

former may be mentioned the new mill built for Messrs. Eckersley, of Wigan, who entrusted Mr. Brooks with the order for furnishing same with 60,000 ring spindles, and the whole of the required preparatory machinery in drawing, slubbing, intermediate and roving frames. Since then the firm have filled many important contracts, and are engaged upon numerous others. Amongst these may be mentioned the Burns Mill, Heywood, consisting of 35,000 ring spindles, and all the carding, drawing, slubbing, and roving frames constituting the preparation from the point mentioned; and again, the Stockport Ring Mill under notice. These facts sufficiently demonstrate the accuracy of the statement made above regarding the extension of ring spinning, and they also prove at the same time that a large proportion of the extension is being provided for by the firm of Mr. Samuel Brooks. The firm are also furnishing the Castle Spinning Co., Stalybridge, with the drawing, slubbing, intermediate and roving machines for their new mill, containing 100,000 mule spindles.

The firm of Samuel Brooks, whose work needs no commendation, being known all over the world in every respect that can be named, we have pleasure in announcing, has just now, with the advent of the New Year, changed its style and title to that of Brooks and Doxey. It may not be amiss in this connection and in view of this announcement to add, for the benefit of our more distant readers, the information that Mr. Richard Alexander Doxey, who has acceded to the firm, is a son-in-law of the late Mr. Samuel Brooks, and for many years was his chief assistant. Naturally, therefore, the principal conduct of the extensive business, on the comparatively early death of Mr. Brooks, fell into his hands. And it is not too much to say that it has ever since been conducted with a continuance of the extraordinary energy that was so characteristic of the management of the founder. Mr. S. H. Brooks, son of Mr. S. Brooks, and Mr. Doxey, will constitute the firm. We are sure all our readers will join with us in the best wishes for its long life and prosperity.

Reviews of Books.

DIARY AND BUYERS' GUIDE, 1892. Manchester: Messrs. H. Bannerman and Sons, York-street, Manufacturers and Merchants.

This charming little annual, the merits of which no one would gather from its title, is again before us. Its appearance must be anticipated with pleasure by all the customers of the firm who take the slightest interest beyond a commercial one in the articles in which they deal. Each issue in succession has contained a delightfully-written description, copiously illustrated, of one phase or another of the textile industries. Those already treated will be indicated by the titles of the papers. They are: "From Cotton to Cloth;" "Calico Printing;" "From Fleece to Flannel;" "From Flax to Linen;" "How a Lace Curtain is Made;" and now we have another, "Concerning Velvet." As in all preceding instances, the subject is handled in the clearest manner, so as to render every process easily comprehensible to the dullest intellect that could feel sufficient interest in the subject to take the book in hand. Every machine used in the processes, from the spinning by the mule to the cutting of velvet by machinery, is beautifully illustrated, and many of the hand processes as well. With nearly all the machines the operatives are shown at work, the illustrations being taken from photographs of actual interiors during working hours. The text for which the illustrations have been made descends upon the origin of the name of velvet, allocates the fabric to its proper place, and puts it into the class of "Manchester cottons"—a grouping which is strictly accurate, and the latter a term of ancient association

with this city. Much curious and interesting information is brought together, which though well known to experts in the history of the textile industries, will not be any the less novel to those for whom this work is intended. It is when Mr. Mortimer approaches the description of the processes that he relies entirely upon himself. Here we would compliment him upon the accuracy with which he has apprehended every point in the complex procedure of the manufacture and the intricate machinery, and the delightful simplicity with which he lays each before the reader. There is no misapprehension, not even a slip, so far as a rapid perusal has revealed to us. The merits of these papers lift them indeed far beyond the laboured efforts of the ordinary descriptive writer, and constitute them prose poems of the textile trades. They are idylls of industry, and as such should be cherished by everybody interested in their subjects. We shall be sorry when Mr. Mortimer has got through the list of the subjects in the textile trades that he deems suitable for his readers.

Designing.

NEW DESIGNS.

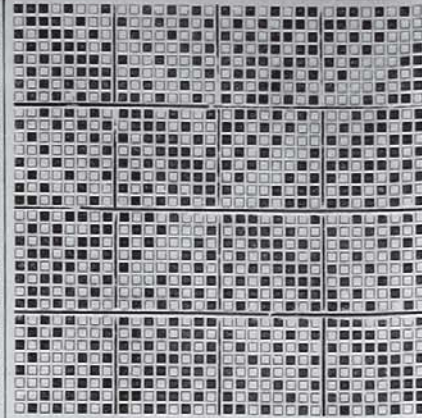
SUGGESTIVE DESIGNS FOR SPRING PATTERNS.

