

E. H. OUTERBRIDGE.
FABRIC.
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931,469.

Patented Aug. 17, 1909.

Fig. 1.



Fig. 2.

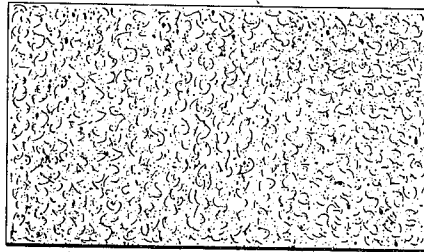
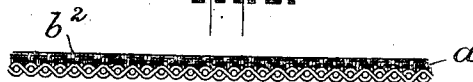


Fig. 3.



WITNESSES

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FABRIC.

No. 931,469.

Specification of Letters Patent.

Patented Aug. 17, 1909.

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To all whom it may concern:

Be it known that I, EUGENIUS H. OUTERBRIDGE, a citizen of the United States, and resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Fabrics, of which the following is a specification.

My invention relates to an improvement in fabrics and particularly woven fabrics for the purpose of giving them the appearance of leather, or of finely-finished woolen cloth. To obtain this I employ a process which, briefly, consists in producing a nap on the fabric and then applying a glutinous coating on the napped surface of the fabric.

The accompanying drawings illustrate two forms of fabric produced according to my invention; Figures 1 and 3 being sectional views, and Fig. 2, a face view of the fabric shown in Fig. 1.

To make the fabric shown in Figs. 1 and 2, I take a suitably woven fabric, such as canvas, and produce a short nap *a* on one side thereof, by means of a suitable machine, then I apply to the napped side a coating *b* of a glutinous substance, but only in sufficient amount to lay the nap without entirely covering the free ends of the napped fibers, so that the weave of the fabric will be concealed as shown in Fig. 2. This gives the fabric an appearance of split leather. On the other side of the fabric I employ a thicker coating *b'* of a glossy character producing an imitation of finished leather. The article thus produced looks like finished leather on one side and like split leather on the other, and is used as a substitute for leather for sweat bands for hats and other purposes.

The particular glutinous substance employed for the coatings *b* and *b'* may be boiled linseed-oil, which is dried afterward in any suitable manner, for instance air dried. This oil may be used alone in some cases, but it will generally be preferable to mix it with a suitable pigment so that the color of the glutinous substance may be practically the same as that of the fabric. Instead of boiled linseed-oil I may however use any other suitable substance, as a solution of soluble cotton, or a glue solution.

If desired the fabric may be napped on both sides and receive a coating of the character above described in an amount sufficient only to lay the napping. In this case

both sides will look like split leather. I may also, as shown in Fig. 3, apply to the napped side of the fabric, a coating *b²* sufficient not only to lay the napping, but to cover it completely and form a glossy surface on it. I find that in applying such a coating to the napped fabric the connection of the coating with the fabric is a much more secure one and the cracking of the glutinous coating is prevented by the fact that the napped fibers extend into it and hold it throughout. Furthermore, and this is even more important, the napping of the fabric in this case forms a cushion which prevents the cracking of the coating, by relieving the strain under which the weave tends to part or open when the fabric is bent or folded. This glossy complete coating or covering of a napped fabric may be applied only at one side as in Fig. 3, or if desired the same treatment may be applied to both sides of the fabric, or both sides of the fabric may be napped and one of them receive a comparatively thick coating such as *b²* while the other would receive only a coating sufficient to lay the napping without rendering it invisible (such as the coating *b* of Fig. 1).

It will be understood that before the fabric is napped its weave is clearly visible. In the napped fabric the weave is almost invisible on the napped side and when the thin glutinous coating is applied the weave is no longer visible, but the napped fibers are, thus giving the surface the appearance of split leather (Fig. 2). When the glutinous coating is of such thickness that it entirely covers and conceals the napped fibers, then the appearance of finished glossy leather is obtained.

To the glutinous substance employed on the napped side of the fabric I may add a suitable coloring matter and this I add particularly when applying my invention to any fabric that can be napped to simulate a woolen cloth. In this case the coloring matter added to the glutinous substance would be of the same shade as the underlying cloth, so that a very good imitation of woolen cloth would be produced. Such fabrics could be employed as carriage cloths for tops of automobiles and other vehicles.

I claim:

1. The herein described improvement in the manufacture of fabrics, which consists in napping the surface of the fabric, and then applying a glutinous coating to the napped

surface in a quantity sufficient to lay the napping, while still leaving exposed the free ends of the nap fibers.

2. A fabric having a napped surface with
5 a thin glutinous coating, the ends of the napped fibers being free and projecting from the surface of the coating.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EUGENIUS H. OUTERBRIDGE.

Witnesses:

JOHN LOTKA,

JOHN A. KEHLENBECK.