

April 1, 1958

H. MEYER

2,828,776

REMOVABLE TABS OR LABELS FOR MARKING TEXTILE ARTICLES

Filed Aug. 16, 1955

2 Sheets-Sheet 1

FIG. 1

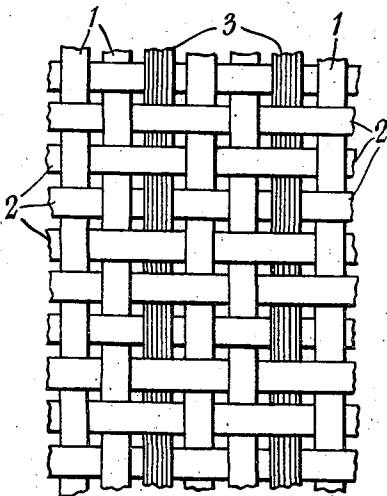


FIG. 3

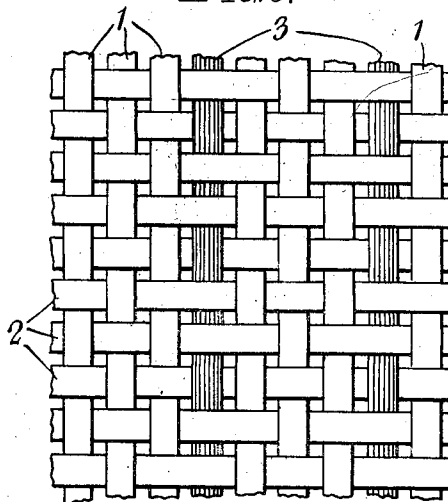


FIG. 2

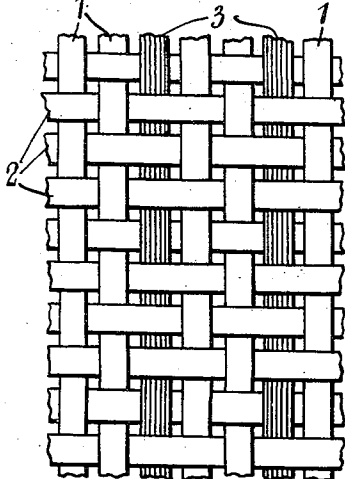
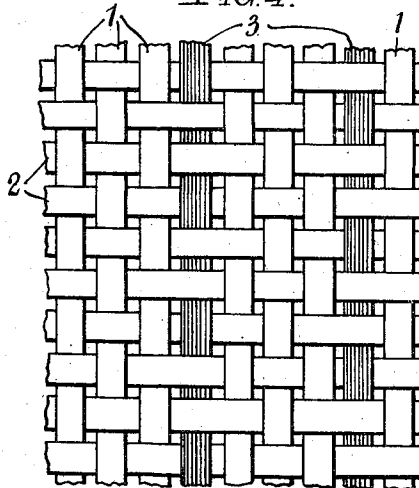


FIG. 4



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2 Sheets-Sheet 2

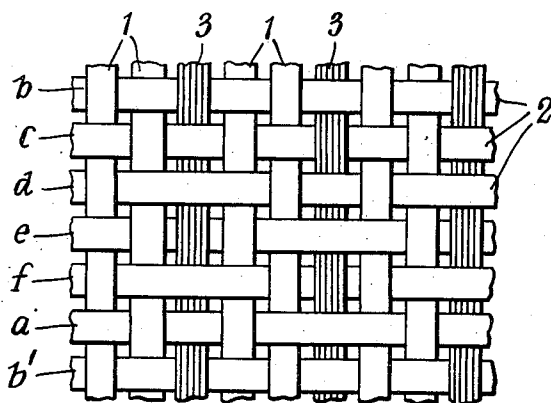


FIG. 5.

