMENTED LEATHER.

APPLICATION FILED OCT. 4, 1913.

1,115,183.

Patented Oct. 27, 1914.

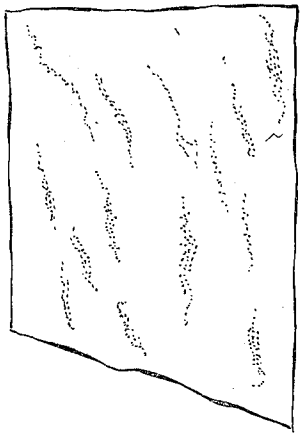


Fig. 1.

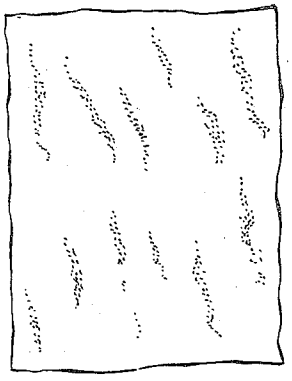


Fig. 2.

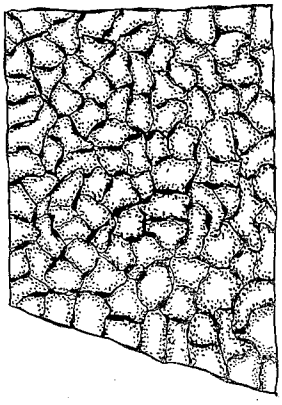


Fig. 3.

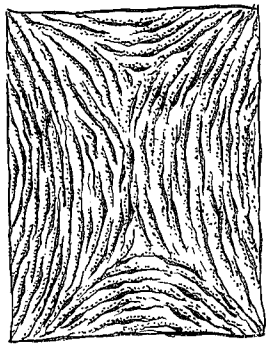


Fig. 4.



Fig. 5.



Fig. 6.

WITNESSES.

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ORNAMENTED LEATHER.

1,115,183. Specification of Letters Patent. Patented Oct. 27, 1914.

Application filed October 4, 1913. Serial No. 793,494.

To all whom it may concern:

Be it known that I, HERBERT E. ENSLIN, a citizen of the United States, residing at Malden, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Ornamented Leather, 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 an article consisting of a piece of leather to one side of which an ornamental pattern has been imparted. For example, it may be an inexpensive piece of leather to which has been imparted the appearance of a more expensive variety. Heretofore, such ornamentation has been produced by methods such as embossing, which require both expensive apparatus and a good grade of leather to be carried out successfully.

Ordinarily, leather which is used for ornamental purposes comprises a flesh side and a grain side, the grain side being the display side; and in order to promote clearness, the present invention will be described in connection with these two sides, the flesh and the grain. I have found that by shrinking the flesh side of a piece of leather without shrinking the grain side, or by shrinking the flesh side more than the grain side, a product can be obtained of considerable less extent than the original piece which is smooth on the flesh side, and wrinkled or puckered on the grain side, and that this wrinkling or puckering can be so produced as to present the appearance of expensive leathers. It is desirable that the shrinking be confined as nearly as possible to the flesh side and that it be produced uniformly so that in the finished piece of leather said flesh side will be smooth and have approximately the same appearance that it had before being shrunk, the wrinkling or puckering being confined to the grain side.

In producing the article of the present invention, the piece of leather should be held taut during the shrinking operation so that the natural tendency of the leather to curl when a selected spot is shrunk will be resisted; and I have found that if the leather is so held it will pass through the shrinking operation referred to above without having imparted to it any considerable curling or warping, the finished product being substantially as flat as the original except, of course, for the wrinkling of the grain side. The article thus consists of a piece of leather, one side of which is smooth and shrunken and the other side of which bears upon its surface in wrinkles or puckers an ornamental pattern. These and other features of the invention will be described in connection with illustrated articles and pointed out in the appended claims.

