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## REVIEW OF TRADE.

Reports received by the wholesale dry goods trade during the past month confirm the statements made to this journal regarding the amount of stocks of heavy goods left over from last year, and the sorting up trade for winter goods is proving to be small in volume.

There are good prospects for spring trade, and one cheering feature of the situation is that payments show a distinct improvement. In the Province of Quebec, and in all the Maritime Provinces, trade is brisk, while in many sections of Ontario fairly active business is reported. Dulness reigns from Manitoba west to the Pacific coast, owing to the causes mentioned in previous issues. In British Columbia the prospects for mining are perceptibly better, and next spring ought to show quite a revival in business there, as mining is getting to be the leading branch of the industries of the great Pacific province.

Generally speaking, there is an improved feeling throughout the textile trade of Canada, and more confidence is shown regarding the future than for the past three years.

The woolen mills are last to feel the benefit of this, however, and most of the leading mills are running short of their full capacity. The knitting mills are, however, doing a good trade generally speaking; and the small woolen mills doing local trade or "custom work " have little or nothing to complain of.

## THE WOOLEN MANUFACTURERS.

During the last few months this journal has dis. cussed the situation of the woolen mills of Canada, and has pointed out some of the difficulties under which they are now laboring. The manufacturers blame the Canadian wholesale dealers for a very large share of their present difficulties, but every wholesale house should not be included in this condemnation. It is true that many wholesale houses are prejudiced against the products of Canadian mills for political and other reasons, and many are in the habit of preferring an indifferent quality of foreign goods because they are foreign, to the standard goods made by home manufacturers. But the foregoing cannot be said of a very fair percentage of wholesale firms, some of whom have Cana. dian wool departments, in which they take special interest and pride. One ground of blame upon the wholesale man is the ceaseless nagging after cheaper goods. This journal foresaw that the recent tariff changes, together with this importunate cry for cheapness, would lead the Canadian manufacturer into two regrettable change's of policy, that is the reduction of wages to the mill hands and the degradation of the quality of his own goods. To compete with some of the cheap imported stuffs has been impossible under existing conditions, without paying less to the operatives and meeting shoddy with shoddy. This has been done in many cases, and it has been one of the inevitable things which the manufacturer has regretted more than any one else. Many mills who formerly made a certain standard of goods, and have Lad their own name ticketed on the goods, are now selling the cheaper goods without associating their name with the product. This we have always maintained is poor policy in the long run, though the temptations have been great to fall into it. It is poor policy because thece mills have practically
thrown away their old reputation, which was worth money to them, and which when lost is so hard to restore. We venture to say that none of these mills who now sell their goods anonymously to the trade are making the money they did when their products went forth with their own name and fame proclaimed to the trade and the consumer. Many of them are now seeing their mistaike, and at this late date are trying to get back to their original position, and, though the struggle will be hard, we think they are wise in so doing. The Shakespearian proverb that "good name in man or woman is the immediate jewel of the soul "will rertainly apply to the woolen manufacturors. A proof of this is that the very houses who have persuaded some Canadian manufacturers to take off their names from the goods and drop the mills' identity, are now making specialties of goods turned out by English and Scotch manufacturers whose trade rests entirely upon their reputation, and who ticket with their own name every piece of goods that goes out.

## FIRST bREAKER FEEDING IN WOOL CARDING.

If there is any one point to which a wool carder should devote attention more than another, says the Industrial Record, it is the first breaker feed. It is also the point to which those who aim to improve carding machinery can advantageously direct their efforts. We hear a great deal about the importance of doubling up the web, in one form or another, on the second breaker, to overcome the uneven work of the first card. This is simply to remedy what should with proper care be prevented. The first breaker has all the requisites for producing even work. if it receives the stock evenly and in proper condition. On the other hand, no system of doubling yet devised, or which is likely to be, will overcome all the disadvantages that exist under present methods. If these causes were few and simple, and produced unevenness in anything like a regular succession of coarse and fine drawings, then a sufficient number of doublings might produce an even feed for the second card. For instance, if the only unevenness resulted from what variation might arise from the weighings of a fairly accurate scale, an equal number of light and heavy feeds might be brought together in the second card to make even work. But this could only be done when the variation was slight, such as would come from a lack of sufficient sensitiveness in the scale. For if there was any defect of the mechanism that made large differences, there is no likelihood that these differences would occur with sufficient regularity to be matched up together. It may be thought that this is supposing a case which is not likely to exist ; but in both hand and machine feeding there are and always have been in use scales that are thus defective, and not as much to be depended upon for uniform results as the common spring balances. It is just because of this idea that a subsequent evening-up is an easy matter that the importance of an exact weighing apparatus is overlooked. So little attention is usually paid to this
matter that there are doubtless verymany managers and carders who would be amazed if they should undertake a critical test of the scales in use in their rooms. In all probability they would find that no two of them could be made to give the same results. When nothing is to be lost by honest weight, and so much depends on exactness, one would suppose that none but the best and most exact of weighing machines would be in use, especially in these days when appliances for all other purposes are made so absolutely perfect. Their cost, too, would make but a nominal addition to the expense of equipping the carding room of a woolen mill.

But even with scales which will invariably give weights exact to the fraction of a grain, like results are not always obtainable. The causes that prevent the best of scales from giving exact results are those which militate most against the possibility of evening-up again by the doubling process. The carder must be very watchful or have his assistants carefully trained, if he would get the same weight of roving from any two of them either with hand or machine feeding. Stocks worked together, which are of different lengths, quality or weight in staple, when not thoroughly mixed before coming to the first breaker, will give uneven work from. perfectly uniform feeding, because some of these varying fibres will throw out more waste than others, thus leaving a lighter web to be delivered from the card. Unevenness comes in the same way from stock that is not evenly lubricated or moistened. Either oil or water, or both, will add weight but not bulk, and if one portion of the stuck which is being fed to tue card contains more of these ingredients than another, by just so much will it decrease in weight when the oil and water is dried or washed out. This shows that it is just asessential that stock should be in such condition that it will not shrink more from one feed than from another, as it is that the same weight should be given at all times.

Now, how does the doubling up,of the carded stock on the second card remedy the unevenness resulting from these causes? Changes among the help are frequently unavoidable. If tue help is to be permanent, however, and a good tender is put at the work, any alteration from the previous feeding may be soon remedied; but if a poor operative is tried, no good work may be turned out until other changes are made. But it is just the temporary changes of the tenders which work the most mischief, for then the work is always at sixes and sevens. Many mills, in order to supply their other machinery with work, are obliged to run the card room overtime. In some of these the tenders are changed two or three times a day, and the time of the different reliefs varies from one to five hours.

Batches or lots of stock are very seldom fed to the cards from the bulk, but are hrought to them in boxes, baskets, or sacks, in such quantities as are convenient for transportation from the picker or stock room. The same carelessness that leaves the stock half mixed almost always results in feeding it to the card in such a manner that the better portion will be fed to it for some time, for example, for a day or half a day, when it is
followed by the poorer stock, and that again by the other for a longer or shorter period, as it may happen. The same thing takes place in working wet and dry stock. It is very seldom that such stock comes to the card with such regularity as to be fed strand with strand in doubling, or that it is so manipulated that it evep dries out with any degree of regularity.

It will be seen from these remarks that a first breaker thus fed must nake coarse or fine drawing for considerable periods of time. Frequently this is long enough to make two or three creels full for the spooler, or at the second breaker. This being the case, what is more likely than that the thin and thick places will each come to the second breaker separately. At one time the strand will all be heavy and at another all light. Only the chance of getting more or less of the fine strands in with the coarser ones remains to offset the labor, delay and other disadvantages of the doubling process. This working in of more or less of the equalizing strands only means so many differenı sizes of roving, between the extremes, which may perchance hit the desired medium, but not very often.

It may be claimed that the causes cited are to a certain extent unavoidable, and that inasmuch as carders are so watchful, tests of the size of the roving and prompt changes of weights and gears when needed will keep the roving near enough to weight. It has been so argued. Did it never occur to the advocates of the frequent sizing of roving, that when it is found to be right there is a useless wiste of stock, time and labor in making the test, and if it is found to be wrong, the mischief has already been done, and that further change may do more, and that when the work may be expected to change continually, the mischief will be done over and over again.

If we must depend upon the roving scale, instead of even feeding, the direct through feed is by far the best, as the unevenness or bad work, from whatever cause it may arise, is much sooner detected and more easily remedied in that case.

*     *         * 


## THE FIXATION OF FAST COLORS ON COTTON.

The Scientific Dyers' Society of Huddersfield, some years ago, made some tests in order to see to what extent dyed cotton goods would be affected by atmospheric influences. One-half of the samples were exposed in Huddersfield, England, for about four weeks, and the others were sent out to this country and exposed for a similar period here. The latter were then returned to England and placed side by side with the first half, when it was found that the colors were affected in opposite ways; and there is no difficulty in deciding that nearly all the patterns exposed in Canada show very marked alkaline reactions, the result being that the colors are faded the same as if the goods had been treated with alkalies, whilst the samples exposed in Huddersfield all show acid reactions-a result that will not cause surprise, having regard to the quantity of sulphurous acid pouredinto the atmosphere
of a town by its consumption of coal. If dyers are ever called upon to produce colors that will withstand atmospheric influences, the merchants will be required to be told where the goods must be exposed; also the uniform condition of the atmosphere must be assured. In the last extremity on fast work the dyer is able to prove that we must submit to the laws of nature, which proves how imperfect are all our works. Briefly, those colors which fade the soonest are often those which easily suffer decomposition or reduction upon the fibre from light, moisture and exposure. Great sclubility of the dye often favors such results, and the most permanent dyes are often those which are least soluble when fixed on the fibre, and such colors show the greatest resstance to the influence in milling, which we will consider for a moment.

How often we hear the remark from those interested in the sale of a dye that its color is fast against milling, which process is held by them to be the highest standard of permanence, although when questioned it is often found that their knowledge of milling extends no further than an assurance from some one who knows just as much of practical milling as they do themselves. The subject is so wide that a whole paper devoted to it would barely exhaust the question. Of late years milled goods for ladies' wear have had a great demand, and it is a little difficult to understand the interpretation placed upon the words "fast colors" as applied to this class of goods, more especially when we know that such goods must of necessity be milled in the grey before they are dyed; hence such colors are not milled at all, and in many cases the objection to millinglgoods after.dyeing would be fatal to the success of both milling and dyeing, as very many of these goods are dyed in delicate bright colors and even the dark colors are sour dyed, and such colors so fixed could not undergo the ordinary process of milling. Then, again, milled goods for ladies' wear are largely manufactured from long staple wool, and all such goods must be prepared for milling, or the goods will be spoiled in the latter process. Then, again, the process of milling extends from 20 minutes to 20 hours, having present in some cases only water, others soap, soda, and thickening in various proportions, and for at least ons branch of the trade sulphuric acid is employed. These conditions are too wide to be covered in general terms An experienced miller, having a knowledge of colors, can mill slightly almost any color without any injury, while a want of intelligence in the use of soap, soda, etc., would spoil most dyed goods, or even grey goods before dyeing. There is also the proper preparation of goods before being milled, which is often an important factor in goods for ladies' wear. While these important processes are generally treated with silence, which may come from want of practical knowledge, such processes are indispensable.

A large proportion of woolen goods, especially in low qualities, are; milled before being dyed, which almost disseminates prevailing notions about colors being fast to milling; still the milling of dyed goods
has not, and probably never will become entirely obsolete.