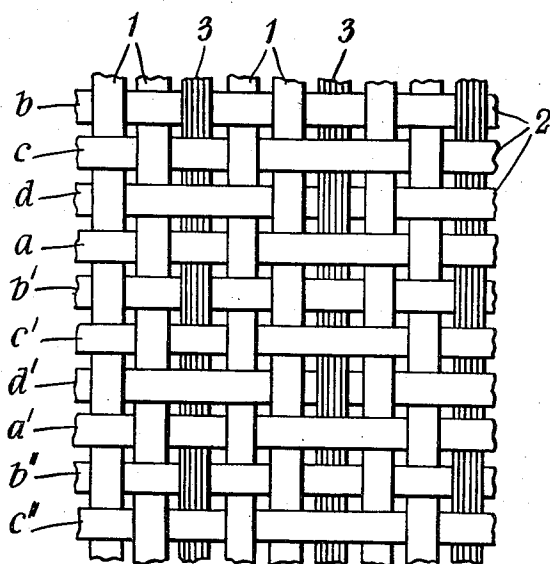


FIG. 6.

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REMOVABLE TABS OR LABELS FOR MARKING TEXTILE ARTICLES

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Application August 16, 1955, Serial No. 528,779

Claims priority, application Great Britain August 27, 1952

20 Claims. (Cl. 139—420)

The present invention relates to improvements in tabs or labels for marking textile articles and is particularly concerned with the provision of a tab or label which consists of a fabric formed in part of filaments or yarns of a thermoplastic material and which is to be affixed to a textile article by the application of heat and pressure whereby the tab or label adheres adequately firmly to the article but can be stripped or peeled off the article when desired.

Such labels or tabs may be used for example for price marking or like purposes while a further important application of such tabs or labels is for marking articles to be laundered or dry cleaned thereby avoiding the disadvantages of commonly utilised laundry and dry cleaning marking methods or systems, since the tabs or labels can be readily removed before dispatch to the customer.

In Patent No. 2,639,255 a tab or label of the above character is described, intended particularly for articles which are to be laundered or dry cleaned which includes a proportion of filaments or yarns of a thermoplastic material or character which is not softened at 100° C. but is softened at a temperature below the scorching point of material to which it is affixed by heat and pressure and which is adapted to carry on one face, identification markings, the tab or label being easily removable by peeling off without affecting the material to which it is attached. In this case the thermoplastic filaments or yarns may, for example, consist of cellulose acetate containing a water-insoluble plasticising agent such as di-ethyl or di-methyl phthalate. A volatile solvent for the cellulose acetate may be present during the application of heat and pressure.

The aforesaid tabs or labels commonly bear identification characters, letters or numerals, applied to the tab by printing immediately before application to the textile material. It has been found that unless a certain amount of care is taken in the operation of this method of applying tabs or labels to textile articles, there is some danger that the printing medium, such as ink, applied to the outer or printing face of the tab or label may be transferred onto the textile material to which the tab is applied, during the hot pressing of the tab or label on the textile material.

The principal reason for this is that the printing medium utilised and applied to one face of the tab or label is in part carried by the thermoplastic yarns or filaments appearing on the tab or label and that due to the action of the heat and pressure, and solvent in some cases, the parts of the thermoplastic filaments or yarns carrying said printing medium are partly fused and disintegrated so that the ink or other printing medium may be carried towards the textile material to which the tab or label is fixed, especially if for any reason an undue amount of the printing medium is applied to the tab or label.

A further effect resulting from the softening or fusing action of the parts of the thermoplastic filaments or yarns present on the printing face of the tab or label is that under the pressure and heat, and the solvent when used,

applied to the tab or label, the parts of the printed characters carried by said filaments or yarns are lost or blurred with the result that the legibility of the markings is reduced.

Speaking in general terms the avoidance of the foregoing difficulties involves careful adjustment of the machine by which the tab or label is fixed to the articles to be marked in order to avoid undue amounts of the printing material being carried into the textile material and remaining as a visible marking on the articles after removal of the label, and moreover to ensure a high degree of legibility of the markings being retained under practical conditions.

The primary object of the present invention is to avoid the aforesaid difficulties by utilising a fabric for the formation of the tabs or labels containing a proportion of thermoplastic filaments or yarns, which fabric is woven in such manner that a greater proportion of the thermoplastic material is exposed on one face than on the other face, the face containing the greater amount of thermoplastic material being hereinafter termed the "adhesion face," while the opposite face containing the smaller proportion of thermoplastic material is termed the "printing face."

