

tions should be imposed, and that young people between 16 and 18 should be assured a certain measure of protection as far as regards (1) *maximum* day's work, (2) night work, (3) Sunday labour, and (4) employment in peculiarly unhealthy and dangerous occupations.

5. Regulation of female labour.
 - (a) Whether the work of married women should be restricted by day or by night?
 - (b) Whether the work of all females (women and girls) should be subjected to certain restrictions?
 - (c) What restrictions would be advisable?
 - (d) Whether exceptions should be provided for in the case of individual branches of industry, and, if so, for which?

It is desirable (1) that girls and women above 16 years of age should not work either at night or on Sunday. (2) That the total number of working hours should not exceed 11 daily and with intervals amounting, in all, to at least 1½ hour. (3) That exceptions should be admissible for certain branches of industry. (4) That restrictions should be imposed in the case of occupations especially unhealthy and dangerous. (5) That mothers should only be allowed to return to work four weeks after their confinement.

6. Carrying out the suggestions of the Conference.
 - (1) Should rules be laid down for the execution of the stipulations agreed upon and as to their supervision?

In the event of the various Governments giving effect to the recommendations of the Conference, the following suggestions are offered:—(1) The execution of the measures which may be introduced in any State with reference to the subjects of deliberation dealt with by the Conference should be superintended by a sufficient number of specially-qualified officials appointed by the Government, who should be independent both of employers and workmen. (2) The yearly reports of these officials published by the various States should be communicated to the other Governments. (3) Each State should periodically, and so far as possible in similar form, collect statistics on the various questions dealt with by the Conference. (4) The States taking part in the Conference should exchange not only these statistical returns, but also the text of all legal or administrative measures adopted by them with reference to the questions submitted to the Conference.

(b) Should the representatives of the Governments interested hold further conferences, and what questions should be laid before them? It is desirable that the deliberations of the States interested should be repeated, with a view to the mutual communication of the observations which may be made during the putting in force of the recommendations of the present Conference, in order to see whether alteration or supplement of the same be desirable.

It will be obvious that if the continental nations will adopt these recommendations, a brighter day will speedily dawn for the working-class section of their peoples, and, for a time at least, competition with the productions of English labour will be based upon conditions more nearly equal than those that at present exist. There is little for us, as a nation, to change, as the Conference was mainly guided by the principles already embodied in the factory legislation of this country.

Foreign News & Notes.

THE GERMAN WOOLLEN INDUSTRY.

The winter trade which we have now left behind may be described as of medium importance. The spring trade has commenced in a most satisfactory manner, and should we have good weather in summer, in order that the light materials in the cloth trade may find a ready sale, the buying desire, which is still small, will likely also increase for next winter. The first sales for the winter of 1899-91 have so far been restricted to very narrow limits. The wholesale dealers have covered their requirements in certain sorts of overcoatings, especially the cheap kinds, and dress materials, and the makers of these goods are very well employed. But, neither for the better staple articles, nor for novelties, do orders come in in the quantity to assure ample employment for the factories next autumn. Piece-dyed worsted especially suffer under this state of things, and lively complaints of bad trade are heard from the Aix-la-Chapelle manufacturers in particular. In the opinion of the wholesale dealers the inferior worsteds—the half-

