## Constructions for Cotton Work Clothing Fabrics

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There are quite a number of cotton fabrics which have of late years been adapted to the purpose of work clothing. The first cloths which we will consider are those manufactured for the special overall trade, featuring goods that are used more or less for advertising purposes. In the past few years, large companies (especially in the automotive field) have been using colors as an advertising medium, painting trucks,

selling them at cost to its employes, or furnishing them gratis. Others, favoring the more dressy uniform, have adapted the peg top short pants, leggings, coat and military style cap of the same material.

Swatches at Fig. 1. represent one type of fabric made for the colored overall trade. The construction is two up and one down left-hand twill, 28 inches wide, 80 ends and 40 picks per inch, 12s warp, 10s filling,  $6\frac{1}{2}$  ounces per yard.

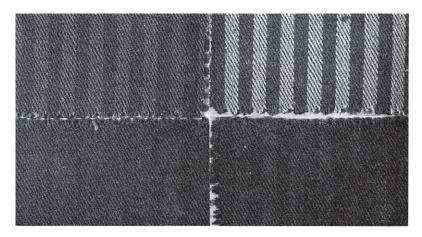


Fig. 1. Fabrics for Colored Overall Trade with Black, Brown, Red, Blue, Yellow and Green Stripes

gasoline stations, etc., with these colors. The tendency of these organizations is to provide their employes with overalls or uniforms, some in the same colors as their advertising, especially when the shades are adaptable for this purpose. In any case the employes are all dressed in the same color of overalls, of which there is a large assortment. These garments are charged to the

These goods do not require finishing, being sold as taken from the loom, with the exception of folding and packing to the customer's requirements. The dyeing is done in yarn form with colors that will give a satisfactory light and washing test.

The fabrics at Fig. 2 also are special overall cloths being made for the employes of cereal manufacturers,

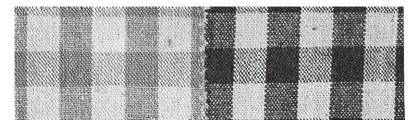


Fig. 2. Overall Cloths for Employes of Food Manufacturers

employe, the transaction saving the workmen quite a little, owing to the company buying the fabric in the market, having the garments made in large volume, and

bakers, etc. The weave is plain and the construction is as follows: 28 inches wide, 58 ends and 40 picks per inch, 10s warp, 8½s filling, 6½ ounces per yard.

These goods have a calendered finish, colors being fast to light and washing, and dyed in yarn form. The ground or white part should be of bleached yarns.



Fig. 3. Uniform Cloths

The next fabrics we will consider are goods made for the uniforms mentioned previously in this article. Swatches of these cloths are shown at Fig. 3 and are of the steep twill or diagonal variety, requiring 11 harnesses. The weave is five up, one down, one up, two the fabric is as follows: 30 inches wide, 101 ends and 42 picks per inch, 2/24s warp, 2/20s filling, 8 ounces per yard.

This fabric is subjected to a light soap bath to remove excess dye and impurities, also to soften the goods which have a tendency to harshness. Colors are fast to light and rain, and are dyed in yarn form.

Observing cuttings at Fig. 4, we find another fabric which is adapted to the uniform trade. It is a Bedford cord weave which is a combination of the three up and one down twill and the plain or cotton weave. The warp is of the 2-ply variety, dyed in the singles two different colors, the two colored yarns being twisted together. The filling is solid color and is generally the same shade as the darker single in the warp. The construction of the fabric is as follows: 28 inches wide, 107 ends and 52 picks per inch, 2/32s warp, 10s filling, 7 ounces per yard.

Colors must be fast to light and rain. No finish is required; goods are simply folded and put up to the customer's specifications. This cloth is adapted to a variety of needs, being one of the fabrics that stand up very well under harsh treatment.

The next fabric is a napped suiting which is popular both here and abroad. Fig. 5 shows swatches of these goods. Upon examination, these fabrics show a raised or



Fig. 4. Bedford Cord Uniform Cloths



Fig. 5. Stock Dyed Napped Suiting

down, one up, one down. The warp is a two-ply yarn, being dyed in the singles two different tones, such as brown and tan, black and slate, afterwards twisting the two colors together, giving the fabric a two-toned or speckled appearance. The filling is the same shade as the darker single in the warp. The construction of

napped condition on one side, this being the face of the goods. These cloths have a soft feel (or handle) and one not initiated would readily accept them for woolen goods.

