

PINK.

Fine shades are produced with rhodamine and alum on cotton, mordanted with tannic acid and an antimony salt. Safranine, in an alum bath, and rose bengale or phloxine, in borax bath, also give nice shades. A fast pink is dyed with K. Schler's fast pink.

BRIGHT RED.

is dyed with brilliant congo in a potash-soda bath. A very fiery shade is obtained with crocein scarlet in an alum bath, but the dye is not fixed. Magenta dyed on the tannic acid mordant yields a blue shade of red.

BORDEAUX.

The cloth is dyed with benzopurpurin, brilliant congo, or diamine red, and for a full red tone topped with safranine or magenta, or with diamine blue, violet black, or benzoxazin for a darker shade. Scarcely so fast are the shades obtained by dyeing with magenta and Bismarck brown, or chrysoidine on cotton mordanted with tannic acid and antimony, and saddening with neutral blue logwood or methyl violet.

DARK BORDEAUX.

is obtained by grounding either with Cachou de Laval, cutch and bichrome, sumac and iron, or logwood and an alumina or tin mordant, rinsing and dyeing either with brilliant congo and diamine blue, followed by a topping with magenta; or with magenta, Bismarck brown, neutral blue, or logwood, after mordanting with tannic acid; if some form of that body has not been already applied; of these dye-stuffs those of the substantive class alone yield shades fast to rubbing.

BUFF.

is dyed with Brahma orange or with chrysamine ff. in a soda soap bath.

ORANGE.

is obtained with Brahma orange, Toluylene orange or Mikado orange in an alkaline bath.

PALE BROWN.

A ground colour is dyed with Cachou de Laval or catechu, the cloth being further dyed with a mixture of brown and blue dyestuffs of the substantive class, such as cotton brown A. and benzoxazin 3G. The shade is considerably brightened by subsequently dyeing with Bismarck brown or auramine.

are obtained in a similar manner on a darker ground. The darker the shade, the greater the necessity for topping with Bismarck brown.

YELLOW.

A delicate shade is obtained with auramine, in an alum bath. Chrysamine in a sodium phosphate bath, yields a chrome yellow.

OLIVE.

The cloth is grounded with sumac and bark, fixed with copperas and alum, and dyed with auramine, Bismarck brown, and methylene blue or a basic green.

GREEN.

is dyed (in an alum bath) with a basic green dyestuff on cotton mordanted with tannic acid, shading being effected with methylene blue or auramine.

DARK GREENS.

are dyed in the same way as the light greens, after bottoming the cloth with sumac and bark, fixed with copperas and alum.

PALE BLUE.

is dyed with methylene blue in an alum bath.

DARKER BLUES.

are obtained with Victoria blue, or a mixture of methylene blue and violet, on cloth, mordanted with tannic acid, or previously dyed in an alkaline bath with benzoxazin G.

NAVY BLUE.

is produced by dyeing with benzo black-blue, or violet black, in alkaline bath, and topping with methylene blue or violet.

MAUVE.

A pure methyl violet should be used. The finest shade is prepared with oleine (in the proportion of 1 to 20), or resin soap, drying, fixing with, and then dyeing gall-nuts, or tannic acid can be used to mordant only for darker shades. Dark shades are dyed on a tannin-tin mordant, saddened with logwood or neutral violet.

PRUNE.

is obtained by bottoming with Cachou de Laval, then mordanting with tannic acid or sumac, fixing with an antimony salt, and dyeing with a basic violet. A very fast prune is dyed with violet, on cloth previously dyed with violet black. All the dyeing operations are conducted in the dye jigger.

The Actien Gesellschaft für Anilin Fabrikation, in Berlin, acquired, as is well known, several years ago the business and works of the Bräuner Colour Works in Frankfurt-on-the-Main. We are now informed that the same enterprising Berlin firm has still further increased its sphere of action by taking over the business, as aniline dye manufacturer, of Georg Carl Zimmer, in Mannheim, whose works will henceforth be managed by the Berlin Company, which has also acquired the whole of the patent rights of the Mannheim firm, including their valuable licenses for the methylene-blue patents, &c. By this addition the Actien Gesellschaft für Anilin Fabrikation has opened a new and yet larger field for its activity. But the latest and most important enterprise of this intelligently managed company has been the purchase, as we are informed from a reliable source, of the business and works of Messrs. I. Levinstein & Co., of 21, Minshull-street, and of Crumpsall Vale, Manchester, one of the largest and most modern and best equipped English coal tar colour works. These works have been acquired jointly by the Farbmanfabriken vorm. Friedrich Bayer & Co., of Elberfeld, and Mr. Ivan Levinstein, the chairman of the Chemical and Allied Trades Section of the Manchester Chamber of Commerce, who has hitherto so successfully managed the business of the late firm of I. Levinstein and Co. The Crumpsall Vale Chemical Works, and also the business at 21, Minshull-street, will be carried on (from the beginning of this year) under the style of I. Levinstein and Co., Limited. Mr. Ivan Levinstein will be the managing director of the new company, whose success may be regarded as almost a certainty. Plans have already been prepared for a considerable enlargement and extension of the Crumpsall Vale Works. This news, needless to say, is of considerable importance to the trade in this country, for not only will the position of two German colour works be materially strengthened, especially so in regard to their various valuable English patents, but there can be no doubt that the amalgamation of two of the most important German colour works with the already extensive Manchester establishment, must exert a significant influence upon the British coal tar colour industry and the allied chemical industries of this country.—*Dyer and Calico Printer.*

