Oct. 8, 1940. H. McADAMS 2,217,558

SEAMLESS KNITTED FABRIC AND METHOD OF PRODUCING THE SAME

Filed Oct. 19, 1932 3 Sheets-Sheet 1

FIG. 2.

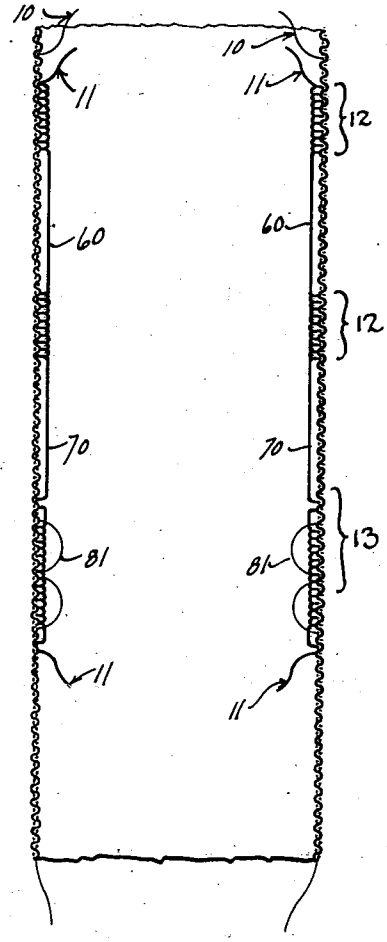
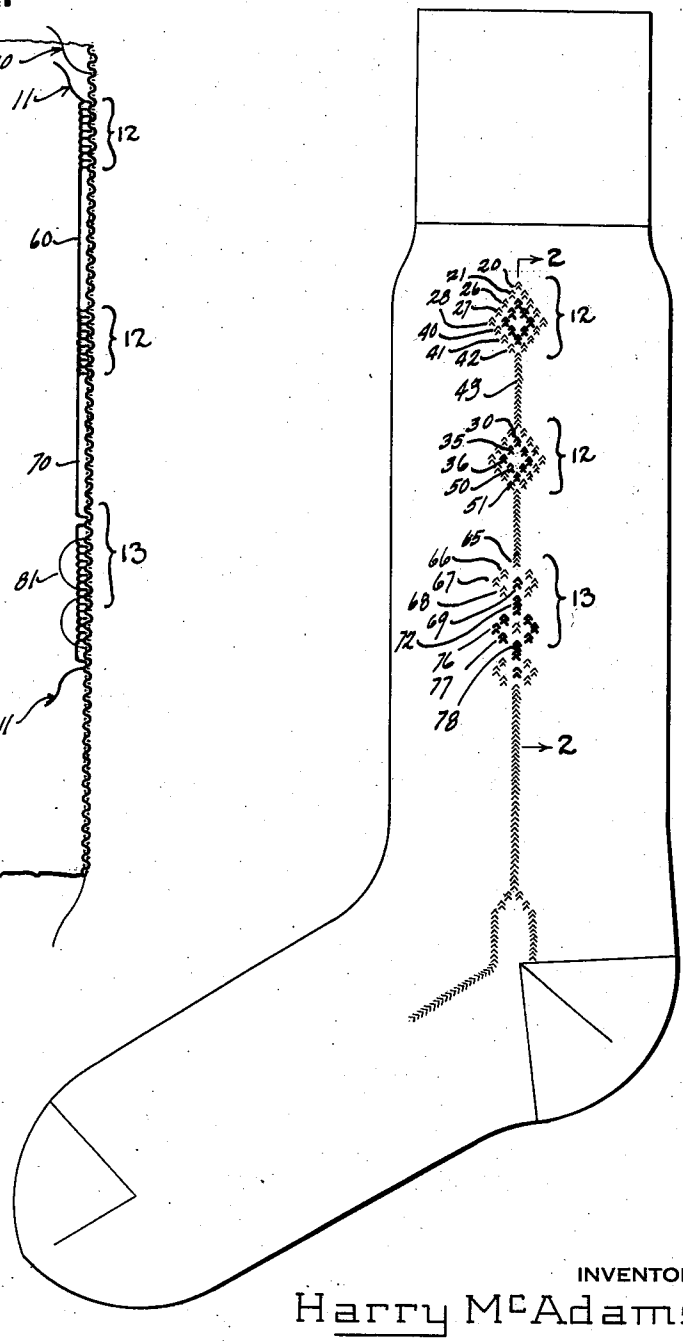


FIG. 1.



INVENTOR.

