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PRINTED TEXTILE FOR MAKING ONE-PIECE CUT-OUT APRONS

Filed May 12, 1932
My invention relates generally to the production of print patterns on textile fabric, but more specifically it is designed to improve the construction and reduce the cost of simple, one-piece garments of the apron type. Heretofore it has been considered commercially impossible to produce in one piece a long apron or other garment for adults of the type which fasten around the neck as well as around the waist of the wearer, because the circumference of the largest printing cylinder now in use is only 36 inches, and the standard width of cloth is 36 inches, while such a garment should be considerably more than 36 inches in length. According to the present invention, however, this difficulty is overcome when the exterior outline of the completed dress pattern has an approximately lozenge or diamond shape, by printing the several repetitions thereof on the bias on a web of cloth so that the longitudinal axis, or length dimension of the garment, may be extended to that of the diagonal of a 36 inch square, which, of course, is about 50 inches.

A further object of the invention is to economize in materials by printing the pockets, belt sections and any other desired garnitures in the waste spaces of the main pattern; and also to render the garment more elastic in horizontal and vertical directions as a result of having the warp and woof threads run diagonally to those directions. The best forms of apparatus and method of operation at present known to me for carrying out my invention, and one embodiment of the product thereof, are severally illustrated in the accompanying sheet of drawing in which

Fig. 1 is a diagrammatic, perspective view of a portion of a printing apparatus and of a web of cloth or other fabric being printed thereby, and

Fig. 2 is a diagrammatic view of an apron formed from a section of such printed fabric.

Throughout the drawing like reference characters indicate like parts. 1 represents generally a web of the cloth or other fabric being printed. This is usually 36 inches wide. 2, 2, represent sections thereof, each of a length equal to the width of the web so as to form a series of squares, in each of which the pattern may be repeated. 3 is the printing cylinder or roll on the surface of which a replica of the desired pattern, generally indicated at 12, is engraved or cast, or otherwise so formed and arranged that when the proper ink or dye has been applied to it and the web of fabric 1 is passed between it and the lower, platen cylinder or roll 4, said pattern will be reproduced in each of the sections 2, 2, of the fabric web, in the usual way.

According to my invention, however, such pattern, if of a lozenge shaped exterior outline, is so as above reproduced and laid out on the web of fabric with its longitudinal axis, or medial length line 5 extending at an angle of about 45 degrees to the edges of web 1. Consequently it forms the diagonal of each square section 2, 2, of the cloth, or other fabric being printed. This result is produced by so laying out the pattern on cylinder 3 that the said line 5 extends once around the surface of the cylinder as a helix, the pitch of which is 36 inches, i.e. equal to the circumference of the cylinder.

In addition to the ornamental design printed upon each web section 2, 2, usually in colors, certain portions of the exterior outline of the garment are also lightly printed, as indicated in broken lines at 6, 6, near the side corners, 7, 7, for the upper side portions, and 8 for the neck opening, while the section divisions are similarly outlined at 14, 14.

Patch pocket sections such as indicated at 9 in Fig. 1 are preferably printed within the said outline 8 of the cut-out to be made for leaving an opening for the neck of the wearer, though this might be done on other waste areas.

After the web of fabric 1 has thus been printed with a continuous series of reproductions of these cut-out lines and of this pattern, which latter will embody any desired design and ornamentation, said web is cut into sections 2, 2, along lines 14, 14, to separate successive patterns, and each such section is then further cut out along lines 6, 7, 8 and so forth, to form the cut-out apron shown in
Fig. 2. The cut-out pocket patches are next sewed in place at the desired locations to form the pockets 13, 13, and the strips 10, 10, which have been cut from the upper edges of the garment can have their ends sewed to it to form a belt, the result being the completed apron 11 shown in full lines in Fig. 2.

It is obvious that such a garment can be so produced with the described printing apparatus of standard dimensions, according to my method, without extra cost for new and larger printing cylinders, and with the maximum economy of fabric used. Also the garment produced thereby has certain advantages in that the diagonal direction of the warp and woof threads gives it an extra elasticity in directions around the body of the wearer, as well as vertically, so that it will fit neatly, and not wrinkle in use. Also three garments can be made out of a given length of web of cloth where only two could be obtained by the old method.

Various changes could be made in the details of apparatus, mode of operation, and resulting structure herein described as constituting the preferred embodiment of the invention without departing from the underlying novel features thereof as above explained and as defined in the appended claims.

Having described my invention, I claim:

1. As a new article of manufacture, a square of textile fabric having the figure design ornamentation of the body portion of an apron with attached bib and neck band printed thereon within the border outlines of such a garment, with the medial vertical line of the apron and bib so outlined running diagonally of said square; whereby, when such square of fabric is cut along the borders of said figure ornamentation, an apron with attached bib and neck bands all in one piece will be produced.

2. An article such as defined in claim 1, in which areas of figure design ornamentation of the same general character as that of the apron body are printed on other portions of said square of fabric within the border outlines respectively of suitable pocket patches and waistband forming sections; such figure designs being so disposed with reference to the respective medial lines of said patches and sections that when said printed areas are cut out and sewed to the apron body to form pockets and a waist band, they will conform to one general scheme of figure ornamentation for the entire garment.

3. As a new article of manufacture, a web of textile fabric divided into square areas extending the entire width of said web, each of said squares having the figure design ornamentation of the body portion of an apron with attached bib and neck band printed thereon within the border outlines of such a garment, with the medial vertical line of the apron and bib so outlined running diagonally of said square; whereby, when such square of fabric is cut along the borders of said figure ornamentation an apron with attached bib all in one piece will be produced.

Signed at New York city in the county of New York and State of New York this 4th day of May A.D. 1932.

HUGO GOLDBERGER.