THE TEXTILE MERCURY.

March 21, 1899.

take it for granted. Should they, however, wish for more decisive proofs, I shall be far more convincing, not, I believe, only from myself, but also from others. I refer, in more important positions—Yours, etc.,

Aldo F. Barker.
The Salt Schools, Shiplay, March 18th.

WOOL IN THE LEVANT.—Wool, which is usually an article of export for the ports of the Levant, is imported to British ports under an amount of 600 to 1,000 bales per annum from Russia and Kustendie. Bulgaria possesses extensive regions, which are noted for exquisite qualities of wool. The title of 'wool' is conferred upon the wool of Asian Minor. The amount of wool from different qualities and thickness which are annually exported from Bulgaria is estimated at about 350,000 bales. The town of Slernno, distant about 80 miles from Doura, in the interior, has already seen large factories with European machinery.

Aniseov in a need of a hobby should try spiders. In one way and another these interesting creatures, which are not insects, have been quite prominent lately in periodical literature, and the general reader probably has a better conception of the tinier spinner than before. As there are over five hundred species known in Great Britain, it must not be imagined that it is possible to become proficient in this branch of science in a week or two; but, for all that is known already of the different kinds and their habits, there is still room for original research, and by way of recreation, the hobby-keeper might verify or improve upon the recorded experiences of the culture of spiders. This matter appears to have been cautiously avoided since some few years, apparently for the want of people interested in it, and the only additional information afforded of late upon the subject appears to be an error. It is said that in 'Scribbler's' threads may be woven, which is true enough, that they are more glossy and brilliant than those of the silkworm, which is not supported by the evidence of experience. The收藏者上海同已有 the double side by side, and that enough of it was once secured for the weaving of a suit of clothes in the year 1847. Now stockings have certainly been made from spider-silk, and gloves too, for specimens of each were seen at the recent exhibition of the Society for the Encouragement of Native Industry at the London Royal Society, in 1720, and there is an indefinite mention of washermen being produced from this material, though the latter is the first that has been heard of an entire suit of clothes furnished by spiders. As it has been calculated that it would be necessary to re-collect 50,000,000, or 600,000,000 spiders to provide the necessary material, it is not likely that the order will be produced. If spiders' silk to that same Louis XIV., and costly memory with careless haste has lost its last made a suit of clothes out of them.—Horace White and Green.

Designing.

NEW DESIGNS.

CUTALASE.

(1.) In 40 reed, 2 in a dent, or 80 ends per inch and 50 pieces of 20's weft, worked on four shafts, 3 up, 2 down, four to the round, straight-over draft. Warp pattern: 7 dark brown, 2 red, 2 white. Weft: dark brown.

(2.) Warp pattern: 3 white, 9 dark blue, 3 light blue, 3 dark blue, 3 white, 2 brown, 2 white. Weft: dark brown.

(3.) 24 dark blue, 3 white, 3 drab, 3 white, 3 dark blue, 3 white. Weft: dark blue.

(4.) 18 dark brown, 6 very bright 6 light blue, 6 white, 6 dark brown.

(5.) 15 white, 6 dark blue, 6 white, 6 dark blue, 6 white, 6 dark blue, 6 white, 6 dark blue.

SPRING SHIRTINGS.

On four shafts, straight overdraft, cannever twill, 60 ends per inch of 20's twist, 100 weft, 40 picks per inch. No. 1 pattern: 30 white, 2 red orange, 2 white, 10 dark blue, 4 each end, 16 green draft, purple, 16 light blue; weft grey cop, soft spun.

No. 2 pattern: 24 cream, 2 red, 24 cream, 60 dark blue, 6 red, 6 dark blue, 6 white, 60 dark brown cop weft.

No. 3 pattern: 20 white, 2 dark blue, 2 white, 2 dark blue, 2 red: weft pattern the same.

No. 4 pattern: 4 white, 2 light fawn, 2 white, 2 light fawn, 2 brown, 2 white, 2 light fawn, 2 white, 2 Napoleon blue, 2 white, 2 Napoleon blue, 2 white, 2 light fawn, 2 white, 4 dark brown.