Harry McAdams

BY Lancaster, Allwine & Rommel

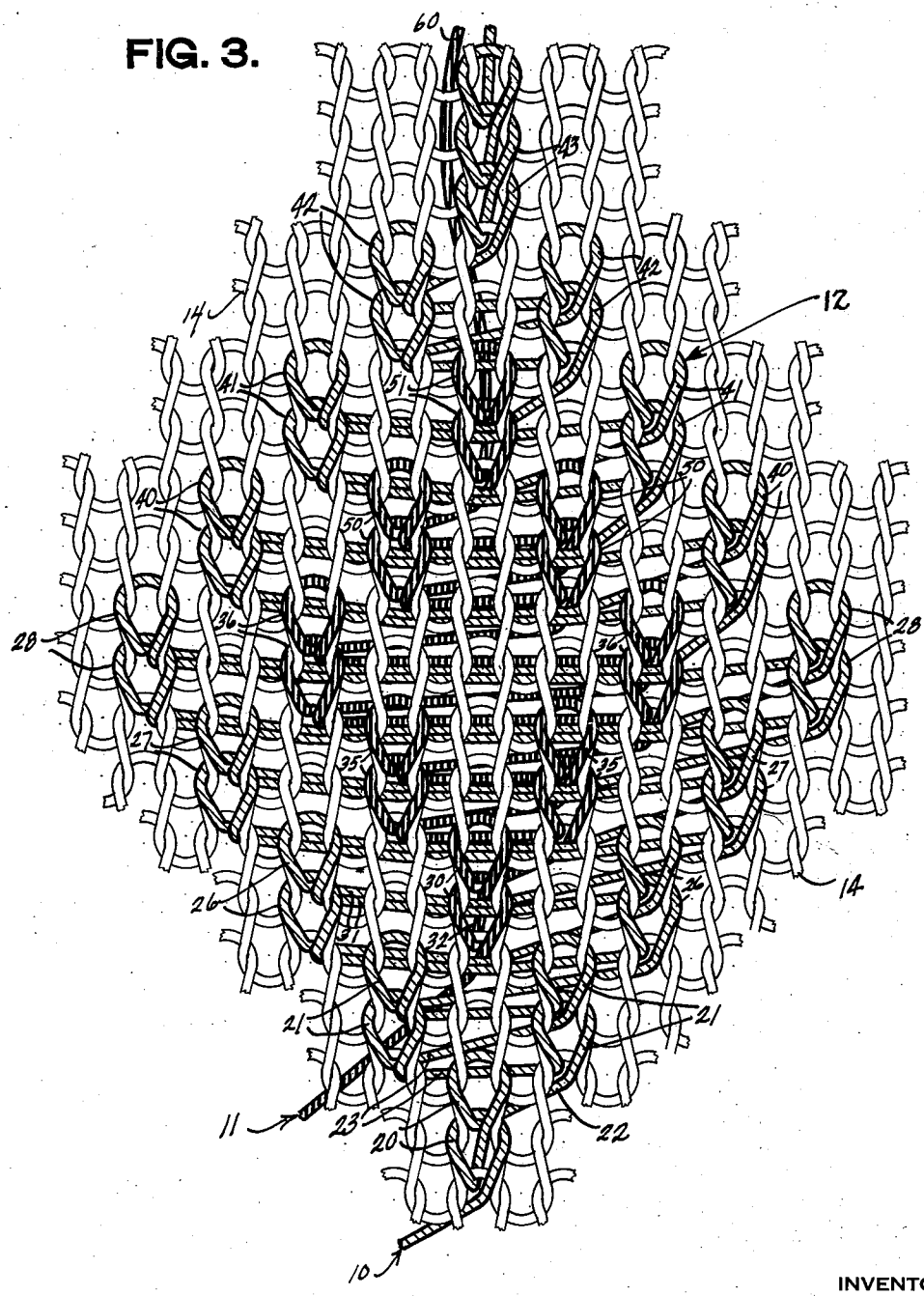
ATTORNEYS.

Oct. 8, 1940. H. McADAMS 2,217,558

SEAMLESS KNITTED FABRIC AND METHOD OF PRODUCING THE SAME

Filed Oct. 19, 1932 3 Sheets-Sheet 2

FIG. 3.



INVENTOR.

