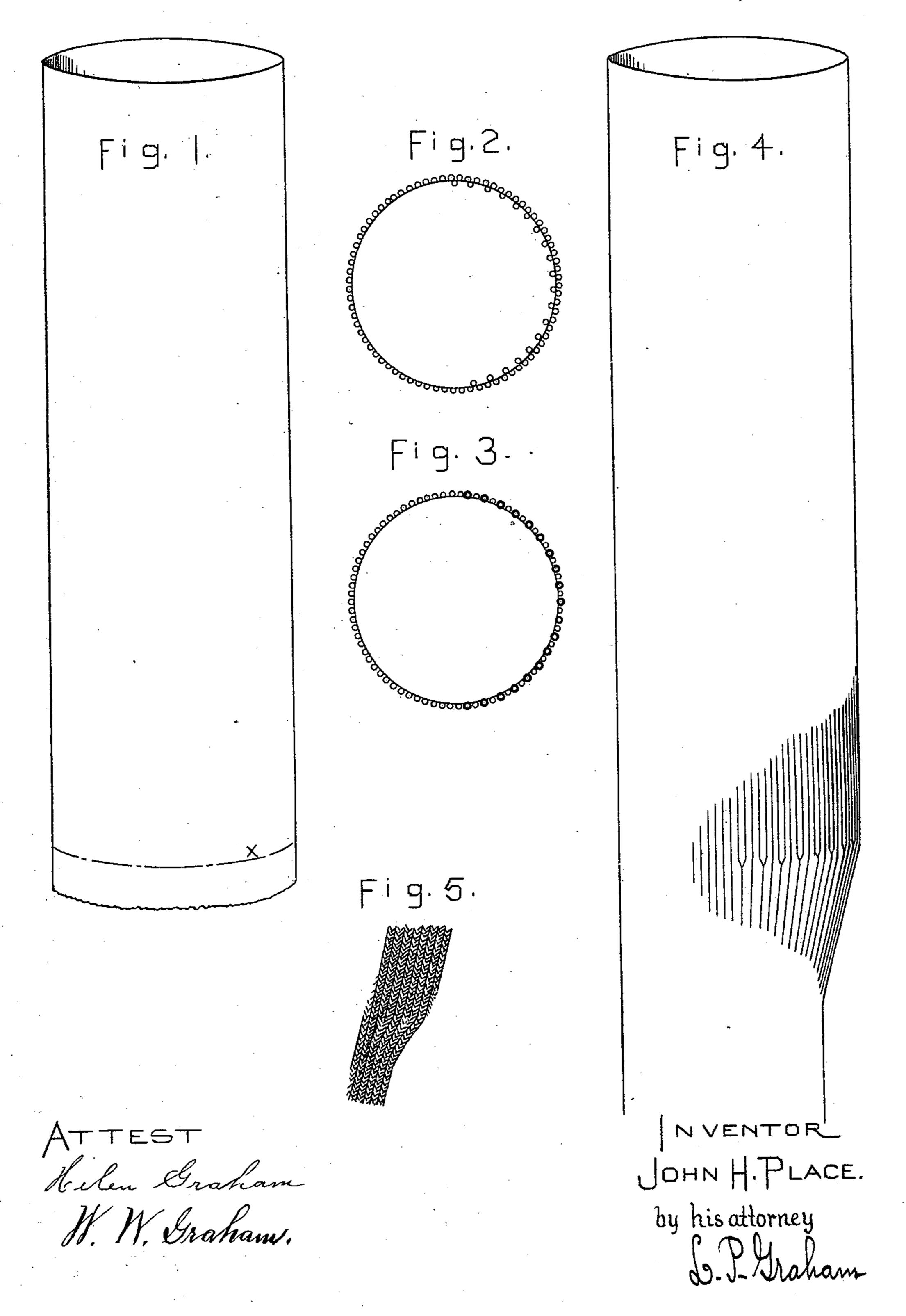
J. H. PLACE.

## METHOD OF KNITTING NARROWED TUBULAR FABRICS.

No. 466.370.

Patented Jan. 5, 1892.



## United States Patent Office.

JOHN H. PLACE, OF DECATUR, ILLINOIS.

## METHOD OF KNITTING NARROWED TUBULAR FABRICS.

SPECIFICATION forming part of Letters Patent No. 466,370, dated January 5, 1892.

Application filed January 2, 1891. Serial No. 376, 466. (No specimens.)

To all whom it may concern:

Be it known that I, John H. Place, of Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Methods of Knitting Narrowed Tubular Fabrics, of which the following is a specification.

This invention relates to the method of narrowing tubular knit fabrics, the object beso ing to produce a stocking-leg conforming in

shape to the natural form.

The method of constructing the fabric is as follows: The upper part of the stocking-leg is knit on a circular machine having the requi-15 site number of needles, and is, for convenience in transferring, continued somewhat beyond the required length. The fabric is then transferred to a machine having about one-fifth fewer needles. The loops of the 20 front part of the leg are placed each on a needle of the smaller cylinder. Every third loop of the rear part of the leg is skipped, and the intervening loops are placed on the remaining needles in regular order. The 25 surplus fabric is then raveled down to the needles, after which the skipped loops are placed each on a needle next adjoining in such manner as to give each alternate needle two loops. This arrangement provides the 30 needles on one side or half of the cylinder with one loop each, while giving one-half of the needles on the other side or half one loop each, and the other half two loops each, the single loops and the double loops being regularly alternate. After the transfer is effected, as stated, the stocking is completed on the small cylinder in the customary manner. The narrowing part of the stocking so knitted consists of two wales of the wider portion 40 combining in one of the narrower, then one wale running through both the wider and the narrower portions, then two wales of the wider portion combining in one of the narrower, and so on alternately, the construction enabling 45 the narrowing process to affect the rear part of the leg only, and to contract the same so grad-

In the drawings accompanying and form-50 ing a part of this specification, Figure 1 rep-

ually as to leave the leg, when properly shaped,

in close approximation to the natural form.

resents a tube knitted in the customary manner, the broken line x showing the line on which the transfer is made to the smaller cylinder, and the extension below such line showing the part of the tube that is to be 55 raveled prior to placing the skipped loops on the needles of the small cylinder. Fig. 2 shows an arrangement of loops as they appear after the first step of the transfer is completed, the skipped loops being thrown 60 to the inside of the circle. Fig. 3 shows the arrangement of the loops after the transfer is completed, the heavy lines indicating double loops and the light lines indicating single loops. Fig. 4 represents the appear- 65 ance of a stocking-leg as it comes from the machine, the wales in the narrowing portion being each indicated by a single line. Fig. 5 is a more complete representation of the arrangement of wales in the narrowing portion. 70

While absolute accuracy in the performance of the process is not indispensable, it is very desirable, as a variation therefrom will either narrow the leg too abruptly or extend the narrowing portion too far around the leg 75

to give the desired form.

I claim—

The method of making a narrowed stocking-leg, which consists in knitting a tube slightly longer than the wider portion of the 80 finished leg, then transferring the tube to a cylinder having fewer needles in such manner that a narrow band projects above the needles, skipping every third needle on one side of the cylinder, and transferring one 85 stitch to each needle on the other side of the cylinder, then raveling the narrow band down to the needles, then placing the skipped loops each on a needle next adjoining in such manner that each alternate needle on one 90 side of the cylinder carries two loops, and then completing the knitting in the customary or any suitable manner.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

JOHN H. PLACE.

Attest:

I. D. WALKER, L. P. GRAHAM.