## british hat trade with canada.

The following is a comparative statement of the export of hats of all kinds from Great Britain to Canada and the United States from 1889 to 1893 :

| Canada........Doz. | 1829. | 1890. | 1891. | 1892. | 1893. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 135,158 | 135,811 | 148,848 | 159,080 | 193,688 |
|  | 140,886 | 133.095 | 1.42,885 | 151,119 | 166,507 |
| United States . . Doz. | 29.336 | 44.719 | 29,360 | 23,270 | 31,060 |
|  | 50,845 | 62,214 | 47,618 | 44,873 | 46.649 |

It will be seen that Canada is a far better customer of England than the United States is. Of the hats that came to Canada in 1893 , ro6, 84 rdoz., valued at $\mathcal{E} 128,283$, were felt hats ; 91,355 doz., valued at $£ 40,548$, were straw hats; and 1,528 doz., valued at $£ 2,037$, were silk hats and hats of other materials. Our imports of felt hats are about twenty-five per cent. more than the Australasian colonies, but those colonies buy from Great Britain over three times the number of straw hats that we du, New South Wales alone importing 112,979 doz. Regarding the hat trade between Britain and the United States, the Stockport, Eng., Advertiser thinks that under the Wilson tariff English hat firms will do a ti.uch larger trade with our American neighbors. We fear, however, that in this point our English contemporary is literally and figuratively "talking through its hat."

## british textile trade with canada.

The following are the values in pounds sterling of the exports of wool and textile fabrics from Great Britain to Canada for Sept., and for the nine months ending with Sept., as compared with the same periods of last year :-


It will be noticed that, with the exception of raw wool, there has been a decided decrease in the value of all textile exports from Great Britain to this country.

Wt gather from a manifesto issued by the cloak manufacturers of New York on the existing strike there, that there are over 150 firms engaged in manufacturing in that line in the American metropolis, the annual wages amounting to $\$ 8,000,000$, and the annual sales to $\$ 40,000,000$. Canada has developed but little in this branch of manufacturing, as no protection has heretofore been afforded,

Point D'Alencon, " the diamond among laces," is made with the needle. The naking of it was virtually a lost art when the Empress Eugenie expressed a desire for lace of the design which had been worn by Madame de Maintenon. The company's agents scurried about until they discovered two or three old women who remembered how to make Point D'Alencon, and thus this exquisite lace was revived. It is made in small pieces, ten different women often working on one piece, one woman making the mesh, and another lining in the thread, and so on.

At the wool spinning mill at Aalsgard, Norway, which employs about 180 hands, a very unusual arrangement exists as to the treatment of the men and women employed. All the unmarried hands, both male and female, are engaged for a fixed yearly salary, and get board and lodgings at the works. There is a large kitchen and a large dining-room, where the employer and the employed dine together. The owner's wife herself superintends the cooking. The bedrooms and the other apartments are roomy and well ventilated; the women sleep in one end of the buildings and the men in the other. They all look healthy and fresh, and very unli' e ordinary factory hands.

John G. Haggard, British Consul at Trieste, in his annual report, draws the attention of silk importers and silk growers to the silk-producing caterpillar of Bombyx lasiocampa otus existing on the coast of Dalmatia. Whether the moth is indigenous or has only comparatively recently appeared on the coast is not known with certainty, for it has but lately attracted the notice of entomologists in Austro-Hungary. The moth is somewhat similar in appearance to that of the silkworm, but the cocoon is much larger and the silk slightly finer and very white. The caterpillar does not feed on the mulberry, but on the evergreen or holm oak (Quercus ilex). "The discovery," says Mr. Haggard, " has been such a recent one, that, so far, little has been done towards rearing the worm artificially; but its breeding has commenced is: one or two places, and perhaps with far-reaching results to the silk trade."

Spors and burls in wool damage both the appearance and the value of the stuff: Carbonization has helped to remedy the difficulty, but much remans to be done. The easiest spots to remove are those of vegetable origin, and these will not give much trouble if the carbonization is thoroughly done. But there is one kind of spots, often associated with colored ones-viz., white spots-which, according to the Boston fournal of Commerce, give as much trouble as any that could be mentioned. Their origin is either pieces of skin in the wool or little lumps of felted hair. Hence to avoid them, the first requisite is that the sorting of the wool should be thoroughly done, and that it should be as little inclined to felt as possible. Perfect cleanliness must be observed in all processes, and the drying rooms must be kept free from dust, The picker and all the machines must be clean and in good order, and the carding must not be hurried,

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Recents of American carpets at English ports have fallen off of late, whether on account of their dimimshed pupulanty or of the improved conditiun of the Amention hume trade, is not stated. Sales recently have only averaged $£ 500$ to $£ 600$ a month.

Jusr before the war between Japan and China the latter country had given large orders in England for cotton machunery, but when hostilities broke out these orders :vere held back. Had the war not taken place, there would have been a remarkable development 1. cotton manufacturing in China during the coming year.

Time was when Japan was the purchaser of large quantities of wide-width satin from Europe. For some time, however, the imports in this direction have been falling off, and now, we understand, they have entirely ceased. On the other hand, a constantly increasing quantum of silk fabrics now goes from Japan to Europe every year. The people who only a short time back stood in the position of buyers have now advanced a stage and become sellers.

The cultivation of ramie is attracting much atten. tion in Jamaica just now, and W. J. Hollier, of New Orleans, is in the island, endeavoring to push a new machine for its preparation. Mr. Hollier claims (and he is not the first man who has oid for the honor) that "a machine has at last been invented for preparing the ramie for market in a rapid and economic manner." Sisal hemp has already been introduced, not without a certain success.

The well-known English hat firm of Victor Jay \& Co., of London, put in practice a principle in dealing with their employes which ought to be generally followed. The hatters who have been in their employ up to the age of sixty are entitled to a superannuation allowance of four shillings (a dollar) a week for the remainder of their days. The rule so common in this country of turning old hands off to shift for themselves, or die like a worn-out horse, is a hard one, and some means of maintaining aged and disabled workmen should be made general.

The Japanese are in a great many respects the exact opposite of the Europeans in their ways and manners of dealing. There is one respect certainly in which business orders as regards quantities differ very essentially. All European manufacturers like a " big order," and of one pattern, and will be able to produce it at a lower price, because the workpeople, becoming accustomed to it, can run a larger quantity, and so are often willing to take a lower price. Not so the Japs. An order for a thousand dozen of a pattern having been offered, a difficulty was at once suggested by the manufacturer. "For even a hundred dozen the price must be increased. My worimen dislike working too long from one pattern, and if I were to take from them the pleas. ure of constantly changing their designs, I should have to compensate them with much higher wages."

Manches.er inteads cutting Liverpool out all along the line. Not content with cunverting an inlanu
town into a seaport and causing thousands of tons of merchandıse to pass Liverpool's doors, its citizens are now intent on forming a raw cotton asscliation and market similar to the one in Liverpool, with greater chances, of course, in favor of the success of the former. Liverpoolians do not favor the project, as may be imagined, but it is, we suppose, another case of "all's fai: in love and trade."

Figures, however carefully compiled, in regard to so broad a subject as the manufacture of silk throughout the world, must of necessity be little more than approximate. According to what is presumed to be a careful estimate, made from the fullest attainable data, the value of the world's ar.nual production of silk fabrics is about $\$ 320,000,000$. France is the leading manufacturer of these goods, of which she turns out some $\$ 125$,000,000 worth, ort'considerably more than one-third, and consumes in so doing neariy $\$ 60,000,000$ worth of raw silk, and perhaps $\$ 20,000,000$ worth of wool, cotton and other fibres used in mised fabrics. Of the raw silk, about one-eighth is of French production, and the rest comes from Italy aud the East. France's export of silk goods amounts to some $\$ 50,000,000$ a year, the greater part of which goes to Great Britain and the United States.

According to the last report of the Department of Militia and Defence, the issues from district and headquarter stores for the year ending June 30, 1893 , were as follows:

Tunics, cloth and serge.......... ............... 9.719
Trousers and riding brecehes.. ..... ............ ro,316
Forage שaps....................................... 6,404
Great coats..................... ................ 3.315
All these assues were approved by and accounted for at the department's headquarters in Ottawa, monthly returns being rendered from each of the district stores. The work of superintending and sending. out such a large amount of clothing is thus carried on smoothly.

The Mexicans spun and wove cotton, and the Peruvians both cotton and wool, into fabrics which the Spaniards found equal to anything they had known at home. The Peruvians, in particular, were adepts in the art. Their woolen fabrics weie of three kinds-a coarse woolen cloth, which they called " avasca," which formed the raiment of the common people; a finer variety, called "compi," worn by the captains and offcials; and still another, also called "compi," but of much finer quality, reserved for the use of persons of royal blood. Specimens of this cloth, still preserved, reveal a fineness of texture and an exquisite finish which modern ingenuity rarely equals. Both sides of these cloths were woven alike. The delicacy of the texture gave it the lustre of silk, while the brilliancy of the dyes employed excited the envy and admation of the European artisan. The Peruvians also made shawls, robes, carpets, coverlets and hangings in great varieties of patterns. They knew how to produce an article of great strength and durability, by mixing the hair of animals with the fleece of their llamas.

Shinshiv, or Shinano, in the centre of the main island, is pur exrellence the silk province of Japan. It contains about 2,000 square miles, and a recent traveller describing it in a Japan juurnal, says that everyhody seems to be engaged in some way in sericulture. The houses appear to be entirely given over for the time being to the silkworms, and the inmates to be solely devoted to their rearing, feeding, and cleaning. Detached cottages sprinkled over the hills and valleys and along the roadside, whole villages and hamlets, as well as many houses in large towns, exhibit signs of the work in progress. Uulike the traffic on roads in general, all the burdens borne by man and beast indicate a connection with silk. Horses, where not laden almost beyond recognition with branches of mulberry, carry huge sacks of cocoons; wagons by the score are similarly freighted; and humble cottagers with their harvest of little white balls toil up steep passes or wind through the valleys in a continuous stream towards the centres of reeling; and if a man be met whose load is neither mulberry leaf nor cocoons, he is generally carrying a piece of machinery belonging to a reeling establishment, or in some other way indicates his connection with the silk interest. In every direction the most obtrusive feature in the landscape is the mulberry.

As inquest which attracted a good deal of attention among English woolen manufacturers recently was that held in Leeds over the body of Thomas J. Bate, a wool dyer, who died of anthrax or woolsorter's disease. This disease is usually pulmonary in form, but in this case it was cutaneous, the first symptom showing itself about eighteen months ago in the shape of a large swelling over one of the deceased's eyes. This swelling afterwards developed over the whole head, and the finger nails and other parts of the body became of a dark color. Anthrax seldom arises from Botany noils, but is not infrequently generated from Buenos Ayres wool. The wool which comes off animals which bave died from anthrax, is not so infectious when firct received as it is after it has been washed and dried. The bacillus would be destroyed by a dry heat of $170^{\circ}$ (which, in the mill where deceased was employed, formed part of one of the first processes), but this heat would be insufficient to destroy the spores. It is said that even in manufactured goods the spores sometimes still exist, and coming in contact with a raw surface, such as a pimple, occasionally produce anthrax. The best remedy against this risk is to apply a considerably greater heat in the carbonizing process than is usually employed, which can generally be dote without injuring the fabric in any way.

The British Board of Trade have just published a report giving the history of profit sharing in Great Britain, from the experiment of Lord Wallscourt, about 65 years ago, down to the system instituted only this year by the Crystal Palace Gas Company. It is satisfactory to note that the large majority of these attempts have been attended with success, though, of course, the principle of profit sharing should hardly be regarded
as a panacea against all the ills to which the commer cial fatric is liable. The compiler of the report in question urges that the facts set forth show that profitsharing, in nearly all tts practical applications, largely tends to establish more harmonivus relations between employer and employes, and to increase the efficiency of the latter in a marked degree. The great difficulty in the way of a general adoption of any system of profitsharing in England seems to be the hostility of the trade unions, and $t^{1}$ this is overcome the principle is not likely to mahe any great general advance. In France, however, we learn from another source that many single masters and joint stock companies are introducing the idea. Most of these instances of profitsharing are in the textile trades. The system usually adopted in that country is for the employes, under certain conditions, such as length of service, good conduct, etc., to receive a certain share of the nett profits, averaging from 5 to 15 per cent., the details of course varying with almost every case.