Referring now to the drawings, Figures 1 and 2 show the appearance of the grain side to two pieces of leather, before said pieces have been subjected to the shrinking process referred to above. Fig. 3 shows the grain side of the finished product produced from the piece of Fig. 1 when the shrinking is permitted to take place approximately equally in all directions. Fig. 4 shows the grain side of the finished product produced from the piece of Fig. 2 when more tension has been maintained from each corner to the corner diagonally opposite than in the other directions, Fig. 5 is an enlarged section of a portion of the article shown in Fig. 3, Fig. 6 is a similar section of a portion of the article shown in Fig. 4.

The shrinking of the flesh side of the piece of leather may be accomplished in any suitable manner. For example, the piece may be held by a contractile frame which is normally held in expanded position by springs or weights; and to the flesh side of a piece of leather so held may be applied a shrinking agent, such as heat. In producing the article by the application of heat an ordinary blast lamp may be used, the operator causing the tip of the flame to travel over the flesh side of the leather. Care should be taken, however, not to allow the flame to remain for any appreciable length of time in one spot since, aside from the danger of spoiling the leather by burning it, which is obviously liable to occur, if heat is allowed to strike through into the grain side to the same extent as into the flesh side, said side will be shrunk equally with the flesh side and the finished product will be smooth on both sides and have the same appearance as the original, except for size. Consequently the heat should be applied only momentarily to the surface of the leather and then immediately withdrawn, a result which may be accomplished by mov-

ing the flame across the surface of the leather so as to make the application of the heat progressive.

The blast lamp referred to above is typical of anything which will give off intense heat, since it is desirable, when the shrinking is accomplished by heat, that an intense heat be available so that its application may be made to cause the flesh side to shrink instantly before the heat has penetrated the grain side to any considerable extent.

By varying the tension along various lines in the piece of leather under treatment and by controlling the application of the shrinking agent various patterns may be produced. In the piece of leather shown in Fig. 3, for example, the tension has been maintained approximately equal in all directions while in the piece shown in Fig. 4 more tension has been maintained along lines extending from each corner to the diagonally opposite one than in any other directions.

No further description of the method of producing the article will be given since the method itself forms no part of the present invention, and an illustrative method is fully set forth in my co-pending application Serial No. 787,943, of which the present application is a continuation so far as common subject-matter is concerned.

It should be particularly noted that the appearance of the flesh side remains practically unchanged. With firm, heavy, close fibered leather this is most nearly true; with soft, light, loose fibered leather the flesh side, after treatment, may show to some extent the reverse of the pattern which has been imparted to the grain side. The effect of heat thus momentarily applied is to contract that side of the piece of leather which is subjected to said heat thereby reducing its size and causing the untreated side to wrinkle or pucker in order to accommodate itself to this reduction. The appearance of the surface of the treated side thus remains practically unchanged while an ornamental pattern in raised figures is imparted to the other side.

It will be understood that the articles shown in the drawings have been chosen for illustrative purposes only and that the terms "flesh side" and "grain side" have been used rather than the terms "one side" and "other side" or "treated side" and "display side" merely to promote brevity and clearness.

Having thus described my invention, what I claim and desire to secure by Letter Patent of the United States is:

1. An article of manufacture which consists of a piece of leather, one side of which is smooth and shrunken and the other side of which bears upon it in wrinkles or puckers, an ornamental pattern.

2. An article of manufacture which consists of a piece of leather, fibers of one side of which are compact and shrunken and the fibers of the other side of which are approximately in their normal condition, the shrunken side being smooth and the other side being wrinkled.

3. An article of manufacture which consists of a piece of leather having a shrunken, compact flesh side, the surface of which is smooth and a less shrunken, less compact grain side, the surface of which is wrinkled.

4. An article of manufacture which consists of a piece of leather one side of which is smooth and shrunken and the other side of which bears upon it ornamental wrinkles having different radii of curvature.

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

HERBERT E. ENSLIN.

Witnesses:
CHESTER E. ROGERS,
RUTH E. WARD.