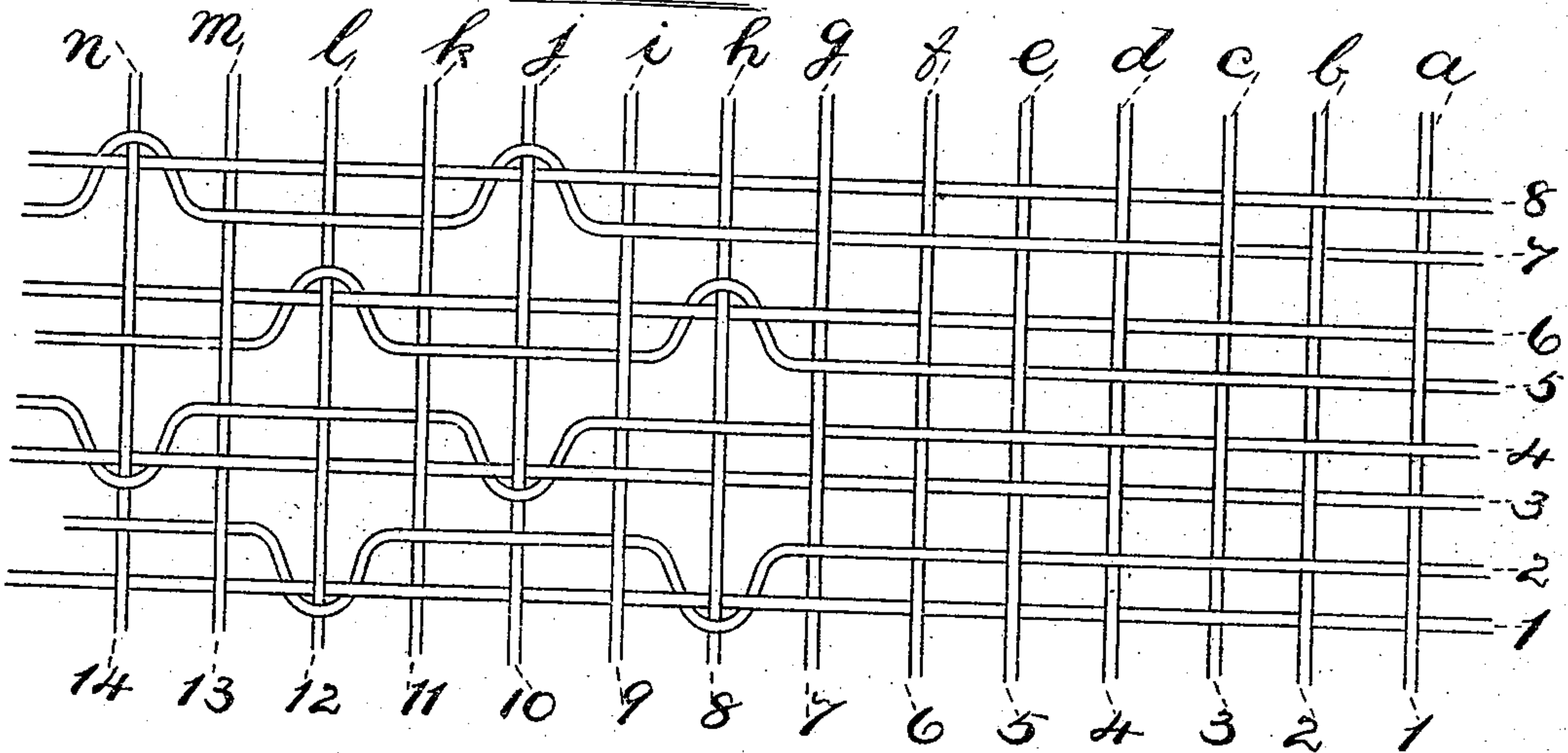


J. C. BROOKS.
METHOD OF WEAVING FABRICS.
APPLICATION FILED DEC. 14, 1903.

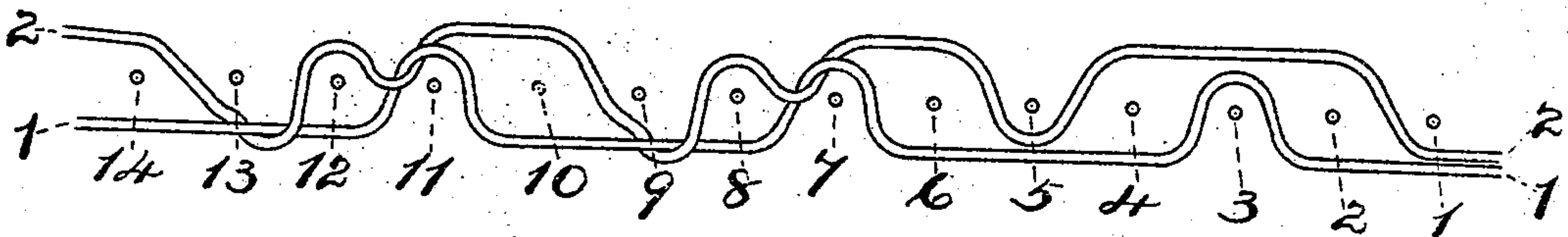
951,359.

Patented Mar. 8, 1910.

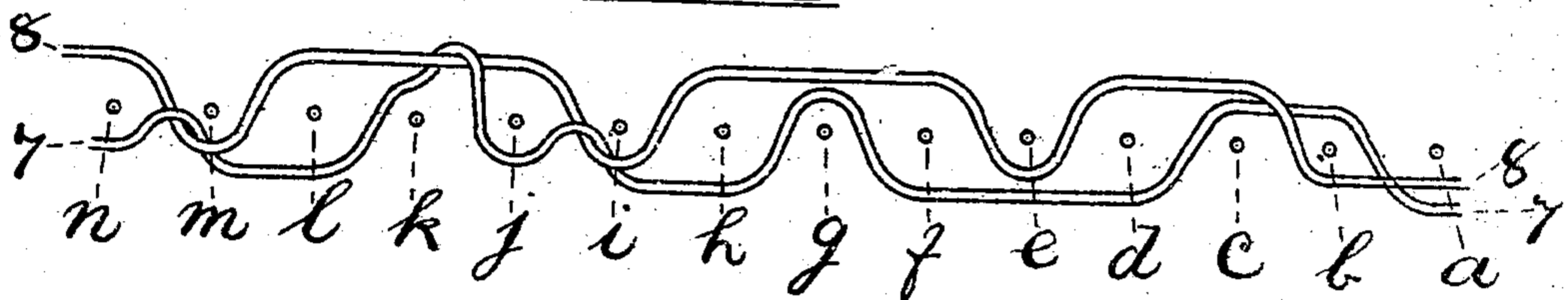
— FIG. 1 —



— FIG. 2 —



— FIG. 3 —



Witnesses

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METHOD OF WEAVING FABRICS.

951,359.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed December 14, 1903. Serial No. 185,165.

To all whom it may concern:

Be it known that I, JOHN C. BROOKS, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Methods of Weaving Fabrics, of which the following is a specification.

My invention relates to the weaving of a fabric in which the figuring is formed by the use of two warps of different colors, one warp forming one face of the fabric the other warp forming the other face of the fabric; and transferring the warp threads from one face to the other, to form the figuring, and in further forming another pattern, by crossing one of the warp threads of the group with the other warp thread of the group. And my invention further consists in making each first pick, and each third pick a duplicate of each other.

The object of my invention is to save time and expense in preparing designs, and pattern cards for such fabrics, instead of as ordinarily, designing and cutting separately cards for each pick. I attain this object by the method shown in the drawings in which—

Figure 1 is a plan view of a section of fabric woven by my method, but exaggerated to show the weave, Fig. 2 being an edge view of threads 1 and 2, Fig. 3 being a similar view of threads 7 and 8.