A report published by the chemical testing department of Breslau, Germany, shows that cloth is often seriously injured by acids which may have been used in certain processes of manufacture. In one case recorded three articles of clothing were submitted to the department for examination. The cloth had been injured by some fluid, the nature of which was not known. In that first examined large quantities of sulphuric acid were detected. The undamaged parts of the stuff were found to contain 0.826 per cent. of sulphuric acid, and the injured parts 9.055 per cent. Besides, the injured places yielded a very strong acid reaction, and free mineral acids could be proved to exist in the watery extracts with the help of methyl violet and methyl orange. In the other two samples the same processes resulted in failure, because the damage was not sufficiently extensive. In the second of these samples there was only a slight acid reaction, while in the other it was scarcely possible to get a reaction at all. Free mineral acids could not be demonstrated in either of these samples. It seems, then, from these experiments that in such cases of injury to cloths the sulphuric acid, which was originally free, passes gradually into the opposite condition, and that principally through the taking up of ammonia out of the air, and possibly also, in some degree, through the influence of sulphuric acid on the fibres of the fabric.

Ter annual general meeting of the Silk Assuciation of Great Britain and Ireland took place in London one day last month. After the routine business had been gone through, several matters pertaining to the state of the British silk industry were discussed. Several of those present spoke of the necessity which existed for keeping up the status of, and supporting the only silk conditioning house in Great Britain, which is situated in London. At present this condition house is only just able to meet its expenses, owing to the lukewarmness of several of the salk manufacturers of the country, and if it were to become extinct a consid-
erable moral check upon the foreign condition houses would cease to exist, with results disastrous to the home industiy. Another important question discussed at the meeting was whether British silks ought to be protected, one or two of the members of the associa. ion being of the opinion that a fair amount of protection was the unly course likely to save this languishing industry from entire extinction in the nut very distant future. It seems strange that in a country like England, the very mention of whose name cunjures up thoughts of "free trade," that such expressions of opinion as the abuve should find any echo in the public mind; but the fact remains that there are to this day a very large number of responsible men in that country who, if not exactly out-and-out protectionists, would welcome any modification of the present state of things, either by what is called "fair trade" or some measure of a more drastic style.
S. N. D. North, in the Popular Science Monthly, states that it was left for an American citizen to first successfully essay the mechanical labrication of felted cloths. Thomas Robinson Williams, of South Kingston, R.I., invented the process of making felted cloths of commercial length, and patented it May 22, 1830. Since that day felts have appeared in innumerable forms -as printed and embossed piano cloths, ladies' skirts, floor coverings, often very highly artistic designs, materials for roofs and protectors against weather, piano hammers, shoe linings, etc. It is difficult to imagine any department of industry in which wool, in its felted form, does not somewhere play its part. Thus we have taken the simple discovery of antiquity and made it among the chief instrumentalities of civilization. The Tartars and kindred people who occupy the middle and nurthern legions of Asia, and wh se manners and customs have remained unchanged from the most remote antiquity, employ the felted wool in a variety of functions, only less important than the supplying of foods. Both their clothing and their habitations have consisted of felt since a knowledge of them first went upon record in the fourth century. The process of felting was generally known among ancient nations. The Greeks gave to it the name "piledis," from "pileo," to compress; literally, a compression, or thickening of the wool. The ancients employed felt for a great variety of uses, just as we do, the chief being to make coverings for the head, the most common form among the Greeks and Romans being the skull cap.

Wool must be treated very difierently to vegetable fibres in dyeing. It has the property of resisting to a high degree the influence of acids, but is very sensitive to alkalies and alkaline solutions. Caustic alkalies quickly dissolve wool, and therefore must not be employed in wool dyeing. The carbonates do not have quite so corroding an action on wool, and can be used to a limited degree-that is, in medium strong solutions. Soap has no decomposing effect upon wool, for which reason soap solutions can be used for cleaning and dyeing. In like manner ammonia has no effect, and can
therefore be used in place of soap solutions. One characteristic of wool is its inclination to felt. When boiled in water and well worked its fibres interlace and form a firmly cohering mass. This tendency must be counteracted as much as possible in cleaning, as well as in dyeing wool. It depends much upon the temper. ature and condition of the bath in which the woul is treated. Tos high a temperature and tov long a treatment in the bath increase the danger of felting. For this reasun a prolonged treatment during builing must be avoided. Again, the condition of the bath exerts some influence in this respect. It has been observed that an alkaline bath materially increases the possibility of telting, so that the use of caustic or carbonate alkalies must be avoided. Strong solutions of soap also readily affect felting, and must be either used in limited quantity only, or be dispensed with entirely. Ammonia has not so strong a felting effect as the other alkalies. Acids, on the contrary, prevent the felting; and this is of importance in wool dyeing, because the acid condition of the dyebath is for this staple one of the principal requirements. Alkali salts-for instance, Glauber's salt and table salt-have little or no influence upon the felting, and may be added tc the dyebath. Indeed, in many instances, they are of advantage in improving the quality of the color. These remarks about wool apply to all other animal fibres, horse hair, rabbit hair, etc., although each kind has a special property of its own as regards its power of resistance to acids and alkalies.

Two gentlemen named Allison and Pennington have taken out a patent in the United States in respect of a process which is said to accomplish the retting of flax, hemp, ramie, etc., in a couple of days, in any water and at any season of the year. Those who have hitherto followed the old method will be interested to learn how this marvel is to be accomplished. By the new process, the microbes which are said to perform the operation are developed with the greatest possible rapidity, through the addition to the water of certain inorganic salts, "which they," says the Industrial Record," being vegetal in their nature, require, as do all phanerogamous plants, for vigorous growth and rapid multiplication." These salts are lime, potash, phosphoric acid, magnesia, soluble iron silica, manganese, and compounds o! nitrogen. They are found in some parts of the River Lys, in Belgium, and in other waters where retting is carried on. Where the retting water has been found to contain no microbes of the desired species, our New York contemporary tells us, a small quantity of water known to contain them is added in the proportion of 1 to 100,000 by weight, together with minute quantities of the salts named. Flax can be retted in two days in any of the waters of the Western States. "In Minnesota, tanks $22 \times 30 \times 6 \mathrm{ft}$. were used, each one capable of holding three tons of stalks. The latter were packed in and kept in place by grids or racks of wooden slats, held down by heavy timbers, which were tightened by cleats on the tanks.

A small quantity of straw was then thrown over, and the solution of salts, etc., run in, after it had been heated to about $90^{\circ} \mathrm{F}$. In two days the retting was accomplished, during which time only two or three degrees of heat were lost, though a part of the time the thermometer stood at zero." After the retting, when the stalks were spread on the ground, they literally "froze" dry, without any damage tu the fibre. Hemp has also been quickly retted by this process, and we are assured that the quality of the fibre was superisr to that obtained by the ordinary method of retting in the meadow. Ramie, too, has turned out equally successful.

Why not wash the yarn? asks a correspundent of Wade's Fibre and Fabric. In a well ordered wooien mill dirty worsted yarn is a great nuisance. When the yarn is taken out of the vats, or off the machines when it is dyed, it ought to be well washed before it goes to the drying-room. When worsted yarn is dried withont washing, it remains very dusty; the dye-stuff which does not adhere to the yarn forms into dust on the surface of the threads and very much hurts fine yarns. The shuttle races and boxes accumulate so much dirt that the shuttles can sometimes hardly get across the shed. Where the yarn is not washed after dyeing till it is made into cloth, the winding-room, dressing-room and weaving-room would require to be whitewashed or painted every three months. The dirt from the yarn makes the face, bands and arms of the operative as black as those of a Manchester chimney sweep-no sweeps in this country except those who work dirty yarn. It is the cause of the dark mark across the cut where the weaver has had to pick out, and sometimes the finishers don't know the cause of it. The fancy colors and mixes cannot be made to look so bright when the cloth comes to be washed in the fulling room. But this is not all; dirty yarn does not take the size well in the dresser. When a few sections of the warp has run through the size, it leaves the half of it nothing but dirt. It is indeed no wonder that some warps don't go good. Dirty size makes the yarn inflexible, and as the knots catch most of the dirt they are sure to break in the weaving. The mill manager who thinks he is saving labor and expense in not washing the yarn before it is woven, ought to reflect that he is losing more than the cost of washing in other departments, besides the great trouble it imposes upon those who have to handle it. All yarns from 40's up ought to be thoroughly washed after dyeing-yarns below $40^{\circ} \mathrm{s}$ might go all right without it.

The Duchess of Sutherland is endeavoring to organize, on wide lines, the cottage industries of the North of Scotland, and to Mr. Sinclair, of Golspie, the produce of many handlooms is already being sent for clothing the Southron. Dunrobin Castle being only two miles from Golspie, and its Duchess being not less approachable than becomes one who, while "globetrotting," has visited the democratic communties of the far South and West, a representative of the Pall Mall Gazelte learned from the Duchess her anticipations of
the future of the cottage industries. . You want to know, in the first place," remarked the Duchess, "why the crofters of this district should be able to spin home. spuns to compete with Biadford. Well, the quality of these hand-made clothes and their durability justufies the higher price we get. You must remember, too, that the winter days here are very short; agricultural employment at that season is almost suspended; therefore, except tor the fishermen on the cuast, it becomes a choice between doing something--cleanng, dyeng, carding, and spinning the wool of these Cheviot sheep, or doing nothing at all, and that is what no Scotchman or woman likes to do! Yes, yes, in theory I know very well that there is no virtue in 'three acres and a cow,' nor yet in cottage spinning. According to your political economy books, just as the future of farming must be given over to steam-ploughs and to farmers who pay four-figure rents, so also it is declared that our cottage industries cannot hope to revive in these days of Brad. ford looms. But remember that both wages and the prices of all the necessaries of life here in the far North are very low, and the fact at least remains that in Rogart last season some fifty cottagers sold homespuns to the value of nearly $£ 400$. R uughly, ten to twelve pounds of wocl at a shilling will make eight yards of tweed, for which we obtain four shillings, or even five, a yard; the outlay for carding may be reckoned at threepence per pound, and the weavers usually charge sixpence for weaving; this is the cost exclusive of dyes -vegetable dyes, which are collected on the hill-sides. Taking into consideration the time and labor given, the profit is not large. I am arranging to have a person of skill and experience-in this industry, to advise our people as to the most popular patterns, and more than one London tailor has been kind enough to promise to buy our homespuns direst. If possible, also, I want to establish a trade with some large wholesale house. I shall be grateful to you, if possibly what you report of this industry in the Pall Mall Gazette enlists a little support for us in the United States and Canada. Many prosperous Scotchmen over-seas most know how valuable any such support would be to those who are, after all, happier at home than in Manitoba, if only they can make both ends meet pleasantly here in the Highlands."