Designing.

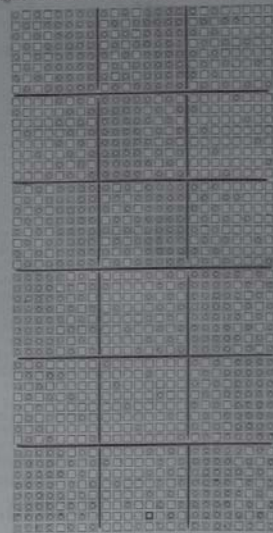
NEW DESIGNS.

DRESS FABRICS.

Figure 4 is furnished for this class of work. It consists essentially of two very conventional leaves opposing each other, and each leaf showing a shadow. A stiff design like this requires great care in the application, both with regard to colour and the material used. Mixture yarns possessing a rough surface will generally answer best, and will tend to take away the stiffness. At the first glance it is very evident that if the figure was woven as here given, the result would not be all that could be desired. We would suggest the application of the sateen distribution of figures, and, of course, the flukes should be cut short by, say, the five or eight-end sateen, if the design is applied as here given, viz. with a plain ground, and warp and weft figures. Another method of developing this design would be to leave the ground plain, but develop the figures in double plain, when, if the warp was one thread black, one thread white, and weft the same, the ground would be developed in a hairline stripe, and the figures respectively in black and white. This class of material is likely to be worn to a considerable extent for some time.

Another way would be to figure by extra materials. Thus: If the leaf was modified and more detail developed, a scroll effect might be introduced for the ground, developed in neutral orange and green; then the leaf might be developed in solid green, and the shadows in dark blue. The tone of the colours we, of

course, cannot express correctly here, so the designer must use his own judgment.



Design 32.

Designs 29, 30, 31, 32, may all be applied to dress fabrics in either cotton, silk, or worsted, using yarns of medium counts, but no very characteristic effect will be produced with, perhaps, the exception of 32, though the effects will be neat.

WORSTED COATINGS AND TROUSERINGS.

Design 33 is a very useful make for a twilled coating, allowing the formation of a good substantial cloth, even if fine yarns are used. Close setting and wetting are necessary. The design repeats on 32 threads and 64 picks.

Designs 29, 30, 31, are useful designs for either coatings or trouserings made to the following particulars:—

Warp.
2 30's worsted.
14's reed 4's.

Weft.
All 15's worsted,
56 picks per inch.

These designs, though producing decided effects, do not exclude the use of colour introduced in either check or stripe form, and since there seems to be a tendency to introduce colour more frequently into cloths along with elaborate weave effect, these may be taken as simple types of this method. The following system of colouring will answer well for design 29:—

Warp.
8 black worsted twisted with white silk,
8 black worsted.
4 dark grey worsted.
8 the black worsted.
4 " dark grey worsted.
16 " black worsted.
4 " dark grey worsted.
8 " black worsted.
4 " dark grey worsted.
8 " black worsted.

Designs 30 and 31 should be used with neutral colours in either stripe or check form, since too loud colouring will kill the weave effect. The following colourings will give effective results:—

8 the dark brown.	16 the brown mixture.	4 the sage brown.
7 drab.	8 the black worsted and white silk twist.	2 the sage brown and blue silk twist.
1 dark brown and light yellow silk twist.		4 the sage brown.
		10 the dark brown.

Patterns 2 and 3 do not occupy the same number of threads as the plans, so the resultant pattern will be considerably enlarged.

