

Query—how much discount could he command if he went with this cash to a Montreal or Toronto wholesale house? From 12 to 18 per cent. per annum.

### THE EMPLOYMENT OF DESIGNERS.

The division of labor is being extended in the textile trades, and it is no longer the very largest mills only which employ a designer whose duties are solely what the name implies. Not so very long ago a mill superintendent was not considered to be doing any more than his work if he also did the designing. There was, of course, this difference, however, that mills then made goods more or less for stock, and a mill of any size had usually a reputation for a certain line of goods upon which it ran from season to season with only slight changes in design, weight or color. The present system of doing business, however, in which the product of many mills is sold through commission agents, who to a certain extent decide upon the fabric and the price at which it can be sold in the coming season, renders a designer necessary.

When a mill manager is informed of the fabric desired and its price, he gives these data to the designer, and expects him to produce a cloth which will meet the requirements. For assistance in these matters, generally the selling agent submits numerous clips or sample swatches, that have been selected from time to time with care for this particular mill or line of work.

Only in the hands of an expert are these swatches of material value, as they present so wide a range of character that only by careful culling are those of worth to any one line selected. From these, the designer lays out his colors and adopts the several weave effects necessary to make a variety of style sufficient for an attractive showing. While the colors chosen are being gotten out either in worsted or woolen carded yarns, the designer has time to formulate his different weaves, arrange color combinations and dressing effects. So when the yarns are ready, block sample work is immediately commenced. In this work, without care and judgment by the designer, trouble arises, as the various effects often require a different number of ends and picks, sizes of yarns, etc., and unless properly arranged, the samples are neither uniform in weight nor general character. Again, all samples of same line must be about one cost, as no selling agent likes two prices on one fabric or line of goods.

After making a sufficient number of block samples, they are submitted to the agent for a final selection of what is termed selling ends. To-day a comprehensive line of either worsted or woolen goods must consist of from 100 to 175 selling samples, covering the various designs of suitings and trouserings in a multiplicity of color combinations. To such an extent has this selling sample business grown, that to-day a mill of 100 looms on fancies must expect an expenditure annually of at least \$5,000 for this work alone.

As about 50 looms are considered a fair number on one line, and often a mill of that size makes two or

three, it is readily seen a designer's work is absolutely necessary, as no one man as manager can look after the details consistent with a proper organization, and attend to the above amount of designing.

For THE CANADIAN JOURNAL OF FABRICS.

### WORSTED FROM THE FLEECE TO THE CLOTH.

BY B. F. FELLOWS.

(Concluded.)

The first process towards finishing the goods is scouring. Scouring removes all the oil, dirt and foreign matter gathered up by the cloth during the manufacturing operation.

The cloth washer has several wooden rollers geared together, and the top ones are weighed down in such a manner that elliptic springs produce a pressure on the goods as they pass between. The pressure may be regulated to suit the requirements of the fabrics. The different pieces of goods are prevented from running together by a system of upright standards, through which they are drawn. An important feature of the new washers is that below the bottom roller there is a deep box, into which is squeezed all the dirt and grease that flows from the goods. In Fig. XIV. the two big washer rollers, *E, E*, are shown, through which the cloth *C* is made to run continuously, thus effecting the washing process. The latest machines are arranged to accommodate eight pieces at one time.

One of the principal difficulties with goods which are not properly scoured is that the defect is seldom discovered until too late. Sometimes a piece of goods will have the appearance of being perfectly clean, and it is shipped to the commission house before the discovery is made that the fabric has not been half washed. The fact will be known by an offensive smell, which is the result of the presence of grease which should have been removed in the washing machine. If the least trace of grease remains in the body of the cloth, it will manifest itself when the goods are opened after they have been rolled up a short time. Of course the only remedy for this trouble is a good, thorough washing of the fabric before it leaves the washer.

Worsted goods are not full or felted so much as woolen. The mechanical structure of the worsted fibre is of such a character that it is not adapted to full and felt. However, most worsteds are full to some extent. The five principal features of fulling are: *A*—A perceptible decrease in the width and length of the fabric. *B*—A decided increase in the density and thickness. *C*—A reduction in the size of the pattern. *D*—Increased durability and firmness. *E*—Development of a softer handle to the cloth. Fulling is accomplished by the use of a machine built somewhat after the plan of the cloth scourer. The pressure of the rollers upon the goods, the heat and moisture produce felting. In Fig. XV. is a sample of checked cloth before and after fulling. The change brought about by the fulling is plainly shown, the sample being reduced in size and thickness. The reason that the wool felts is that the