

UNITED STATES PATENT OFFICE.

SAMUEL THACKER, OF SNENTON, ENGLAND, ASSIGNOR TO JOHN S. CROPPER, OF HACKENSACK, NEW JERSEY; SAID CROPPER ASSIGNOR TO HIMSELF AND CALVIN H. CARTER, OF WATERBURY, CONNECTICUT.

IMPROVEMENT IN KNIT-FABRICS.

Specification forming part of Letters Patent No. 120,126, dated October 17, 1871.

To all whom it may concern:

Be it known that I, SAMUEL THACKER, of Snenton, in the county of Nottingham, England, have invented a new and useful Improvement in Knit-Fabric; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same.

The invention has for its object improvements in the manufacture of knitted fabrics, and relates to the production of knitted-fabrics as substitutes for twist-net, crown-lining, leno, buckram, muslin, and other fabrics produced in looms or in twist-lace machines, and afterward stiffened.

For this purpose I prefer to use that class of knitting-machine known as the ordinary round frame; but other descriptions of knitting-frame may be employed; and in order to produce an open fabric for the above purposes I use a finer yarn than that ordinarily employed in the production of ordinary knitted fabrics on any particular gauge or machine, thereby producing a slack fabric, in which the "wale" (which is considered to be essential to other descriptions of knitted-fabrics) is almost entirely obviated. Thus, for example, in the manufacture of a fabric as a substitute for buckram I employ a knitting-machine of about No. 20 gauge, and with such gauge of knitting-frame I use a size of yarn about No. 40 or 50 singles to produce a fabric, the holes or meshes of which are of a very open character. Such fabric is then, after removal from the knitting-frame, placed in an ordinary dressing-frame, in which it is stretched out and stiffened in a similar manner to that employed in dressing and stiffening lace or other fabrics.

When a round frame is employed for the above purposes the fabric is, either before or after removal from such frame, cut up so as to be capable of being opened out to permit of its being

placed in a dressing-frame for the purpose of being stretched and stiffened, as above described.

By the above means fabrics are produced, the holes or meshes of which approach in form to nearly that of a square, and having somewhat the appearance of, and capable of being used as, substitutes for fabrics of the character above referred to produced in the ordinary manner upon looms or twist-lace machines.

I have not thought it necessary to give the number of gauge of machine and size of yarn for producing substitutes for other fabrics than buckram, as, aided by the description already given, a manufacturer will readily understand how to produce substitutes for other fabrics of the character herein described.

When it is desired to produce fabrics for some purposes, such as for the manufacture of hat and bonnet shapes, I prefer to unite two or more thicknesses of my improved knitting-fabric together by the process of dressing. For this purpose I stretch the number of thicknesses, one upon another, in a dressing-frame so that their entire surfaces are in contact with each other, and I then apply the dressing or stiffening material in the ordinary manner.

Having thus described the nature of my invention and mode of carrying the same into effect, I would have it understood that what I claim is—

The manufacture of fabrics of the character herein referred to upon knitting-frames, aided by the after process of dressing and stiffening, substantially in the manner herein described.

The above specification of my invention signed by me this 3d day of August, 1869.

Witnesses: SAMUEL THACKER.

JNO. CROPPER,
Silk merchant, Nottingham.

WM. WHITTLEY,
Solicitor's clerk, Nottingham.