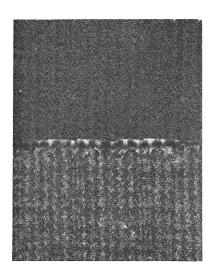
The weave is the regular three up and one down left twill. The construction is as follows: 28 inches wide

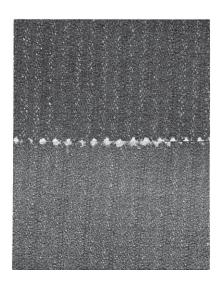
finished, 78 ends and 40 picks per inch, 8½s warp, 7s filling, 91/4 ounces per yard. The colors should be fast to light and rain and raw stock dyed, which will give a solid color (all the fibers being dyed). This will prevent any fluctuation in color during the napping process, yarn dyed warp and filling not being adapted to the work, owing to the dye not penetrating (in some instances) all through the yarn. These goods are made in a large variety of patterns, mixtures playing a very important part in their make-up, the mixing taking place either in the dyed stock, before processing, or during the picking operation. The napping of these goods constitutes the major part of the finishing process; the goods being treated with diastafor to remove size, etc.; then napped to the required width; then folded or rolled on boards to customer's specifications.

regards design, color and finish, owing to the fact that cotton lacks the luster characteristic of worsted. Samples at Fig. 7 show two colorings of a representative fabric used for this trade, the warp being made of black and a two-toned twist to form the pattern. The filling is black. The weave is a combination of the two up and one down twill and plain weave. The construction of this fabric is as follows: 28 inches wide, 58 ends and 42 picks per inch, 2/20s warp and filling, 6 ounces per yard.

Colors must be fast to light and rain. The finish should be one that will eliminate, as much as possible, the harsh feel which is characteristic of these goods.

The last fabric considered is shown by the two cuttings at Fig. 8, one being a check, the other a stripe. The checked fabric is a suiting, while the striped is more adapted to the making of trouser's material. The





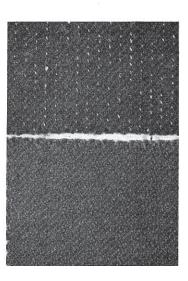


Fig. 6. Stock Dyed Twill for Work Suits

Fig. 7. Imitation Worsted Trousering Fig. 8. "Frenchback" Fabric with Extra Warp

Observing samples at Fig. 6, we find a fabric which is very popular for work suits. Being fairly reasonable (as regards price) it is quite a factor in the work clothing field, being worn by men under very diversified working conditions. The weave is a two up and two down left-hand twill. This is another stock dyed proposition, being fast to light and rain. The construction of the fabric is as follows: 28 inches wide, 78 ends and 40 picks per inch,  $8\frac{1}{2}$ s warp, 8s filling, 8.85 ounces per yard.

These goods are subjected to a diastafor bath to remove size, etc., then are given a light soaping to soften the goods, which have a tendency to harshness.

Another branch of the work clothing field is the workmen's trousers trade. These goods call for a large assortment of patterns, generally made to imitate worsteds. This branch of the business calls for a deal of skill as characteristic of these fabrics is explained by their trade name "Frenchback", which term is used for a cloth that has a fine texture for the face and a weight which corresponds with goods using heavier yarns. Weight is obtained in these fabrics by utilizing an extra warp system for the back of the goods, and binding the extra warp system to the cloth in such a way that it is not visible on the face. The weave utilized in the two cuttings is as follows: two up and two down Cassimere twill for the face weave and the 8-end satin for the back. The back is solid black in the striped or trouser's goods, while the checked suiting has a striped back. The construction of these cloths is as follows: 30 inches wide, 103 ends and 50 picks per inch, 2/26s and 2/20s warp, 2/26s filling, 8½ ounces per yard. Colors are to be fast to light and rain: Finish to be as soft as possible.