

**MENGYLON TINCTORIUM.**—This tree is known as *Gorakha* to the Singhalese, and as *Tassa* to the Tamils. It is found growing over the whole of Ceylon, and is a perfect substitute for sumac, to which it is superior as a dyeing and tanning material. The leaves should be gathered in the nuts, when they will turn yellow, and emit the odour of sumac. The young twigs may be gathered, and ground up with the leaves.

**SAYA FAYA** (*Oldenlandia Umbellata*)—This variety of Indian Madder grows wild on the western coast of Ceylon, especially in the Akorapattu, where it is gathered, dried, and exported to India. It yields a dull but lasting red colour, which local dyers know how to improve by the addition of about 5 per cent. of Cassia leaves. The price realized on the spot is 80s. per cwt.—a rate far beyond its worth in the home market, so that the article never finds its way to England.

**BLEACHING TUSSAH SILK.**—In our issue of the 9th November we gave, on page 518, a recipe for bleaching Tussah silk. This was from M. Horace Köchlin, and it was stated by him that it might be used successfully. Two or three of our subscribers have written to say that they have tried the process without any success, but we ourselves cannot say that it is good, bad, or indifferent. Considering, however, that such a high authority as Köchlin recommended it, we considered it worth noting in our journal, but it should be understood that we cannot guarantee that every process in bleaching or dyeing that we give, and which may possibly be taken from other sources, is workable.—Ed. T.M.

**DYEING WOOLLEN GOODS.**—For dyeing woollen goods with ceruline, galleine, or alizarine blue, wooden vessels, not copper ones, should be used. If the goods are mordanted in the usual manner with bichromate of potassium and tartar, they are to be rinsed lightly and entered cold into the dyebath, that is at the ordinary temperature; the bath is then heated to boiling during one and a quarter hours, and kept boiling for from two to three hours. By neglecting the gradual rise, etc., of the temperature, the colours will not be sufficiently fixed if the duration of the boiling be shortened. If the water used be hard, it must be rectified by adding acetic acid in the proportion of one part acid to 1,000 of water.

## Designing.

### NEW DESIGNS.

#### COTTON DRESS FABRICS.

*Design 16* is for this class of material. Last week we gave an example of a double plain cotton and mohair dress fabric, and here again the same principle has been used, yet the effect produced is very different. The warp should be as follows:—

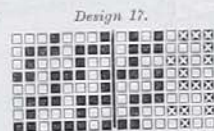
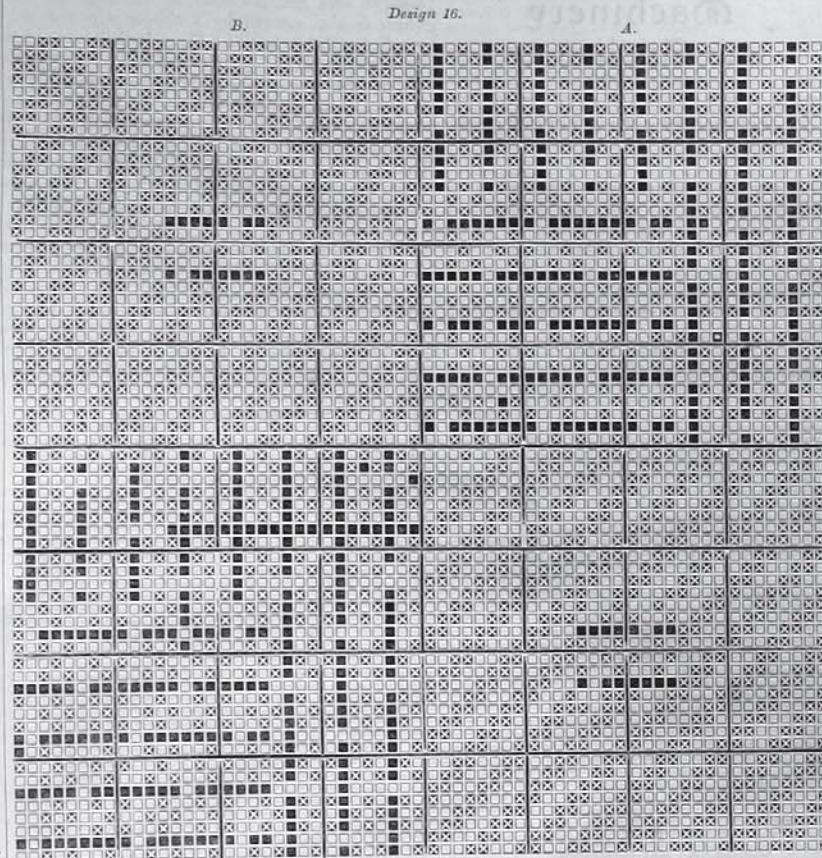
**Warp.**  
1 thread tan,  
1 thread red and white twist,  
2 threads tan.

