

No. 637,636.

Patented Nov. 21, 1899.

A. E. MEYER.

SURFACE DECORATION AND ORNAMENTATION.

(Application filed Apr. 28, 1899.)

(No Model.)

Fig. 1,

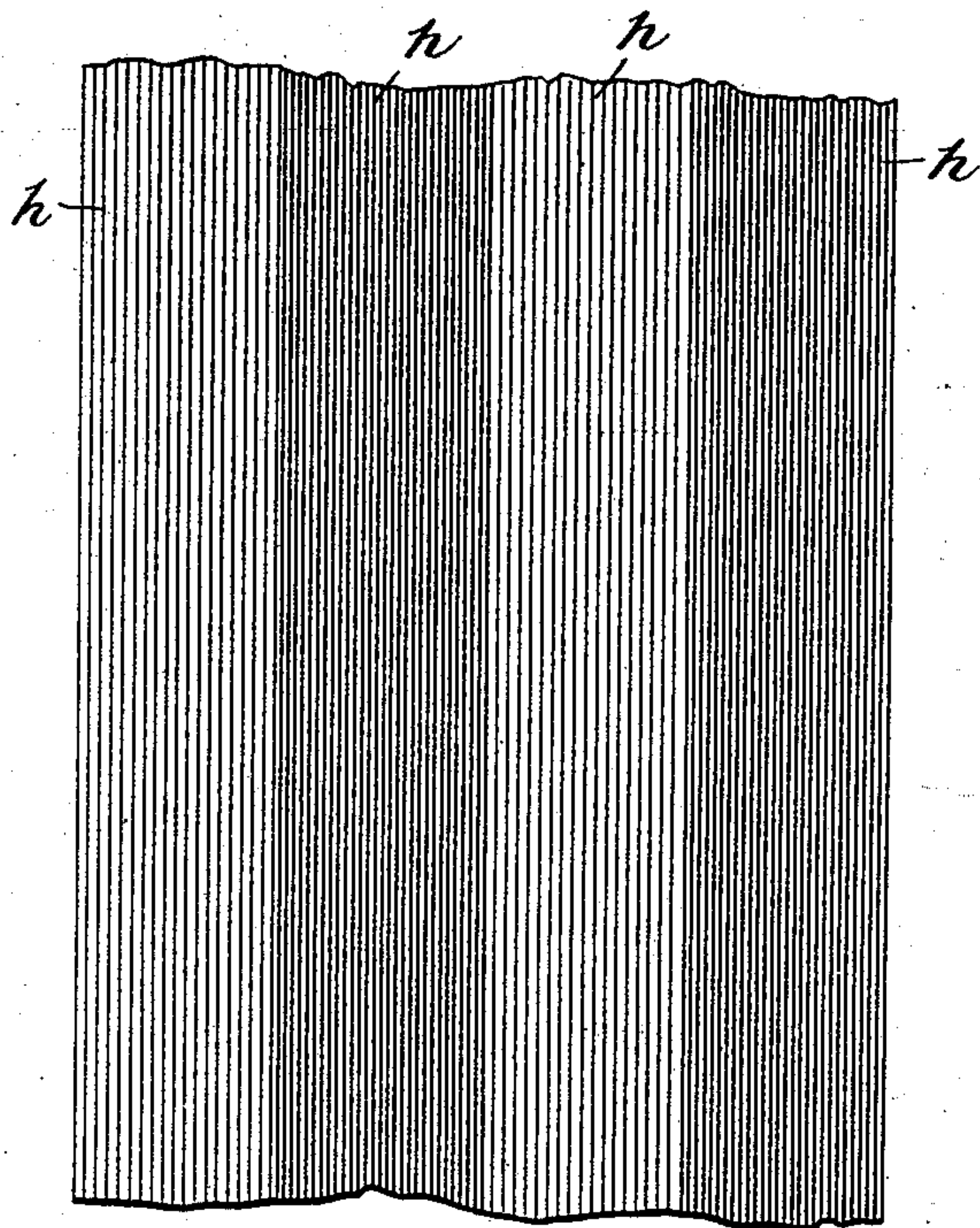
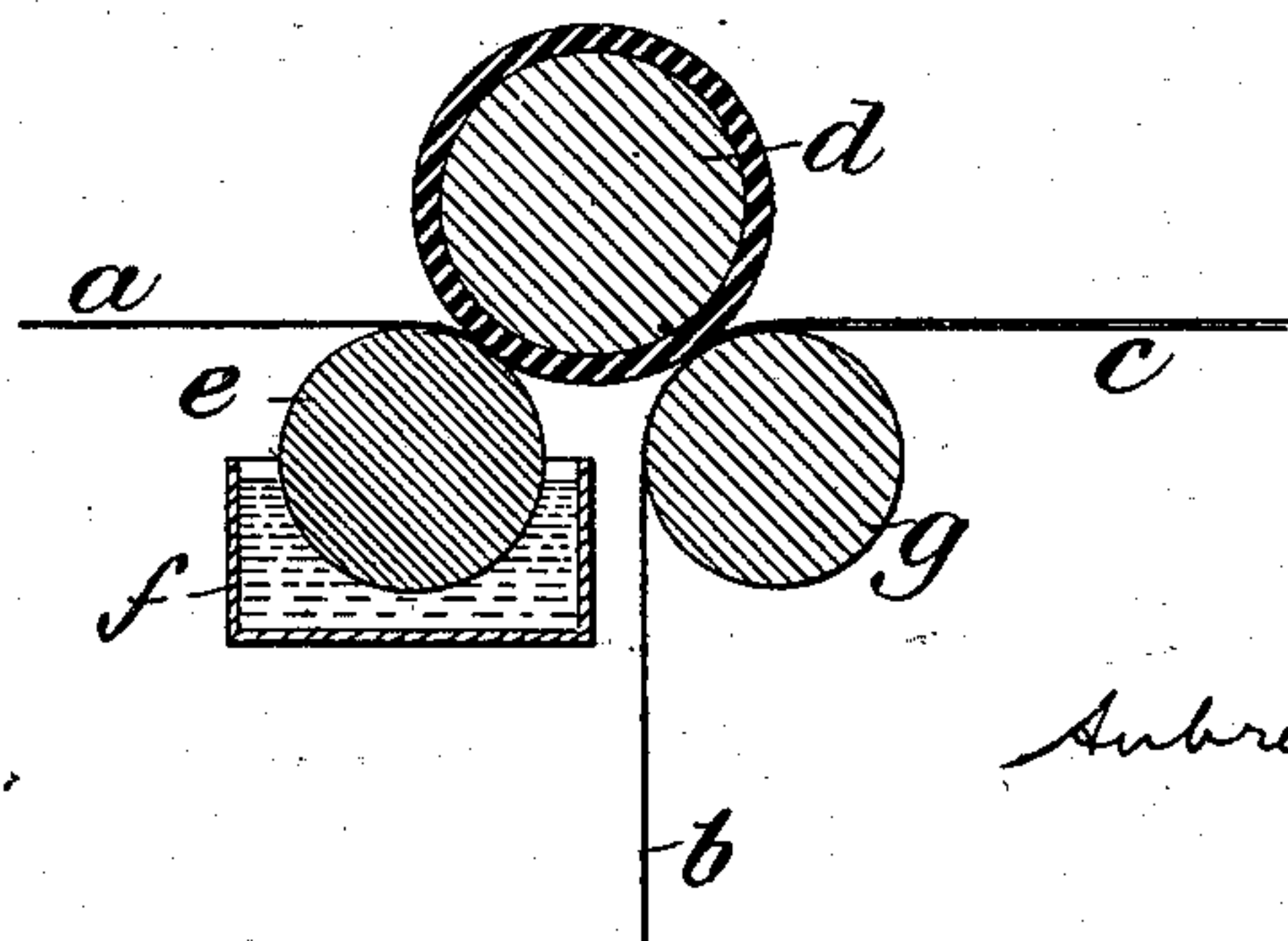