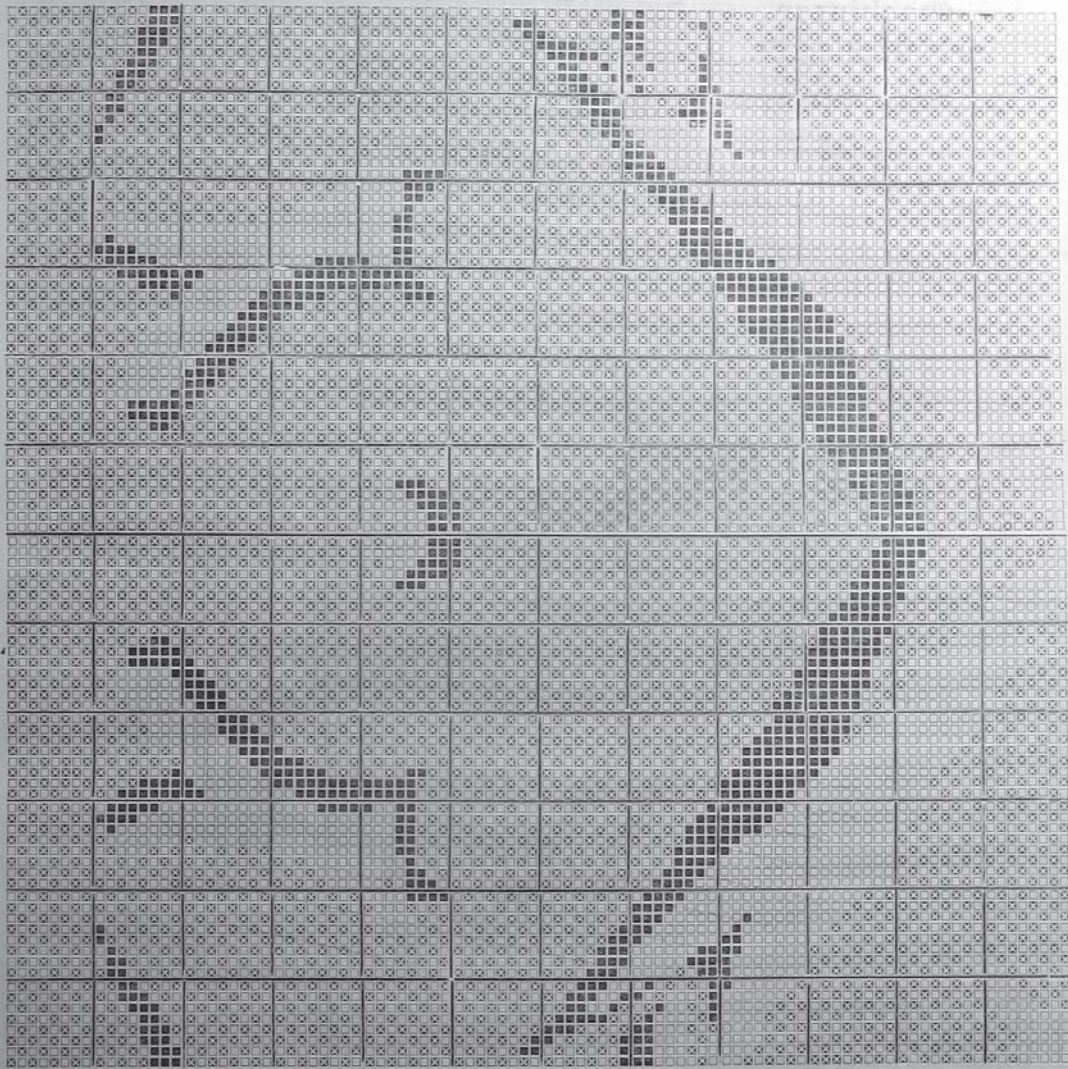
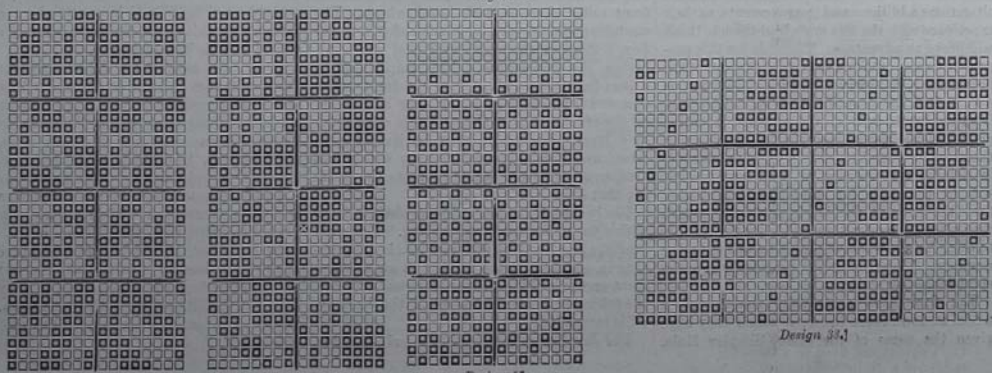


Figure 4.



Design 29.

Design 30.

Design 31

Design 32.]