**Weft.**  
Same as warp.

If the sections in solid type be carefully examined it will be found that in one corner of each the red and white threads are always on the surface, while throughout the other part of each section these threads run at the back. In sections *A* the red and white threads interweave in plain order with their picks, at the same time that the tan threads interweave in plain order with the tan picks; while in sections *B* the tan threads along with the red and white threads form the 4 end twill ground. An endless variety of patterns developed on the same principle are suggested by this design, for example, a very different form might be given to the figure formed by the red and white threads and picks, while the small figures in the centre of the 4 end twill ground might be arranged in saeten order. Then again, the ground itself might be figured with weave, or with flushes of warp and weft, and thus a distinctly different pattern formed.

#### COATINGS AND TROUSERINGS.

The double plain weave is an exceedingly useful weave to use either for woollens or worsteds. *Design 17* shows the simplest method of using this system.



**Warp.**  
1 thread 20 sk. dark blue,  
1 " 40 sk. green, olive and brown twist,  
12's reed 4's

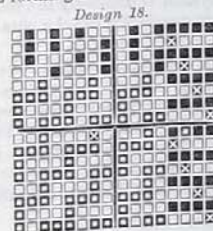
**Weft.**  
Same as warp  
48 picks per inch.

With this order of warping we shall have in section *A* 6 threads of dark blue, and in section *B*, 2 threads of olive and brown twist on the face of the fabric. The following worsted warp may also be used with the same plan:—

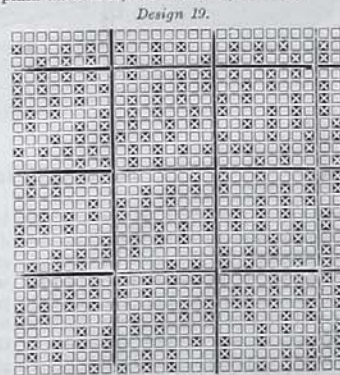
**Warp.**  
1 thread 2/40's dark blue,  
1 " 2/40's dark blue worsted,  
18's reed 4's

**Weft.**  
Same as warp,  
68 picks per inch.

A good effect might be obtained by bringing the silk threads up for say 12 threads and picks, and then the plain threads up for 12 threads and picks, thus forming a check.



*Design 18* is the double plain used in conjunction with weft and warp ribs, thus the inside portion could be formed of worsted twisted with silk, and the outside or ribbed sections of plain dark blue, brown, olive, or black.



*Design 19* is a check formed by two corkscrew effects. The following is a suitable set:—

**Warp.**  
All 2/44's worsted,  
16's reed 6's

**Weft.**  
All 23's worsted,  
108 picks per inch.

This is a method of figuring extensively utilized by *Les Tissus*, and certainly it is well worthy of better attention than it obtains at present.

An inquiry amongst the leading receivers of cotton in New York has resulted in the opinion that the attempt to substitute cotton cloth for jute bagging as a covering for the raw cotton bales is a failure.