heavy Rhenish goods with an artificial or mixed wool undershot—are in a particularly bad way. The shopkeepers and large tailors have heavy stocks of these articles, and it would appear that they have lost much of their favour with buyers. Some of the makers had foreseen the turn affairs would take and have also brought worsted Cheviots into the market, both piece-dyed and wool-dyed. Many bad articles of this class are made which do not deserve the name of Cheviots; for very inferior shoddies and the coarsest and hardest worsteds, which would be more in place in a carpet than in an article of clothing, are employed both in wool-dyed and piece-dyed goods. If makers go on in that way we may expect such articles to speedily lose all favour. Cheviots take the first place as novelties for winter overcoats, and the first business for next winter is the best in this sort. Dark, uncoloured cloths are mostly ordered, blue receiving the preference. Semi-light, fresh fashionable mixtures are readily taken up, whilst dull fashionable tones are no longer favoured. In the designs for suitings, covered squares or plaids are frequently met with. The sorts that present an unobtrusive and modest appearance are most to the front. They are also used in more striking designs for trousers, but stripes are still most in favour, but only the stripes that are even with the rest of the cloth, the raised stripes are avoided, as they wear badly. Unicoloured, plain, cloth-like materials and Cheviots are in prospect for ladies' mantles for autumn. The latter article is now very popular in the light sorts for summer vests and waterproof mantles, and these articles of clothing may be almost exclusively favoured by the fashion in autumn; blue in all dark and semi-light shades are the colours that meet with the preference, though the striking fashionable tones also attract attention. The business in ladies' woollen dress materials is at present pretty good. The Saxon and Thuringian factories are, in some cases, very well employed, and the Silesian factories, in which plain dress cloths are made, have already large orders in hand for next autumn. Plain cloths will play a leading part next winter. These articles have recently been produced in mixed wool, and it looks as if the latter are being taken up too. Strikes have only occurred in the woollen industry in single cases. It would, however, appear that some of the large Thuringian merchants apprehend difficulties in that direction, as they have inserted a clause that in the event of any compulsory suspensions of work they are released from their contracts. As regards the prices of wool, the opinion is largely held that they will turn in favour of the buyers at no very remote distance. The sale of finished goods is not in general as good as last year, and, in consequence, more moderation is observed in their production and only the most pressing requirements in raw stuffs are covered.—*Kuh'ow's Review*, April 9th.

Designing.

NEW DESIGNS.

TWILLS.

As promised last week, we give in *Designs 70* to *74* examples of various classes of small twills, etc., all on 16 shafts. *Design 70* consists of a fine make, forming the large twill, with a five and two twill running across in the opposite direction. It will be noticed that the large twill moves two threads forward every three picks, therefore, one third more picks than threads will be required. *Design 71* is a combination of the 3 end twill, warp or weft face, as the case may be, with a decided diagonal of warp, marks here meaning warp. In this case the twill moves one thread forward every two picks, so just twice as many picks as threads are required for the complete repeat. *Design 72* is a combination of the two and two twill, three and three rib, and a warp twill. Here the twill only moves one thread forward every three picks, therefore just three times as many picks as threads are required. *Design 73* consists of a four and two make, and the two and two rib. Its construction is similar to *71*. *Design 74* is constructed on an altogether different basis, being, in fact, a quarter of an elongated diamond. It is complete as given here, but by means of a point draft and a pegging plan twice

the size, the full diamond might be developed with the same number of shafts, viz., 16. This design, modified in various ways, will make an effective cotton design. As a fancy stripe, to combine with gauze, this will also prove very useful, but in future articles we shall dwell on this subject at length. We dismiss it, therefore, for the present.

AFRICAN, OR NIGER STRIPES.

Taking into consideration the fact that most of the Niger district is under the protection of Great Britain, the exports from Lancashire and other parts where these class of goods are made is not what it ought to be for such an important market. The present state of our foreign trade and the ground lost by our manufacturers, first in one place and then in another, demands an effort, at whatever cost, before it is too late. In this issue full details are given of a stripe which, we believe, would take the fancy of the negro, and is well worth a trial. The full extent of the pegging plan is given to avoid mistakes: 8 shafts, 4 for plain cloth, 4 for stripe, 36 reed, 2 and 4 in a dent, 1,200 ends on 30 inches wide, all 2 in a heald, 24's warp, 20's weft, 40 picks per inch, dark blue, one shuttle.

Warping and Draft.

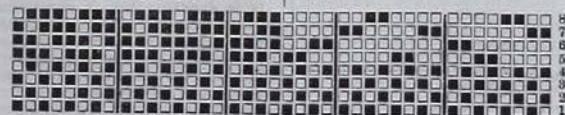
12 dark blue, 2 in a heald, on plain shafts 1, 2, 3, 4.			
2 light "	"	"	"
23 dark "	"	"	"
2 light "	"	"	"
23 dark "	"	"	"
2 light "	"	"	"
23 dark "	"	"	"
2 light "	"	"	"
12 dark "	"	"	"
24 bright orange, 2 in a heald, on shafts 5, 6, 7, 8.			

