J. PHIPPS.

Improvement in Knitted Fabrics.

No. 130,312. Patented Aug. 6, 1872.

Fig. 1.

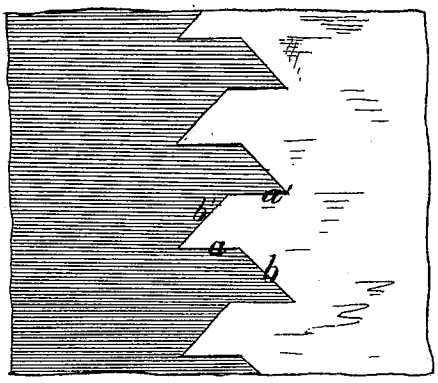


Fig. 2.

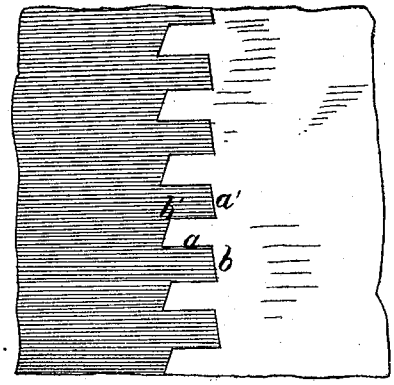


Fig. 3.

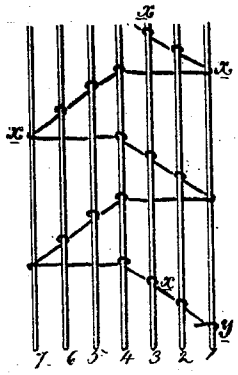
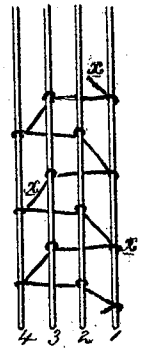


Fig. 4.



Witnesses. Hubert Howson

Thomas McElwain

James Phipps
by his Attys
Howson and Sons

A.M. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

JAMES PHIPPS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO MARTIN LANDENBERGER & CO., OF SAME PLACE.

IMPROVEMENT IN KNITTED FABRICS.

Specification forming part of Letters Patent No. **130,312**, dated August 6, 1872.

Specification describing an Improved Knitted Fabric, invented by JAMES PHIPPS, of the city and county of Philadelphia, State of Pennsylvania.

Improved Knitted Fabric.

The object of my invention is to produce in a knitted fabric, an edging for stripes, consisting of a series of projections composed partly of straight lines *a a'*, and partly of inclined lines *b b'*, as shown in Figs. 1 and 2, this effect being produced by causing each thread *x* of the fabric to traverse a certain number of needles, first in one direction and then in the other, as shown in Figs. 3 and 4, the thread during this traversing motion being lapped around successive needles, and pressed off after every lap, in order to form the inclined portions *b b'* of the edging, and skipping one or more needles in order to form the straight portions *a a'* of the same. The projections of which the edging, Fig. 1, is composed, are of greater length transversely than those shown in Fig. 2, and their lines *b b'* are at a greater inclination than the corresponding lines of the latter. The method of knitting and the character of the fabric are, however, the same, the difference in the angles and in the length of the projections depending solely upon the number of needles which the thread is caused to traverse, the outline, Fig. 1, for instance, being formed upon seven needles, while but four are required for that shown in Fig. 2.

My invention will be clearly understood from the following detailed description of the course of one of the threads of the fabric over the seven needles, illustrated in Fig. 3. The thread, starting at *y*, is first lapped over the needle 1, and, after being carried beneath the same and toward the needle 2, is pressed off of the needle 1 in order to form a loop. The same operation is repeated with the needles 2, 3, and 4, successively, the thread being lapped around each and pressed off, thus forming a loop after each lap. This completes the first part of the stitch, and forms the inclined portion *b* of one of the projections of the edging, Fig. 1. The thread is next carried from the needle 4 beneath the needles 5 and 6, skipping the latter, and is lapped around the needle 7, from which it is pressed off to form a loop. This completes the second part of the stitch and forms the straight portion *a* of one of the projections, Fig. 1. The inclined portion *b'* of the latter is formed by lapping the thread around the needles 6, 5, and 4, successively, and pressing it off after each lap, just as in the first part of the operation, and the stitch is completed by a traverse of the thread from the needle 4 to the needle 1, it being carried beneath the needles 3 and 2 without lapping around the same, and thus forming the straight portion *a'* of the projection, Fig. 1.

I claim as my invention—

A knitted fabric in which stripes having an edging of the character described are p 10 duced substantially as set forth—that is to say, by causing the threads to traverse and lap around certain of the needles, first in one direction and then in the other, and to be pressed off after each lap to form the inclined portions, and to pass behind and skip certain needles to form the straight portions.

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

JAMES PHIPPS.

Witnesses:
WM. A. STEEL,
HARRY SMITH.