THE TEXTILE MERCURY.

June 11, 1870.

SOCIETY OF CHEMICAL INDUSTRY.

Among the papers down for reading at the last meeting of the Manchester section of this society were some on the second part of his "Researches on the formation of lake pigments." He referred especially to the formation of LAKES FROM THE ACID COAL-TAR COLOURS, and said that the reason these lakes had not hitherto turned out well was because the process, such as borium chloride, only acted on one of the two or more groups present in the colour. When borium chloride was not used, the result was quite the contrary of a dye; the sulphone and amido groups, the former only was precipitated. The cotton had been washed out of cotton dyed with a sulpho basic colour, and this cotton had no affinity for the acid group. If, however, the cotton was oximated and tannar hemic, and then placed in a solution of a basic sulphone dye, on the addition of borium chloride to the bath the colour was precipitated on the cotton. By means of this the author had produced good and fast colours from sulphated methyl blue and indigo dyes. In a paper presented by the firm of Messrs. W. and R. Weber, entitled "The Preparation of Arsenic Sulphide and its Use in the Manufacture of Jute," there was referred to reference to the OILS USED IN WOolen MILLS and the experiments which had been undertaken for the insurance companies, who, it appeared, were particularly that only fatty and nitro petroleum oils should be used. By saturating wool with various oils and exposing it to the temperature of boiling water, great variations were observed in the rise of temperature.

The amount of oxygen absorbed by wool grease with the different oils was also found to vary. These tests confirmed the general idea that a woolen fabric was more likely to be attic than when dry, but he could not confirm the generally accepted theory that white wool was more liable to spontaneous combustion than dyed wool. Various cloths dressed with 8 per cent. of olive oil and exposed to the same temperature gave the following results: —

<table>
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<th>Material</th>
<th>Temperature (°F)</th>
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<tr>
<td>Olive oil</td>
<td>250 F.</td>
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<tr>
<td>Cotton</td>
<td>250 F.</td>
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He had never been able to get spontaneous combustion with the proportion of oil used in the wool. A blue dye may be dyed on cotton by first passing through sucope, then through an iron bath, dyeing with alizarin, and then with indigo. The cost of the labour must be great, although the blue will be the best. According to a French patent, Chinese grass may be bleached by boiling in 12% solution of the chlorate of soda for from two to five hours, washing in water, and steeping in sulphurous acid or bisulphite of soda to dissolve off the brown deposit of oxide of manganese which is formed on the fibre.

A Japanese manufacturer of designs or ornamental effects in a variety of colours on textile fabrics has been established in this country. The principle of the process consists in producing on the piece a deposit of sulphate or other metal sulphate that has no affinity for the fibre, but will form a water-soluble compound. The next proceeding is to print on a discharge of colouring as an essential constituent peroxide of hydrogen, which acts by oxidizing: the sulphate to sulphur, which is colourless, and is deposited as an insoluble body (lead sulphate) in the fibre, or is soluble and is therefore washed out. By mixing with the other coloured blue on which peroxide of hydrogen has no effect, coloured designs may be produced, and it will be seen that both the effects of the discharges so printed on, a variety of effects may be produced.

Designing.

NEW DESIGNS.

COTTON DRESS GOODS.

Design A is on 6 shafts, 12 end draft, 12 to 13 picks per inch, 12 to 14 per inch, and two 30's pick in a shed; 20 perches per inch, 4 in a dent, 30's twist; 50 perches per inch of 30's wert; 31 inches between spaces. Woven pattern: 12 red, 12 cream, 12 green; weft pattern the same. Second warp pattern: 6 green, 6 red; worst the same. Third pattern: 2 dark blue, 2 light blue, 2 white, 2 yellow, 6 white, 6 yellow, 2 white, 6 yellow, 2 white, 2 yellow; weft pattern the same.

Design B will furnish an immense number of styles of scarfs, either in cotton or wool dress goods.

The colour may be varied at will, and the separate sections of the draft be gone through in any one of the widths, the width of the goods may be increased to any size. It is on four shafts, 4 to the round; a very simple weave, 40 dent, 2 white for warp; 60 picks per inch of 18's cotton. Warp pattern: 18 white, double end of green, double end of red, 20 light blue, 2 orange, double end, 2 dark blue, double end; weft all white. Second pattern: 18 cream, 1 dark blue, double ends, 20 cream, 20 purple double end, yellow double end; weft all white. Fourth pattern: 18 white, 4 ends double violet, 20 white, 4 ends double orange; pattern: 18 white; the violet and orange set in 2 in a shed.

Tuttnberg of Johann Ernst Wuehler has just erected a new ribbon factory in Barmen.

HERK LAUBSCHER BARTEN is erecting a large steam dye-house in Boston, South Carolina.

Herr J. Fried is building a power-loom weaving shed in the neighbourhood of Neustadt, in Bohemia. Herr Georg, fabricator of Bunenhof and Weber, is erecting a dye works and finisher's, in Elternau, in Hanover, is enlarging its dyeing works at Fischer-gasse, No. 8, by an additional shed.

The factory premises of Herr H. Mayer, Herr H. W. Docter, and Isaac Mantern and Son, all in Naheich, are about to be extensively enlarged. In each of the two last named, 200 power-looms will be installed.

A large piece of land in Geewasdale has been purchased by the Upper Lustatian firm of C. A. Barth, of Algersdorf, in order to erect a loom factory intended for the needs of Austria. It will have an adjoining iron foundry.

PATENTS. In 1870, according to the ninth report of the Comptroller-General of Patents, Designs, and Trade Marks, just laid upon the table of the House of Commons, the total number of patents and designs registered last year was 22,888, as compared with 21,907 in 1869. Of the nine applications made to the Privy Council for patents on the terms of models and samples, and two refused, the remainder not having been disposed of at the end of the year. The receipts from the sale of the office publications amounted to £6,142, which sum was paid over to the account of the Stationery Office. The total receipts for registration of designs was £3,675 (excluding sets of designs, of which there were 375), as against £22,235 in 1869 (excluding 375 sets of designs). No fewer than 555 designs were refused registration on account of their similarity to designs already registered, while 1,104 applications were rejected by the Comptroller-General in the case of 1,005 of the objections, the applicants acquiescing without claiming a hearing, and in 82 cases the objections were waived after argument. Of the 107 opposed applications which were accorded a hearing, 44 were accepted without alteration, 55 were refused, and 8 were amended and preferred. In regard to trade-marks, there were 7,275 applications, of which 10,258, being those for marks being advertised, and 4,255, registered. The total receipts from various sources on account of trade-marks were £1,704, including £635 on account of special fees. The number of applications under the provisions of the International Convention for the Protection of Industrial Property was 171.