Total: 122, which will give 10 repeats. White selvage and only half the above pattern at each side. The dark blue, one heald in a dent; the orange, two healds in a dent. It would be advisable to have the coloured stripe on a separate warp beam, as it would take up much more than the plain cloth, especially in a long piece. White may take the place of orange, or bright red, and changes may be made in the light blue; dark blue must, however, in every pattern form the main part of the plain cloth; if these particulars are carefully carried out in the make of the cloth, the result cannot fail to be satisfactory.

CORDED CLOTH.

A ribbed or corded cloth on 12 shafts straight over draft, 12 to round, 40 reed, 4 in a dent, or 80 ends per inch of 30's warp, 2 in a heald, all grey, 250 picks per inch of 2 fold 24's spun silk or mohair in any of the fancy shades, one shuttle. If the rib is required more bold and defined, a greater proportion of weft must be used; the races must not be cut; only a careful finish of the cloth is needed. The particulars here given would make it applicable for ladies' or children's jackets, skirts, vestings, corsets, trimmings, etc. If made all grey cotton, warp and weft, and unent, bleached, or dyed and printed, any pattern, it would be suitable for the dados of walls, being easily detached for cleaning purposes; the perpendicular lines of the rib would give a greater effect to the pictures, or any other ornamentation immediately above it, and for novelty, simplicity, and comfort would compare more than favourably with any other material used for wall covering, and would last for years. It might also be used with advantage for stair carpets, hangings, curtains, and upholstery.

It is our constant endeavour to simplify as much as possible the necessary details for working out the designs given in this journal, and in many cases we leave to the consideration of manufacturers what will best suit them so far as entailing extra cost for particular reeds, healds etc. No exaggerated attempts are made in giving designs which would only end in failure and disappointment; all we have done or intend to do, is meant to be of some commercial value.



PEGGING PLAN NIGER STRIPE.

TWEEDS, ETC.

Design 75 is furnished for using in combination with colour. If colour be applied to a six-end twill in the following order:—

- 3 threads black,
- 3 " white,

we shall obtain the effect shewn in A. If the following be adopted:—

- 6 threads black,
- 6 " white,

the effect shewn in B is developed. These effects, without the assistance of gradation, are hardly competent to produce large effects, even if the twill be reversed, as in Design 75, but if the colour contrasts be stronger in one section than in the other, then a sufficiently marked effect is obtained.

For Design 75 the following will prove effective:—

- | | | |
|-------------------------|---|------------------------|
| <i>Warp.</i> | | |
| 3 threads 20 sk. black, | } | Repeat for 12 threads. |
| 3 " 20 sk. white. | | |
| 3 threads 20 sk. black, | } | Repeat for 24 threads. |
| 3 " 20 sk. grey. | | |
| 11's reed 4's. | | |

West.

All 20 sk. black or dark grey,
40 picks per inch.

The following colourings will prove effective:

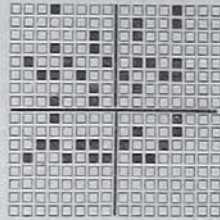
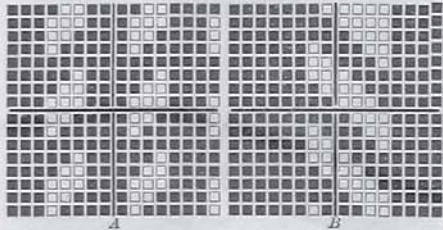
Pattern I.

- | | | |
|----------------------|---|------------------------|
| 3 threads olive, | } | Repeat for 12 threads. |
| 3 " black, | | |
| 3 " black and white, | } | Repeat for 18 threads. |
| 3 " black, | | |
| 3 " brown, | | |
| 3 " black, | | |

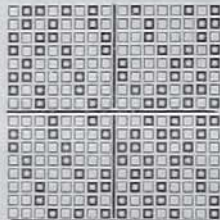
Pattern II.

