THE TEXTILE MERCURY.

July 16, 1859.

Weller, and Co., which he has held for the past six years and up to the last.

The hosiery trade is quiet. Spring goods have been ordered in large quantities by Western houses. With reference to foreign hosiery, there has been some report for autumn goods, and prospects have improved during the last four weeks.

A new curtain fabric, by the Mitchelline process, has appeared in Philadelphia, and is being shipped to buyers of fall goods. It is said the patterns are extremely beautiful, while the novelty of the material is such as to command unusual attention among those in quest of attractive goods. The company who control this novelty have also introduced a suit made of the same style of fabric. Both the quilt and curtain come in a variety of patterns, and many different designs in colour and decoration work. The Pioneer Flannel Company of Paterson, which employs about 500 hands, is making a few velvets, but it is principally engaged in the production of the cheaper grades of silk pluses for upholsterers and box covers. The fact that velvets are being manufactured by this firm, however, one of some significance to Manchester men. Candidly, I do not think that a long period will elapse before this country is producing much larger quantities of velvets than it is to-day. The difficulties to Americans are not insuperable.

MACHINERY NOTES.

At a recent meeting of the directors of the Portland (Me.) Plush Mill Corporation, Mr. Ackroyd was instructed to go to Europe to buy machinery, and he left on the City of Paris last Wednesday. In two or three weeks President Robie or Treasurer Tilton will follow him.

It is said that German and French machinists have been making enquiries about the "Imperial" and "Woolly" spindles in "made" by Taylor, Shaw, and Coeker, silk machinists of Paterson.

REVIEWS OF BOOKS.

THE KINDER PRINTING CO.; ITS STRANGE HISTORY. By "Kinder," Manchester: S. Fy Office.

This is a pamphlet unique in its way. It deals with the origin, growth, and decay of one of the best-known calico-printing concerns in the world. Although many of its pages relate to personal matters, on which we cannot be supposed to comment, there is enough information in the remaining portion of the work to repay outsiders for the labour of perusal. As a picture of life behind the scenes in a printing-office, the "Kinder" is specially worthy of notice. There are many chatty details, too, of a friendly character, regarding well-known print men, both at the Manchester "end" and at the works of various firms, with some reminiscences of a school of print buyers, such as old Captain Farr, of Henry's (whose hats must, we fancy, be especially made for him), now rapidly passing away. As a sample of the class of information given by the author, we reproduce a cost sheet which is said to represent prices paid at the Kinder Works in 1853:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>8 d.</td>
</tr>
<tr>
<td>Draw</td>
<td>0 8</td>
</tr>
<tr>
<td>Shops</td>
<td>0 6</td>
</tr>
<tr>
<td>Colour</td>
<td>1 9</td>
</tr>
<tr>
<td>Starch and blue</td>
<td>0 25</td>
</tr>
</tbody>
</table>

so that the change made in the latter proportion gives a less disaster, and, therefore, a heavier count than the count required to give 1-6 heavier cloth. Therefore, the number of threads must be increased to compensate for the heavier yarn employed. This may be demonstrated as follows: Suppose a cloth is found to be made of a 40's yarn, and it is decided to make four times the width, then the simplest method is to change directly by the counts, thus,—

As 4 x 8 = 32 so the required counts.

Note: Fig. 2 shows this to be true, but according to the correct method the change would be—

As 4 x 8 = 32 the correct counts required.

But 24 counts would give a cloth four times the required weight as given by 10 counts; so this weight must be decreased four times by dividing each count by 10. Then

As 4 : 1 = 4 : 10 so 10 threads per inch.

This may be a different question according to what is the increase in the thickness or density of the yarn, viz.:

As 40 : 50 : 50 is the required increase in the thickness of the cloth, then

As 5 8 = 100 so 100 threads per inch.

That this is correct is the following calculations show:

<table>
<thead>
<tr>
<th>Yarn</th>
<th>No. of Yds.</th>
<th>Grey Weight, in Grams.</th>
<th>Average Grey Wt., Weight, in Grams.</th>
<th>Loss per lb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Grey satin</td>
<td>100</td>
<td>160, 166, 168</td>
<td>139, 149</td>
<td>98</td>
</tr>
<tr>
<td>2. Grey suiting</td>
<td>100</td>
<td>206, 212</td>
<td>177, 187</td>
<td>56</td>
</tr>
<tr>
<td>3. Blue</td>
<td>100</td>
<td>30, 36</td>
<td>25, 30</td>
<td>13</td>
</tr>
<tr>
<td>4. Yellow</td>
<td>100</td>
<td>50, 56</td>
<td>44, 50</td>
<td>29</td>
</tr>
<tr>
<td>5. Dark Brown</td>
<td>100</td>
<td>125, 130</td>
<td>118, 125</td>
<td>11</td>
</tr>
<tr>
<td>6. White</td>
<td>100</td>
<td>172, 180</td>
<td>165, 170</td>
<td>12</td>
</tr>
<tr>
<td>7. Light blue</td>
<td>100</td>
<td>200, 210</td>
<td>193, 200</td>
<td>13</td>
</tr>
<tr>
<td>8. Dark</td>
<td>100</td>
<td>250, 260</td>
<td>243, 250</td>
<td>16</td>
</tr>
</tbody>
</table>

* The colour should be stated, since some colours (such as indigo) are liable to affect the results.
been at some trouble in collecting the following particulars, we trust they may prove useful to
the reader, and an inducement to further minute research in the matter.