## acetic acid in alizarine dyeing.

Every dyer knows that the water used in the dyeing operafion has an important influence upon the results obtained, and that success depends upon the degree of its purity and adaptability. Only in exceedingly rare cases will water be found in 2 condition even approaching to chemical purity, and it generally contains more or less \{oreign ingredients, such as spod, clay, vegetable or animal products, etc. These mechanical admixtures are mostly present only in small quantities, and do not seriously interfere with the operation. They are inconvenient, but can readily be got rid of by suitable apparatus. More injurious, however, are the salts dissolved in water, especially in lime salts, which are often of great inflaence upon the results of dyeing. Besides the lime salts, water also contains frequently magnesiom salts, which are of as great an injury as the first named. Iron is not found quite as often, but, if present, it exerts a highly unfavorableinfluence upon many methods
of dyeing, as well as upon the colors. Other salts are still scarcer. Alkaline salts, such as cooking salt, chloride of potassium, sulphate of soda, and potash, sometimes occur in water, but either have only a slight disturbing effect, or are innocuous altogether. Oftenest to be found and strongest in their effects are, doubtless, the lime salts in the natural water. They are mostly carbonates and sulphates of varying proportions. Carbonate of lime and carbonate of magnesia are insoluble in pure water, but are soluble in water containing carbonic acid, whereby carbonates are formed. Every natural water contains carbonic acid, and, since it runs through the ground, it dissolves carbonate of lime and carbonate of magnesia, and is, thereby, impregnated more or less with these salts. When water, which contains the dissolved carbonate, either of lime or of magnesia, is heated to boiling, it loses its carbonic acid, the salts lase their solvent, and are precipitated in an insoluble form. Every owner of a steam boiler, and, indeed, every cook, knows the dangerous " boiler scale." The sulphate of either lime or magnesia is also present in nearly all waters, but, contrary to the carbonates, it still remains in solution when the water is boiled. To use a common expression, lime and magnesia make the water "hard." This quality, again, is divided into temporary hardness and permanent hardness. When hard water is used for dyeing, and especially for alizarine dyes for wool, the effect of the lime salts is that they unite with the dyestuffs and form lime lakes, which adhere only very loosely to the fibre. If this fibre is then washed, the color lakes are loosened, and the dyed, or rather undyed, fibreloses in depth and lustre. The effect is similar if the fibre has not been washed entirely free from dirt. The dyestuff unites with the filth and lime, but not with the fibre, and a subsequent soap bath removes the dirt and the dyestuff at the same time. If, in addition, a caicareous water is used in the subsequent operations of washing and dyeing, a smeary and bad smelling lime soap is formed, which is removed with great difficulty, and prevents the dyeing of the fibre. The most convenient means for moderating the cvils of the calcareous water is the neutralization of the carbonates by the
addition of an acid to the dye bath. The acid most suitable for this is acetic acid. The acelate of lime thus formed is entirely soluble in water, and is not precipitated even by boiling. A trifling excess of acetic acid is, besides this, not at all injurious, as it has neither a dissolving effect upon the mordant nor upon the color lake. The quantity of the acetic acid to be added, which, generally speaking, is also a good solvent for dyestuffs, depends upon the percentage of the carbonates contained in the water. From one to two quarts of acetic acid per 1,000 quarts of water will suffice.Faerberci Zengdrucken Zeitung.

## IMPROVEMENTS IN KNITTING. MACHINERY.

Messrs. Robt. W. King \& Co., whose new advertisement appears in this paper, have been adding improvements to their Tomkins Bros.' pattern of shirt and drawer knitting machine. . We have lately seen one of these machines as built from their improved patterns. The slatted upper table is done away with and the feed stands held on link-shaped pieces that enable them to be extended to the full distance, or moved around the cylinder to occupy any desired circumferal position in reference thereto. The inside burrholders have been improved: the stop motion made self-setting, and so machines can be stopped or started from either side of the table. This latter improvement is by permission of Mr. Fred Hill, knitter for William Algie of Beaver Woolen Mills, Alton, Ont. Cylinders are now made exactly interchangeable with American machines, so cylinders for these latter can be more readily furnished. Every pains have evidently been taken to make their new machine equal to, if not superior to anything that can be procured from the United States. The machine certainly presents generally a very creditable and tasty appearance. The firm having parted with their rights for the Dominion of Canada to manufacture their patent automatic hosiery machine, are now giving their full attention to the working up and improving of their business in other lines.

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$16 \times 8$.
Warp-3,780 end, worsted cheviot, mixture, 16,000 yards per pound double twist, i6 harness straight draw.

Reed- $15 \times 4=63$ inches wide in loom.
Filling-60 picks per inch, same yarn as in warp.
Finish-Worsted cheviot finish, 55 inches wide.


Complete Weave. $12 \times 12$.

Warp-2,400 ends, 12 harness straight draw.
Reed $-12 \frac{1}{2}+3=64$ inches wide in loum.
Dress-5 ends light color merino yarn, 8,000 yards
per pound, double and twist.
$r$ end fancy twist 3,500 yards per pound.
6 ends in pattern.
Filling - 38 picks per inch, cheviot worsted, mixture, 9,000 yards per pound, double and twist.

Finis!l-55 inches wide, full, shear and press.
moss finished woolen overcoating.


Complete Weave. $10 \times 20$.

Warp-3.360 ends, 33 run, woolen yarn, dark shade.

Reed- $10 \frac{1}{2}+4=80$ inches wide in loom, so harness, straight draw.

Filling- 52 picks per inch, $2 \frac{1}{4}$ run, woolen yarn, medium soft twist, dark shades.

Finish-Shrinkage in length at fulling, 14 percent.; finished width, 58 inches; moss finish, gig back, plenty to produce a very soft handling fabric.

## THE WOOL INDOSTRY IN SOUTE AFRICA.

There has again to be recorded the practical failure of an attempt to eransplant the woolen industry to South Africa, says the Leeds Mcrcury. From time to time companies have becn floated in Cape Colony, Natal, and the Orange Free State, for the parpose of cloth and blanket manufacture. At the outset cverything was coulcur de rose, and the promoters managed to persuade the shareholders that it was not only possible but easy to manufacture these textiles in South Africa. One by one, nevertheless, the concerns have come to grief, and by last mail there is intimation that the
most promising of ventures-the one at Newcastle, Natal-is in difficulties, and that the industry is likely to be shortly abandoned in that part of the Empire. Despite the fact that the Government has bolstered up the industry by a yearly bonus, the merchant has been more than able to compete with the colonial makers of tweeds. The South African article is splendid as a material for wear, but no small colonial concern can produce the vaiety of shades and patterns the importer can place on the market, and which fashion inexorably demands. The time seems far distant when South Africa will offer a field for prosperous enterprise in the woolen industry, and facts reported by careful observers up to date con vince ond that the Yorkshire manufacturer need fear no unwelcome rivalry, nor the loss of his present farly valuable markets in that quarter.

In the adjacent republic of the Transvaal and the Free State, therc has been much talk as to the desirability of establishing woulen manufactories, but as yet no project has taken definite shape. The Transvaal Government nearly two years ago, in accordance with a resolution of the Volksraad, announced the offer of a substantial annual bonus, for ten years, for the establishment of a woolen manufactory, and the manufacture each year of a certain number of yards of cloth and pairs of blankets from wool grown within the republic, but as yet nobody has entered into competition. Several West Riding firms have despatched representatives to inquire as to the prospects of a venture of the kind, but the reports are understood to have been discouraging.

Practically, the whole of South Africa is supplied with cloth, blankets and rugs made in Eugland. Woolen rugs, too, have during the last dozen years become greatly the vogue in South Africa, and there seems great scope in this branch of woolens for the future. The natives are year by year becoming purchasers of blankets and rugs, and as there are some six millions of them in the territories within the sphere of British influence, trade is likely to increase. The Kaffir uses his blanket or rug for quite a variety of purposes. It protects him from the heat of the sun and shelters him from the cold ; he utilizes it as a table cloth, uses it as an umbrella, and when he travels it is his portmanteau and his purse. Of gaudy and garish colors he is fond, and he often delights to have on his blanket the representation of some warlike, hunting, or pastoral scene. Compared with the European colonist, the ordinary South African native is very lightly taxed, and the tax is imposed indirectly. The blanket is one of his principal purchases during the year, and by a small import duty upon it, the Government manage to thereby make him a contributor to the revenue.

## BRUSSELS CARPET MANUFACTURE.

For Brussels carpets, yarns intended for whites are always superior to those for any colors, at least this is the practice that has always obtained where the genuine article is produced, says the Boston Fournal of Commerce. There is great carefulness used in the sulphur stores, so that the bleaching renders the fibres known as " snow-whites." To speak about dyeing would be to tell a welltold tale. Suppose the yarn prepared for the weaving process, we may consider the fabric into which this yarn will be woven and which will hold it together. The main portion of the carpet, other than yarn, is the chain, and this may, according to quality, consist of linen or may be cotton threads. Linen is preferred in the best goods, because it gives greater firmness, or " handle," and more weight;; cotton gives a softer carpet, and probably, if of good fibre. will wear better.

The linen, or cotton, yarn is in skeins and wound in the usual way from a winding frame on to bobbins, which are afterwards placed in upright iron frames placed at a $V$ angle towards the sizing, warping and beaming machines. The hot colored size is principally composed of glue, horns of animals boiled down and old shuttle pickers. After all the preparation of warp and weft, it would appear that the actual work of weaving a carpet would be a very small matter, and so far as the power-loom carpet weaver is concerned this is correct, as with fair materials the weaver has little else to do but watch, and keep up the supply of filling and piece-broken warp threads. The physical labor is performed by
the loom, and the jacquard machine and harness supply the brains. It is. however, an nbject of interest to see a loom working like a living thing and steadily turning out carpets from a mass of materials, blending the colors and producing the patterns which grow inch by inch under the eye Behind the loom, one above another, are wooden frames, containing bobbins filled with colored yarn The best carpets are made from six of these frames Across the carpet, generally twenty-seven inches wide, better known as $\frac{8}{3}$-yard, any number of colors may be placed by a careful intermixture of various colored bobbins in the frames, instead of the keeping each frame confined to one color, as in the ordinary system. Striping must be avoided, and the tints and colors of a five or six-frame actually obtained frona a three or four-frame

The designs are in many instances sketched freely and then transferred upon ruled paper, and so colored that the finished carpet is well represented The design is then embodied in the jacquard harness and eards Many designs are merely woven as specimens, a yard and a-half or so, and others are woven of 2 medium grade to act as "foils" to the superior patterns.

The loops, of which the front or pile of a Brussels carpet consicte, are made upon wires, drawn out as used by what is called the wire motion, and placed between the threads again $:$ the front ready for the next row The operation of this part of the loom, machinery, which has cost a vast amount of money, time and thought, is a splendid example of the fertility of invention and of mind over inert matter. As the row of stitches is forced to a tension by the blow from the lay, the last wire, that is, the one nearest the weaver, is reached for and drawn out by an iron finger with as much dexterity as the human one could use. The wire is taken over an oiled brush to make it run smooth and pleasantly, and brought to the unwoven portion of the carpet, and just as the right threads for the next row of stitches are lifted up, the wire is inserted, the shuttle with its filling fies across, the lay comes forward again, and the row of stitches made Formerly, on the old system, the shuttle was thrown by hand, the wires being drawn out and put in by a boy.

The wire motion, the most important of all other movements in connection with a carpet loom, whether for Brussels or tapestry carpeting, has been a length of years reaching its present perfect condition, and there are many modifications of it applied to the looms.

## THE BRITISH WOOL TRADE.

Consul Meeker, of Bradford, England, in a recent report to the United States Government on the British wool trade, says:

The clip of wool in England for 1894 has been purchased by dealers quicker than ever before. For this several reasons are given:
(x) Auction fairs or sales are now held to a greater extent than heretofore :
(2) Owing to the depression which has existed here, coextensive with that in the United States, farmers have been poorer and more anxious to turn their fleeces at once into ready money.
(3) Anticipation that the changes in the United States tariff allowing wool to enter free would bring about a brisker demand and increase the price, has made the buyers more eager.