- | | | |
|------------------------|---|------------------------|
| 3 threads dark maroon, | } | Repeat for 12 threads. |
| 3 " black, | | |
| 3 " bright olive, | } | Repeat for 18 threads. |
| 3 " black, | | |
| 3 " dark olive, | | |
| 3 " black, | | |

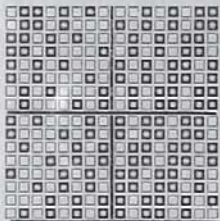
In Figure 16 we have developed on point paper a leaf which may be utilised in various ways. First, this figure will prove very effective for a figured cashmere, applied all over or only in striped form. Again, it suggests a form of plant which may be utilised for silk dress goods, in which case every embellishment in the way of weave effect should be employed.



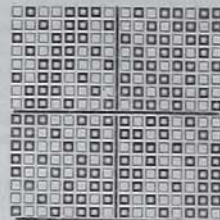
PEGGING PLANCOTTON CORD OR RIB.



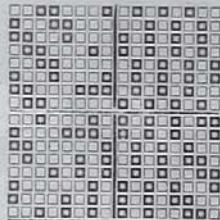
DESIGN 70.



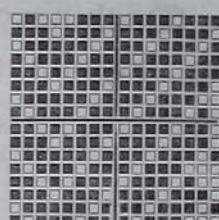
DESIGN 71.



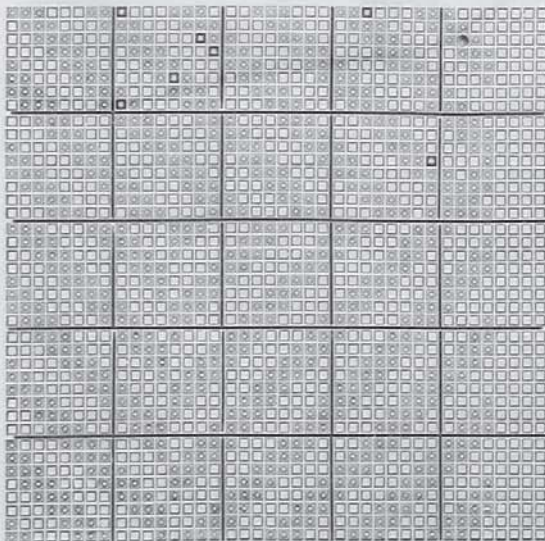
DESIGN 72.



DESIGN 73.



DESIGN 74.



DESIGN 75.

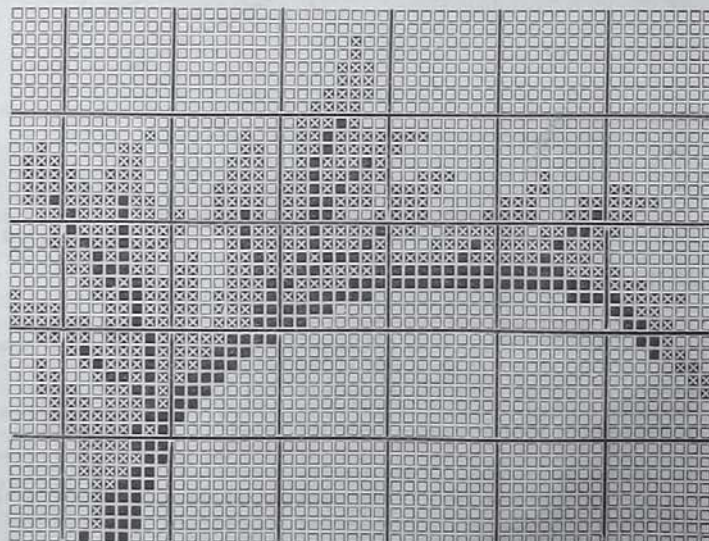


FIGURE 16.