The new year will open out extreme novelties in many-coloured diagonal cross stripes, large squares in splendid colour combinations, like dark heliotrope, ground with transverse stripes in corn-flour blue, pearl, or blue-grey and rose, stone-grey, ash-grey, bronze and plum, and clan-tartan effects. Cotton canvas in neutral shades, as well as those in decided dark colours, form very serviceable dress goods, for daily wear; white and printed muslins, zephyrs, and fancy prints will become popular in the late spring. Skirting cloth patterns in dark blue canvas are being prepared. The old-fashioned muslin will be introduced as a new fabric for composing entire costumes in white or cream, forming a delicate back-ground for coloured floral sprays, which will be designed and woven in the muslin or cambric. These transparent fabrics will be made up into fresh gowns for wearing on almost any occasion, the under attire being of woollen material. Clean white or cream muslin will be the leading tissues for evening gowns, with girdles of very wide silk ribbon fastened with a bow, the ends reaching to the extreme edge of the skirt. The brightest colours are so far confined to indoor uses; plain dark colours, as navy blue, bottle green, and seal brown, with every description of neutral tints, are worn for walking costumes.

Design A will give a good fabric, made with 20's cotton warp and weft, 40 dents per inch, two in a dent, 80 picks per inch of weft, woven grey, and well bleached (a bleach with a decided pale blue cast); if coloured in the warp, very light tints or good contrasts of light upon dark grounds. A pretty arrangement would be (1st) Venus-blue ground warp, light cinnamon weft; (2nd) vivid spring-green warp; Velasquez (a new name for dark salmon pink) as weft; (3) light magenta red warp; light greenish-blue weft; (4) dark lilac warp, white weft.

These combinations, out of many that might be mentioned, will afford a sufficient idea of how beautiful effects may be created if the colours are bright and materials good.

Design B: Same particulars of quantity in warp and weft as *A*. It will be seen by the draft being on two sets of heald shafts that the squares may be extended by repeated draws on each separate set, and increasing the pegging plan. There are four distinct weaves, and all may be woven grey, bleached, and piece-dyed; or each square in warp and weft may be opposing colours. As the design stands, 16 ends may be blue, 16 ends dark yellow; weft, 16 brown, 16 white, or any arrangement fancy may dictate. Simply observing some regard for harmony, all the shades mentioned in *Design A* can be used, as it is only a variation in weaves, the fabric produced being more



DESIGN A. SPRING PATTERNS.

open in texture, cloth of this porous nature being very much fancied by the votaries of fashion. Both designs would give a capital effect in fancy skirting cloths, and are well worth a trial.

Design C is given as a suggestion for contrast in warp and weft; dark or light grounds with opposing shades or tints, such as dark blue warp, cop weft, or dark brown warp, cop weft; the reverse may obtain—grey or cream-coloured warp, weft dark shades, 30 dents per inch, two in a dent, 20's cotton for warp, 60 picks per inch of 16's cop or 20's weft. These counts and qualities are given as a guide to work from; more picks may be requisite for finer materials; at all events, it is much easier to alter the weight of the weft, or to bring it in proportion to the warp, according to the weave or other circumstances.

Design D is a fancy diagonal, which can be broken up into very effective patches by the pegging plans 1 and 2. Warp, 24's cotton, 30 dents per inch, three in a dent, drawn on 8 shafts, one double end, one single; weft, 16's or 20's soft cop, piece-dyed in all the fancy colours, or well bleached; good spring pattern for dress materials.

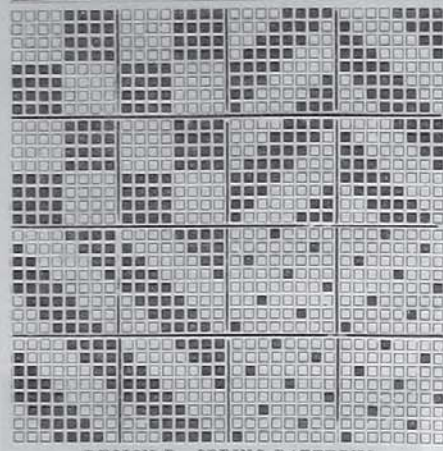
NOVELTIES IN WOOLLENS AND WORSTEDS.

