## A. M. FYFE. Textile Fabric.

No. 227,241.

Patented May 4, 1880.

Fig. 2.

Fig. 3.

Fig.4.



WITNESSES:
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ALEXANDER M. FYFE, OF UTICA, NEW YORK, ASSIGNOR TO THE GLOBE WOOLEN COMPANY, OF SAME PLACE.

## TEXTILE FABRIC.

SPECIFICATION forming part of Letters Patent No. 227,241, dated May 4, 1880.

Application filed January 22, 1880.

To all whom it may concern:

Be it known that I, ALEXANDER M. FYFE, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Textile Fabrics, of which the following is a specification.

The object of this invention is to furnish for overcoatings, cloaks, coats, &c., an improved cloth or fabric of that class in which a lining is woven on the back, said lining having, when different colors are used, an irregularly-clouded or chiné pattern or a flammée pattern.

Heretofore this style of goods was manufactured for overcoatings with a lining representing a regular repetition of the same pattern, the same being either thrown up by the weaver or by laying variously-colored threads side by side, so as to form a striped or check-20 ered pattern.

This invention is designed to produce a cloth having a lining of cloudy pattern, in imitation of a leopard-skin, or a flammée pattern, in imitation of flames.

The invention consists of a textile fabric having a face of woolen or other cloth and a lining woven thereon made of a series of yarns of irregular thickness, the thicker portions of the yarns having longer nap than the other portions, so as to form, when different colors are used, a cloudy or flammée pattern of irregular design.

Referring to the drawings, Figure 1 represents a side view of a yarn as employed for manufacturing my improved fabric. Figs. 2 and 3 are back views, showing the fabric respectively before and after gigging; and Fig. 4 is a diagram illustrating a section of the same on the line x x, Fig. 3, with the nap 40 erect.

Similar letters of reference indicate corresponding parts.

A in the drawings represents the face of the cloth, of woolen, worsted, or other mate-45 rial, with which the lining B is woven, forming a part of the same fabric.

In the weaving of the lining portion are employed yarns C of irregular thickness, one

of which is shown in detail in Fig. 1. This irregular yarn is obtained from a roving of different widths produced by the doffer of the carding-machine, the alternately narrower and wider roving being then twisted in the spinning-mule without being stretched finer. This operation of twisting without drawing finer 55 has the effect of twisting the fine places harder without putting the twist into the thick places, which are left soft.

The yarn so obtained is either used singly or twisted with other threads of different 60 kinds, so as to form every variety of pattern by using different colors in different proportions.

In weaving the lining portion of the cloth the yarns C are not arranged therein in regular order, but so that an irregular disposition of the heavier portions is obtained, as shown in Fig. 2. The thicker and softer portions of the yarns project above the surrounding surface of the cloth, and are thus easily pulled 70 up by the teazles of the gigging machine, forming a furry nap. The teazles act upon the projecting parts of the yarns before they raise the nap on the remaining surface, and bring out thereby a longer nap, as illustrated 75 by Fig. 4, which forms when laid a clouded spot at every thick place in the yarn, as shown in Fig. 3.

As the yarns are irregularly disposed an irregular cloudy effect is the result.

For the cloudy pattern the teazles act transversely on the yarns, while for the flammée pattern the teazles are applied in the same direction as that of the yarns.

The body of the lining, with its differently- 85 colored yarns of irregular thickness, is thus transformed by the teazles into a furry nap of unequal lengths, forming a cloudy or flammée pattern, which is the characteristic feature of this fabric.

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

1. As a new article of manufacture, a textile fabric having a wool or worsted face and a 95 back or lining with yarns of irregular thick-

ness and nap of different lengths, substantially as set forth.

2. As a new article of manufacture, a textile fabric for overcoatings, &c., consisting of a wool or worsted face and a back or lining woven thereon, said lining containing differently-colored yarns of irregular thickness and having nap of different lengths, forming an irregular cloudy or flammée pattern, substanto tially as herein specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 7th day of January, 1880.

ALEX. M. FYFE.

Witnesses:

A. C. MILLER, F. G. FINCKE.