This arrangement will make a very handsome checked shirting cloth.

THE FINISHING OF WOOLENS.

(Continued from page 152.)

It will be remembered that in our last article on this subject we had occasion to refer to the introduction of a new process, presumably with the idea of superseding the teasels. The principle of this machine is shewn in Sketch 1, and it seems to be made of the fact to which we previously called attention, viz., the two-fold motion of the teeth, which is introduced to prevent any possibility of damaged pieces, and also most probably with the idea of varying the severity of the operation according to requirements.

There is one motor involved in the "raising" of wool, which notice has not yet been taken, and that is the direction in which the cloth should be raised. As would be expected, this must depend almost entirely on the class of cloth under treatment, though there are certain broad principles, which are somewhat similar, that can be considered. There are, of course, four ways in which a cloth can be raised; 1st, right to left lengthways; and 2nd, to the left lengthways; 3rd, right to left across; 4th, left to right across. Having, however, once raised a cloth in one direction there is practically no limit to be placed on the direction raised, viz., directly opposite and across, since this latter process is practically the same whether effected from right to left or vice versa. Now on first thought it would be expected that such goods as doeskins, etc., i.e., dress face goods, would be simply raised in the direction required, but again the fact must not be lost sight of that first a fibrous surface must be obtained and then the fibres be shaped in the direction required, thus in the case of doeskins it is usual to raise them almost all ways to obtain the fibrous surface previously to finally laying the fibres so raised parallel to one another. The same principles are equally applicable to meltons, tweeds, etc., but in the first-named cloth note should be made of the fact that it is not raising which obliterates the make and procures the required effect, but the preliminary operations, which we considered at length in past issues.

Following raising comes "cutting." This practically consists of clipping off all the fibres projecting from the body of the cloth as short as possible, leaving a bare cloth, in the case of flannel or else in reducing all such fibres to the required length, thus obtaining evenness of surface, which is most necessary in all instances.

Having dismissed "cutting," attention must now be directed to "boiling and crabbing." Boiling is practically introduced to obtain a permanent lustre. Thus it is usual to wind the piece tightly upon a roller and to boil for some hours, but, in case of unevenness, it is taken off and wound on the reverse way during the operation. Doeskins and like cloths may be taken as possessing the typical appearance resulting from this treatment. For in their treatment boiling is sometimes repeated again and again. Remembering these facts little difficulty should be experienced in realising the principles of boiling and crabbing. Washing, centering, and drying, now, being in turn succeeded by "pressing."

Pressing may be said to have for its objects: firstly, the solidifying of cloth; and secondly, to impart lustre or otherwise. Though, of course, the real weight of the cloth cannot be affected in that which is possible to give to the cloth a firmer handle, though there is the fear of "cackiness" if this be carried too far; though, it must be got rid of in the subsequent process of steaming. The amount of lustre and solidity imparted must of necessity vary with the condition in which the cloth is put into the press; but as

SKETCH

already stated, these attributes are always more or less fatigue. The question of hot or cold plating is one worth consideration, since it requires little thought to realise that a very different effect will be produced in each case. Thus we shall find that the lustre goods, which we have already had occasion to refer to, are cold-plated, thus preserving the characteristic parallelism of the fibres, while in the case of rough Scotch finish, etc., warm plates are used, which undoubtedly tends to render the wool fibres curly and rough, thus obtaining the desired rough effect. Here a study of the processes involved in finishing, it remains only for us to state again that throughout we have assumed the word "finishing" to denote all the processes involved, since we are inclined to believe that there yet exists too much 'rubbing of thumbs on' the part of the mill. The certainty of attaining an effective and required finish must, of necessity, be sought in the fabrication of the cloth itself, and this has been considering. It is therefore our hope that some of our remarks will directly benefit and prove of service to those interested.

FANCY DRESS STRIPES.

