

No. 705,464.

Patented July 22, 1902.

W. T. SMITH.  
WOVEN FABRIC.

(Application filed Feb. 17, 1902.)

(No Model.)

Fig. 1.

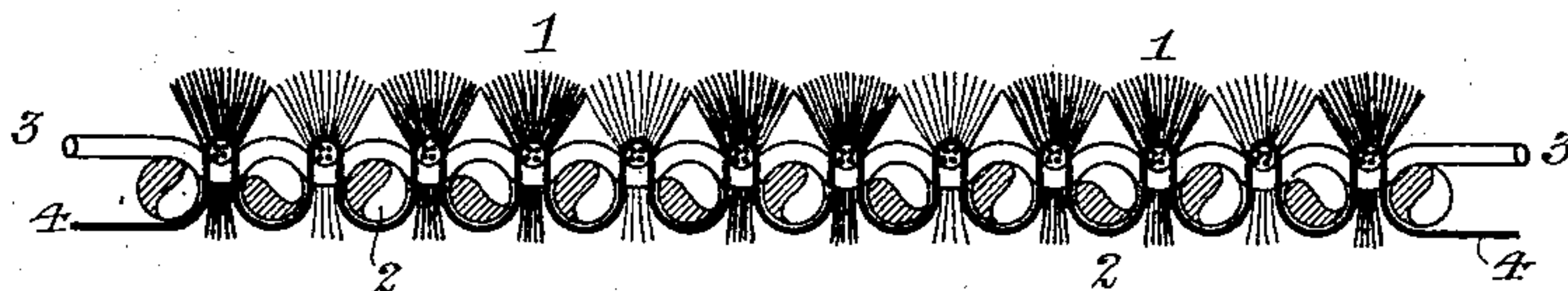


Fig. 2.

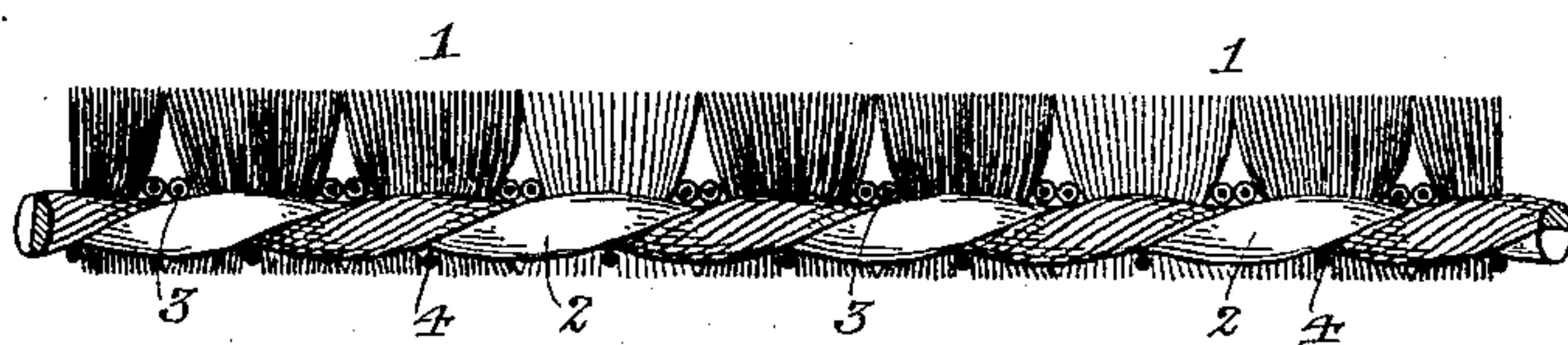
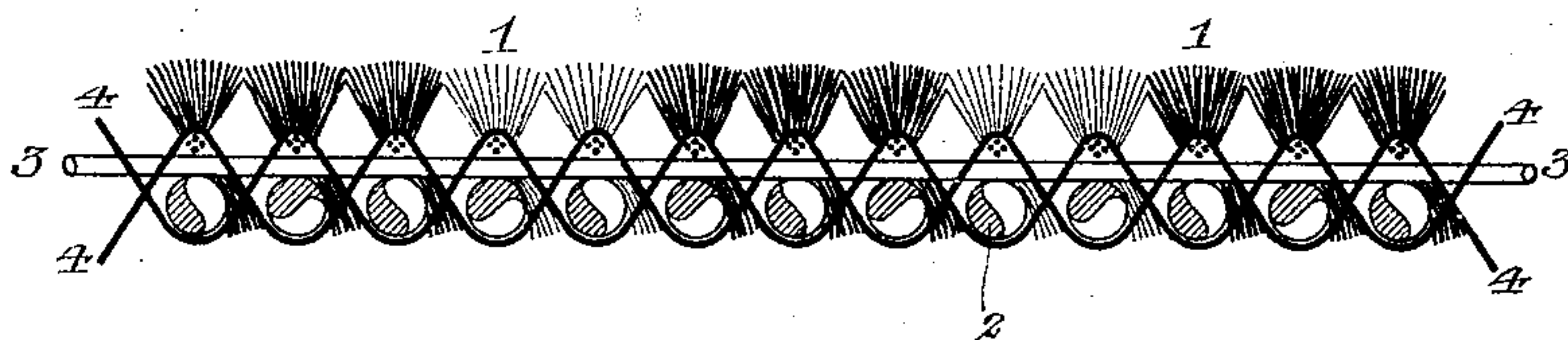


Fig. 3.



