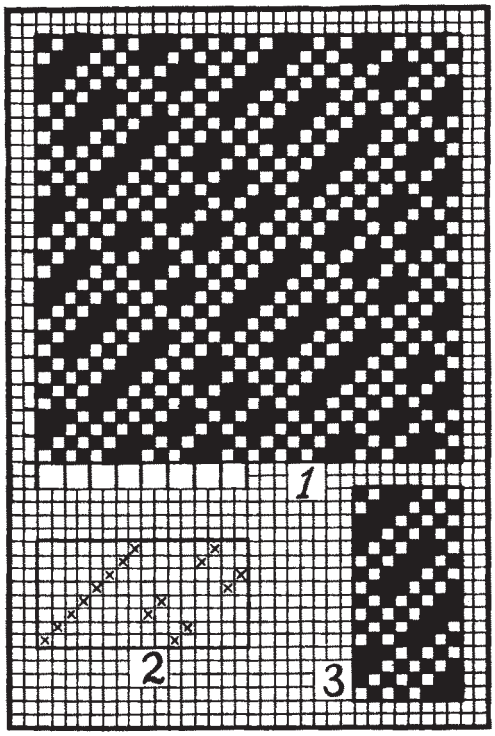
Novelty in Cotton Crepe.

In Fig. 1, the weave for a novelty from abroad in this line of fabrics is given, being intended for summer dresses and blouses. The cloth is woven in the grey, to be dyed in any fashionable color. This fabric structure presents a novelty brought out by the weave as well as the yarn used in the construction of the fabric.

The repeat of the weave calls for 16 harness and 16 picks, and as shown in drawing-in-draft, Fig. 2, can be woven on 8 harness. Fig. 3, is the harness chain, 8 by 16.



The unique appearance of the cloth, as mentioned before, depends upon the yarn used in its construction. A very hard twisted yarn is to be used for both the warp and the filling, using in either instance 2 ends of right hand twist to alternate with 2 ends left hand twist, as indicated by dashes below the weave for the warp, and at the left hand side of the weave for the filling. Draw your warp 2 threads in a dent, and put the same on 2 beams in order that the different twisted threads will not be mixed by the weaver. Set the fabric sufficiently wide in the reed to permit considerable shrinkage in both directions of the fabric, in its length as well as in its width, in order to obtain with the weave the novel crepè effect in the fabric as produced by means of the floating of the threads. Besides being used in single color piece dyed fabrics, the weave and structure may be used with advantage, in combination with other weaves, in yarn dyed fabrics.

Fireproofing Fancy Fabrics.

This refers to a late English patented process in which fabrics are woven with a filling which has been rendered uninflammable by treatment with metallic salts or otherwise, and with unproofed warp-threads, the fabrics being then raised to form a nap. As the nap is produced chiefly from the filling, the resulting fabric is practically non-flaring and uninflammable, while in weaving fancy pattern fabrics, the colors of the dyed unproofed warp-threads are not injured.

WHITE AND BLACK ON TUSSAH SILK.

The increasing use of artificial silk fibres in association with others in various classes of fabrics and the extremely popular effects it is possible to produce in that way, especially as regards quality of white and fineness of black, has tended lately to force the dyers of natural silk to improve their results.

Perhaps the change in this respect bears more on the wild silk varieties than on the cultivated qualities, since they are relatively much cheaper than the latter. The comparative cheapness of the wild silks brings them of course more into demand for the production of a large class of materials, in selfs and in mixture goods, but it is not so easy to produce on them as pure a white or as good a black as can be obtained on cultivated silks.

Whereas the permanganate-bisulphite method of bleaching tussah silk serves as a means of bottoming for the dyeing of many pale shades, and is a fairly cheap process, it does not give an effect cheap enough for a true white. For the latter the only course open consists in the use of sodium peroxide or hydrogen peroxide. To attain the desired effect the material must be treated with a mixture of equal volumes of the latter (12 vols. per cent) and of water. A quantity of silicate of soda must be added in amount just sufficient to render the solution slightly alkaline. Then add 10 grms. of Marseilles soap per litre and raise the temperature of the liquor up to 50 deg. *C*. The material should be previously boiled out for one hour in a solution of 4 to 5 grms. of soda per litre of water before it is entered.

At the end of one hour's manipulation the liquor is raised to boiling point and treatment continued for 8 to 10 hours. After the first half hour the tussah silk is removed, wrung out, and returned, again at the end of two hours, and again later on.

The alkalinity of the liquor must be tested, and if needed assisted to the proper extent by an addition of a small quantity of silicate of soda. Afterwards the silk is washed, treated at the boil in a 10 per cent solution of Marseilles soap, blued slightly with a trace of basic violet in a cold solution of soap, hung overnight in the sulphur chamber, washed well, and finally brightened. This course of procedure requires much time and is costly, but so far there is no alternative method known for attaining a similar result in the clearness and comparative purity of the white.

Bleaching merely for the subsequent dyeing of tussah silk is done with permanganate by the following method: The tussah silk is boiled off according to the customary manner with a solution of soda and is then worked for twenty minutes in a cold solution of permanganate of potash, 300 grms. to 100 litres of water. It is then allowed to lie off for a short time, wrung out lightly, and worked in a fresh cold liquor of 100 litres water, 4 bisulphite of soda 35 deg. *B*., and 400 c. cs. concentrated sulphuric acid. The silk should remain in the last named liquor for about three quarters of an hour, and afterwards be washed and soured. It is not advisable to employ a stronger solution of permanganate than that named, since this