THE TEXTILE MERCURY.

We see from these figures that the Amalgamated Association of Operative Cotton Manufacturers of Lancashire and adjoining Counties has thus a total strength of 32,667 members. It is not our purpose to inquire on the present occasion how they may have succeeded or how far they have fallen short of enrolling every operative, whose occupation as spinner, mender, or piece, renders him eligible for admission. That may form another subject for inquiry. It is more our purpose to point out that whatever may be said regarding it, one thing must be admitted, namely, that the efforts made have resulted in a grand success in two of the most important phases of such a movement—the numbers enrolled and the amount of money contributed by the individual members. The total income from contributions during the past year has been £16,145, 45s. 5d., which, with various items from miscellaneous sources makes the total income of the year 247,293 10s. 10d. This is a magnificent sum, and shows how "many a mickle makes a muckle." Roughly speaking the contributions of each member may be put down at 1s. 6d. per week. Now these 32,667 people have combined and contributed their money for certain purposes, namely, the protection of their common interest, and to educate and promote the interests of those in the same line or in any other line in which they are antagonistic, and this truth we will, we expect, make its way home to the consciousness of increasing numbers of both sides every day in the future, leading to a diminution of conflict and an increase of cooperative effort to advance their common good.

CHEMICAL PATENTS.

The May number of the Manchester Chamber of Commerce Monthly Report, issued on Tuesday, contains a report on the English law of patents, drawn up by a committee of the Chemical and Allied Trades Section, which offers proposals for a further amendment of the already much-amended Patent Act of 1883. These proposals are drawn up to meet the exigencies of the chemical industries of this country.

The present law on the subject of the amendment of patents has been almost entirely built up on legal experience gained in dealing with patents for mechanical inventions, where the nature and scope of the invention is, as a rule, fairly well ascertained. The report of the above-named committee very properly points out that chemical patents are frequently of a very different kind, and the strict application of legal principles derived from dealing with mechanical inventions has been, and can still be productive of a great amount of injustice and actual obstruction of the path of chemical progress, and that, therefore, a more explicit statement of the scope of the invention should be required in specifications of chemical patents. The proposals made by the committee are as follows:

1. To add to part III, section 5, sub-section 2, of the Act of 1883, the provisions which shall be known as sub-section 15: "When general terms are used in chemical patents, the patents shall specify how much substance is to be understood by each compound which he intends to include within such term or terms, and he shall be entitled to claim as his invention those substances or compounds which have been so specified by him."

2. Sub-section 16 shall be deposited at the Patent Office, along with the complete specification of the substance the sample insufficient for analysis or examination of the result or results claimed, and of all raw and intermediate products used in obtaining such result or results, unless such raw or intermediate products shall be ordinary articles of commerce easily obtainable in this country."

3. Sub-section 17: "The complete specifications of all patents relating to coal-tar colours, in addition to the samples of the colouring matters themselves, and the intermediate substances used in obtaining them, shall be accompanied by dye specimens of cotton wool or silk showing the results obtained with one part per cent. and two parts per cent. respectively of the dyes claimed. A complete statement of the process of dyeing in each case shall also be given."

The Committee are further of opinion that the words in clause 1, section 18, "from time to time," shall be altered, in the case of chemical patents into "two years from date of application."

The three paragraphs above-mentioned are, of course, proposals, and would materially contribute to the removal of the present abuses, but we regret we cannot express our approval of the subsequent somewhat ambiguous paragraph, which appears to have been interpolated in the report as an afterthought, and which would practically do away with the undoubtedly great advantages which section 18 confers.

For example, a claim three elements of an invention, say A, B, and C, and it turns out that C is not novel, the patent for A and B is invalid unless the patentee subsequently disclaims the C part of his invention, but the law very properly says that it is not right to take advantage of an inadvertence on the part of the inventor to steal from him his undisputed elements A and B. To limit the time for disclaimer to six months from date of application would in many cases be an act of far greater injustice than the evils the proposal is intended to remedy. From the point of view of a chemical manufacturer, who would like to make use of an inventor's labours without paying for them, the total abrogation of this section, or even of the Patent Law altogether, might be necessary. From the inventor's point of view, the matter presents itself in a somewhat different light. It is somewhat remarkable that the Committee have in their report given no reason whatever for the "further" opinion respecting the restriction of the time for amendments.