Harry McAdams

BY Lancaster, Allwine & Rommel

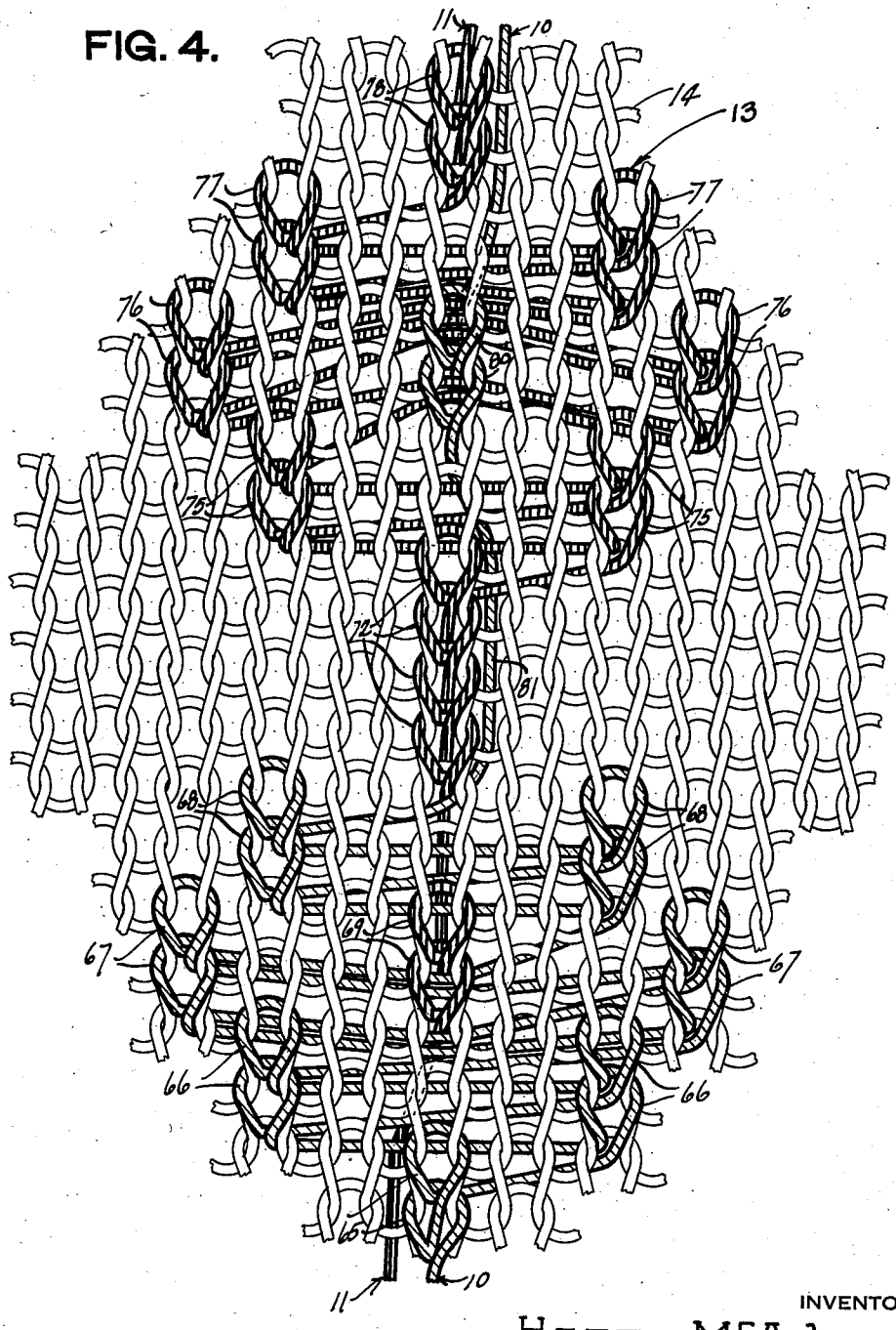
ATTORNEYS.

Oct. 8, 1940. H. McADAMS 2,217,558

SEAMLESS KNITTED FABRIC AND METHOD OF PRODUCING THE SAME

Filed Oct. 19, 1932 3 Sheets-Sheet 3

FIG. 4.



INVENTOR.
Harry McAdams

BY
Lancaster, Allwine and Rommel
ATTORNEYS.

Patented Oct. 8, 1940 2,217,558

UNITED STATES PATENT OFFICE

2,217,558

SEAMLESS KNITTED FABRIC AND METHOD OF PRODUCING THE SAME

Harry McAdams, Reading, Pa., assignor to Nolde and Horst Company, Reading, Pa., a corporation

Application October 19, 1932, Serial No. 638,619

22 Claims. (Cl. 66—201)

The present invention relates to an improved fabric, such as a seamless or circular knitted stocking, wherein selective designs may be provided in the clocking zones, or elsewhere in the stocking, by means of additional threads which may or may not contrast in appearance or color; the additional yarns being so knitted into the web fabric of the stocking that one color may be completely boxed in with a border of another color and the additional yarns floated in unobjectionable relation upon the inside of the fabric.

This application is a continuation in part of my copending application, Ser. No. 591,689, filed Feb. 8, 1932.

In the drawings, wherein for the purpose of illustration is shown merely one ornamental clocking zone with a plurality of differently arranged designs therein:

Figure 1 is a side elevation of a seamless stocking having an ornamental clock extending lengthwise thereof formed of additional relatively contrasting yarns, which are selectively located to produce a variety of designs; it being understood that a similar clocking zone is provided upon the opposite side of the stocking.

Figure 2 is a diagrammatic representation simulating a vertical cross section taken through the seamless knitted stocking to designate the knitting in of the additional design producing or clocking threads and the floating thereof along the sides of the stocking.

Figure 3 is a considerably enlarged view in side elevation of one of the design areas of the clocking zone or stripe illustrated in Figure 1 showing the same as it is hung upon the machine during knitting, and indicating the relation of knitting the additional contrasting yarns in with the web of the stocking and the manner in which the float portions are disposed upon the inside of the fabric; it being understood that in the actual article the float portions are not visible from the outside of the stocking. This design, as shown, is actually inverted in the finished stocking.