The season's clip showed an average in price of from half a cent to one cent per pound advance over last year. This advance was also said to be caused by proposed American tariff changes, as it was not warranted by consumption in the home trade. The spin. ners have not increased the price of their yarns in proportion to the increase in rav: material, for the reason that the condition of trade would not allow it, and they could not have sold their product had they done so. In their price lirts issued for the next six months, spinners have not advanced prices at all. They are said not to be making a profit, but to feel that they are doing well to pay running expenses during these dull times.

It is difficult to estimate the total clip or Finglish wool for 1894. though it is supposed to be up to about that of 189.3 . In the "Down districts" it is considered to be 20 per cent. less than last year, on aciount of the prolonged drought of the spring and summer of 1893 .

This season's wool, which has been purchased so quickly, is now stored in large quantitics in Bradford and the surrounding district, at the various railway atations and in the warehouses. There is a prospect of an abundant harvest in England, which is expected to improve the home trade, while the new market, which is expected to open up in the United States soon, adds encoaragement to the dealers who are holding very large stocks. They are now sanguine in the wool trade, and consider the prospest brighter on all sides.

No more than the usual quantity of foreign wool (that is, wools from Asia, Australia, Europe, Africa and South America) iscoming to Bradford. In fact, if any difference is noted in the London wool markets, it is that Bradford is purchasing a little less. For this there are three reasons-the state of trade, the fact that Craven \& Craven, the largest spinners in the district, have failed and are not consuming as usual, and that the banks are cutting down the amount of paper they carry to the lowest possible figure Despite this fact the bank rate is very low and money is to be had at 2 per cent.

The wool sales of England are of so much consequence in commerce that the railroads make of them almost a special department. The Great Northern Railway makes up a list of the "principal wool sales and rates to and from which the Great Northern Railway can carry." It announces a "representative of the Great Northern Railway will attend these fairs for the purpose of giving information as to rates and routes, and facilitating transit of wool over the Great Northern system and to places beyond." In this connection a table is given showing the location and date of seventy-six sales and fairs in the provinces.

The Midland Railway also issues a card monthly, showing the wool sales that are to take place during the month in London, giving the day, the place of sale and the names of the sellers. During last month (July), for instance, there were 39 sales in London, which had been thus bulletined in advance. On the reverse of this card the number of bales of wool lately arrived from New South Wales, Queensland, Victoria, South Australia, Western Australia, Tasmania, New Zealand, Cape and Natal, Falkland Islands and Punta Arenas are shown, the total being 258.902 bales. The information is given that of this number 55,500 bales of Australian and 20,500 of Cape have been forwarded directly to Yorkshire and the Continent, the inference being that the balance will be sold to the highest bidder.

It is a matter of comment that rival buyers, in bidding for the 1894 clip at the various sales, have not indulged in the usual contest for raising an infinitesimal fraction of a cent at each bid, but have gone at once to the higher prices.

## Valleyfield en fete.

The directors of the Montreal Cotton Co., together with some friends and shareholders, one day last month paid a pleasure visit to their mills at Valleyfield.

Among those present were: A. F. Gault, R L. Grant, Hon. J. K. Ward, Charles Garth, J. Grenier, E. K. Greene, S. H. Ewing (Directors); Henry Barbeau, manager of City and District Bank: A. C. Clark, J. Y. Gilman. Dr. Lovejoy, Jno. MacFarlane, F. Nicholls, G. H. Mathew, Jas. Wilson, jr., A. S. Ewing, S. Finley, J H. R. Molson, G. F. C. Smith; E. Lichtenheim, vice-president of the Ville Marie Bank; Chas. Hosmer, Ed. Hanson, Wm. Hanson: A. L. De Martigny, manager of Jacques Cartier Bank: J. O. Villeneuve, George Greene, Wm. Reid. J. Horsefall, J. Shearer, J. Contin, C. R. Whitehead, P. P. Martin, S. O. Shorey, C. E. Gault. P. R. Gault, A H. Plimsoll, J. Wilson and C. H. Blackader.

At Valleyfield the party was joined by J De Martigny, manager of the Jacques Cartier Bank of the town: Louis Simpson, gen. eral manager of the Montreal Cotton Co. (Ltd.), and D. F. Smith, secretary of the same company. The occasion was the celebration of the recent improvement and enlargement of the mills. Mr. Simpson, the manager, showed carefully every detail of the cotton industry from the raw plant away through sixty processes to the coloured fabrics made up into fasionable gowns. He showed that in consequence of the increase in capital $\$ 600,000$ had been spent on new baildings in order to combine spinning, weaying, convert-
ing, dyoing and exporting under one roof-a venture before never perfectly established on this continent. At 12 o'clock the directors and all the party gathered at the factory door and watched the 1,500 employés file out.

Hon. J. K. Ward, the second president of the Cotton Co., showed one of the first pieces of cotton ever made in the factory and in Canada. It was handled and compared with the colored cottons of to day.

An infomal meeting of the directors was held, while the others visited the Factory Club, where billiards and other games were provided. The club is part of the cotton factory, and at one end is a long building used as a skating rink in the winter.

At two o'clock a fine dinner was arranged at the hotel of Jas. St. Onge, and all sat down to a hearty rep-st. After dinner R. L. Gault proposed a toast to the president, A. F. Gault.
A. F. Gault said, in response, that the Cotton Company bad seen dark days, but by energy and application they had come out on top of the heap. Their binldings, at present, were unsurpassed on this continent. He regarded it as marvellous that cotton after passing through all its wonderful phases in the mill, was sold for four cents a yard. In his opinion no money had been spent wrongly, and the company was fully abreast of the times.
G. F. C. Smith, of the Liverpool, London and Globe Insurance Company, proposed the health of the directors. To this Mr. Garth responded first, followed by Hon. J. K. Ward, one of the pioneers of the company. The mill, he said, was the trst in Canada to make bleached goors, but the change had come perforce. He hoped that under Mr. Simpson's management the company would, in the near future, not only pay a dividend, but a great big bonus.
J. Gremer spoke, and was followed by Manager Simpson, who said that the president had aided him much by building a new school, wnich would attract intelligent workmen to Valleyfield.

Mr. Galmour proposed the toast of the selling agents. To this Mr. Blackader responded suitably, mentioning that Mr. Stevenson was away in England, and that he spoke on behalf of the firm of Stevenson, Blackader \& Co.
D. F. Smith, secretary of the Cotton Company, then spoke.

On the train small souvenirs of the trip were distributed to all present by Mr. Blackader. Che trip to the city was enlivened by speeches, songs, recitations, etc. This is the first jaunt of the kind since 1891 , and virtually since 1883 .

## OCTOBER FUR SALES.

Blatspiel, Stamp \& Heacock, London, report that the attendance at last month's fur sales was small, furriers being detained at home by the more lively state of the manufacturing trade. In various catalogues there have been offered: Australian Oppossum ( $1,093,945$, against last October $1,723,019$ ). Although supply is diminishing and consumption has gone on fairly, the excessive quantities last year quite overpowered the demand and leave large stocks over; thus the desire to purchase was very restricted and holders would not meet the market, preferring to hold till later in the season : realized 15 to 20 per cent. lower figures, and probably one-third of supply is unsold. Black Monkey (69.413, last year $46,04 \mathrm{r})$. No sale having taken place since June, this large quantity had accumulated. Demand for America was weak, and orders limited to prices below what owners would accept, thus a cunsiderable quantity remain unsold; prices show ten per cent. average decline. Wombat $(92,766$, last year 175,553$)$ only fetched the low prices ruling last sale. Wallaby (47,242, last year 71,456) fully maintained their high prices, and were taken exclusively for Germany for dyeing. Fapanese Fox ( 30,168 , last year 54.772 ). A nice collection of fresh skins, ruling 15 per cent. higher than June, were taken by. Germany and England for dyeing purposes. Thibet Lambs-Coats (1,462, last year 1,191) ; Crosses (2.089, last year 3.972) ; Skins ( $\mathbf{2} 6,370$, last year 24,723). In good demand for Eng. land and the continent, mostly sold at improved prices. China Goat Rugs ( 50,868 , last year 55,334 ) were offered, but nearly all withdrawn, only few sold at low figures. China Kid Crosscs (2,472). A mixed collection, and all sold very briskly, prices being about i9 per cent. higher than realized by iate private treaty.
C. M. Lampsola \& Co. sold. Raccoon (32,915, last year 60,037 ;, the small supply did not attract much attention, but prices are fully equal to last June. Fox, Red $(4,084$, last year 6,634$)$, remun at last June values, excepting prime rough skins, which are wanted for dyeing and sold 20 per cent, higher. Fox, Grey $(2,513$, last year none), still much neglected and remain : $t$ last values. $L y n x(4,478$, last year 877). demand very slight but maıntained March prices. Marten ( 27,848 , last year 4,398 ), this article having been in brisk demand in England, and consumption having been very considerable, a rise in value was expected, result shows an improvement of near 35 per cent. on last June, prices, the pale and common sorts were fully 50 per cent. higher, but prime and better color skins were only 20 per cent. dearer, the collection was a rather fine one, and was practically all purchased for England. Russtan Sable (4,150, last year 2,021), the collection comprised chicfly dyed skips of rather infertor sorts, these were much neglected and sold cheaper, the few natural skins on the contrary were a little dearer. Beaver ( 4,347 , last year 1,717 ), demand proved poor and result shows a decline of so per cent. Otter ( 4,738 , last year 581 ), also very quiet demand, and prices receded 10 per cent, Wolf $(3.964$, last year 3.309), neglected, and declined 15 per cent. Amcrican Oppossum (38,711, last year 8,031), this article has been neglected and superseded by other furs for dyeing purposes, result, however, was to realize last prices. Black Bear $(5,189$, last year 2,270$)$ a large and particularly fine collection, demand proved very sirong and prices advanced 10 per cent., all practically purchased for the English market. Brown Bcar (732, last year 223), demand very strong and prices advanced 20 per cent. Grizzly Bear (514, last year 65). Russian (706, last year 258), the American skins sold 20 per cent. higher, but the Russians remain at the high prices of last spring. Musquash (282,375, last year 279,867), a collection com. posed chiefly of Minnesota skins sold at lower prices, while a few good parcels of Canada showed no decline, we have to record an average fall of $7 \frac{1}{2}$ per cent. on June. Musquash, Black (2,073. last year 6,155), remained at last values. Skunk $(29,346$, last year 11,868), a moderate lot of S.W. and Minnesota goods sold at last June prices; many were taken for American orders. Mink (20,961, last year 24.497), on the whole a good collection, and after the sbarp rise seen in marten it was expected a better feeling for this artucle would come about, but the larger skins only seemed in demand and prices practically remained unaltered. Real Chinchilla (486, last year none), an inferior parcel, sold at high prices. Bastard Chinchilla ( 13.915 , last year 32,016), comprising two nice parcels, sold about 5 per cent. cheaper than June last, the darker sorts being in least request.

Walter Bloe is about to erect a large factory for the manufacture of ready-made clothing in Sherbrooke.

A NEw wholesale dry-goods house has been established in Toronto, called the Merchants' Import Company. They will deal through samples exclusively. The leading man in this new concern is John Northway, of Toronto.