It is a comparatively easy matter to calculate the weight of a cloth as woven, but it is quite
another matter to estimate the weight per yard when finished. The chief causes of variation
are loss of oil in scouring; loss of fibre in milling; increase of weight per yard owing to con-
traction in length, which contraction may be varied, within certain limits, at will; and lastly,
in the filling often put into cotton and cloths.

The loss of oil in scouring must first be considered. Practically, all wool yarns are
spun with oil; hence, when a yarn is delivered to a certain count, it is only that count so long
as the oil remains in it; therefore, it will evidently be advantageous to ascertain the probable
loss in scouring, by reeling, say, 100 yards of the yarn, accurately weighing, scouring with soap
at about 90°F, drying, and weighing, say, a couple of days to regain the natural moisture,
and weighing again to estimate the loss.

A serious of such experiments are shown in List VII.

A curious point is here revealed, viz., that a marked difference frequently occurs, in the
weight of the same yarn in the same state weighed at different times. These weights have
been very carefully tested, and may be taken as an indication of what actually occurs in
practice, the weather materially influencing the weight of the wool; or more correctly the
amount of moisture in the wool. Another point that should be carefully noted is the heat
at which the yarns are scoured. This should not exceed 90°F, and guess-work will not do.
It is a pocket thermometer may be purchased for
about $5, which will answer every requirement
for exact work, and should always be used
to test the heat of the bath.

It will be observed that only one example of wooden yarn is given, and not even one of
cotton. We have not gone further into this matter, simply because the conditions will vary
too much, owing to the oil in the case of wooden and filling in the case of cotton, that any further
particulars than those given would really be of
little service. The analysis should carefully

take a test on the lines here laid down for each
yarn with which he has to deal, and this, with
the following particulars, should enable him to fairly accurately estimate the weight of the
finished cloth.

(To be continued.)

NEW DESIGNS.

COTTON DRESS GOODS, ETC.

Spots are very much in vogue at present, especially white spots on a dark-blue ground.
The simplest of all, on satinette, are pretty and effective; for whether these spots be close
or far apart, large in size or small, they always stand out well on a satin material.
The sea-side costumes made in this style from all-cotton warp and weft are generally white
spots on a cardinal-red ground; cream, red, and blue are favourites.

For tennis dresses, cotton canvas cloths still retain their popularity; they are really much
cooler for hot weather than any other washing
material yet produced. Mains as a colour is
coming very much to the front, especially as a
foundation for gaze fabrics of pure white or
blue.

Shaded stripes, an example of which is given
in Design B, are peculiarly novel and pretty
catchy in the blendings, tones, tints, and
shades, offering a very wide field of choice,
and surely claiming general commendation.

Design A will be found useful, not only as a
species of ornamentation for dress and shirting
goods, but by an increase of warp and weft
would be very effective as a ladies' vesting
patterns. It is 30 shafts, 30 to the round,
straight-over draft, and may be used either in
a warp or weft figure. The pegging plan gives
the unbroken square as well, which might with
advantage be of some lustrous materials—
either spun silk or linen. Warp 30's twist, in
30 deniers per inch, three in a dent; weft 24's.
Quantity of picks to be regulated by quality of
cloth required: less warp yarns for very light
fibres. In fact, as it is a suggestive design,
very much may be left for consideration of
materials and quantity. All light ground for
warp; with dark times, such as cream ground,
purple or brown weft, etc.

Design B will give a shaded stripe, the weft
crossings breaking up the colours in the stripe
from a perpendicular line, but at the same
time giving each its proper effect in varied
groups. Warp 30's twist, 40 deniers per inch,
two in a dent; weft 60 picks per inch of 30's
cotton or spun silk; 24 shafts, 25 to the round,
in straight-over draft. We give a pattern from
which any number may be formed by rearrange-
ment of colour and increase or decrease in size
of stripes.

Warp pattern: 15 brown, 3 white, 15 brown, 3 white, 15 brown, 15 white, 15 blue, 3 white, 15 blue, 15 white, 3 white, 15 blue, 15 white.

Repeal first 15 of brown; weft all
white.

DESIGN A: DRESS GOODS, 42

DESIGN B: DRESS GOODS, ETC.