The manner of weaving may be such that in some only of the weft picks the thermoplastic yarn is brought to the printing surface together with the two non-thermoplastic yarns on each side thereof. At the points where this occurs the thermoplastic yarns are substantially screened or covered by the adjacent non-thermoplastic yarns.

The present invention also has for its object an improved form of fabric wherein the non-thermoplastic yarns extending in both directions are woven as a plain weave and thermoplastic yarns are incorporated at spaced points between the non-thermoplastic yarns extending in one direction and are woven with non-thermoplastic yarns extending in the opposite direction, said thermoplastic yarns extending over two or three non-thermoplastic yarns on one face of the fabric and only over a single non-thermoplastic yarn on the other face of the fabric so that a greater proportion of the thermoplastic yarn is brought to said former face of the fabric than to the latter face.

The invention also has for its object a fabric consisting of non-thermoplastic yarns extending in both directions and woven so that each such yarn crosses alternately above and below the yarns in the other direction, and with interspersed thermoplastic yarns in one direction which on one face of the fabric appear at every point with a non-thermoplastic yarn present on one side thereof, said thermoplastic yarns being woven so that a greater proportion of thermoplastic yarns is exposed on one face than on the other face.

By virtue of this formation of the fabric, such fabric can be designed or arranged so as to exhibit an appropriate degree of adhesion to a textile article when applied thereto under heat and pressure, generally in the presence of a solvent for the thermoplastic material, and preferably such as to enable a label made from such fabric to be adherent throughout treatments to which the article may be subjected such as laundry or dry cleaning operations, but which can be peeled or pulled off the article at the end of such operations. Such removal of the label may be facilitated by the provision of a non-adherent edge, either by appropriate provision in the machine used for applying the label or by forming the label fabric with an edge portion without thermoplastic yarns. Further that face of the label which is not adhered to the textile article, embodies only a very small amount of exposed thermoplastic yarn, with the result that the label itself is well adapted to take a printed-on indicating marking, and such marking is not

liable to be destroyed or made illegible as a result of mechanical and/or chemical influences to which the article may be subjected, for example in the course of laundry or dry-cleaning operations.

In the production of a fabric suitable for tabs or labels according to the invention the warp of the fabric may consist of spaced yarns of a thermoplastic material with one or more non-thermoplastic yarns located between the thermoplastic yarns and said warp is woven with a weft which preferably consists of non-thermoplastic material in such manner that after laying one weft thread capable of bringing thermoplastic yarns to the printing face of the fabric two or more weft threads are laid over said thermoplastic yarns so that despite the fact that a satisfactorily compact fabric of adequate tensile strength is obtained yet there is a comparatively small amount of thermoplastic yarns exposed on the printing face of the fabric.

By virtue of this method of production a fabric may be produced containing on the adhesion surface a relatively large proportion of exposed thermoplastic yarn, capable under the action of heat and pressure of adhering adequately and firmly to a piece of a textile material, for example a garment being laundered, to enable said tab or label to remain in place as long as required, for example throughout laundering operations, but such as to permit it to be subsequently peeled off the article. On the opposite or printing face of the tab or label only a relatively small proportion of the thermoplastic yarn is exposed and when the tab or label has printed characters imparted thereto prior to applying the tab or label to the textile material there is in consequence little danger of the printing ink being carried onto the garment to which the label is fixed. Moreover the fact that the printed characters can only be formed to a very small extent by ink carried by the thermoplastic yarns results in the fact that there is little danger of the legibility of the markings being lost.

Furthermore the fact that, of the total quantity of thermoplastic yarns, a greater proportion appears on the adhesion face, permits the overall amount of thermoplastic yarn to be reduced, thereby reducing the cost of the labels.