Figure 4 represents an enlarged side elevation of another portion of the clocking design upon an enlarged scale, showing the same as it is hung upon the machine during knitting, and showing how the yarns are selectively varied in placement with respect to each other and the loops of the fabric web to produce substantially different desired designs. This design, as shown, is also inverted in the finished stocking, as will be noted in Figure 1.

Ornamental designs have heretofore been produced in seamless knitted fabrics, such as stockings. These designs have been produced by embroidering on the web of the stocking; by the introduction of clocking yarns such as set forth in U. S. Patent #1,619,788, which requires the cutting out of the float portions before the stocking is usable or marketable. Lap stripes have also been provided in stockings by wrapping the design producing yarns upon the needles during the knitting of the base web. There has not, however, been a method devised by which a plurality of relatively contrastingly colored or otherwise differing yarns may be selectively knitted in with the web of the stocking in different stitches of each of several design areas upon the stocking, with the respective yarns floated between successively knitted stitches of the same design area from course to course, and the yarns manipulated with respect to the knitting of the base web so that they may be variably employed in selectively different manner in the different design areas. A machine method of knitting the improved fabric has been set forth in my co-pending application Serial No. 591,639, filed February 8, 1932, wherein a machine is shown for the selective manipulation of additional contrasting wrapping yarns adapted to be fed in selective manner to needles of a predetermined group, in such manner and in cooperation with the selective needle control that the design producing yarns may be wrapped for the creation of various predetermined designs in the same stocking, with float portions extending across the inside of the fabric between successively knitted stitches of the same design area and from course to course thereof. It will suffice, so far as the present method and improved fabric are concerned, to say that upon the improved machine of the above mentioned copending application there is independent and selective control of the needles of a desired set upon which the design producing yarns are to be wrapped for knitting the design zones. This is true to the extent of variously causing the needles to move into design yarn receiving relation in different numbers and sequences for producing distinctly different designs along the same clocking zone or side of a stocking, and at the same time to independently and selectively control one or more of a plurality of relatively contrastingly appearing or colored additional design producing yarns in their feed to the needles as they are moved into receiving relation. Such manipulation of the needles and design yarns enables the production in one design area in a clocking zone of a contrasting yarn

knitted in the stocking web entirely within a boxed border design formed by the knitting in the web of a contrasting additional yarn, with portions of the yarns floated upon the inside of the fabric between successively knitted stitches of the additional yarns from course to course of the same design area, so that it will not be necessary to remove the same for marketing, and to interchange the positions of the design producing yarns in another design area of the same clocking zone, if desired.

In Figure 1 I have illustrated a seamless stocking having an ornamental clock which is merely typical of one of many different ornamental designs, clocks, or stripes which may be produced upon the machine set forth in my above identified co-pending application. In this pattern I have used two relatively contrasting colored yarns 10 and 11 which are respectively green and red, and which may of course contrast with the stocking main or body yarn 14 in color or appearance, if desired. The design producing yarns 10 and 11 may of course be of any colors desired and may contrast in any manner desired, or they may have the same appearance. More than two of them may be used in the same design area by following the methods outlined in this and my other co-pending application above mentioned.

Figure 3 is an enlarged showing of the portion of the ornamental clock embraced in either of the brackets 12 of Figure 1; this portion of the ornamental clock being herein referred to as a design area of the clocking zone. Likewise, in Figure 4 is shown an enlargement of web and design producing yarns embraced within the design area designated at 13 in Figure 1.

