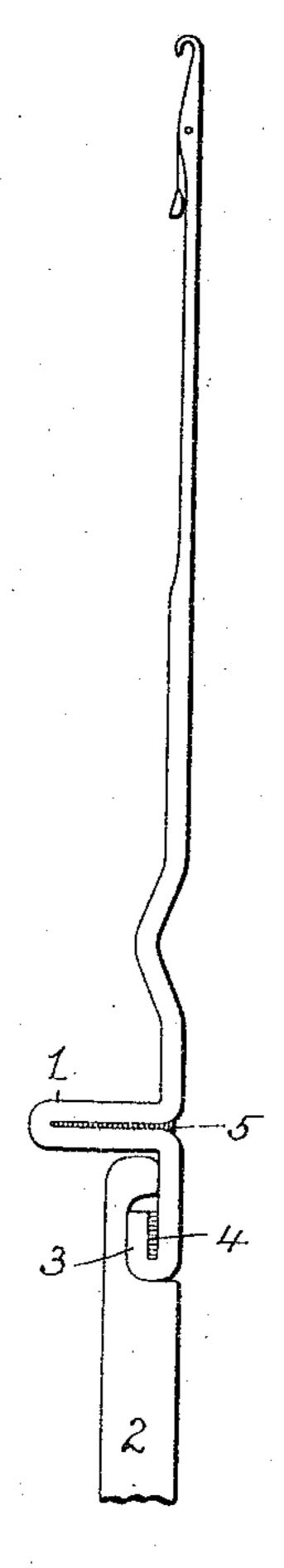
## R. W. SCOTT. KNITTING MACHINE NEEDLE. APPLICATION FILED MAY 12, 1908.

975,466.

Patented Nov. 15, 1910.



Witne ses Harry L. Smith

Robert W. Scott Byhis attorneys Smith Razier

## UNITED STATES PATENT OFFICE.

ROBERT W. SCOTT, OF LEEDS POINT, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO SCOTT & WILLIAMS, INCORPORATED, OF CAMDEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## KNITTING-MACHINE NEEDLE.

975,466.

Patented Nov. 15, 1910. Specification of Letters Patent.

Application filed May 12, 1908. Serial No. 432,491.

To all whom it may concern:

Be it known that I, ROBERT W. Scott, a citizen of the United States, residing in Leeds Point, Atlantic county, New Jersey, 5 have invented certain Improvements in Knitting-Machine Needles, of which the following is a specification.

My invention relates to that class of knitting machine needles which have an end butt 10 for the action of a cam or for engagement with a jack, the object of my invention being to so construct such butt as to impart to it the strength needful to enable it to resist the strain to which it is subjected in use.

15 The drawing illustrates, on an enlarged scale, a needle constructed in accordance with my invention.

The needle is composed of wire bent to form the ordinary butt 1 for the action of 20 the knitting cams and it is also provided at the end with another butt, which may be intended either for the action of a supplementary cam or for the attachment of a jack through the medium of which movement in-25 dependent of that imparted by the knitting cams may be transmitted to the needle, a portion of such jack being shown at 2 in the drawing, and where I use the term "hook-like operating member" in the claims,-30 it is to be understood that both a supplementary cam and a jack, through the medium of which movement independent of that imparted by the knitting cams-may be transmitted to the needle, are included thereby.

If the butt simply projects at right angles from the stem or shank of the needle it does not possess the necessary strength to resist the strains to which it is subjected, and, in order to overcome this objection, I form the 40 butt by means of a reversely bent finger 3 at the end of the shank, this finger, by preference, lying parallel with the stem or shank of the needle, and being united firmly to the lower portion of said stem or shank by 45 means of soldering or brazing 4, the result being an extremely strong butt, which will effectually resist all of the strains to which it is likely to be subjected in the use of the needle. The bends which form the butt 1 50 may also be united by soldering or brazing,

if desired, as shown at 5 in the drawing in order to prevent breakage at the bends.

1. A knitting machine needle having a wire shank bent to form a projecting butt above its lower end and having at said lower end a reversely bent finger terminating such distance below the upper butt to form a 60 lower butt whose upper face is adapted for engagement with a hook-like operating member of the machine in the plane of the

needle, whereby the needle can be operated. 2. A knitting machine needle having a 65 wire shank bent to form, above its lower end, a projecting butt having its members secured together and below said butt a second butt whose upper face is adapted for engaging a hook-like operating member of 70 the machine in the plane of the needle, whereby the needle can be operated, said second butt comprising a reversely bent finger terminating such distance below the upper butt to permit said hook-like operating 75 member to engage said butt in the plane of the needle.

3. A knitting machine needle having a wire shank bent to form a projecting butt above its lower end, and having, at said 80 lower end, a reversely bent finger secured to the shank of the needle and constituting a lower butt whose upper face is adapted for engagement with a hook-like operating member of the machine in the plane of the 85 needle, whereby the needle can be operated.

4. A knitting machine needle having a wire shank bent above its lower end to form a projecting butt having its members secured together, said shank having at the lower end 90 a reversely bent finger lying alongside of and secured to said shank and constituting a lower butt whose upper face is adapted for engagement with a hook-like operating member of the machine in the plane of the 95 needle, whereby the needle can be operated.

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

ROBERT W. SCOTT.

Witnesses:

HAMILTON D. TURNER, KATE A. BEADLE.