In a recent issue of *The Textile Mercury* attention was directed to the introduction of mohair into coatings, trouserings, etc., as an ordinary or extra weft. In the present number we propose dealing briefly with rather uncommon methods of utilising extra weft, affecting more particularly the colourings applied to the ground fabric. First, however, the designs here given, Nos. 1, 2, and 3, merit description as applied to solid colourings. *Design 1* simply consists of a fancy two-and-two twill figure, arranged in 5-end sateen order, on a two-and-two twill ground. The idea here is that the ground fabric shall be formed of some semi-lustrous material such as English wool, while an extra weft of soft woollen yarn shall interweave (as indicated by solid type) with the English warp. The result should be blurred spots upon a clear ground, such spots being either the ground colour or some other harmonising colour; in fact, by changing the colour every eight picks each sateen spot might be developed in a distinct colour. Of course the procedure might be exactly reversed, the ground fabric being woollen and the spot worsted or mohair, but under these circumstances the spot should be considerably enlarged, otherwise it will be entirely lost.

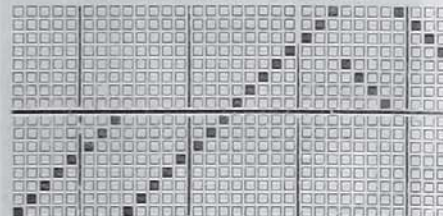
Design 2 admits of the same treatment as *Design 1*, though of rather simpler construction. If the extra weft be 1 dark, 1 light, the spot will be developed in the two shades.

Design 3 is a bolder effect, yielding in the actual cloth a diamond shape, the centre of which is formed by the extra material, which may be either woollen, worsted, or mohair, as indicated for *Design 1*.

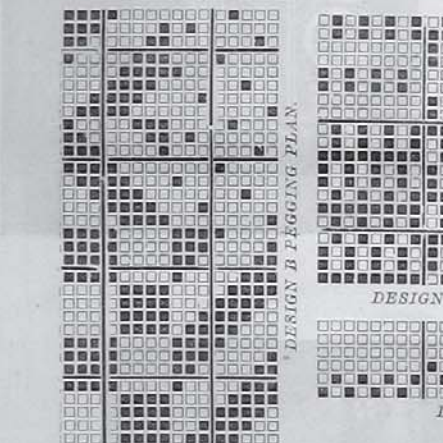
Such treatment as the above will yield somewhat novel effects, but the following suggestions should yield results still more so. Suppose, for



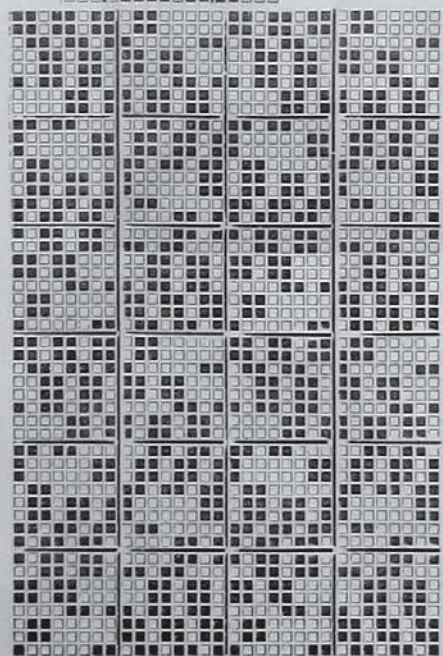
DESIGN B. SPRING PATTERNS.



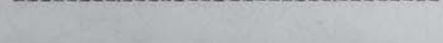
DESIGN B DRAFT.



DESIGN B PEGGING PLAN.



DESIGN D. SPRING PATTERNS.



DESIGN D DRAFT.

example, that the following colouring be applied to Design 2:—

- 1 thread black,
- 1 " grey,
- 10 " black,
- 1 " white,
- 1 " black,
- 1 " white,
- 2 " black,
- 1 thread white,
- 1 " black,
- 1 " white,
- 10 " black,
- 1 " grey,
- 1 " black,

then, with the same colouring for the ground weft, it will be evident that the check formed on the black ground by the four white threads will be interrupted and broken by the extra weft spot.