In the production of the fabrics according to the present invention it is preferable that the thermoplastic yarns shall be warped separately from the non-thermoplastic yarns in order that the tension in the former yarns may be held at a lower value than the warp yarns of non-thermoplastic material with the result that a certain measure of "crimping" of the thermoplastic yarn is obtained in the course of production of the fabric. It should be noted however that the degree of such "crimping" need only be comparatively slight and moreover it is not unduly critical. Each thermoplastic yarn may alternate with two non-thermoplastic yarns.

In the production of fabrics according to the present invention for the production of tabs or labels it is preferable to utilise cotton yarns both for the non-thermoplastic warp yarns and also for the weft threads, while the thermoplastic yarns are preferably of cellulose acetate. An alternative material for the non-thermoplastic yarns is viscose; while other thermoplastic materials are polyvinyl formal and other vinyl polymers such as polyvinyl chloride and polyvinylidene chloride, other ethers and esters of cellulose, or polyethylene. Such thermoplastic yarns may consist of a single filament or of a plurality of fine filaments preferably slightly twisted.

Where cellulose acetate is utilised a proportion of a water insoluble plasticising agent such as di-ethyl or dimethyl phthalate can be added. The proportion of such a plasticising agent may be such that the tab or label can be rendered adhesive in respect to a textile material merely by the application of pressure at a temperature preferably slightly above 100° C., so that in the case of garments being laundered adhesion of the tab with the gar-

ment is not lost during normal laundry operations, but at a temperature below about 160° C. so that the tab can be applied without risk of scorching any textile material likely to be encountered.

It is to be understood that the fabric for forming the tabs or labels according to the present invention may be woven in substantial width and strips may be cut therefrom and reeled. Small tabs or labels can then be cut from these strips, for example by means of a machine incorporating printing integers, tab cutting means, solvent applying means if required and heated presser means for applying the tabs to the articles or garments concerned. Preferably the labels or tabs are applied to the articles in such manner that a small part of the tab does not adhere to the article and forms a portion which can be gripped by the fingers to peel the tab off the article or the garment when required.

Alternatively if desired the tabs may be woven as comparatively narrow ribbons or strips and in this case they may include marginal portions without thermoplastic yarns to provide the non-adherent portion for peeling the tabs from the article to which it is fixed.

Several forms of fabric according to the present invention are shown by way of example on the accompanying drawings, Figs. 1 to 6 of said drawings being enlarged "theoretical" views of pieces of fabric showing the arrangement of the yarns on a somewhat opened out scale. Said drawings are not intended however to show the finished appearance of the fabric nor do they show the way in which the thermoplastic yarns are at least partially covered by the non-thermoplastic yarns at certain points as hereinafter explained. Further these figures show the fabric as seen from the face of the fabric having the minimum amount of thermoplastic yarn, i. e. the face which is intended to take a printed-on marking.

The woven fabric shown on Figs. 1 and 2 comprises non-thermoplastic yarns 1 extending in one direction and other non-thermoplastic yarns 2 extending in the opposite direction. Thermoplastic yarns 3 run parallel to the yarns 1, there being for example and as shown, two non-thermoplastic yarns 1 between adjacent thermoplastic yarns 3. On grounds of convenience in production it may be assumed that the yarns 1 and 3 comprise the warp while the yarns 2 comprise the weft. The yarns 1 and 2 may consist of cotton or viscose and the yarns 3 may consist of cellulose acetate. The fabric as a whole is of a closely and finely woven character so that a label, suitable in size for laundry or like marking, is capable of carrying a legible reference mark which may consist of several numerals optionally with one or more letters.

As will be clearly apparent from the drawing the non-thermoplastic warp and weft yarns 1 and 2 are woven together in the form of a plain weave, each passing alternately above and below the yarns in the opposite direction, so that an inherently coherent fabric is obtained in which the thermoplastic yarns 3 are embodied. The thermoplastic yarns 3 are however shed differently from the non-thermoplastic yarns 1 and in Fig. 1 they cross below two weft yarns 2 then above one weft yarn, then beneath two weft yarns and so on, with the result that a substantially greater amount of the thermoplastic yarn is exposed on the under face of the fabric than on the upper or printing face shown on the drawing thus giving the desirable properties sought for the label fabric.

