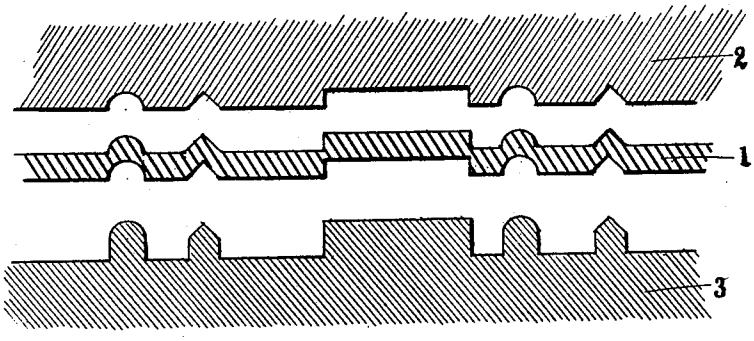
H. H. ALLISON.

PROCESS OF EMBOSSING ELASTIC WEBBING.

APPLICATION FILED JUNE 19, 1908.

904,912. Patented Nov. 24, 1908.



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PROCESS OF EMBOSSING ELASTIC WEBBING.

No. 904,912. Specification of Letters Patent. Patented Nov. 24, 1908.

Application filed June 19, 1908. Serial No. 439,451.

To all whom it may concern:

Be it known that I, HARVEY H. ALLISON, a citizen of the United States, residing at the borough of Brooklyn, city of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Processes of Embossing Elastic Webbing, of which the following is a specification.

My invention is a process for embossing elastic webbing, which webbing is composed of a loosely woven fabric having longitudinal strands of rubber incorporated therewith so that it can be stretched.

My object is primarily to cheaply emboss flat commercial webbing with any suitable ornamental design without injuring the elastic properties thereof and which embossed design will not pull out and be destroyed on stretching the webbing.

Heretofore raised designs have been produced on such webs by weaving or embroidering the design during the course of manufacture.

In the accompanying drawing 1 indicates the elastic webbing, 2 the shallow female die and 3 the high male die or counter.

My process comprises the use of a very high male die or counter and a very shallow female die, both bearing the design so that the pressure will be received by the webbing only on the lines of the design and not on the body or flat part. My process differs from that used in embossing leather, paper, etc. in this respect. The pressure employed is quite heavy being sufficient to give the webbing a permanent set wherever the dies bear.

The temperature to which the dies are heated is about 200° F. which is considerably higher than has heretofore been used in embossing paper or leather and is sufficiently high to mold the rubber strands lying between the dies. The pressure is quickly applied and released so that the vulcanizing effect of the heat is negligible.

The best results are obtained by elongating the webbing before the heat and pressure are applied as this seems to give the embossing a clearer and sharper appearance and to enable it to hold its outlines under all conditions. It is of course understood that the webbing contracts to its original length after the embossing is completed and the tension is released.

I am aware that it is old in embossing to employ heat and pressure simultaneously and do not claim such process broadly. I believe that none of the embossing processes heretofore practiced can be employed in embossing elastic webbing.

I claim:—

1. The process of embossing elastic webbing comprising the subjection of the webbing to pressure between heated dies whereby the pressure is applied only to lines of the design and not to the body of the web and the temperature is sufficiently high to mold the rubber and give the webbing a permanent set without being applied long enough to vulcanize the rubber.

2. The process of embossing elastic webbing comprising the subjection of the webbing to heat and pressure between dies whereby the pressure is applied only to the lines of the design for an interval of time long enough to impress the design in the web without altering the elastic properties thereof.

3. The process of embossing elastic webbing comprising the subjection of the webbing to the pressure of flat male and female dies heated to a temperature of about 200° F. whereby the design is impressed in the web without altering the elastic properties thereof.

4. The process of embossing elastic webbing comprising the elongation of the webbing, the subjection of it to heat and pressure between dies, and the release of the tension whereby it resumes its original length.

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

HARVEY H. ALLISON.

Witnesses:
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