

(Specimens.)

R. W. SCOTT.  
NARROWED KNITTED WEB.

No. 410,031.

Patented Aug. 27, 1889.

FIG. 1.



FIG. 2.

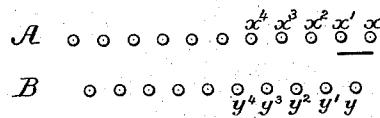


FIG. 3

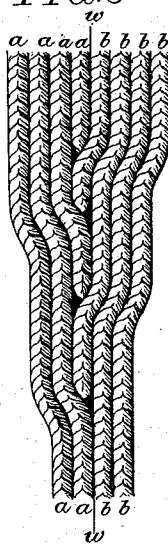
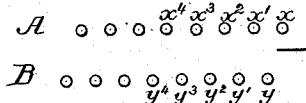


FIG. 4.



Witnesses:  
Aly. Darkoff  
John J. Meany

Inventor:  
Robert W. Scott  
by his Attorneys  
Houdon & Houdon

# UNITED STATES PATENT OFFICE.

ROBERT W. SCOTT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO LOUIS N. D. WILLIAMS, OF SAME PLACE.

## NARROWED KNITTED WEB.

SPECIFICATION forming part of Letters Patent No. 410,081, dated August 27, 1889.

Application filed May 16, 1889. Serial No. 310,964. (Specimens.)

*To all whom it may concern:*

Be it known that I, ROBERT W. SCOTT, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented an Improved Narrowed Knitted Web, of which the following is a specification.

My invention consists of a narrowed knitted web, which can be more readily produced than a web narrowed in the ordinary way, and which is more acceptable than the ordinary narrowed web, in that the narrowing-stitches are not stretched and weakened—as by the insertion of transfer-points—in effecting the narrowing operation.

5 In the accompanying drawings, Figure 1 is an exaggerated diagram illustrating part of a knitted web narrowed in the ordinary way. Fig. 2 is a diagram illustrating the method of narrowing such a web. Fig. 3 is a diagram similar to Fig. 1, but illustrating a knitted web narrowed in accordance with my invention; and Fig. 4 is a diagram similar to Fig. 2, but illustrating the method of producing my improved narrowed web.

25 Ordinarily in narrowing a knitted web produced upon a machine having opposite needle-beds A and B, as shown, for instance, in Fig. 2, it is the usual practice to transfer the stitch from the end acting needle of one row to the next needle of the same row, stitches being transferred first on one row and then on the other until the desired narrowing has been effected. Thus, supposing the first transfer to be effected from the needle  $x$  of the row

35 A to the next needle  $x'$  of the same row, the next transfer would be from the needle  $y$  of the row B to the next needle  $y'$  of that row, the third transfer being from the needle  $x'$  to the needle  $x^2$ , and the fourth from the needle  $y'$  to the needle  $y^2$ , and so on. The effect of 40 this method of operation is to form two rows of narrowings  $a$  and  $b$  on opposite sides of a central line  $w$ , the narrowings  $a$  being effected on the needles of the row A of the machine, and the narrowings  $b$  on the needles of the row B of the same, each wale  $a$  which is dropped merging into the next outer standing wale  $a$ , and each wale  $b$  which is dropped merging into the outer standing wale  $b$  next 45 to it.

In carrying out my invention I transfer a stitch from the end needle of one row to the adjacent end needle of the opposite row, instead of transferring from the needle of one row to the next needle of the same row, as usual. Thus, supposing the diagram Fig. 4 to represent part of the two rows of needles of the machine, the first transfer will be from the needle  $x$  of the row A to the needle  $y$  of the row B, the next transfer being from said needle  $y$  to the needle  $x'$  of the row A, the next transfer from said needle  $x'$  to the needle  $y'$  of the row B, and so on. By this means, instead of having two rows of narrowings side by side, by dropping wales on opposite sides of the central line alternately and merging each dropped wale into the outer-standing wale next to it I produce a knitted web in which each wale  $a$  which is dropped merges into a standing wale  $b$  across the dividing-line  $w$ , and this wale  $b$  is the next wale to be dropped, and merges into the adjacent standing wale  $a$ , and so on, as shown in Fig. 3, narrowings thus produced presenting a more acceptable appearance than the usual narrowings, as the narrowing loops or stitches are not stretched or weakened in the transfer, the stitch to be dropped being passed directly from one needle to the other without the use of the usual transfer points or pickers, this method of operation forming the subject of a separate application, Serial No. 310,965, filed by me, and bearing even date herewith.

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

50 A knitted web narrowed by the merging of wales one into another, the standing wale into which a dropped wale is merged itself constituting the next dropped wale, substantially as specified.

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

ROBERT W. SCOTT.

Witnesses:

WILLIAM D. CONNER,  
HARRY SMITH.