

(Specimens.)

F. PEARSON.  
WOVEN PILE FABRIC.

No. 484,606.

Patented Oct. 18, 1892.

FIG. 2.

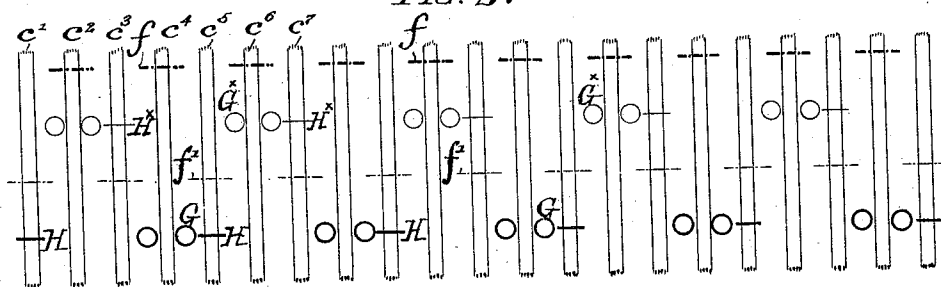
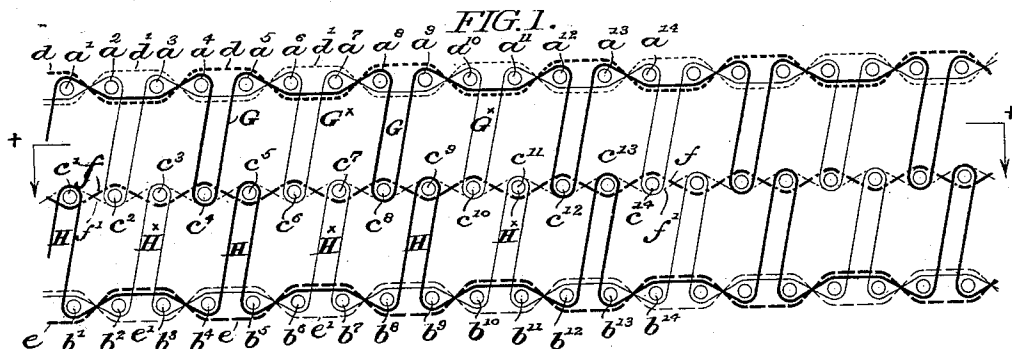


FIG. 1.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRED PEARSON, OF PHILADELPHIA, PENNSYLVANIA.

## WOVEN PILE FABRIC.

SPECIFICATION forming part of Letters Patent No. 484,606, dated October 18, 1892.

Application filed March 31, 1891. Serial No. 387,115. (No model.)

*To all whom it may concern:*

Be it known that I, FRED PEARSON, a citizen of the United States, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Woven Pile Fabrics, of which the following is a specification.

My invention relates to the class of fabrics in which ground or foundation webs are formed independently of each other but are united by common pile threads passing from one to the other.

It is the object of my invention to produce a novel compound fabric composed of three independent webs formed of ground warp and weft threads, united by pile threads, and adapted to be separated to form three distinct merchantable fabrics.

The double pile fabrics heretofore constructed have consisted of two foundation or ground webs, united by pile threads engaged with the weft threads of each and passing and repassing from one to the other. In my improved treble fabric I construct two exterior webs of material, and engage pile warp threads with each, but instead of passing said pile warp threads from one exterior fabric to the other, I pass each from its respective exterior web to an interior or central web and I then return it to said exterior web. By reason of this arrangement the two exterior webs, after the fabric is divided, are similar in that each has one plain face and one pile face, while the central fabric has two pile faces.

In the drawings, Figure 1 is a longitudinal sectional elevation of a fabric embodying my invention. Fig. 2 is a diagrammatic plan on line *xx* of Fig. 1, sight being taken toward the central fabric, the diagram being designed to illustrate the arrangement of the threads.

Similar letters of reference indicate corresponding parts.

In the drawings,  $a' a^2 a^3 a^4 a^5$  are the weft threads of the upper fabric,  $b' b^2 b^3 b^4 b^5 b^6$  the weft threads of the lower fabric, and  $c' c^2 c^3 c^4 c^5$  the weft threads of the central or intermediate fabric.

$d d'$  are a pair of ground warp threads of the upper fabric. These ground warp threads are interwoven in any usual manner with the weft threads of said fabric, but are preferably, as shown, crossed after every second weft thread.

$e e'$  are the ground warp threads of the lower fabric, and are preferably arranged in the same manner as the ground warp threads of the upper fabric.

$ff'$  are the ground warp threads of the central fabric, and are preferably in their interweaving with the weft threads thereof crossed after each of said threads.