It will be noticed however that at every point in Fig. 1 (also Figs. 2, 3 and 4) where the thermoplastic yarn 3 is brought to the upper or printing face of the fabric there is a non-thermoplastic yarn extending parallel thereto and on one side thereof. As the non-thermoplastic yarns are in general not of the compact and well defined form shown and as the fabric is in practice more closely woven than is apparent on the accompanying drawings, said thermoplastic yarns are to a substantial extent covered or protected by the non-thermoplastic yarns adjacent thereto with the result that there is in

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fact much less exposure of thermoplastic yarn material on the outer or printing face of the fabric than would be expected from the drawings; whereas conversely there is a substantial degree of exposure on the opposite face which is to be caused to adhere to the article. The fabric is however of a coherent character and even after the thermoplastic yarns have been softened and caused to flow to some extent in the course of application to an article to be marked under heat and pressure, the label can be readily peeled off when required without having an appreciable residue on the article.

The fabric construction shown in Fig. 2 is substantially similar to Fig. 1, but in this case the thermoplastic yarns pass beneath three successive weft yarns 2 then over one weft yarn, then under three weft yarns again and so on, giving a fabric having a still greater amount of thermoplastic yarn exposed on the under face which is to be adhered to a textile article.

Fig. 3 shows the construction of a fabric which is substantially similar to that of Fig. 1 with the exception that three non-thermoplastic yarns 1 are located between each pair of thermoplastic yarns 3. The latter yarns cross successively over one crossing yarn 2 then beneath the next two crossing yarns 2 and so on successively.

It will be seen that in all of Figs. 1 to 3 the thermoplastic yarns cross alternately over one and beneath two or three crossing yarns; said alternating crossing action being the same for every thermoplastic yarn. Fig. 4 shows another arrangement based on Fig. 3 but also applicable to Figs. 1 and 2, in which the crossing of one thermoplastic yarn over a single non-thermoplastic yarn is progressive for successive crossing yarns 2 so far as successive rows of the latter yarns are concerned, giving a diagonal pattern of the exposed thermoplastic yarns on both faces of the fabric.

In every case so far described it will be noted that at each appearance on the face of the fabric shown on the drawings the thermoplastic yarn is flanked on one side by a non-thermoplastic yarn thus ensuring the desirable properties aimed for by the present application.

Allowing for the fact that the adhesion is determined primarily by the amount of thermoplastic yarn material exposed on the face of the fabric which is adhered to the article, it will be seen that the total amount of thermoplastic yarn incorporated in a given area of label fabric may be reduced in comparison with known label fabrics, permitting the amount of thermoplastic material present on the upper or printing face of the fabric according to the invention, to be further reduced correspondingly. The fact that at every point on the printing face where the thermoplastic yarn does appear it is at least partially protected by a non-thermoplastic yarn adjacent thereto, ensures the result that the total amount of thermoplastic material appearing on the outer or printing face can be reduced to a very low value.

In the embodiment so far described the yarns 1 and 2 form a plain weave independently of the yarns 3 but this is not necessarily the case as shown by Figs. 5 and 6. In Fig. 5 successive picks of weft are indicated by the horizontal lines marked *a* to *f* there being a six-row repeat as will be seen from the diagram.

In the weft pick *a* none of the thermoplastic yarns are brought to the surface while in pick *b* alternate yarns are brought to the surface and at each point where they appear they are flanked at each side by weft yarns.

Likewise for weft pick *c* alternate thermoplastic yarns are brought to the surface, again flanked on each appearance by weft yarn. In weft pick *d* none of the thermoplastic yarns are brought to the surface and it will be seen that in both of weft picks *a* and *d* the lay of the warps is in the sequence: 1 down, 1 up, 1 down, 3 up, 1 down etc., while in weft picks *b* and *c* alternate warp threads are brought to the surface. Picks *e* and *f*, each of the character: 3 up, 3 down, bring the same thermoplastic threads to the surface as in rows *b* and *c*

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respectively, but in this case each appearance of the thermoplastic yarns is flanked on each side by one of the non-thermoplastic warp yarns 1 and in practice it has been found that the thermoplastic yarns in these horizontal rows (i. e. *e* and *f*) do not in fact appear on the surface, being virtually covered by the non-thermoplastic yarns on each side.

