

Posselt's Textile Journal

Vol. XXIV.

May, 1919.

No. 5

Fancy Corkscrew Effects.

There is always a limited demand for styles elaborate in design and marked in coloring, to meet the taste of persons who like something striking and out of the common line, also to impart variety and relieve the monotony of the simple designs and quiet colorings which form the bulk of fabrics for men's wear.



Fig. 1

Corkscrew weaves are largely used to produce these elaborate effects in design and coloring, because the whole scheme of coloring depends upon the warping, the filling which is often all of one color, being hidden in the centre. The fabric can be woven without the long box chains and the expense of extra shuttles incident to fancy colored effects in simple twills.



Fig. 2

The fabric sketched in Fig. 1 consists of angled twills, contrasted with shaded twills. The weave is shown in Fig. 2. The warp is one thread light (marked in round dots) and one thread dark (marked in full squares) alternately; the filling is all light shades. In the angled position, where the twill is



Fig. 3

reversed, two threads work together, thus changing the coloring on to the opposite twill, and causing the colors to cut each other.

Threads 3 and 5, also 13 and 15, are suitable places for the insertion of fancy colored threads. Six weaves

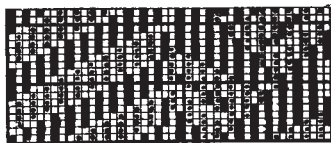


Fig. 4

are employed to produce the shaded effect, gradually changing the length of warp float from two light and seven dark, to seven light and two dark.

The fabric sketched is a 17oz. cloth, and contains 96 ends per inch of 2/28's worsted warp, and 90 picks per inch of 20's single filling. About three-fifths of the fabric is warp. True corkscrews have a warp surface on both sides, therefore more warp than filling is required to make them satisfactory. When they are

set in this manner, with nearly the same number of picks as threads, and the warp thicker than the filling, to give the required extra weight of warp, the twills do not look so smooth, each thread appearing separate and distinct. The whole result is not so clear and smart as if finer yarns and more threads per inch had been used for the warp.

The fabric sketched in Fig. 3 contains a width of nine-harness corkscrew, contrasted with a fancy stripe. It is a 15oz. cloth, with 127 threads and 72 picks per inch, all 2/40's worsted. The plan is given in Fig. 4, the first eighteen threads being repeated nine times:—

<i>Warping.</i>			
165	}	1 dark.	<i>Picking.</i> All dark.
		1 light.	
23	}	1 dark.	
		1 very light.	

The warp is considerably smaller than in Fig. 1, and there is nearly twice as much warp as filling, this difference in the setting causing the twills to appear smoother and more compact. The light warp in the fancy stripe should be rather lighter in shade than that in the body of the pattern, so that the figures will appear more prominently on the surface. A double line of twist threads in the centre of the twill portion, as indicated by *dots* in the sketch, will help to impart a little more variety.

PRINCIPAL PROCESSES OF SILK MANUFACTURING.

THROWN SILKS.

The term throwing as used in the silk industry includes the series of operations by which reeled or raw silk is made into yarn. It is essentially a spinning or twisting process including various doubling processes, by which several raw silk threads are combined. In other textile spinning the process involves a drawing or attenuating of the roving and then twisting it into yarns. In reeled raw silk, however, the threads or fibres have already been formed by the silkworm and no drawing is possible.

The chief products of throwing mills are organzine and tram. Organzine is silk especially twisted for use as warp. Two or more raw silk threads which have already been twisted in the single are doubled and then twisted the reverse way. Tram is often made of poorer qualities of silk and is used for filling. Single untwisted threads are loosely twisted together and unlike organzine require only one spinning.

The principal processes of silk manufacturing with reference to fatigue and health hazards of operatives may be briefly described as follows:

WINDING: After soaking the raw silk to soften the gum which adheres to it, and drying it — processes performed by unskilled labor and almost exclusively by men — the skeins are placed on hexagonal power reels and wound on spools or bobbins attached to rapidly revolving spindles. The work of winding consists of putting the skeins on swifts, as they are called, joining the ends of broken fibres, removing the bob-