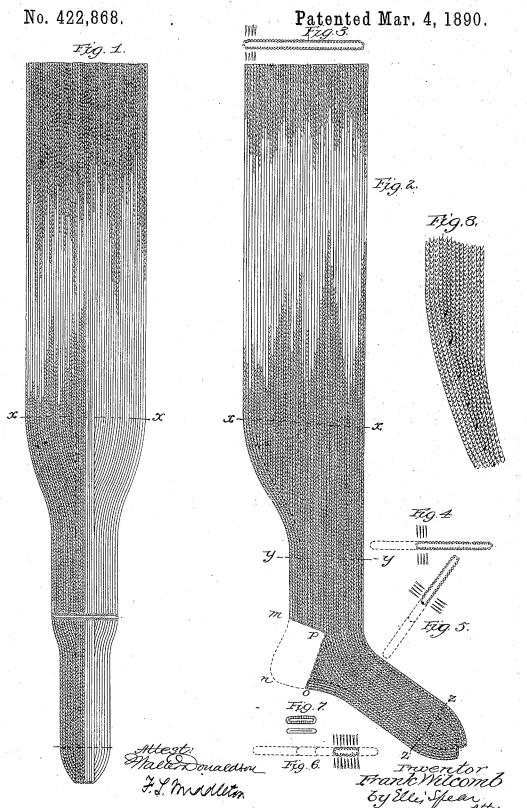
## F. WILCOMB. STOCKING.



## UNITED STATES PATENT OFFICE.

FRANK WILCOMB, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE WILCOMB KNITTING MACHINE COMPANY, OF JERSEY CITY, NEW JERSEY.

## STOCKING.

SPECIFICATION forming part of Letters Patent No. 422,868, dated March 4, 1890.

Application filed August 28, 1888. Serial No. 283, 970. (Specimens.)

To all whom it may concern:

Be it known that I, FRANK WILCOMB, of Providence, in the county of Providence and State of Rhode Island, have invented a new 5 and useful Improvement in Stockings; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improved stocking, which is knitted tubular throughout, having 10 a fashioned leg, gusset, and toe, with a series of straight wales or lines of stitches extending along the back of the leg, the sole of the foot, and the upper part of the toe, the narrowings of the fashioned portions being on the mar-15 gins of the straight wales.

The invention is illustrated in the accom-

panying drawings, in which-

Figure 1 represents a rear view of the stocking with the foot extended. Fig. 2 repre-20 sents the stocking in side elevation. Fig. 3 is a section on line x x of Fig.1. Fig. 4 is a like section on line y y, the full size of the tube being indicated by the dotted lines. Fig. 5 is a section on line z z. Fig. 6 rep-25 resents an end view of the tube, and the successive steps in the reduction of the tube being indicated in dotted lines. Fig. 7 also shows the end of the tube, it being represented as open in one part of the figure and 30 closed in the other. Fig. 8 is a view more in detail, showing a portion of the stocking at one of the narrowings.

The stocking thus represented is knit on a straight tubular-knitting machine of the gen-35 eral construction shown in Letters Patent of the United States granted me on the 12th day of October, 1886, and numbered 350,795.

Preferably in making the stocking I use eleven transfer points on each side at one 40 end of the machine in narrowing the leg and foot and the same number at each end in narrowing at the toe; but the number of these transfer-points may be varied without material change in the invention. For the sake 45 of definiteness, however, and only for clearness of illustration, I use definite numbers of stitches in describing the stocking shown in the drawings.

with a hundred and ninety-two stitches, and 50 is knit continuously in tubular form down to the line x x, where the narrowing begins for the ankle. At this line the stocking is narrowed by one stitch for each narrowing at desired intervals, and is continued until there 55 have been thirty-two narrowings in each row. In the section shown in Fig. 4 there are one hundred and twenty-eight stitches in the circumference, this being the narrowest part of the ankle. It will be observed that the nar- 60 rowing for the ankle is only on one end of the rows of stitches, and this forms the back of the stocking-leg. Eleven transfer-points being used on each side, there will be a series of wales or lines of stitches along the back of 65 the leg extending to the upper part of the foot at the toe continuously, except for a break at the heel and at the end of the toe, the narrowing being on the margins of these

At the line y y is the opening for the heel. This is formed by dropping stitches from a sufficient number of needles from the back to about the middle of the stocking-leg, the stitches on the front of the stocking-leg be- 75 ing left on the needles. After dropping the stitches, as before mentioned, for the heelopening, the work is immediately set up again and the knitting continued, and this leaves the stocking at this line half severed from the 80 rear. After the work is set up a few rounds are knit straight and then the transfer-points are again brought into action-eleven on each side at one end, as before—and the tube is narrowed six times on each side, which reduces it 85 by twelve stitches. This forms the gusset on each side, and the narrowing stitches at this point are still on the margins of the central wales or lines of stitches. The foot is then knit in the form of a tube to the line 22 with- 90 out narrowing. As twelve stitches are taken out, this tubular part which forms the foot is one hundred and sixteen stitches in circumference.

At the line 2 2 the narrowing for the toe 95 commences. This narrowing is performed on both the under and upper sides of the foot at The stocking is begun at the top of the leg I the toe, eleven transfer-points being used on

each side of the machine and at each end of the needle-rows. The tube is narrowed eighteen times on each side and at each end at desired intervals until the toe is properly tapered. This reduces the tube to forty-four stitches, this being the number of the transfer-points, and at this point the knitting ceases. The opening in the bottom of this tube is then closed by stitching. The heelpiece, bounded by the lines m n o and o p, is knit separately and connected by the edges thereof to the stocking proper on the line of the heel-opening. The line of stitches at the heel and that heretofore described at the toe form the only seams in the stocking, and as

the stocking is knit by transfer-stitches in the

narrowing there are no holes left in the nar-

rowing and the stocking is complete and perfect.

I claim as my invention—

A knittubular stocking having a fashioned leg, gusset, and toe, with a series of straight wales or stitches extending along the back of the leg, the under part of the foot, and the upper side of the toe, the narrowings being 2: on the margins of the straight wales, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

FRANK WILCOMB.

Witnesses:

WALTER DONALDSON, GEO. R. WILSON.