

tween the rollers J, this supply being collected at the tank O, and also that the supply for the shower at H is taken from the tetrachloride which is expressed by the rollers L and collected in the tank P; the showers at K are supplied with pure tetrachloride of carbon. The tetrachloride of carbon charged with the extracted fatty matters which collects at the bottom of the apparatus is drawn off through a pipe at Q and conveyed to the distilling apparatus.—Textile Manufacturer.

Textile Design

BY ROBERTS BEAUMONT IN TEXTILE RECORDER.

Small patterns are still amongst the most successful for worsted trouserings as regards selling quality. The simple stripes given in Designs 1 to 4 may be woven in either 2/28's yarn with 68 threads and



Design 1.

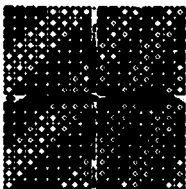


Design 2.

64 picks per inch, or in 2/48's with 80 threads and 72 picks per inch. They are very dissimilar in character, Design 1 being composed of up-



Design 3.



Design 4.

right twill and a fancy mat weave; Design 2 of a broken mayo angled; Design 3 of twill and weft rib, the twill running through the design underneath the rib; and Design 4 of twills running at 45° and 60° respectively.

THE METRIC SYSTEM OF MEASURES AND WEIGHTS.

The Dyers' Bulletin of Philadelphia has the following appreciation of our recently issued Chart of the Metric System of Weights and Measures: "Everybody who uses it, and has used the antiquated system of former times, knows its unquestionable advantages of uniformity, regularity and an unalterable basis. Every means to educate the people, especially the growing generation, for the use of the new system, should be put in operation, notwithstanding the assertions of its opponents that its very simplicity and uniformity is confusing, and that the English-speaking people would never learn a lot of foreign words signifying units and fractions of them. We say: Teach them already in the primary schools! Peoples speaking the Latin or Germanic tongues have overcome all alleged difficulties, even where not the slightest similarity existed between the old and new system, their units, subdivisions or names of them. These peoples cannot be said to be more intelligent than the English-speaking ones; still the metric system is with them in daily popular use. Our technical and trade journals have thus far maintained a half-hearted attitude, the daily newspapers have kept silent on the subject, perhaps waiting for some semi-official inspiration from London and, most obediently, from Washington, and yet they pretend to educate the people and to do nothing that is not promoting the welfare of the people. We had to go to Canada to find a class journal that fearlessly advocates the speedy introduction of the metric system at home, in the interest of Canadian industries and commerce abroad. Taking upon itself its share in preparing the people for the inevitable change, The Cana-

dian Journal of Fabrics, published by Messrs. Figgat, Samuel & Co., Toronto and Montreal, is not satisfied with publishing instructive articles, but gives educational material into the hands of the people in the shape of a chart 30 by 14 inches, which presents a view of the entire Metric System of Measures and Weights, illustrated by plain sketches, in a graphic manner, which cannot fail to make a lasting impression on the mind through the eye. It should be given a place in every counting room, office and school room, and will be forwarded on receipt of 10 cents to any address in the United States or Canada, by the publishers, Messrs. Figgat, Samuel & Co., Toronto or Montreal, Can."

REMOVING COLOR FROM SHODDY.

A simple yet safe process for removing the color from woolen rags and shoddy is greatly needed in the textile industry, more especially since the demand increased for light colored or undyed shoddy. Unfortunately the processes most easily carried out have injurious effect upon wool fiber. Recently, however, two German chemists have succeeded in finding an excellent chemical for the purpose in hydrosulphite, a product of reaction of zinc dust upon bisulphite of soda, which, when employed in the aqueous solution at boiling temperature destroys the color of the woolen rags after a short immersion. Of the hydrosulphite solution, only a comparatively small quantity is required, and with most of the rags, especially those of cloth, stockings, and woolen fabrics generally, a thorough decoloration is said to be obtained, so that the goods manufactured from them appear almost white, and as if manufactured from fresh wool. As with this process the solidity, touch and elasticity of the wool fiber are in no way injured, there is a great improvement in the treatment of rag material, furnishing regenerated wool of a good color, thus constituting a result of considerable importance.

The following is an example of the manipulation of the process: A thousand pounds of fully dyed rags (Bordeaux, scarlet, red, navy blue and green), called "Thibet," are boiled with from 150 to 200 gals. of water and 100 to 150 pounds of hydrosulphite solution, the rags being from time to time turned to enable the liquid to thoroughly penetrate them. After boiling for about half an hour the process is usually complete, the rags having become nearly white. They are then washed in a cold bath, dried, and are ready for manufacture.

The hydrosulphite solution is prepared by diluting two gallons of sodium bisulphite of 70° Tw., specific gravity, with 18 gallons of water at 30 to 40° C., and adding gradually four pounds of zinc dust, while the mixture is well stirred. After the reaction is complete, the whole is allowed to rest and the clear supernatant liquid is employed. Instead of sodium bisulphite, potassium or ammonium bisulphite may be used. Instead of separately prepared hydrosulphite solution, the bisulphite and zinc dust may be added directly to the bath, but this method is not to be recommended, as the material is soiled by the zinc dust. The rags may be boiled in either an open or closed vessel: in the latter case less hydrosulphite is required, but with the same result.

TORONTO INDUSTRIAL EXHIBITION.

The Toronto Industrial Exhibition of 1901 is generally pronounced to be an improvement on what it has been for several years. This is only what might have been anticipated, from the fact that Canada has had a most prosperous year, and that the crop, on which the whole prosperity of the country depends, is exceptionally good. Manufacturers feel encouraged to push business, and as the Exhibition affords a