Fig. 2,



Fig. 3,



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SURFACE DECORATION AND ORNAMENTATION.

SPECIFICATION forming part of Letters Patent No. 637,636, dated November 21, 1899.

Application filed April 28, 1899. Serial No. 714,826. (No model.)

To all whom it may concern:

Be it known that I, AUBREY E. MEYER, a citizen of the United States, and a resident of Whitehall, in the county of Washington and State of New York, have invented certain new and useful Improvements in Surface Decorations and Ornamentations, of which the following is a specification, reference being had to the accompanying drawings, which form a part hereof.

My invention relates to surface decorations and ornamentations such as may be used for walls and ceilings of houses and for other purposes.

It has for its object to provide a new article of commerce or a new material that may be used as a substitute, for instance, for wall-paper and fabrics used for similar and other purposes.

My improvement consists, essentially, of a new article of manufacture or a new surface ornamentation consisting of a web or webs of non-woven fibers suitably applied to a suitable backing or support and suitably secured thereto, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing. I prefer that the fibers shall be non-spun as well as non-woven, and I prefer also that the fibers shall be of silk and of non-spun silk and that the backing or support shall be flexible. The webs may be of longer or shorter lengths and widths on the backing and the webs may run in different and varying directions on the backing. The web or webs constituting the ornamental face or surface of the new article of manufacture may consist of non-woven natural fibers or of non-woven artificial fibers, and many different varieties of fibers would be suitable for the purpose. The backing or support may be of paper, cloth, leather, wood, or otherwise, so long as it does not prevent or substantially prevent or interfere with the ornamental characteristics or features of the web or webs of non-woven fibers constituting the face of the new article of manufacture. Many beautiful effects may be produced through the coloring of the non-woven fibers and through control and variation of the method of arrangement of the fibers or of the web or webs

of fibers upon the face of the article. In no case, however, are the fibers to be woven prior to the application to the backing or support. In order to secure the adhesion of the web or webs of non-woven fibers to the backing or support, some form of adhesive substance may be used, such as dextrine, gelatin, &c. In the selection and manipulation of the adhesive substance care should be exercised so as not to interfere with the desired ornamental appearance of the web or webs.