The odd numbered warp threads, as 1, 3, 5 and 7 are the bottom warp threads; the even threads, as 2, 4, 6 and 8 are the top warp threads, and are interwoven with the weft threads, designated by letters, as follows. First pick, *a*, and every fourth pick thereafter as, *a*, *e*, *i*, and *m*, each alternate group of warp threads, as 1, 2; 5 and 6 are left down, and the opposite alternate groups as 3, 4; 7 and 8 are raised, and a pick of weft inserted. At the second pick, *b*, threads 2, 4, 5, 6 and 8 are raised; at this pick, and at the next second pick, the change in position of the warp threads are effected to produce patterns, viz—warp thread 5 is brought to the surface, as well as thread 6; on the third pick, *c*, *g*, *k*, as before stated, the threads in groups are opened and pick *c* inserted, on the fourth pick, *d*, threads 2, 4, 5, and 7 are raised and pick *d* inserted, on the fifth pick, *e*, the threads, in groups, are opened and pick *e* inserted, on the sixth pick, *f*, threads 2, 4, 5, and 7 are raised and pick *f* inserted;

on the seventh pick, *g*, the threads are opened in groups and pick *g* inserted, on the eighth pick, *h*, thread 2 is raised to the left of its mating thread, thread 5 to the right of its mating thread, and threads 4 and 7 are raised, and pick *h* inserted; on the ninth pick, *i*, the threads are opened in groups and pick *i* inserted; on the tenth pick, *j*, thread 4 is raised to the left of its mating thread, thread 7 to right of its mating thread, threads 2 and 5 raised and pick *j* inserted; on the eleventh pick, *k*, the threads are opened in groups and pick *k* inserted; on the twelfth pick, *l*, thread 1 is raised to the left of its mating thread; thread 5 is raised to the right of its mating thread; threads 4 and 7 are raised and pick *l* inserted; on the thirteenth pick, *m*, the threads are separated in groups and pick *m* inserted; and on the fourteenth pick, *n*, thread 4 is raised to the left of its mating thread, thread 7 to the right of its mating thread, threads 2 and 5 raised and pick *n* inserted.

The raising of the threads, on the so termed even pick, may be varied at will according to the desired effect sought.

I claim;

1. The herein-described method of weaving a double-faced fabric presenting at its opposite faces like patterns differing in color or material formed by warp-threads and weft threads, which consists in dividing said warp into substantially two parts, one to form the upper face of the cloth the other to form the lower face of the cloth, reeding the successive warp threads into the reed to form groups; separating the warp threads to form sheds in the following manner, viz—for the first pick, raising each alternate group and inserting a pick of weft, then closing the warp shed, and to form a new shed for the second pick, and to make patterns, raising in some portions all the threads of one warp and in the other portions all the threads of the other warp; inserting a pick of weft then for the third pick raising each alternate group left down at the first pick and inserting a pick of weft, closing the warp and repeating the foregoing for any number of picks desired.

2. The herein described method of weaving a fabric presenting at its opposite faces like patterns differing in color formed by warp threads and weft threads, which consists in dividing the warp into substan-

tially two parts, one to form one face of the fabric, the other to form the other face of the fabric; separating the warp-threads to form sheds in the following order, viz; the
5 first pick raising each alternate warp thread of both warps, inserting a pick of weft, closing the warps; then for the second pick raising in some portion all the threads of one warp and in the other portions raising
10 all the threads of the other warp, inserting a pick of weft and closing the warp shed; for the third pick raising the alternate warp threads, left down at the first pick, inserting a pick of weft; repeating the foregoing for
15 any desired number of picks until the de-

sired pattern has been formed, then repeating the formation of the sheds for the first and third picks but for the aforesaid second pick raising a warp thread to the right and for the second second pick raising the same thread to the left of its mating thread, and continuing the formation of said sheds for the length of pattern desired.

In testimony whereof I have signed my name in presence of two subscribing witnesses.

JOHN C. BROOKS.

Witnesses:

W. C. HOWARD,
M. C. MURPHY.