The following pick *a'* commences the repeat of the pattern as will be readily apparent from the diagram. From this it will be seen that the thermoplastic yarns in weft rows *b*, *b'* . . . and *c*, *c'* . . . are visible on the printing face of the fabric while the rows *e*, *e'* . . . and *f*, *f'* . . . do not substantially show the thermoplastic yarn with the result that comparatively speaking only a very small amount of the thermoplastic yarn is exposed on the printing face of the fabric, with the favourable results outlined above; while on the other hand a satisfactory, strong and compactly woven fabric is produced owing to the fact that the thermoplastic yarns are mechanically woven in the rows *e* and *f* into the fabric although their presence is masked by the adjacent non-thermoplastic warp yarns.

The appearance of the fabric on the reverse side will be readily understood, the thermoplastic yarn being exposed in rows *c*, *c'* . . . *d*, *d'* . . . and *f*, *f'* . . . *a*, *a'* . . . for the one group of thermoplastic yarn and in rows *a*, *a'* . . . *b*, *b'* . . . and *d*, *d'* . . . *e*, *e'* . . . for the alternate warps; these thermoplastic warp yarns may be regarded as floating between the weft picks which bring them to the former face of the fabric.

The appearance of a small section of such fabric as woven is shown on a greatly enlarged scale in Fig. 5 from which the character of the fabric will be readily appreciated, the appearance on the printing face of the fabric in weft rows *b*, *b'* . . . and *c*, *c'* . . . being well indicated while in rows *e*, *e'* . . . and *f*, *f'* . . . it is also seen how the thermoplastic yarn is flanked by the non-thermoplastic yarns and it will be readily understood that in practice the yarns are not well defined rod-like elements as indicated on the drawing but have a rough and fibrous surface and moreover being closely woven they virtually cover the thermoplastic yarns which would otherwise appear in the rows *e*, *e'* . . . and *f*, *f'* . . . Fig. 5 also clearly indicates the comparatively large proportion of the thermoplastic yarns exposed on the reverse or adhesion face of the fabric.

Fig. 6 illustrates an alternative form of fabric in the same manner as Fig. 5 wherein the thermoplastic warp yarns are interspersed with non-thermoplastic yarns but in this case the thermoplastic yarns are brought to the printing surface at alternate picks of weft. Weft picks *a*, *a'* . . . and *b*, *b'* . . . are of the same character as in Fig. 5 but picks *c*, *c'* . . . are the same as *a*, *a'* . . . Weft picks *d*, *d'* are the character: 3 up, 3 down. It will be noted that in alternate warp (vertical) rows where the thermoplastic yarns are brought to the printing surface, the thermoplastic yarns are flanked on each side by non-thermoplastic yarns which thus cover and more or less screen the thermoplastic yarns as in Fig. 5. This fabric thus shows the thermoplastic yarns on the one face in well defined vertical rows whereas, in the fabric of Fig. 5 the thermoplastic yarns appear in well defined horizontal rows.

It will be noted that in Figs. 5 and 6 the screening action of the thermoplastic yarns by the non-thermoplastic yarns is obtained by the fact that the warp yarns may be considered as being in groups of three yarns, each group consisting of a non-thermoplastic yarn on each side of a thermoplastic yarn, and that for at least some of the weft picks alternate groups are shed (as groups) by the weaving loom. In Fig. 5 alternate groups are shed for two successive weft picks, whereas in Fig. 6 there is, for each pattern repeat, only one pick wherein the groups of warp yarns are shed in this manner, so that it is always the same

alternate groups of three yarns which are brought to the face of the fabric.

It is assumed that the fabrics shown in Figs. 1 to 6 are produced on a normal type of loom for example a tappet or dobby loom, the thermoplastic yarn being separately beamed and woven at a looser tension than the non-thermoplastic yarns so that the former yarns are to some extent crimped in the course of weaving. Strips can then be cut from the fabric and suitably reeled.

