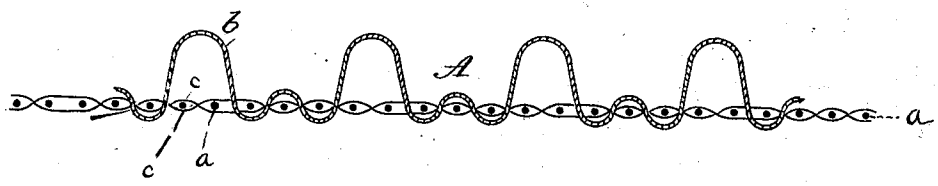
(No Model.)

F. LEAKE.

TERRY FABRIC.

No. 376,664. Patented Jan. 17, 1888.



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UNITED STATES PATENT OFFICE.

FRANK LEAKE, OF PHILADELPHIA, PENNSYLVANIA.

TERRY FABRIC.

SPECIFICATION forming part of Letters Patent No. 376,664, dated January 17, 1888.

Application filed May 5, 1887. Serial No. 237,251. (No model.)

To all whom it may concern:

Be it known that I, FRANK LEAKE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Terry Fabrics; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improved fabric of that class in which a series of loops is arranged upon the surface, whether solidly or in different designs, commonly known as "terry cloth."

Heretofore in the manufacture of terry cloth the second loose warp-thread constituting the terry loops has been held in place by a single weft-thread of the body of the fabric, it being thus secured in the operation of forming the cloth by throwing in three picks of weft and beating the third pick home to form the terry pile. These loops have thus been very loosely held, and it is possible to pull the terry thread out of its looped shape by drawing upon any one of the loops along the whole extent of the cloth. In the manufacture of a pile fabric from a terry, which is done by simply cutting the looped ends of the terry pile, it is necessary to employ special mechanism to hold the loops while being so cut in order to prevent them from being drawn out from beneath the weft-threads which hold them in place, and for this reason, also, the terry cloth as at present made is very objectionable.

It is the object of my invention to produce what I term a "fast terry"—that is, to so secure the warp-thread which constitutes the terry pile that it will be more securely held than in the terry fabrics now known, and which will permit of the farbric being transformed from a terry to a pile fabric without the use of special mechanism for holding the loops during the cutting process.

My invention consists of a terry cloth or pile fabric consisting of the ordinary cloth proper, which comprises the filling and body warp threads and of the loose warp-threads forming the terry pile, the said pile-threads being held to the body of the fabric between the terry loops by three weft-threads or a greater uneven number of said threads.

The accompanying drawing represents a longitudinal section of a portion of a terry fabric made according to my invention.

In the drawing the fabric is represented at A, and is shown as composed of the filling *a* and warp-threads *c*, which constitute the cloth proper on which the terry pile is made. The terry pile is shown at *b*, and is woven into the fabric in precisely the same manner as the ordinary terry, except that instead, after throwing in three picks of the filling, of tightening the reed or drawing it up into place, thus driving the three picks home at once, as usual, and continuing this operation, I follow the third pick up by another and another, thus bringing the top warp up at the ends of the fifth pick, ready for commencing another terry loop, and in this manner the operation is repeated until the fabric is complete. It will thus be seen that instead of being held in place by a single weft-thread, as usual, between every two loops the terry warp will be bound securely to the main body of the fabric by three weft-threads.

The warp and weft threads of the ground fabric are woven together in nearly the usual manner, the warp-threads changing their position in the alternate movement of the heddles so as to bind the weft-threads in place. This alternate movement of the warp-threads is interrupted, however, at the second pick of the series when the loose or terry warp is carried below to the under surface of the fabric, and at this point the body warp-threads are floated over two weft-threads before changing their position. The loose or terry warp follows the line of the body warp through the third, fourth, and fifth picks of the series, but then changes, remaining raised, and passes down between the second and third picks of the next series, the terry loop being formed above the first and second picks of the second series. As the loose or terry warp passes down between the weft-threads of the second and third picks, it tends to bind the weft-threads at this point, and thus the warp-threads may be floated over, as described. This, it will be seen, gives a firm body throughout for the terry loops, and not only are the threads firmly held between the loops by the weft-threads, but the loops are supported and prevented from displacement by the body of the material beneath them.

It will be understood that while I have

shown the warp-thread bound by three picks in five, I may increase this number to a larger uneven number—such as five in seven or seven in nine—without departing from the spirit of my invention.

I claim as my invention—

1. A terry fabric consisting of the warp and weft threads forming the ground of the fabric and the loose warp or terry thread bound between its loops by three or more of the weft-threads, the said warp and weft threads being bound together beneath the terry loops, substantially as described.

2. A fabric consisting of filling and warp threads and a second warp-thread formed in a series of loops and bound between the loops by the weft-thread, passing first above, then below, and then above the loose warp, the tight warp of the cloth proper being floated over the second and third picks of the weft, substantially as described.

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

FRANK LEAKE.

Witnesses:

ALBERT W. COX,

EDWARD S. MCINTYRE.