The firm of Lechshick, Woeker, and Girbach are charging their customers, as Lechshick and Lodi, by the section of a cambric-yaung-spinning establishment, which will accommodate 300 spindles. Similar to the Lechshick and Lodi are also a adding a cambric-yaung-spinning factory to their works.

Manufacturing in Natal.—The Government of Natal has issued under the authority of regulations for the law to make provision for encouraging by rewards the manufacture of certain class of manufactured industries. The two most prominent features of the regulations are the appointment of a commissioner of industries, and the offer of rewards varying in amount from £10,000 to £20,000 or more, according to the establishment of new industries, of which twenty may be made. The amount of rewards extends from one-eighth to one-half of the cost of the capital outlay. The amount of the capital to be invested ranges from £25,000 to £50,000. The principal industries are those in which the Government wishes to build up are leather, woollen, and jute, and firms established industries mentioned in the schedule embossed woolens, worsted goods, flaxens, and coarse woolen goods, of the highest range from colonial wool. The value of the product to be pro-duced in one year and after £50,000, on which a reward or bonus of £20,000 will be paid, the amount of capital invested must equal £50,000, and the value of the output for one year and a half must equal £50,000, on which a bonus of £10,000 will be paid when remitted. Class A covers a year's and-bonus from colonial wool. The amount of capital to be invested must equal £25,000, and on the output of a value of £1,000, the Government will pay a bonus of £150. Natal is determined if the ease to build up manufacturing.

Letters from our Readers.

The Editor does not necessarily endorse the opinion of his correspondents.

ANSWERS TO CORRESPONDENTS.

T. S. V. (Tommaston, Maine, U.S.A.)—Your inquiry has been passed on to the Manufacturers and Co. Dungarvan, Manchester, who have a specialty in the same line, and the subject of your inquiry is evidently the French Journal "Les Tissus," which is the English manufacturer and is not behind their neighbours in the efficient utilization of such effects. We have previously referred to the pages of this journal, and the effects of the above-named companies and government in combination with other makers, and we now present another series which, together, probably owe some of their component parts to the journal mentioned.

Designing.

NEW DESIGNS.

WOORED COATINGS AND TROUSERS.

A great improvement has been noticeable lately in the application of both weaved and colour to worsteds. The novelty of construction (i.e., weaves) which have come into use, has been widely adopted in the United States, and though the best of these probably owe their origin to the French journal "Les Tissus," it is the English manufacturer who has not been behind their neighbours in the efficient utilization of such effects. We have previously referred to the pages of this journal, and the effects of these weaves in combination with other makers, and we now present another series which, together, probably owe some of their component parts to the journal mentioned. "Designs 159" is a weave combination which should claim our best attention. It consists primarily of two effects, viz., a warp twill and a weft rib effect. The colour and the order in which they are varied will well pay due consideration. First of all comes a broad warp twill effect, leading up to a weft rib effect n, on the other side of which is the satin or Schiffli twill c, after which comes one of the main features of the design, viz., the weft twill n. This consists of a broad rib in twill form, and three small rib designs to the English best the broad twill leading this is another section of the backfill in make, followed by a weft twill to balance the other short element described. This is a broad warp twill effect, and then the backfill follows, to be repeated according to the width of stock required. The following ruling will prove effective:

<table>
<thead>
<tr>
<th>Width</th>
<th>All 25’s worsted</th>
<th>All 25’s worsted</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’s</td>
<td>1’s red 0.3</td>
<td>30 picks per inch</td>
</tr>
</tbody>
</table>

It will be noticed that the weft rib portions have been interposed with the white red in the weft, and that by inserting one and one, sections a and c, vary considerably from section b. The following ruling will prove effective:
THE TEXTILE MERCURY.

2 threads dark olive.
2 olive worsted and red silk twist, or olive worsted and dark brown silk, black.
2 olive worsted and red silk twist.
1 dark olive.
1 black.
1 dark olive.
2 olive worsted and red silk twist.
2 olive worsted and red silk twist.
1 black.
2 olive worsted and red silk twist.

Warp.

16 the medium light drab.