Referring to the sequence of steps for the knitting of one of the design areas 12 shown in Figure 1, and with particular reference to the enlarged and somewhat distorted showing of the fabric in Figure 3, the green yarn 10 is wrapped upon the needles of the machine after the method and arrangement set forth in my co-pending application above mentioned to successively knit the stitches 20 in successive courses of the same wale line of the fabric, as shown at the bottom of Figure 3, and thereafter through cam and jack manipulation of the knitting needles and yarn feeds, stitches 21 are knitted upon the next two succeeding courses of the web in wale lines at each side of the wale in which the previously knitted ornamental stitches 20 appear. The yarn 10 is floated upon the inside of the fabric from the last knitted stitch 20 to the next knitted stitch 21, as shown at 22 in Figure 3 of the drawings, and the yarn is floated back and forth between the successively knitted stitches 21 and from course to course as designated at 23 in the drawings. By cam actuation of jacks, needles and yarn wrapping fingers, after a selected pattern, the yarn 10 is knitted in with the body yarn during formation of the web to successively produce the ornamental loops or stitches 26, 27 and 28 in pairs of successively knitted courses and in wales adjacently removed from the wale line in which the ornamental stitches were last knitted. This produces a stepped ornamental bordering effect upon the outer face of the fabric, as can readily be appreciated. The yarn 10 is of course floated between successively knitted stitches 26, 27 and 28 and from course to course across the inside of the fabric. During the knitting of the courses of the web wherein the ornamental loops or stitches 26, 27 and 28 appear the other contrastingly colored yarn 11, which merely for purposes of illustration will be referred to as a red yarn, is fed to certain needles of the knitting machine which are cam and jack actuated, to interknit the same in the web inside of the border produced by the loops of the yarn 10. Thus, in the wale line wherein the loops 20 of the yarn 10 appear, and in the same courses of the web formed by the main body yarn wherein the ornamental stitches 26 appear, the needles are so manipulated as to take the red yarn 11 and knit the stitches or loops 30. The float portion of the yarn 11 at the inside of the fabric between the first knitted stitch 30 and the second knitted stitch 30 will cross over and float behind certain float threads 31 of the yarn 10; this float portion of the yarn 11 being referred to at 32 in Figure 3 of the drawings, and it is characteristic of knitting a contrasting yarn in a main web within a bordering design yarn of another color, that the float portions of one of the additional contrasting yarns will cross over and tend to bind the float portions of the other yarn. The stitch loops formed in the body web with the additional red yarn 11 may vary in design arrangement. In the example shown, the yarn 11 in the courses wherein the loops 27 of the yarn 10 appear, is knitted into the stitches of the main web producing yarn in the wale lines wherein the loops 21 of the yarn 10 are knitted, as shown at 35 in Figure 3 of the drawings, and similarly in the courses of the main web wherein the design producing loops or stitches 28 appear, the yarn 11 is knitted into the stitches thereof in the wale lines wherein the stitch loops 26 of the yarn 10 appear, as shown at 36 in Figure 3 of the drawings. The yarn 11 is of course floated at the inside of the fabric between the successively knitted stitches thereof from course to course entirely at design 12, and the float portions of the yarn 11 in crossing from one course to the next knitted course pass over and overlap certain of the float portions of the yarn 10, as is clearly shown in Figure 3, with a tendency to bind them in position against too free movement. It is of course understood that the stitches formed by the design producing yarns 10 and 11 are knitted at the same time as the courses of the main body yarn wherein they respectively appear.

The green plated portion of the design 12 is completed as to stitches 40, 41, 42 and 43, appearing in successive pairs of courses of the main web by cam actuation of jacks, needles and yarn control fingers; the stitches 20, 21, 26, 27, 28, 40, 41, 42 and 43 completing a diamond-shaped boxed border all formed from the same additional knitting yarn 10, which is floated between successively knitted stitches, and from course to course across the inside of the fabric directly at the rear of the diamond-shaped design appearing on the face of the fabric. The inner portion of the design within the boxed bordering design is completed by knitting in the same courses wherein the loops 40 appear, in the same wale line wherein the loops 21 appear, the yarn 11 to produce the stitches 50, and in the central wale line the yarn 11 is knitted to provide a pair of stitches 51 in the same courses with the stitches 41. Additional stitches 43 may be produced in the wale line in successive courses for considerable length along the clocking design. It is of course understood that the yarns 10 and 11 are floated between successively knitted stitches thereof from course to course as the web of the stocking is knitted, and of course the float

portions of the yarn 11 at the inside of the fabric are floated across the other float portions of the yarn 10 in manner above described.

In Figures 1 and 2, in the clocking zones the green yarn 10 has been indicated in lighter lines than the red yarn 11, to more readily distinguish one from the other. The design area 12 designated in bracketed portions of Figures 1 and 2 are substantially identical with that above described, with reference to Figure 3. The green yarn 10 is knitted in the central wale line of each clocking zone between the design areas 12 of the clock, preferably in each of the courses of the knitted web, although not necessarily so, and the red yarn 11 is floated between these design areas 12 at the inside of the stocking vertically along each clocking zone, as designated at 60 in Figure 2 of the drawings. It is of course understood that different yarns 10 and 11 are used at each of the clocking zones, so that the yarns are not floated transversely across the inside of the stocking.

Another design area of each clock of the seamless stocking has been designated at 13 in Figures 1 and 2, and is shown in enlarged detail in Figure 4 to designate the varied manner in which the design producing yarns 10 and 11 may be interchanged to produce internal and external pattern effects. In the lower portion of the design shown in Figure 4, which is knitted first, the green yarn 10 is interknitted with the web to produce the border stitches 65, 66, 67 and 68, with float portions thereof at the inside of the stocking between successively knitted stitches thereof from course to course. Within this border effect the yarn 11 is knitted with the web in one or more stitches 69 which appear at the outer face of the stocking in contrast with the bordering stitches 65, 66, 67 and 68. From the last knitted stitch in the design 12 the yarn 11 is floated at the inside of the stocking along each clocking zone, as designated at 70 in Figure 2 of the drawings, to the stitches 68. In the courses of the web succeeding those in which the stitches 68 are knitted the yarn 11 is knitted in the central wale line of the clocking zone in a plurality of stitches 72 which may vary in number as desired according to the length of the clocking zone. From the last knitted stitch 72 the yarn 11 is manipulated through cam control of the jacks, needles and yarn finger to produce of the yarn 11, in the remaining portion of the design 13, an external boxed border, made up of stitches 75, 76, 77 and 78 preferably in pairs of succeeding courses of the web. This border design may take any shape desired and may be knitted in adjacent wales or in alternate wales, or in a selected arrangement as shown in Figure 4. The yarn 11 is of course floated at the inside of the stocking between successively knitted stitches thereof from course to course. From the last of the stitches 68 the green yarn 10 is floated at 81, at the inside of the stocking along the clocking zone to a point within the bordering design produced by the yarn 11, and in the courses of stitches wherein the stitch loops 76 of the yarn 11 appear, the needles and control finger for the yarn 10 are so manipulated as to knit stitches 80, which appear on the face of the fabric. Other float portions of the yarn 10 bind in float portions of the yarn 11 between the two stitches 80.