In carrying out my invention in the best and cheapest form known to me I may utilize silk waste as follows with excellent results: Describing such process in detail, (which process, however, forms no part of my present invention,) the silk waste is first freed from gum and dirt by boiling, &c. It is dried and then passed through an "opener," being a machine which has feed-rollers and combs, which tend to separate the fibers and draw them into some degree of parallelism. Then the lap of fibers is passed through the filling-engine having feed-rollers and combs, in which the lap is drawn out and cut into parallel strips. Then the strips are combed. The combed stock is next passed through a spreader, which equalizes said stock and forms a more uniform lap of nearly parallel fibers. The lap is then passed through a "set-box," which forms the lap into slivers. The slivers are then drawn several times in drawing-boxes to equalize and perfect the same, all of said operations tending to produce parallelism and regularity in the distribution of the fibers. The collection of fibers is finally passed through a drawing-box that has a provision for gathering the fibers together and which causes the fibers to leave the machine in a continuous flattened web or ribbon of non-woven fibers lying substantially parallel to one another and contiguous and so forming a continuous web. This web is now ready to be attached by suitable adhesive material to the backing or support.

Any other suitable method than that above set out may be employed to prepare the web or webs of non-woven fibers for application to the backing or support. Such application of the web of non-woven fibers to the backing or support may be conveniently attained by the

use of such apparatus as is shown in Figure 3 of the drawings, which is a diagrammatic representation of machinery suitable for applying a continuous web of non-woven fibers to a continuous flexible backing or support. Referring to Fig. 3, *a* is the continuous web of non-woven fibers. *b* is the flexible backing. *c* is the new article of manufacture. The web *a* is continuously fed between a rubber-faced iron roller *d* and a copper roller *e*, which revolves in a fountain *f* of suitable adhesive material. The pressure between the rollers *d* and *e* limits and graduates the amount of adhesives applied to the web *a*. The moistened web *a* and the flexible backing *b* are fed between the rollers *d* and *g*, where the pressure applies the one reliably to the other and with the adhesive causes them to reliably adhere together.

Fig. 1 is a face view, and Fig. 2 a sectional view, greatly enlarged, of an illustrative sample of the finished article, in which *h* represents the web or webs of non-woven fiber, and *i* represents the backing. The web or webs *h* of non-woven fibers is so colored as to represent parallel stripes, (indicated in the drawings by different shading lines.)

A web of non-woven fibers or any desired number of such webs side by side, adjacent webs touching each other if desired, may be continuously fed to a continuous web of paper or other flexible backing and pressed upon the face thereof with a suitable adhesive layer intervening and then passed over heated rollers to dry it. The article so produced in continuous lengths may be cut and manipulated in any desired way for sale and use. The fibers may be dyed before being arranged into the web form and so before application to the backing, or they may be dyed or printed with a pattern or both after arrangement into webs and before application to the backing, or they may be dyed or printed after application to the backing, and novel and varied and beautiful effects may be produced and cheaply. Any other method or means may be employed to apply the web or webs of non-woven fibers to the backing or support.

What I claim as new, and desire to secure by Letters Patent, is—

1. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven fibers applied to a suitable backing or support with an adhesive material, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

2. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven and non-spun fibers applied to a suitable backing or support with an adhesive material, said fibers lying substantially parallel to the face of the back-

ing and in the main running substantially parallel to each other over the backing.

3. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven silk fibers applied to a suitable backing or support with an adhesive material, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

4. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven and non-spun silk fibers applied to a suitable backing or support with an adhesive material, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

5. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven fibers applied to a suitable flexible backing or support with an adhesive material, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

6. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven and non-spun fibers applied to a suitable flexible backing or support with an adhesive material, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

7. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven silk fibers applied to a suitable flexible backing or support with an adhesive material, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

8. The new article of manufacture, substantially as described, consisting of an ornamental web or webs of non-woven and non-spun silk fibers applied to a suitable flexible backing or support with an adhesive material, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

9. The new surface ornamentation, consisting of a web or webs of non-woven fibers suitably secured to a backing or support, as set forth, said fibers lying substantially parallel to the face of the backing and in the main running substantially parallel to each other over the backing.

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

AUBREY E. MEYER.

Witnesses:

EDWIN SEGER,

GEO. W. MILLS, Jr.