Since marks here mean warp, the spots which are distributed on the basis of the 4-end seton will be developed in the light drab. Colours may, of course, be introduced, but since the spotting should be the characteristic feature of this design care must be taken to avoid too strong contrasts, or any other effects that will render the spots unimportant.

INDIAN CARPET

This week we give an Indian carpet design from Cashmere. It is five yards square, made of spun silk; all the ground (light type) of side, edge, borders, and centre, is a peculiar green white approaching to peacock green, tinged very much with white; all the dark type is a brilliant crimson. As will be seen it is an all-over pattern on a purely geometrical basis, giving the proper form for a floor decoration. Some of these carpets are made of fine goats' wool, and sell at prices almost incredible. They possess extreme softness with durability. The colours are perfect; they are always glowing, radiant, and bright. It is a matter for regret that home manufacturers do not improve their designs, by introducing something of the spirit and appearance of Eastern patterns into their productions.

NEW GALATEA STRIPES.

No. 1.—Fast colours: 60 reed, 3 in a dent, or 60 ends per inch, of 20's twist. 24's weft. 30 picks per inch; one shuttle dark blue; four shafts, three for twist and one for spot; three in round. Warping and draft: 36 dark blue on shafts 1, 2, 3, 3; of white; 3 in a heald, on the fourth shaft; 15 of dark blue on 1, 2, 3, and 3 of orange; three in a dent on 4th shaft; total ends in pattern, 93.

No. 2.—The same reed and counts as No. 1. Three shafts for twist and two for spot; 9 to the round. Warping and draft: 15 dark blue, 2 of white, 4 dark blue, all on shafts marked 1, 2, 3, 3 of pink, 3 in a heald on 4th shaft, 3 of light green, 3 in a heald on 5th shaft, 4 dark blue, 1 of white, 4 dark blue on shafts 1, 2, 3, then 3 of white, 3 in a heald on the 4th, and 3 of white on the fifth shaft, 2 and 3 dark blue, 2 white, 4 dark blue on 1, 2, 3, shafts, 3 light green, 3 in a heald on 5th shaft, 3 of pink, 3 in a heald on 4th shaft, 4 dark blue 2 of white on shafts 1, 2, 3; complete pattern. Total number of ends, 109 and repeat.

WOOLEN SUITING.

Design 106 is for this class of goods. The production of spots in one form or another calls for attention from all woolen manufacturers. Of course, the introduction of extra yarns is often resorted to for such effects, but the method indicated in this design is quite as effective and sometimes much more appropriate. If the following system of warping, etc., be adopted, an effective stripe will be produced:

Warp. 16 the medium light drab. All black or dark brown.

The twill effect may be extended as far as required on coloured silk or worsted twill introduced in this twist section. The threads going to the back in the large rib effect should be tied to ensure a firm cloth being produced.

ZEPHYR COTTON TARTAN WITH SILK STIPPLE.

60 reed, one in a dent, or 30 ends per inch of 21's twist, 24's weft, 30 picks per inch, silk strips, 25's two-fold spun silk, bright colours. Warping and draft: 1 buff, 4 white, 12 times over on shafts 1, 2, 3, 4; 12 green drab, 2 brown, 2 blue, 2 brown, 2 blue, 2 brown, 3 blue, 2 brown, 13 blue, all on 1, 2, 3, 4; 24 crimson or scarlet silk on 5, 6, 7, 8 shafts; 13 blue, 2 brown, 3 blue, 2 brown, 2 blue, 2 brown, 2 blue, brown drab; total ends in complete pattern, 106. The silk to be 4 ends in a dent, 8 shafts, 4 to round.

<table>
<thead>
<tr>
<th>Design</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>Zephyr Cotton Tartan with Silk Stipple</td>
</tr>
</tbody>
</table>
INDIAN CARPET.

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1 Draft</td>
<td>12 W of 20 cm</td>
</tr>
<tr>
<td>No. 2 Draft</td>
<td>12 W of 20 cm</td>
</tr>
<tr>
<td>No. 3 Draft</td>
<td>12 W of 20 cm</td>
</tr>
<tr>
<td>No. 4 Draft</td>
<td>12 W of 20 cm</td>
</tr>
</tbody>
</table>

![Pattern Diagram](image-url)