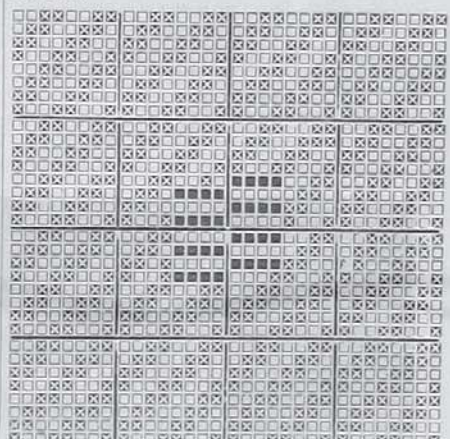
Design 3 may be treated in a similar manner, or as follows:—

- Warp.
- All 2/30's black English; 16's reed 4's.
- Weft.
- 1 pick 15's white English,
- 1 " 26 sk. soft black woollen,
- About 60 ground picks per inch.

The 26 sk. woollen may only be inserted for the figure, but preferably throughout as a backing, thus materially adding to the "handle" of the cloth, so that throughout these three designs, when the extra weft is not on the surface, it should be bound in the most regular order possible.

Should the above scheme of colouring be adopted, the lines will be changed from the horizontal and vertical to an angle of 45

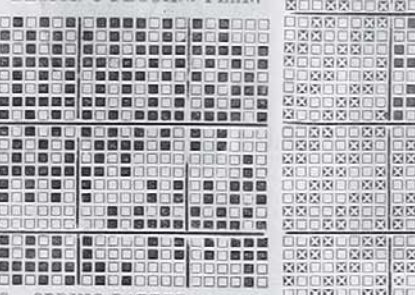
degrees to the right and left, the diagonal check so formed being broken in the centre with the solid black weft and warp. From these suggestions others will no doubt arise which will prove equally effective, attention being given to the two chief points—colour and material.



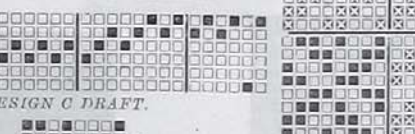
DESIGN 2.



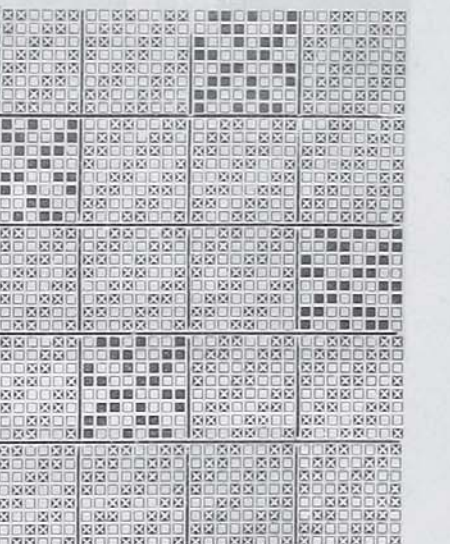
DESIGN C PEGGING PLAN.



DESIGN C. SPRING PATTERNS.



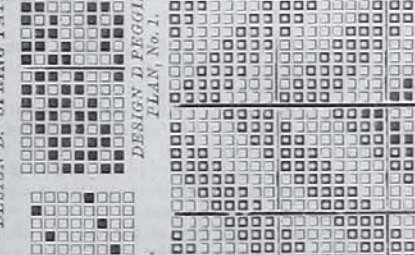
DESIGN C DRAFT.



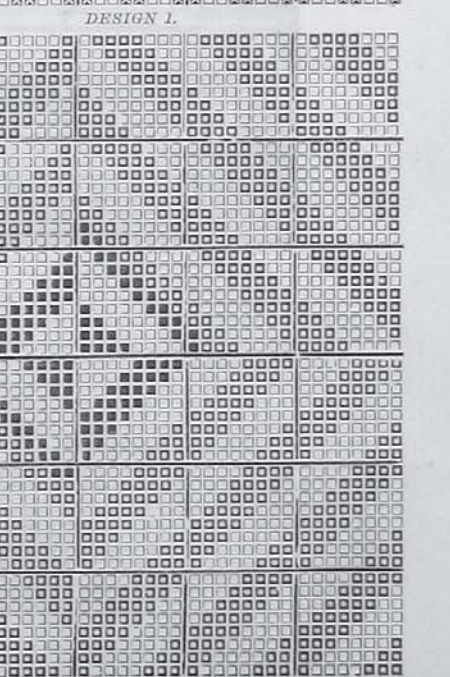
DESIGN 1.



DESIGN D PEGGING PLAN, No. 2.



DESIGN D PEGGING PLAN, No. 1.



DESIGN 3.