It can be appreciated from the foregoing that the design producing or contrasting additional yarns may be varied in number, and varied as to wale and border placement, for the production of many and varied complicated patterns, designs, stripes, contrasting figures and plated effects. There is practically no limit to the relation of placement of the relatively contrasting yarns within a single design area and it is quite apparent that the portions of the contrasting yarns between successively knitted stitches, since they are floated from course to course and along the inside of the stocking from one level to another, will not interfere with the marketing or use of the stocking, and they do not need to be cut out after knitting of the desired clocks, patterns, or designs.

So far as the knitting of lap stripes along the wales of the seamless stocking are concerned it is possible with my method to knit different colored striping yarns in any desired number in successive wales of the stockings, or to box in a lap stripe knitted of an additional yarn between lap stripes in adjacent wales knitted of a different and contrasting yarn floated at the inside of the stocking across the wale having the first mentioned lap stripe.

From the foregoing it is quite apparent that an improved seamless stocking or fabric and method of knitting the same have been provided by means of which seamless hosiery with more effective and neater patterns of greater variety may be more economically produced than heretofore.

While only one embodiment of my invention has been illustrated, after a method herein described which may be made applicable to various modes of manufacture, I desire it to be understood that various changes in the number of design producing yarns as to number, color and effect in general may be made, and that many and varied complicated patterns, designs, stripes and contrasting figures may be knitted other than that specifically shown, and that the scope of the invention is not to be limited by the specific illustration and description herein set forth.

I claim:

1. That method of knitting a seamless fabric comprising knitting a web or body and interknitting therewith an additional contrasting wrap yarn exposed at the face of the fabric in a boxed border design with the yarn floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and from course to course, and during the knitting of the same interknitting with selected web stitches within said border design a second additional contrasting wrap yarn in at least some of the same courses wherein the first wrap yarn is knitted.

2. That method of knitting a seamless fabric comprising knitting a web or body and interknitting therewith an additional yarn of contrasting color exposed at the face of the fabric in a boxed border design, with said addititonal yarn floated coursewise at the inside of the fabric directly between successively knitted stitches thereof from course to course, and during the knitting of the web and said design interknitting with the web an additional yarn with selected web stitches within said border design contrasting in color with the other yarns, with the said last mentioned additional yarn floated at the inside of the fabric directly between successively knitted stitches thereof from course to course.

3. The method of knitting a seamless stocking having an ornamental design of contrasting yarn

which comprises knitting a seamless circular web and during the formation thereof producing a design by interknitting therewith an additional contrasting yarn in relatively spaced stitches of the same courses of the web with float portions extending coursewise across the inside of the web directly between said stitches and from course to course of the same design, and in the said same courses of stitches interknitting a second additional yarn contrasting with the web yarn and first additional yarn in different stitches of said courses than the first additional yarn appears and within the design produced by the first additional yarn with float portions thereof extending coursewise across the inside of the web directly between the successively knitted stitches of said second additional yarn and from course to course within the design.

4. The method of knitting a seamless stocking having an ornamental design of contrasting yarn which comprises knitting a seamless circular web and during the formation thereof producing a design by interknitting therewith an additional contrastingly colored yarn in relatively spaced stitches of the same courses of the web, with float portions extending coursewise across the inside of the web directly between said stitches and from course to course of the same design, and in the said same courses of stitches interknitting a second additional yarn contrasting in color with the web yarn and first additional yarn in different stitches of said courses than the first additional yarn appears and within the design produced by the first additional design, with float portions thereof extending coursewise across the inside of the web directly between the successively knitted stitches of said second additional yarn and from course to course.

5. A seamless hose or stocking having a leg portion composed of a body yarn or yarns forming a knitted web and having at each of the clocking zones thereof a plurality of exposed designs on the face of the stocking at different levels, each design formed of a plurality of additional relatively contrastingly colored yarns wrap knitted in with certain predetermined loops of the body yarn and constrasting in color therewith, at least one of said additional yarns being knitted in different loops of the body yarn web to produce in each design area on the outer face of the web a boxed border design, and another additional yarn being interknitted with the loops of the web within said boxed border design, the said additional yarns being floated coursewise at the inside of the web directly between the successively knitted stitches of the respective yarns and floated from course to course and floated directly between the successively knitted designs of the respective clocking zones at each side of the stocking without crossing the stocking diametrically.