In materials, stripes will be worn more than ever, and it is said that a new lead for the moment, although not to the absolute exclusion of all other colours. It is seen in bright effect when produced in red, which are difficult to describe; the most popular are green, cress-green, and very light tints approaching yellow. These are coming into favour in white and green on a brown ground. Soft and agreeable to the eye, but not very effective, are the contrasts of navy blue and very dark and dull greens, forming indefinite outlines with a plaid appearance. Cotton costumes might be taken for wool or satin, so much skill has been expended in the designs and colourings. They droop quite as gracefully as wool goods, and are washable; the finest specimens of cotton goods are shown in striped, and allow of little sunshine. Buyers are on the alert for ottomans, satins, serephs, cambrooms, batistes, and particularly gingham of good make. The colour blendings most fancied in these fabrics are green, almost black, deep granet blue in navy; gendarmes, brown in all shades, and black in the lighter hues, rose tints, pale lemon, light violet, sky blue, white, and cream; and all the delicate tints of the earlier blossoms will be fancied, pale tints of primrose and cowslip leading.

We give a few patterns in stripes and plaids, which may be successfully carried out and will at the same time convey useful ideas for weave and colouring endeavours. The widths of the bands or stripes may be of any size, or one larger in width than the other: generally four and two. The bands of stripes may be of any size, or one larger in width than the other: generally four and two. The bands or stripes may be of any size, or one larger in width than the other: generally four and two. The bands or stripes may be of any size, or one larger in width than the other. Generally four and two. The bands or stripes may be of any size, or one larger in width than the other: generally four and two. The bands or stripes may be of any size, or one larger in width than the other: generally four and two. The bands or stripes may be of any size, or one larger in width than the other.
picks per inch of 30's for worst, 45 inches wide out of the loom.

No. 1 Pattern.—100 of deep emerald green on 1, 3, 5, 4, 5, 6 shafts; 12 of white, three in a head, one in a dent, on 6th shaft; 150 cross, all grids, 3, 5, 7, 4, 5, 6 shafts, until this portion of the stripe is complete. To make it more plain, the second band of light green is introduced with a good effect in the place of white and crimson cotton. The weft may also be any shade of green or other of the stripes used.

No. 1 Pattern.—100 light pink, 1 azure, 19 dark, 3, 2, 1, 5, 4, 3, 2, 3, 2, 1, etc., shafts; 2 of azure blue form the break of the draft; then 6 dark brown, three in a head, on 3rd shaft; 6 light green, three in a head, on 6th shaft; 6 dark brown, three in a head, on 6th shaft; 6 light green, three in a head, on 3rd shaft, 3rd shaft; 6 light green, three in a head, on 3rd shaft. Weft: all white, cream, or light primrose. These patterns will give fair indication of the variety obtainable by change of drafts, and widths of the stripes. To give more examples would only convey the idea already set forth.

FASHIONABLE CHECKS.

Same reed, weave, and draft, as given for the stripes.

No. 1.—Warp pattern: 24 cinnamon brown, 2 white, 20 cinnamon brown, 4 white, 16 cinnamon brown, 8 white, 16 cinnamon brown, 12 white, all on 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 7, 6, 5, 4, 3, 2, 1, etc., shafts. The 2 of azure blue form the break of the draft; then 6 dark brown, three in a head, on 3rd shaft; 6 light green, three in a head, on 6th shaft; 6 dark brown, three in a head, on 6th shaft; 6 light green, three in a head, on 3rd shaft; 6 light green, three in a head, on 3rd shaft. Weft: all white, cream, or light primrose. These patterns will give fair indication of the variety obtainable by change of drafts, and width of the stripes. To give more examples would only convey the idea already set forth.

WORSTED COATING.

In Design 23 is given a check effect which will readily draft into 24 shafts, though occupying 36 threads and picks when fully developed. The scheme of the arrangement is to divide four small warp checks by a narrow band of worsted, the total band, the band of the same worsted. The part played by colour in this design is very important, and should claim minute consideration at the hands of our readers. Since the small checks alluded to shew up the warp prominently, a natural suggestion for colouring would be to have a warp of a lightish shade and a weft of a darker shade, or vice versa. The following colouring on this principle will prove effective:

Warp.
All 2/3's medium brown slate worsted. 10's red 1/4's.

Wstf.
All 20's dark brown worsted. 76's per inch.