The firm of De B. Macdonald \& Co., manufacturers of bustles and dress stays (Alain C. Macdonald), of Montreal, has assigned on the demand of John D. MacBurnie, with the following list of creditors: Canadian Bank of Commerce, Montreal, \$6,50s; La Banque Nationale, Montreal, \$2,421, J. C. Wilson \& Co., Mon. treal, $\$ 405$; Mallson Rubber Co., New York, $\$ 521$; Carl Hinnenberg \& Son, New York, $\$ 225$ : Estate Pratt (rent), Montreal, $\$ 386$ : F. Nash, Montreal, \$500; C. De B. Macdonald, Montreal, \$800. J. R. Speṇcer (salary), Montreal, \$434; Lighthall \& MacDonald, Montreal, $\$ 300$; Thibaudeau Bros. \& Co., Montreal, $\$ 54 \mathrm{I}$; Gerand, Terroux \& Co., Montreal, $\$ 280$; A. Steinam, New York, $\$ 54$. Evans Bros., Montreal, $\$ 342$ : Jno. Geo. Clayton, Manchester, $\$ 323$ : Royal Electric Co., Montreal, $\$ 300$; P. E. Duhamel \& Co., Montreal, \$312; James Virtue, Montreal, \$258; De Leary Macdonald, $\$ 315$. This business was started by the late LA i. Macdonald, a good many years ago, and upon his death his so.s, Alain, succoeded to the business. Dulness of trade and changes in fashion. together with law suits, are assigned as the cause of his trouble. He has been behind hand for a long time past.

## Foreign Textile Oentres

Mancuestrr.-Cotion dealers lately have had a curious experience. With sales amountung to nearly 100,000 bales in one week-the largest weekly record for the last twelve months-prices have receded considerably, and again broken any known record. The reasons for this unusual condition of affars are various, one being pressing orders to sell from America, while another is the natural desire on the part of bankers for further cover in consequence of the great decline in values. The stock of cotton in Liverpool is 707,820 bales, being nearly 100,000 less than on the corresponding month last year, and prices are nearly $1 / 2 \mathrm{~d}$. per lb . less. The trade are evidently resolved to buy freely, and the policy is a wise one, especially as their margin has considerably improved during the last few days, and reports, true or false, of "killing" frost may any day be in evidence, and as a consequence prices may suddenly advance. The outlook for spinners is undoubtedly discouraging In yarns a very considerable business has been put through, more especially in home trade American counts. Some extensive orders for export in bundles have been placed, prircipally for India, in 30 s. water twist and qos. mule. For the Continent a fair trade has also been arranged. The low prices ruling have caused increased activity in all departments. In the cloth department less activity has been observed. Some orders at very low prices have been booked fer distant delivery. A few manufacturers of medium and good shirtings for India have done fairly well. South American merchants have also purchased more freely. The market, though not active, has more signs of life than have lately been seen. Inquiry for Eastern fabrics is not important, and principally consists of miscellaneous goods required for bleaching and dyeing. Makers of printing cloths find demand very slow, and few transactions are reported, except of a retail character. Prices are scarcely regular, owing to the different view and position of individual producers

Bradford.-There is still a great lack of animation amongst the wool circle on the Bradford exchange, and the reports from Australia that the clip at present being taken off will be unprecedentedly large, does not at all tend to strengthen values. All the large wool merchants in Bradford are at present holding large stocks, and there seems to be no scarcity of any class of wool that may be asked for. Consumers, however, are only buying for their immediate wants, and are displaying the greatest caution in doing so. The slight recovery in the "terme "wool market at Antwerp has given a little better tone to fine merino tops here, but the improvement is very slight. The yarn trade, although not by any means lively, is assisted by numerous small miscellaneous orders from the Continent, which have apparently been kept back as long as possible, as very quick delivery is wanted in each case It is probable that some spinners would now make slight concessions in price to secure good particulars to keep their machinery fully going. Business for the Continent in bright alpaca and mohair yarns for weft purposes is again increasing. and there is no doubt that these yarns are being largely used in the production of mohair crépons and jacquards The piece trade presents very few new features. Some further ori'rs for coatings and linings for the United States have been placed at prices even lower than those given earlier in the season Most of the dress goods representatives have now returned from the States They gencrally express themselves as disappointed with their trip, and I find that though their orders embrace a great variety, they are not in big numbers. The home trade in dress goods has been slightly improved by the colder weather, but there are distinct evidences that the purchasing powers of some of the country districts are less than usual. Tweeds, especially those of the cheaper order in dark shades, are again moving off well, and there is more enquiry for "snowfakes" in these goods. As I hear that further orders in high-priced twee,is are peing placed in light shades, it is now certain that these goods will be worn in the early part of next spring.

Notinishan.-There is not much business doing in the lace trade. Irish guipure. Venise, Valenciennes, and other superior
cotton laces are still selling tolerably well, but the demand for common cotton laces is only moderate. A few suall orders are placed for tattings, trimmings, embroidery edgings, and such like goods, and in the making-up department many of the workpeople are on short time. The silk branches of the lace trade are without improvement. Fancy laces still sell slowly, and the sale of silk hets is small. Veilings, however, are in fair request. The curtain branch is still wanting in animation. In the plain net trade some fair orders are in course of execution, and prices are steady. Cotton yarns are still very low, but consumers generally buy from hand to mouth. There is a fairly good demand for warm underclothing, and black and fancy hose and half-hose are in steady request. The demand for cotton hosiery is quiet, and silk goods are also slow of sale.

Leicester.-The depression in the wool market is unrelieved, and for the moment there is almost an entire cessation of speculative operations either in home.grown or colonial produce, and quotations are weaker. The consumption is of fair extent, but spinners decline to buy in advance of actual requirements to sort up stocks unless concessions are made. Faulty and inferior descriptions are a very dragging business, and prices are very irregular, but the best lots of demi and lustre fleeres are fairly steady. Skin wools are a dragsing trade, and colonials for the moment are neglected. The yarn market is steady. Cashmere yarns are very jow in price, but lambs' wool and fancy yarns are steady. The hosiery trade is partial, with a lack of large repeat orders. The sales of leather are very moderate, while the supplies of English. American and Australian hides are heavy, and prices iow. Elastic web fab. rics are in fair request, with the exception of gussets, which are flat, and much machinery is only half employed.

Leeds.-A fair amount of business is being done in this market, the demand for presidents, naps, beavers, pilots and thick meltons being large in consequence of the colder weather. Considerable parcels of the best overcoatings have been hastened off to Canida, and some good parcels are yet to follow of the highest class 0 coatings and suitings. The Continental demand is kept up at about the same level as last week, and there a large outlet is found for vicunas, fancy cheviots and new hweeds Spring goods have not come much under consideration. Nevertheless, producers are increasing their amount of work in order to be prepared for any sudden chauge.

Huddersfield.-Few buyers are in this market and business is dull. The improvement in the demand for fine goods and coatings generally is fairly well maintained, and overcoatings have been selling well, the chief demand being for beavers, meltons and rough serges. Some good orders on home trade account have been placed for lower class cloths. More briskness is noticeable in the shipping trade, and fine and medum goods are selling well for the Continent and the United States. Yarn spingers are better employed, but competition remans keen. Wools are selling steadily at firm rates.

Glascow.-The cold weather which has prevailed recently has bad the effect of considerably increasing the sale of woolen goods. There has been a steady demand for overcoatings and hosiery. Retail warehousemen are very hopeful of having a good winter's trade. The wholesale travellers are finding business very stiff in the provinces. The Kirkcaldy linen trade continues to improve, although a good many looms are still idie. The output at the linoleum and floorcloth factories is still large. A good demand from America is expected soon. The Ayrshire lace trade is reviving gradually. Since my last report a number of good American orders have been booked. Notwithstanding these, welcome as they are, the demand from the States and Canada is still below that of former years. Small floral and fancy styles are most in demand for America. The home demand is still quict, however, but now that the coal strike is over, a better condition of affairs is expected.

Dundee.-Although the elements have been rather unsettled and not quite favorable to good steady trade, I am glad to report that there has been no falling off experienced by drapers. The increased number of hands who are employed in the various jute and linen works which have been restarted lately has thrown more
money weckly in the draper's way, the lower and middle-class trades especially finding a better turn-over. In these trades, flannels, skirtings, plaidings, shirtings, and flannelettes are selling well, as, in fact, are heavy goods generally. Medium-priced dress stuffs in tweeds, serges, and heavy-dyed fabrics are also in good demand. The better class trades are now right in the middlo of their season, and are fairly busy in all departments, mantles and mantle cloths, notably beavers, being rapidly turned out The dress departments are doing well, and dressmakers are pretty steadily employed. The hosiery, glove, and haberdashery departments in all classes of trades have no cause to complain. Milliners are busier this year than they wore at the same time last year. The Dundee market continues very sluggish, and orders are scarce. The jute market is quiet, though prices, either for shipment or near at hand lots, are steady Linens are inactive, and makers have a difficulty in keeping looms supplied with orders. The linen trade in Fife is showing improvement, and in nearly all the malls the working time has been increased from 40 to 50 hours per week.

Lvons.-Machinery generally is much more actively employed, Paris houses, or travellers visiting the market, having presumably placed fair orders. Idle power-looms are becoming less and less numerrus. Local hand looms engaged in the production of figured novelties have been more actively employed on two-lat damask. two-lat double-warp façonne goods, printed warp façonnés, and gauze with a damask ground. In plain goods hand looms are busier on wool wefts in various fancy weaves, moire sc̣intillante, glace cuit taffetas, printed on the warp, and fine all-silk amures such as gros de Suez and gros de Londres. In the country, hand-looms in Dauphind and the Ain are busy, faille foundations, in blacks and colors, plainsand glacés being turned out. In other districts looms are not well employed, with the exception of a few on checks. Commissions for satin grdge in the coarse numbers have not been repeated.:but have been replaced by various armures in ecru.

Chemwitz.-Prices are higher again in hosiery than they were last week, the increase being due to higher wages. In fine gauge goods the factors are busy until January, and buyers that cone into the market late will find it hard work to procure goods at right prices. Not only that, but they will not get the goods delivered at the time they want them In coarse gauges the demand has been better lately than during the summer, so that the prices on these also have gone up. Fancy hosiery is still slow: so also are the embroidered styles. Silk-plated hosiery is very little called for, as this article has been ruined through the terribly poor qualities that have been sent to the other side.

Caudry.-After a peried of ussatisfactory trade business has improved lozally. Samples were prepared earlier than has been the custom here, and the buyers who have been in the market have placed important trial orders. The desperate cutting of prices that has characterized previous operations in this market has again been seen, with disastrous results on the trade in medium goods, which did leave some profit to manufacturi is

Calais.-The general condition of business has leen more satisfactory, says the Textile Mercury. The opinion prevails that A merica will be a large buyer, and large nimbers of travellers are expected to operate during the current month. Bourdons, both plain and on coarse grounds, the various styles of cotton laces and veilings, keep in the foreground. For Vals., the inquiry is steady. The Continental season has opened, and business before long will, it is expected, be in its normal position. sipart from these standard articles it is difficult to say on what classes of goods. the demand is likely to be concentrated. For hats light Chantilly will, it is said, probably come into use. Up to the present the creations in this lace have not been numerous, manufacturers having been occupied in completing their collections. Chantilly for confections have met with greater favor.

Plauzn.-Business last month was quiet, no marked movement having been witnessed in the exnort trade. Heavy guipures are less and less demanded. Fashion appears to prefer lighter articles, particularly embroidery on tulle, in small delicate effects, intimating similar designs on Chantilly. Imitations of Alencon lace
are commencing to be inquired for: and good collections of veilings, bandes, and entredeux have left the town lately. Veilings have mot with great success here. The small and light effects which up to the present have been in demand have partiy yielded to those of larger proportions. All these articles are partly embroidered by hand. Numerous novelties embroidered un muslin and nainsook continue to be offered. The demand is still rather restrained, but the belief still exists that sales will improve during the course of the se ison. Silk goods, contrary to expectation, are only in small demand. Nevertheless, some orders have been placed during the course of the month for entredeux and small lace in 3,4 , and 5 centimetre widths.

Miran.-The demand for raw silk is sufficiently small to make prices weak. Offers are not scarce, but being unsatisfactory in regard to price, do not lead to traisactions. Sales to manufacturers are few in greges, as weil as in thrown silk. In the latter especially the temper of holders is not weak, and low offers are as a rule refuscd. There is a fair cursent of dentand for silk for the fthrowing mills, several lots of which have changed hands. Cocoons are rather quiet and not strong.-Dry Goods Economist.