6. A seamless hose or stocking having a leg portion composed of a body yarn forming a knitted web and having a design area on the face of the stocking formed of a plurality of additional relatively contrastingly colored wrap yarns knitted in with only a few of the loops of the body yarn and contrasting in color therewith, one of the additional yarns being knitted in to provide a boxed border design with the stitch loops thereof appearing in adjacent wale stepped relation from course to course and with float portions thereof at the inside of the web extending coursewise and also diagonally between successively knitted stitches thereof from course to course, and another of said additional yarns being wrap interknitted with the web within said border design so as to be exposed at the face of the fabric in at least some of the same courses wherein the first contrasting yarn is knitted and floating at the inside of the fabric coursewise and lengthwise between successive stitches formed of the same.

7. A seamless hose or stocking having a leg portion composed of a body yarn forming a knitted web and having a design area on the face of the stocking formed of a plurality of additional relatively contrastingly colored yarns knitted in with only a few of the loops of the body yarn and contrasting in color therewith, one of the additional yarns being knitted in to provide a boxed border design with the stitch loops thereof appearing in adjacent wale stepped relation from course to course and with float portions at the inside of the web extending coursewise and also diagonally between successively knitted stitches thereof from course to course, another of said additional yarns being interknitted with the web within said border design and being exposed at the face of the fabric in a design within said border design and at the inside of the fabric being similarly floated between successively knitted stitches thereof from course to course.

8. A seamless hose or stocking having a leg portion composed of a body yarn forming a knitted web and having a design area on the face of the stocking formed of a plurality of additional relatively contrastingly colored yarns knitted in with only predetermined loops of the body yarn and contrasting in color therewith, one of the additional yarns being knitted in a boxed border design with the stitch loops thereof appearing in course stepped relation from wale to wale and with float portions thereof at the inside of the web extending coursewise between successively knitted stitches thereof from course to course where the stitches thereof are in stepped relation, another of said additional yarns being interknitted with the web within said border design and being exposed at the face of the fabric in a design within said border design and at the inside of the fabric said other additional yarn beng floated coursewise between successively knitted stitches thereof and floated from course to course with certain float portions of one of said additional yarns crossing over and binding the float portions of the other additional yarn.

9. A seamless knit stocking having a knitted leg web provided with an ornamental design consisting of a plurality of relatively contrasting additional yarns interknitted in different stitches of the main web in the design area and floated at the inside of the stocking at said design area between successively knitted stitches from course to course, with the float portions of one of said additional yarns as they extend from one course to the next respective course in which the said yarn is knitted crossing over and binding the float portions of another additional contrasting yarn.

10. In a seamless knit stocking or the like the combination of a seamless knitted leg web having interknitted therewith a plurality of relatively contrastingly colored additional yarns which also contrast in color with the yarn of the web to produce a plurality of designs in different areas along the web at different levels, one of said additional yarns being interknitted

with the web to produce a bordering effect in one of the design areas with the other additional yarn interknitted with the web within said border, and in another design area the last mentioned additional yarn being interknitted with the web to produce the design border and the first mentioned additional yarn being interknitted with the web within said last mentioned design border, the said additional yarns being floated coursewise and walewise at the inside of the web between the respective successively knitted stitches thereof and along the inside of the web from one design area to the other design area.

11. The method of knitting a circular seamless stocking or like tubular article which comprises knitting a seamless web portion and producing during the knitting thereof a design therein by interknitting with the web during the knitting of the web a plurality of contrasting wrap yarns, one of which is interknitted with relatively spaced non-adjacent stitches in the same course or courses and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and floated from course to course wherein the same appears, and interknitting the other of said contrasting wrap yarns in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course or courses formed by the said first wrap yarn, to produce upon the exterior of the article a contrasting effect of said wrap yarns in the same course or courses.

12. The method of knitting a circular seamless stocking or like tubular article which comprises knitting a seamless web portion and producing during the knitting thereof a design therein by interknitting with the web during the knitting of the web a plurality of contrastingly colored wrap yarns, which also contrast in color with the web yarn or yarns, one of said wrap yarns being interknitted with relatively spaced non-adjacent stitches in the same course or courses and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and floated from course to course wherein the same appears, and interknitting the other of said contrastingly colored wrap yarn in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course or courses formed by the said first wrap yarn, to produce upon the exterior of the article a contrasting color within color effect of said wrap yarns in the same course or courses.

13. The method of knitting a circular seamless stocking or like tubular article which comprises knitting a seamless web portion and producing during the knitting thereof a design therein by interknitting with the web during the knitting of the web a plurality of contrasting wrap yarns, one of which is interknitted with relatively spaced non-adjacent stitches in the same course or courses and floated coursewise at the inside of the fabric directly between successive stitches thereof and floated from course to course wherein the same appears, and interknitting the second of said contrasting wrap yarns in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course or courses formed by the said first wrap yarn, to produce upon the exterior of the article a contrasting effect of said wrap yarns in the same course or courses, and subsequently producing another contrasting effect of said wrap yarns during the knitting of the web by interchanging the position of the second wrap yarn to correspond with the above mentioned position of the first mentioned wrap yarn and vice versa in the same course or courses.

