## United States Patent Office.

R. MILLIGAN, OF HARDEN, ENGLAND.

## IMPROVEMENT IN ORNAMENTING TEXTILE FABRICS.

Specification forming part of Letters Patent No. 7,567, dated August 13, 1850.

To all whom it may concern:

Be it known that I, ROBERT MILLIGAN, a subject of the Queen of Great Britain, and now residing at Harden, near Bingley, in the Kingdom of Great Britain, manufacturer, have invented or discovered an Improved Ornamented Woven and Printed Fabric; and I do hereby declare that the following is a full

and exact description thereof.

Whereas it often happens that the grounds of various fabrics are wholly unsuited for the purpose of printing bright colors thereon, either from the peculiar color or the texture of the said fabrics, and whereas the introduction of certain floated warp or weft into fabrics, so unsuited, as aforesaid, for the express purpose of receiving the bright colors intended for ornamenting the same, would be a great improvement in the manufacture of such fabrics, and enable them to be much more highly ornamented by printing than heretofore, the object of my said invention is to obtain this desired end; and it is accomplished in the following manner: Supposing it is my wish to ornament a dark - gray alpaca mixture with a bright rose-flower, it is evident the mere printing of a flower with a bright rose-color on the said dark-gray mixture would not produce even a marketable effect. I therefore take care in the weaving of the said mixture to float or weave on the surface of the alpaca mixture a secondary ground whose external boundary shall be that of the figure of a rose wherever it is intended to print the same, providing always that the material so floated, whether warp or weft, shall be of a color and texture suited to the dye or color with which the same is afterward to be printed. By "suited" I mean that will give the brightest and best effect to the color printed upon it. The same

serves generally to illustrate a very large class of fabrics; but it is not necessary that the floated warp or weft should in all cases correspond with the figure to be printed. Thus, for instance, I may take the same dark-gray alpaca ground, or any other fabric the ground of which is equally unsuited for the reception or display of bright colors, and having floated or woven any kind of secondary ground, stripe, or design upon the same, providing always that the material so floated, whether warp or weft, shall be of a color and texture suited to the dye or color with which the same is afterward to be printed, I next proceed to print anywhere within the limits of the said floated warp or west any device in bright colors, and thus ornament the same according to my invention.

Now, having sufficiently described the nature and general application of my said invention, what I claim as my improvement is—

The new or improved ornamental fabric or manufacture, made substantially as specified, viz: having any ground suitable or unsuitable for receiving and exhibiting bright color or colors when imprinted thereon, and having figures, stripes, or other portions of surface floated over the said ground in material and color suitable for representing such bright color or colors, and having such bright color or colors printed on the said floated surfaces.

In testimony whereof I have hereunto set my signature this 31st day of May, A. D. 1850, in the presence of the two hereunto subscribing witnesses.

ROBT. MILLIGAN. [L. s.]

Witnesses:

ALBERT DARY,

Consul U. S. A.

MATT BRADLEY,

Leeds.