Zurich -Business has become more active and the demand lively with the presence of a good number of buyers in the market. Orders for future delivery have combined with those for ready delivery to swell the total of transactions. Plaids have done well, especially fancy plaids and novel color combinations. Black and colored damassés find a good market. The Zurich industry has in prospect a successful spring season. Good orders have already been placed for Londen, where Zurich goods are holding their own, while important orders for spring have been transmitted from New York. Thes:- orders are principally for taffetas in various fancy effects and in chine effects, which are expected to be leaders next spring.

Crereld.-The re-assortment demand for the home retail trade not having been encoutaged in its development by a good distribution by retailers, the market is rather quiet,!and following this slowness the spring order business, which showed signs of making a good start, has also been ratarded. The temporary slowness does not seem to affect the manufacturing activity, the improvernent in which has continued, and the looms are now keeping up at thesame rate of enlarged production. In this increased production dress and trimming silks do not take as good a share as could be expected, but, on the other hand, further orders in tie and umbinlla silks make both these branches fvery busy, although some of tie orders have been taken at prices that are not very satisfactory. Linings are doing relatively well, there being an improved demand by the garment-making trade. A good demand exists for piecedyed satins in black and in seal.brown. The garment trade is also beginning to be interested in linings for next spring and has been asking for sampies. In the pile fabric branch a good demand holds on for plain millinery velvets in the belter and medium grades, while the cloak trade are still good buyers of seal plushes and velour dv Nord. The business in plushes and velour du Nord is less important for export than for home consumption Business with America is improving, but bas not yet reached the high water mark, and there is still room for further improvement.

Kidderminstrr.-The carpet travellers are now all on the road, and we shall soon learn what are the trade prospects for the coming winter. Matters are no worse, but rather are slightly improved. The demand for Axminsters is good, and, though Brussels suffers considerably by the low price of pile carpets, it is thought that the depression is only temporary, and that when trade improves and the cut-throat action of the American firm of Sloane \& Co. is knocked on the head, the Brussels trade will resume much of its old position as the British carpet par excellence.

Tue Journeymen Tailors' Union of Toronto appeared before the Mayor on the 18 th inst. to protest against the action of the Police Commissioners in giving the contract for police clothing to a non-union shop. The Police Board is independent of civic control and the city cannot interfere.

## PARIS FASHIONS.

There are some few models to add to the list of outer garments given last week. For instance, the Bon Marche has brought out a sealskin plush cloak reaching to the knees and bordered with a very wide band of brown marten, to the neck of which is mounted a little plush pelerine and turndown fur collar, and a coat in satin cloth or drapaux with a collar in Canadian beaver of a new shape, namely, cut off square like a yoke, and with a narrow band of the fur running down the front, where it is fastened by four lumpy buttons made of beaver. I have also seen some quite short collets in sealskin plush, astrachan, or caracol, combined with wide collars continued down the front in long ends falling almost to the foot. Beaver or some other dark brown fur is used when the collet is in brown plush, whereas mongolian is chosen when the garment itself is in black lamb skin. One elegant model in caracol is made with a black velvet collar of the sailor shape bordered with mongolian, the boa-hke ends starting from beneath the collar. Another collet of medium length is made partly of velvet embroidered with jet and partly of caracol, the skin being used for the collar, narrow bands down the front and lower half of the cape. More coats are made of fancy cloth than earlier in the season. Some of these, as well as a few of those in drapaux, instead of being made doublebreasted, are fastened with loops and olive-shaped buttons over a border of fur and surmounted by wide circular collars of astrachan or mongolian.

The weather, although anything but fine, is still mild, and ladies who consider their own comfort refrain as yet fro, n fur-trimmed wraps, while many wear their tailor-made.costumes only, without any outer covering. For cloth costumes of this sort one of the most approved styles of trimmings consists of bands and scrolls cut out of the material and machine-stitched at the edge. This has been the favorite decoration for coats and jackets during the last few months, but its application to costumes is of later date. Many forms of scroll prevail; some are composed of curved loops, others are square or pointed dagger-form, while others again are combinations of two or all three. The ornament is generally extended to the hem of the skirt, as well as the basques, back, and facings of the jacket bodice. Ready-made skirts are sold trimmed in this way, and the piece of material provided for making the bodice is decorated to correspond. Of course it is preferable to have the applications of cloth specially designed for each particular costume, but this renders them costly, and in an ordinary way the cloth is prepared with scrolls beforehand, which greatly simplifies matters. Similar scrolls and arabesques are stamped out of velvet, but these are more often used for cloaks and capes than for dresses. Braided scrolls are of more universal application. Most of the trimmed jerseys are decorated in this way. Braiding is most frequently executed in black, whether the material on which it is placed is black or colored. The stamped cloth arabesques, on the other hand. are, more often than not, of the same color as the garment itself, though sometimes of a somewhat deeper shade, while those out of velvet are generally a decided contrast, being either black or some color harmonizing well with the general tone. Cloth ara. besques can be only used as a decoration for cloth, but those made of velvet or carried out in braid are applicable to almost any woolen or fancy tissue.

A few weeks ago we.were led to believe that horizontal trimmings for skirts were played out, but the result shows that this was a mistake; the band of decuration on the hem is still the most popular for everyday walking costumes. True, a great many skirts -the majority perhaps-are entirely plain or merely decorated with a few rows of stitching. They are very fully gored, so that while resting quite smoothly over the front and tablier, they sweep out at the bottom so as to cover a comparatively wide surface, and frequently form slight flutes. A very small minority of the readymade costumes and skirts are made with panels or quilles; this style is reserved particularly for smart dresses; some few, bowever, are trimmed down the sideseams, and more have these seams folded over and decorated with buttons some way down from the waist.

The tailor-made costume proper has almost invariably a
basqued jacket or a vest, the latter, although it has lasted so long, is still a favorite, either open in front, closed with one button on the bust, or double-breasted and buttoned across. Some of the jacket bodices, too, are made double-breasted, others are buttoned all the way down the middle with small battons, while others again are open. Full chemisettes are still worn, $t$, latest novelties being made in velvet arranged in pleats, but the taght fitting waistcoat is the newer style. For plain and fancy woolen costumes they are often made of cloth of a much lighter shade, but black whip-cord waistcoats are fancied by some fashionables. and these, too, are to be purchased ready-made at the magasins. Almost all jackets and vests have flat coat collars and lapeis, the latter faced with the same material, and the collar often with velvet Sleeves are as wide as ever, though less complicated in form -at least so far as costumes and the simpler sorts of dresses are concerned-all sorts of picturesque arrangements of puffings being resorted to for home and evening gowns The leg of mutton sleeve, very full at the top, and pleated into the arm-hole, and tight fitting below the elbow, is the shape that obtains exclusively for ordinary walking attire Sometimes there is trimming on the forearm, but the simply stitched cuff is the more usual

A very prominent feature of all the smarter ready-made dresses and frocks is the collar, which is composed of wide ribbon or of the same silk or velvet as the bodice, folded and decorated either with little bouillonnés or rosettes at the sides or with a bow in front, in the centre of which is a buckle. These ornamental collars add considerably to the smart effect of a dress without materially increasing its expense. They are also sold separately. made in satin and velvet, as well as in surah and gossamer. I have noted a decided improvement in these collars since they first put. in an appearance last summer-a very insignificant matter it would seem-the bringing forward of the rosettes an inch or two, but when placed under each ear they widened the throat in a very ugly fashion. Sashes and belts often have rosettes placed at an equal distance from each other as those on the collar, while ribbon straps passing over each shoulder are terminated with other rosettes just in front of the arm-hole. Dresses in black damask or black bro. caded merveilleux, with rich trimmings on the bodice and quite plain skirts, are among those which find the readiest sale just now, there being a great fancy for black toilettes. Other models in the same materials have sinilar collars and belts, but the fronts of the bodice, which are made full, are open in a $V$ point, so as to show a jet plastron, while quilles of jet passementerie run down each side of the front breadth, starting from the rosettes on the belt. This arrangement is also carried out in black velvet.

There is certainly a great variety in the ready-made costumes and dresses shown by the magasins this season. To give you a general idea of what they are like, one is a comparatively reasonable walking dress, composed of a plann skirt of fancy woolen and a bodice of velvet to match the predominating color in the material used for the skirt; the bodice is gathered at the shoulder seams; the collar, made of a very wide piece of velvet, has two little bouillonnes run up the sides, and the waist band is' made exactly in the same way. Another dress in fancy woolen has a plain skirt, a tightfitting bodice, surmounted by a square yoke of velvet entirely framed in a band of fur and a little jet beading. A black satin dress has a full front to the bodice smocked over the shoulders, beneath a network of arcowhead jet beads, shoulder shape with three bows on each, and a sash with bows and ends falling symmetrically on either side. The bodice, of a black satin brocade, is cut down very low over a high plastron of velvet trimmed with $V$ points of jet ; that of a zibeline cloth dress is also low, the plastron being in gathered velours mirroir, and the top of the bodice edged with sable. The bodice of a fancy natte is made in the same way, only edged with marten, and the plastron embroidered in open work showing a bright-colored lining. All these dresses have plain skirts and plain leg of mutton sleeves.-Warehouseman and Draper.

Moorehouse \& Snelz's tarpaulin works, Preston, Ont., have been destroyed by fire. The valun of the stock in hand at the time of the fire fortunately amounted to only $\$ 800$. The building was once occupied by Gray's kaitting mill.

## USE OF THE MICROSCOPE IN THE MILL.

Ten years ago the use of this instrument was cquite the exception in textile manufacturing establishments, but within the last few years there has been so much written about fibres and fabrics which called for such an amount of knowledge involving microscopic methods, that superintendents and others have been compelled, as it were, to learn something about microscopy, and thereby keep in touch with the rapid strides made in the most exact means at our disposal to examine fibres, etc. Some of our readers may think that the tests which they find from time to time given in the journals will suffice for all "practical" purposes, but in this case, it is a misconception of the meaning of just what is "practical "

To some persons who do not know very much about modern methods of work, it seems superfluous io go to the trouble of preparing a slide with a few fibres of silk and examine it under the low and medium powers of the microscope, and determine from its appearance that it has been subjected to the action of a strong acid or other destructive agent. The above was an active case brought to the writer concerning the condition of a piece of goods which was rendered quite unsaleable by some operation in sither the dyeing or finishing. The microscope at once revealed the fact that the fibre was almost destroyed by some agent which had a strung affinity for silk. A line of, ork was then mapped out and the solution was reached without any difficulty.

Another case bearing upon wool came under the microscope. In this one the yarn was very coarse and brittle, and it was with great difficulty that it could be spooled; some of the "practical" men around the works suggested several remedies-em.nag others, to size the yarn. The microscope, however, developed the fact that the fibre was very much cut or destroyed by some agent, and inquiries of the dyer showed that sulphuric acid was employed in the dye-bath. Here was what we were looking for. The idea occurred at once that, after dyeing, the yarn was not washed off properly, but was simply "whizzed" and taken to the dry-room. As the acid became more and more concentrated in the heated atmosphere, it acted quite easily upon the fibre, which gradually weakened.

The microscope does not show up the, cause of a result, but it is a seldom failing index to the correct solution of an orror,

For mill use, a writer in the Textile Record of Philadelphia strongly recommends an instrument of the Continental type, provided with two objectives, $\mathfrak{a} \ddagger$ and a $\ddagger$ inch, also two eye-pieces, $x$ and 2 -inch, a dozen or two slides and oblong cover-glasses, dissecting needles, and a few other accessions to be hereafter mentioned, the entire outfit not costing above $\$ 50$, and may possibly be bought for less.