14. The method of knitting a circular seamless stocking or like tubular article which comprises knitting a seamless web portion and producing during the knitting thereof a design therein by interknitting with the web during the knitting of the web a plurality of contrasting wrap yarns, one of which is interknitted with relatively spaced non-adjacent stitches in the same course or courses and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and floated from course to course wherein the same appears, and interknitting the other of said contrasting wrap yarns in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course or courses formed by the said first wrap yarn, to produce upon the exterior of the article a contrasting effect of said wrap yarns in the same course or courses, the said wrap yarns being so manipulated during the interknitting thereof with the web yarns that the second mentioned wrap yarn where it extends from one course to another will cross over and bind the intermediate float portions of the first mentioned wrap yarn.

15. A seamless stocking or like tubular article composed of a seamless knitted web having a design area thereon formed by a plurality of contrasting wrap yarns, one of which is interknitted with relatively spaced non-adjacent stitches in the same course or courses and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and floated from course to course wherein the same appears, the other of said contrasting wrap yarns being knitted in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course or courses formed by the first wrap yarn.

16. As an article of manufacture, a seamless stocking or like tubular article composed of a seamless knitted web having a plurality of contrastingly colored wrap yarns interknitted therein to produce a color within color design area, one of said colored wrap yarns being interknitted at said design area with relatively spaced non-adjacent stitches of the web in the same course or courses and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and floated from course to course wherein the same appears, the other of said contrasting colored wrap yarns being interknitted in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successively knitted stitches of said first wrap yarn.

17. As an article of manufacture, a seamless stocking or like tubular article composed of a seamless knitted web having a plurality of contrastingly colored wrap yarns interknitted therein to produce a color within color design area,

one of said colored wrap yarns being interknitted at said design area in relatively spaced non-adjacent stitches of the web in the same course or courses and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and floated from course to course wherein the same appears, the other of said contrasting colored wrap yarns being interknitted in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successively knitted stitches of said first wrap yarn, the article having another design area with the relative positions of the first and second mentioned wrap yarns interchanged with respect to the relation of them above described and with said wrap yarns floating at the inside of the article from one design area to the other.

18. A seamless stocking or like tubular article composed of a seamless knitted web having a design area thereon formed by a plurality of contrasting wrap yarns, one of which is interknitted in relatively spaced non-adjacent stitches of the web in the same course or courses and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and floated from course to course wherein the same appears, the other of said contrasting wrap yarns being knitted in the web stitches in at least some of the same courses wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course or courses formed by the first wrap yarn, the coursewise floated portions of the first mentioned wrap yarn at the inside of the article being bound in place by the portions of the second mentioned wrap yarn which extend lengthwise of the article from one course to another wherein the same appears.

19. The method of knitting a circular seamless stocking or like tubular article which comprises knitting a seamless web portion and producing during the knitting thereof a design therein by interknitting with the web during the knitting of the web a plurality of contrasting wrap yarns, one of which is interknitted with relatively spaced non-adjacent stitches in the same course and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and interknitting the other of said contrasting wrap yarns in the web stitches in the same course wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course formed by the said first wrap yarn, to produce upon the exterior of the article a contrasting effect of said wrap yarns in the same course.

20. The method of knitting a circular seamless stocking or like tubular article which comprises knitting a seamless web portion and producing during the knitting thereof a design therein by interknitting with the web during the knitting of the web a plurality of contrastingly colored wrap yarns, which also contrast in color with the web yarn or yarns, one of said wrap yarns being interknitted with relatively spaced non-adjacent stitches in the same course and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof and interknitting the other of said contrastingly colored wrap yarn in the web stitches in the same course wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course formed by the said first wrap yarn, to produce upon the exterior of the article a contrasting color within color effect of said wrap yarns in the same course.

21. A seamless stocking or like tubular article composed of a seamless knitted web having a design area thereon formed by a plurality of contrasting wrap yarns, one of which is interknitted with relatively spaced non-adjacent stitches in the same course and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof the other of said contrasting wrap yarns being knitted in the web stitches in the same course wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successive stitches in said course formed by the first wrap yarn.

22. As an article of manufacture a seamless stocking or like tubular article composed of a seamless knitted web having a plurality of contrastingly colored wrap yarns interknitted therein to produce a color within color design area, one of said colored wrap yarns being interknitted at said design area with relatively spaced non-adjacent stitches of the web in the same course and floated coursewise at the inside of the fabric directly between successively knitted stitches thereof the other of said contrasting colored wrap yarns being interknitted in the web stitches in the same course wherein the first wrap yarn is knitted but at a location where the first wrap yarn is floated and between successively knitted stitches of said first wrap yarn.

HARRY McADAMS.