

(No Model.)

C. H. M. LYTE.
FLOOR FABRIC.

No. 568,092.

Patented Sept. 22, 1896.

Fig.1.

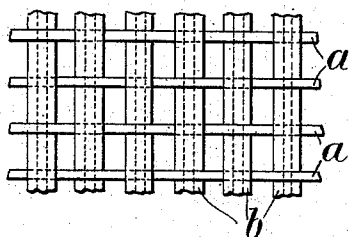


Fig.3.

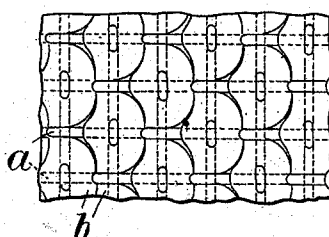


Fig.2.



Fig.4.

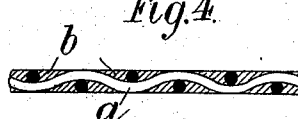


Fig.5.

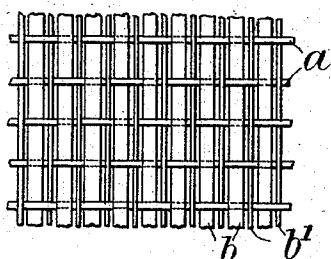


Fig.7.

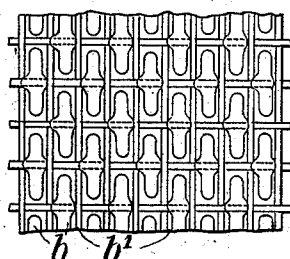
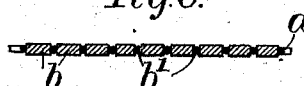


Fig.6.



Fig.8.



Witnesses.

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By Whitaker & Frost, Atty.

UNITED STATES PATENT OFFICE.

CECIL HENRY MAXWELL LYTE, OF LONDON, ENGLAND.

FLOOR FABRIC.

SPECIFICATION forming part of Letters Patent No. 568,092, dated September 22, 1896.

Application filed April 11, 1896. Serial No. 587,146. (No model.)

To all whom it may concern:

Be it known that I, CECIL HENRY MAXWELL LYTE, a subject of the Queen of Great Britain, residing at London, England, have invented new and useful Improvements in the Manufacture of Floor and other Coverings, of which the following is a specification.

This invention relates to the manufacture of a fabric suitable for floor and other coverings, and has for its object the production of a covering which, while possessing most of the durable qualities of the harder metals, such as steel or iron, has also many of the attributes of the softer metals, such as lead and its alloys.

In carrying out my invention I weave together metallic wires of different degrees of hardness, such, for example, as steel or iron wire and lead wire or steel or iron wire coated with lead. The reticulated fabric thus formed is then passed between rollers or otherwise compressed, so as to cause the softer metal to spread and fill up the interstices or meshes between the wires, thereby forming a solid or close sheet of fabric.

To enable my invention to be fully understood, I will describe how it can be carried into practice by reference to the accompanying drawings, in which—

Figure 1 is a plan of a piece of fabric woven from steel or iron wires running in one direction and compound wires of steel or iron coated with lead running at right angles thereto. Fig. 2 is a section of the same. Figs. 3 and 4 are views similar to Figs. 1 and 2, respectively, but showing the fabric after it has been subjected to pressure. Figs. 5, 6, 7, and 8 are views similar to Figs. 1, 2, 3, and 4, respectively, showing a fabric woven from steel or iron wires for the warp and wires of steel or iron and lead, in pairs, for the weft.

In the fabric shown in Figs. 1, 2, 3, and 4, *a a* are the harder-metal wires, preferably steel or iron wires, and *b b* are the compound wires, that is to say, steel or iron wires coated with lead, the said wires being shown in Figs. 1 and 2 simply woven together and in Figs. 3 and 4 after they have been passed through rollers or otherwise compressed, so that the softer-metal coating of the compound wires *b* has been squeezed into the interstices or meshes between the wires, thereby forming

a solid or close sheet of fabric. The coating of my compound wires is of such a thickness as to provide a sufficient quantity of the softer metal to fill in the interstices or meshes of the fabric.

In the fabric illustrated in Figs. 5, 6, 7, and 8, *a a* indicate the warp-wires, of steel or iron, and *b b'* the lead and steel or iron wires, respectively, forming the weft, the steel or iron wires *b'* being shown of less diameter than the lead wires *b*. The fabric thus woven is then subjected to pressure, as above stated, so as to produce a solid or close sheet of fabric, as shown in Figs. 7 and 8.

I do not limit myself to any particular metals or their alloys or proportion of alloys or to any particular proportions of the two or more metals to be woven; but in all cases the metals employed must be of different degrees of hardness, so that the softer can be squeezed into the spaces between the harder metal, whereby the interstices or meshes being thus filled up a solid or close sheet of soft metal is obtained, supported and held together by the harder metal.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The herein-described fabric comprising woven strands of different degrees of hardness, the softer strands being compressed to completely fill the interstices between the harder strands, thereby forming a solid fabric, substantially as described.

2. The herein-described fabric comprising warp-strands of a hard metal and weft-strands comprising a hard and a soft metal, the softer portions of said fabric being compressed to substantially fill the interstices of the harder strands, substantially as described.

3. The herein-described fabric comprising warp-strands of a hard metal, weft-strands including strands of a softer metal and separate binding-strands of a hard metal, the softer-metal strands being compressed to substantially fill the interstices of the hard-metal strands, substantially as described.

CECIL HENRY MAXWELL LYTE.

Witnesses:

G. J. REDFERN,
G. F. TYSON.