$G G^x$  are pile warp threads common to the upper fabric and the central fabric. These threads may be interwoven with the upper fabric in any desired manner varying with the character of the fabric to be produced. I prefer however to interweave them in the manner illustrated, that is to say to laterally separate and not to cross them, and to engage the thread  $G$  with the weft threads of the upper and intermediate fabrics by passing it over the weft thread  $a'$ , under the weft threads  $a^2$  and  $a^3$  and over the weft thread  $a^4$  of the upper fabric, to carry it to the central fabric and around the weft thread  $c^4$  thereof, to then carry it back to and over the weft  $a^5$ , under wefts  $a^6$  and  $a^7$ , over weft  $a^8$ , and to then carry it to the central fabric, and around the weft  $c^8$ , to return it to the upper fabric, and so on. The thread  $G$  is thus engaged with every fourth weft thread of the central fabric, and the loops or bights of said thread descend to and make engagement with the wefts of the central fabric between the two threads of every alternate pair of weft threads of the upper fabric. The adjoining pile thread  $G^x$  is interwoven with the upper and central fabrics in a similar manner, except that said thread  $G^x$  engages with other threads of the central weft, and the loops or bights of said thread  $G^x$  which descend to make engagement with the wefts of the central fabric, pass, in descending, between the other pairs of weft threads of the upper fabric.

$H H^x$  are the pile warp threads common to

the lower and central fabrics, and these threads preferably follow the arrangement of the threads  $G\ G^x$  described, being each similarly engaged with four weft threads of the exterior fabric, then with a central weft thread and then with four more weft threads of the exterior fabric, and so on. The two lower pile threads  $H\ H^x$  shown, engage with the central weft threads not engaged by the pile threads  $G\ G^x$ , so that all the central weft threads will throughout the breadth of the fabric be engaged by a like number of loops of pile.

The fabric is to be divided between the upper and central and lower and central webs respectively. The upper and lower webs will present surfaces of uniform unridged pile, while the central web will have pile on both faces.

Having thus described my invention, I claim and desire to secure by Letters Patent:

1. As an article of manufacture, a blank adapted to be split or cut to form three pile fabrics, said blank consisting of three ground webs, an upper, a central, and a lower, the upper and central webs being united by a set of pile warp threads common to both, and the lower and central webs being united by an independent set of pile warp threads common to both, substantially as set forth.

2. As an article of manufacture, a blank adapted to be split or cut to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, one exterior web and the central web being united by a set of pile warp threads common to both, which pile warp threads are each caught in the central web by single picks of weft therein, the other exterior web and the central web being united by an independent set of pile warp threads common to both, substantially as set forth.

3. As an article of manufacture, a blank adapted to be cut or split to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, one exterior web and the central web being united by a set of pile warp threads common to both, which pile warp threads are each caught in the central web by single picks of weft therein, and in the exterior web by a plurality of picks of weft therein, the other exterior web and the central web being united by an independent set of pile warp threads, substantially as set forth.

4. As an article of manufacture, a blank adapted to be split or cut to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, one exterior and the central web being united by a set of pile warp threads, and the other exterior web and the central web being united by an independent set of pile warp threads, all the pile warp threads being caught in the central web by single picks of

weft therein and each caught in an exterior web by a plurality of picks of weft therein, substantially as set forth.

5. As an article of manufacture, a blank adapted to be split or cut to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, one exterior web and the central web being united by a set of pile warp threads common to both, which pile warp threads each in going from the exterior web to and returning from the central web, pass between the same pair of weft threads of said exterior web, the other exterior web and the central web being united by an independent set of pile warp threads, substantially as set forth.

6. As an article of manufacture, a blank adapted to be split or cut to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, one exterior web and the central web being united by a set of pile warp threads common to both, and the other exterior web and the central web being united by an independent set of pile warp threads common to both, the pile warp threads each, in going from their respective exterior webs to and returning from the central web, passing between the same pair of weft threads of the exterior webs, substantially as set forth.

7. As an article of manufacture, a blank adapted to be cut or split to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, one exterior web and the central web being united by a set of pile warp threads common to both, each pile thread being in the central web engaged with a pick of weft intermediate between the picks of weft with which the next adjacent pile threads of the same set are engaged, the other exterior web and the central web being united by an independent set of pile warp threads, substantially as set forth.

8. As an article of manufacture, a blank adapted to be cut or split to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, one exterior web and the central web being united by a set of pile warp threads, and the other exterior web and the central web being united by an independent set of pile warp threads, each pile warp thread being in the central web engaged with a pick of weft intermediate between the picks of weft with which the adjoining pile threads of the same set are engaged, substantially as set forth.

9. As an article of manufacture, a blank adapted to be cut or split to form three pile fabrics, said blank consisting of three independent ground webs, two exterior and one central, each consisting of ground warp threads and ground weft threads, the ground

warp threads being in the exterior webs  
crossed after every second pick of weft, and  
in the central web crossed after each pick of  
weft, the upper and central webs being united  
5 by a set of pile warp threads common to both,  
and the lower and central webs being united  
by an independent set of pile warp threads  
common to both, substantially as set forth.

In testimony that I claim the foregoing as  
my invention, I have hereunto signed my name  
this 11th day of December, A. D. 1890.

FRED PEARSON.

In presence of—

F. NORMAN DIXON,  
J. HOWARD MORRIS.