In general it may be stated that the present invention embraces constructions of fabric wherein two or three non-thermoplastic yarns are disposed between adjacent pairs of thermoplastic yarns, and an arrangement wherein the thermoplastic yarns cross over a single non-thermoplastic yarn and then beneath two or three non-thermoplastic yarns. The thermoplastic yarns 3 and the non-thermoplastic yarns 1 may form the warp while the yarns 2 form the weft or alternatively, the non-thermoplastic yarns 2 may form the warp and the yarns 1 and 3 form the weft.

This application is a continuation-in-part of my co-pending application Serial No. 308,024, filed September 5, 1952, now abandoned.

What I claim is:

1. A closely woven single-ply fabric adaptable for forming laundry identification labels printable on one surface with a printing medium and removably attachable on the opposed surface to other textile materials by heat and pressure comprising a first series of yarns including thermoplastic yarns and non-thermoplastic yarns interposed therebetween and a second series of yarns transverse to said first series and consisting of non-thermoplastic yarns, said yarns being woven in a pattern repeat to form a cohesive fabric which remains cohesive independently of said thermoplastic yarns, said pattern repeat having said thermoplastic yarns on the printing surface crossing above single yarns and then below the succeeding two to three yarns of said second series, and, on said printing surface, at least about 50% of the total thermoplastic yarn sides in side by side relationship with a non-thermoplastic yarn being flanked thereby to protect and screen said thermoplastic yarns.

2. A closely woven single-ply fabric adaptable for forming laundry identification labels printable on one surface with a printing medium and removably attachable on the opposed surfaces to other textile materials by heat and pressure comprising a first series of yarns including thermoplastic yarns and non-thermoplastic yarns interposed therebetween, and a second series of yarns transverse to said first series and consisting of non-thermoplastic yarns, said yarns being woven in a pattern repeat to form a cohesive fabric which remains cohesive independently of said thermoplastic yarns, said pattern repeat having said thermoplastic yarns on the printing surface crossing above single yarns and then below the succeeding two to three yarns of said second series, at least about 50% of the total sides of said thermoplastic yarns appearing on said printing surface being flanked by immediately adjacent and parallel non-thermoplastic yarns to protect and screen said thermoplastic yarns.

3. A fabric as claimed in claim 2 wherein two non-thermoplastic yarns are interposed between succeeding thermoplastic yarns.

4. A fabric as claimed in claim 2 wherein three non-thermoplastic yarns are interposed between succeeding thermoplastic yarns.

5. A fabric as claimed in claim 2 wherein said thermoplastic yarns are cellulose acetate and said non-thermoplastic yarns are cotton.

6. A label for the temporary marking of articles to be laundered or dry cleaned formed from a fabric as claimed in claim 2 and having identification markings applied to said printing surface.

7. A fabric as claimed in claim 2 wherein the number of said non-thermoplastic yarns in said first series is about

two to three times the number of said thermoplastic yarns.

8. A fabric as claimed in claim 2 wherein said thermoplastic yarn sides appearing on said printing surface are about 50 percent flanked.

9. A fabric as claimed in claim 8 wherein the flanking of said thermoplastic yarns on said printing surface occurs simultaneously on both sides of said thermoplastic yarns.

10. A fabric as claimed in claim 9 wherein alternate thermoplastic yarns only are flanked and at every appearance on said printing surface.

11. A fabric as claimed in claim 9 wherein each thermoplastic yarn is flanked only at alternate appearances on said printing surface.

12. A fabric as claimed in claim 8 wherein said flanking of said thermoplastic yarns occurs only on one side at any appearance of said thermoplastic yarns on said printing surface.

13. A fabric as claimed in claim 12 wherein said non-thermoplastic yarns independently of said thermoplastic yarns are woven to form a plain weave pattern of alternately crossing above and below each transverse non-thermoplastic yarn.

14. A fabric as claimed in claim 13 wherein each said thermoplastic yarn is flanked on one side only on the printing surface throughout the extent of said fabric.

15. A fabric as claimed in claim 13 wherein each said thermoplastic yarn is flanked on alternate sides at successive appearances on said printing surface.