Witnesses:-

Hamilton D. Turner

Norman E. Mettles.

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# UNITED STATES PATENT OFFICE.

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## WOVEN FABRIC.

SPECIFICATION forming part of Letters Patent No. 705,464, dated July 22, 1902.

Application filed February 17, 1902. Serial No. 94,465. (No specimens.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. SMITH, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain  
5 Improvements in Woven Fabrics, of which the following is a specification.

My invention relates to that class of woven fabrics which have a face composed of chenille weft-threads partly-colored to produce the  
10 desired pattern and a back composed of spun weft-threads, between which sufficient of the chenille face weft-threads is visible to give an indication of the face pattern, the face and back weft-threads being separated by inter-  
15 posed stuffer warp-threads and being bound together by tying warp-threads.

The object of my invention is to prevent the marring of the chenille pattern on the back of the fabric by the spun weft-threads,  
20 which constitute the back ply; and this object I attain by using for said back weft-threads a mottled or variegated yarn, which produces a pleasing effect and imparts to the fabric the quality of reversibility.

25 In the accompanying drawings, Figure 1 is an exaggerated section, taken in the direction of the warp-threads, of a piece of woven fabric made in accordance with my invention. Fig. 2 is a transverse section of the same—  
30 that is to say, a section taken in the direction of the weft-threads; and Fig. 3 is a view similar to Fig. 1, but illustrating another form of my improved fabric.

The fabric comprises face weft-threads 1, of  
35 partly-colored chenille fur, back weft-threads 2, which are ordinary spun threads, stuffer warp-threads 3, lying between and separating the face and back weft-threads, and binding or tying warp-threads 4, which pass alter-  
40 nately above the face weft-threads and behind the back weft-threads, and thus serve to tie or bind the two faces of the fabric together. There may be but one of these tying or binding warp-threads for each of the stuffer  
45 warp-threads, as shown in Figs. 1 and 2, or there may be a pair of such binding or tying warp-threads for each stuffer warp-thread, as shown in Fig. 3.

50 The partly-colored chenille weft-threads form the desired pattern or design on the face of the fabric, and portions of these partly-colored chenille face weft-threads project be-

tween the spun weft-threads on the back of the fabric, so that the face pattern is in a measure reproduced upon the back. If, how-  
55 ever, back weft-threads 2 of solid color are employed, they mar the appearance of the back of the fabric and detract from the effect of the design presented by the projecting portions of the chenille face weft-threads. I have  
60 found that this defect can be largely overcome by using for the back weft-threads a mottled or variegated yarn, the lines of color presented by these variegated threads on the  
65 back of the fabric being broken, so that they do not have the dominating effect upon the appearance of the back of the fabric which they ordinarily have, the broken effect of color in the lines of the back weft-threads 2 being  
70 more in accordance with the broken effect of color due to the haphazard showing of portions of the chenille face weft-threads at the  
75 back of the fabric, and a pleasing and harmonious back effect being thus attained which imparts to said fabric the quality of reversibility, either face of the fabric being  
presentable.

The stuffer warp-threads 3 are passed through the heddle-eyes either singly or in  
80 pairs or groups. In the latter case the pairs or groups are split by the reed, and as the said warp-threads are kept under strong tension they are spread uniformly throughout the fabric, so as to produce a perfectly flat  
85 web, which will not curl up or wrinkle upon the face.

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

1. A woven fabric in which are combined  
90 partly-colored chenille face weft-threads, back weft-threads of mottled or variegated spun yarn, and binder warp-threads tying together the face and back weft-threads, portions of the partly-colored chenille face weft-threads  
95 projecting between the back weft-threads so as to produce, upon the back of the fabric, a pattern composed in part of these projecting portions of the partly-colored chenille face  
100 weft-threads and in part of the mottled or variegated yarn constituting the back weft-threads, substantially as specified.

2. A woven fabric in which are combined partly-colored chenille face weft-threads, back

weft-threads of mottled or variegated yarn,  
stuffer warp-threads separating the face and  
back weft-threads, and binder warp-threads  
tying together the face and back weft-threads,  
5 portions of the party-colored chenille face  
weft-threads projecting between the back  
weft-threads so as to produce upon the back of  
the fabric a pattern composed in part of these  
projecting portions of the party-colored che-  
10 nille face-threads and in part of the mottled

or variegated yarn constituting the back weft-  
threads, substantially as specified.

In testimony whereof I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

WILLIAM T. SMITH.

Witnesses:

ROBERT C. STERNER,  
JOHN S. GEBHARDT.