16. A fabric as claimed in claim 13 wherein the succeeding thermoplastic yarns cross above and below the same transverse yarns so that the appearances of said thermoplastic yarns on the printing surface are in parallel alignment with said transverse yarns.

17. A fabric as claimed in claim 13 wherein the succeeding thermoplastic yarns cross above and below different transverse non-thermoplastic yarns so that the appearances of said thermoplastic yarns on the printing surface are in diagonal alignment with said transverse yarns.

18. A closely woven single-ply fabric adaptable for forming laundry identification labels printable with a printing medium on one surface and removably attachable on the opposed surface to other textile materials by heat and pressure comprising a first series of yarns including thermoplastic yarns and a pair of non-thermoplastic yarns interposed in each space between succeeding thermoplastic yarns, and a second series of yarns transverse to said first series and consisting of non-thermoplastic yarns, said yarns being woven in a pattern repeat to form a cohesive fabric which remains cohesive independently of said thermoplastic yarns, said pattern repeat having said thermoplastic yarns on the printing surface crossing above the same single yarns and then below the same succeeding two yarns of said second series so that the appearances of said thermoplastic yarns on the printing surface are in parallel alignment with said transverse yarns, said thermoplastic yarns being flanked along 50% of their sides appearing on said printing surface by immediately adjacent and parallel non-thermoplastic yarns to protect and screen said thermoplastic yarns, said flanking on said printing surface occurring only on one side at any appearance of said thermoplastic yarns and on alternate sides at successive appearances along a given thermoplastic yarn.

19. A closely woven single-ply fabric adaptable for forming laundry identification labels printable with a printing medium on one surface and removably attachable on the opposed surface to other textile materials by heat and pressure comprising a first series of yarns including thermoplastic yarns and a pair of non-thermoplastic yarns interposed in each space between succeeding thermoplastic yarns, and a second series of yarns transverse to said first series and consisting of non-thermoplastic yarns, said yarns being woven in a pattern repeat to form a cohesive fabric which remains cohesive inde-

pendently of said thermoplastic yarns, said pattern repeat having said thermoplastic yarns on the printing surface crossing above the same single yarns and then below the same succeeding three yarns of said second series so that the appearances of said thermoplastic yarns on the printing surface are in parallel alignment with said transverse yarns, each said thermoplastic yarn being flanked along one side when appearing on said printed surface by the immediately adjacent and parallel non-thermoplastic yarn on said one side to protect and screen said thermoplastic yarn.

20. A method for temporarily marking articles to be laundered or dry cleaned comprising forming a label from a closely woven single-ply fabric adaptable for forming laundry identification labels printable on one surface with a printing medium and removably attachable on the opposed surface to other textile materials by heat and pressure; said fabric comprising a first series of yarns including thermoplastic yarns and non-thermoplastic yarns interposed therebetween, and a second series of yarns transverse to said first series and consisting of non-thermoplastic yarns, said yarns being woven in a pattern repeat to form a cohesive fabric which remains cohesive independently of said thermoplastic yarns, said pattern repeat having said thermoplastic yarns on the printing surface

crossing above single yarns and then below the succeeding two to three yarns of said second series, at least about 50% of the total sides of said thermoplastic yarns appearing on said printing surface being flanked by immediately adjacent and parallel non-thermoplastic yarns to protect and screen said thermoplastic yarns; applying an identification marking to the printing surface of said label; and pressing the opposed surface of said label onto the article with pressure and heat within the temperature range above 100° C. and below the scorching point of the textile material to which the label is applied.

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U. S. DEPARTMENT OF COMMERCE
PATENT OFFICE

CERTIFICATE OF CORRECTION

Patent No. 2,828,776

Hans Meyer

April 1, 1958

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 6, line 54, for "are the character" read -- are of the character --; column 7, line 46, for "surfaces" read -- surface --.

Signed and sealed this 27th day of May 1958.

(SEAL)

Attest:

KARL H. AXLINE

Attesting Officer

ROBERT C. WATSON
Commissioner of Patents