## dyeing notes.

To improve the fastness of direct cotton dyes, Just. Mullerus passes the yarns to be dyed through a solution of 10 pts . blood albumen and 10 pts. turkey-red oil, 60 per cent. in 100 pts. water.

Sumacgives a stronger liquor when it is boiled, a simple scalding not being sufficient to extract all the tannic acid. On the other hand, a continued digesting in hot water extracts the tannis acid just as thoroughly as boiling. The scalding of the sumac and longer immersion in hot water is to be preferred, because it yields a lightercolored liquor-that is one that contains less of the vegetable dyestuffs, and that will not color the cotton so yellow when treated with sumac.

A French patent has been obtained for the following method of -dyeing a tinge on pile fabric: Take a plush or felt cloth that has been previously dyed, or is still undyed, and fasten it upon a vertical plate. Brush the pile against the nap, and then with a vaporiser spray on any desirable color that has been ground in some drying oil or essence. This color must previously be diluted with about twenty times its volume of petroleum, benzine, or any other volatile agent that dissolves the dye, in order to make it suitable for use in the vaporiser. The color sprayed in this way upon the cloth dyes only the tips of the pile and leaves the face or body of the cloth almost untouched. For instance, if a red dye is
thus sprayed on a green plush, the result will be a green plush with a red tinge, and if a light tinge on a dark ground is wanted, it is necessary to use only opaque dyes. This method may be employed for ready garments as well as for pieces of velvet and other cloths.

A vivid dark green is ob' ained as follows, viz - Bottom the wool light blue upon the vat, boil for two hours with 072 per cent. potassium bichromate and 05 per cent. tartar, and dyo upon a fresh bath with 3 per cent. patent blue, 15 per cent anthracene yellow, and 4 to 5 per cent. acetic acid. Enter hand-hnt, raise to the boil, and continue boili..., for two hours. Take up, add o, per cent. chromium fluoride, re-enter and boil $1 / 2$ hour If a copper boiler is used it is recommendable to hang strips of ainc into the boiler, not only on account of the fluoride, but because patent bluo is also very sensitive to copper. Such green stands fulling well, but alkaline soap must be strongly avoided It can be used for figured goods and mixtures, and is fairly fast to light

According to a French journal, the following arrangement is given of some of the principal substantive colors which may be used for the purpose of producing either one color or double effects in mixed goods of silk and wool : colors that dye both silk and wool with the same intensity are orchil, tumeric, safranine, rhodamine, auramine, quinoline, yellow, azoflavin, alkali blue, diphenylamine blue, Victoria blue, and Bismark brown. The following colors have more affinity for silk: ordinaty magenta, naphthalene piok, ruby, rosolane, Paris violet, spirit soluble aniline blue, methylene blue, iodine green, malachite green, nigrosine; of those which have more affinity for wool are mentioned eosin, erythrosis roccellin, maroon, tordeaux, acid green, and naphthol black. The colors which, at the boiling point, aye the wool only, are indigo carmine, cochineal, acid magenta, naphthol scarlet, picric acid, naphthol yellow, and tartrazine.

## LONDON FUR PRICES.

The following table will show at a glance the prices received at Lampson \& Co.'s last fur sale, compdred with the prices received earlier in the year:


The Hand-in-Hand Clothing Co., Toronto, are applying to their creditors for an extension of time.


General Aleturies:
NEW YORK, 109 Liberty St.
PHILADELPHIA, 2036 N. Front 8tree.
MINNEAPOLIS, 210 S. Third Street
CHICAGO, 218 Lake Street

## WILIIAM CRABB \& CD.

Manufacturers of all kinds of
Hackle, Gill, Comb and Card Pins, Picker Teeth, Needie
Pointed Card Clothing in Wood and Leather for Flax, Jute, Tow, etc.
Hackles, Gills and Wool Combs made and repaired; also Rope Makers Pins, Picker Pins, Special Springs, Loom and Shutte Springs, English Cast-Steel Wirc, Cotton Banding and General Mill Furnishings. Bloomfeld Avenue and Morris Canal. NEWARE, N.J.


Establishce 1849.

## A. EICKHOFF

Manufacturer and Dealer in
Fatters', Furriers' Tailors'.
Glovers' and Shirt Cutters'
KNIVES AND SCISSORS.
Knives for all kinds of business always on hand and warranted. All kinds of Cutlery ground and repaired.
No. 381 BROOME STREET, Botween Broadwas and Bowery, NEW YORK CITY

## MILL AND PLANT FOR SALE

The managing partner, and the onl one of the company with any experience in the business, died lasi \#car, and in consequence rec have decided so scll the mill. We make both underwearand hosicty.
plan ncaty new and in cood condition. Also, 2 Plant neatly nea and in rood condition. Also, 2
soh.p engine. This is the only mill of its class in the Ilaritme provinces. We will supply all information on application.

THE FARMOUTH BOSIERY MFG. CO.
sixRMOUTZi, N.S.


ROTHSCHILD BROS.\& CO.
Manafacturers, Menufactarers' Agents and Impoxters

## BUTTONS.



Ofrices-42S \& 432 I3rcadway, X.Y. -s Roc de la Vicroric, Paris, France. ix $\$ 23$ Front Si. Eass, Toronto.

## The R. Forbes Co.

 (Mnited)Manufacturors of

For Hosiery and other work FIESPEIRE, ONT.

## WEBSTER OIL EXTRACTOR

## and Feed Water and Pupifier

AGGREGATE SALES 400,000 HORSE POWER:

The Webster Feed Water Heater is the only heater in the matket that will work satisfactorily in conncction wih Exhaust Steam Herting.
Every machine guaranteed and furnisted subject $t 030$ days' trial.
Send for illustrated Catalogue of Webster Oil Ex. tractors and Sicam Scparators.

## $\underset{\substack{\text { neliuge works } \\ \text { montreal }}}{ }$ Darling Bros.

## VERY CONVENIENT.

## PENCIL

POCKETS
to hold Pencils, Pens, \&c., in the yest pocket. In Plain Leather, Calf, Russia and Morocco Leather. Light \& Pliable Prices-10, 15, 20 cts. each.
a-Sent by mall at aboro prices.

## MORTON, PHILLIPS \& CO.

Stalloners, Lłlank Book Makers and Erantors
1755-1757 Notre Dame St., Montreal
WILLIS \& CO.
1,824 Notre Dame St. (near McGill)

## N:ONTREAL

The Leading American and Leading Canadian
PIANOS...
parlor organs
CHUREH Rad CHAPEL ORGANS

## Among the $\mathbf{M}$ ills

The Mississippı woolen mills at Appleton, Ont, are running full blast.

Wellestey, Ont., woolen mills are running at present on threequarter time.

The Corticelli Silk Co., St. Johns, Que., gave a dance to their employes on Hallowe'en.

An exhaust fan is being put in at the drying house of the Moncton, N.B., woolen mill.

The Ontario Glove Works, Brockville, are rushing work on mitts, suspenders, gloves, ctc.

Lanark, Ont., woolen mill, which has been closed down for some time, is now operating again as usual.
D. Fisher, Paisley, Ont., h.ws decided to rebuild his woolen mill, which was burnt down a short time ago.
J. A. Stansfeld, mule spinner, at Magog. Que., cotton mills, has returned from a visit to the Old Country.

Almonte No. $x$ mill, which has been working for some time for only four or five days per week, is now closed down.

The Schofield Woolen Company. Oshawa, Ont., have reduced wages for certain kinds of piece work, aınounting in some cases to 25 per cent.

Coaticook, Que., Knitting Mill Co. have put their new boiler into position, and the chimney is now completed. Operations are going on as usual.

About forty hands at Weir \& Weir's flax mills, at St. Mary's Ont., struck work a short time ago owing to a reduction in wages of 8 cents a day until April ist.
D. J. Henderson Mann, loom fixer for Brodie \& Co., Hespeler Ont., died last month of cancer of the iongue and throat. He leaves a widow and three children.

Martin Mashke, who was charged at Pembroke with setting fire to the Combermere, Ont., woolen mills, was sent back to stand trial at the next assizes, the jury disagreeing.

James Harcourt's carding mill and turning shop at New Glasgow. Que., were totally destroyed by fire on the and inst, There was no insurance and Mr. Harcourt's loss is a serious one.

No settlement has been reached yet in the strike of the weavers at Brantford, Ont., cotton mill. The employes think of asking the Ontario Government to appoint arbitrators to settle the dispute.

Some of the hands at the Empire Carpet Factory, St. Catharines, Ont., went out last month on strike, owing to a reduction of wages. In a shost time, however, they diought better of it and returned to work.
J. C. Sauliner is establishing in Truro, N.S., a factory for the manufacture of fur caps. There will thus be two hat factories in Truro to take the place of the one burned down zwo or three months ago.

The Kingston Hosiery Co. have 25 of their new automatic knitting machines running on hosicry, and they are now turning out 150 doz. socks. Joo doz. stockings, and too doz. of underwear per day. The mill is now running overtime.

The Gillies woolen mill, Carleton Place, was closed down for 2 fortnight las: month while men were engaged in removing stones from the river-bed from the flume inside the wing dam up to the rilway bridge. Yart of the flume, and a small bridge also, were rebuilt. The mill is not: running as usual.

The hat works recently burned down in Truro, N.S., are to be rebuilt in that place after all. Wm. Craig has formed a partnership with W. P. Miahoney, of Newberryport, Mass., and the firm have Ict a contract for the new building, on the completion of which they will carry on the manufacture of wool and felt hats, probably before the end of this month.

Chas. L. Kauffman, New Dundee, Ont., woolen manufacturer has assigned.

There have been no less than 800 patents taken out in th United States on kniting machines.

The Brodie mills, Hespeler, which were closed down a short time last month for repairs, are now running as usual.

Some hopes are eapressed that a new company will buy up the Royal Corset Co.'s property at Sberbrooke and carry on the business.

Delisle Bros. have started a factory for the manufacture of wood spools for thread at Lake Rouchette, on the line of the Quebec and Lake St. John Railway.
M. B. Berry, Quebec, intends to double the capacity of his woolen mill, which is working chiefly on blankets and tweeds. It is at present a one-set mill. He will also build a new mill to furnish increased facilities for the manufacture of asbestos goods.

A number of the leading woolen mills have made a cut in wages during the past two months, the reduction averaging about ten per cent. This result was predicted by Tue Canadias Journal of Eabrics when the tariff reductions were being made by the Government.

Orders for print goods received by the agents of the Magog Print Works (Dominion Cotton Mills Co.) are considerably ahead of last year. The indigo goods, on the plant for making which a large amount of money was spent during the past year, are selling well.

Last week, says Wrade's Fibre and Fabric, about 75 Portuguese families moved away from New Bedford. Many French Canadians are leaving town, and some Englist, families are engaging passage to England. Other operatives are going to Rhode Island and elsewhere.

The Dominion Cotton Co., at a meeting held on the 6 th inst., declared a dividend of $1 \%$ per cent for the current quarter, being at the rate of 6 per cent. per annum. This was a disappointment to the shareholders, as they had hitherto been receiving an 8 per cent. dividend.

The Montreal Silk Mills Company have suffered from fire for the second time this year. On the roth instant a fire broke out in the premises of the Montreal Watch Case Company, just above them, and the Silk Mills Company had some of their hosiery stock damaged by water. Loss covered by insurance.
M. Frankenburg, owner of the Globe India Pubber Manufacturing Co.. of Manchester, Lingland, has been visiting Quebec, where he will open shortly a branch of hisextensive establishment. As•an encouragement to the new industry, the city council has voted an annual grant of $\$ 2.500$ to be paid during five years.

The Chancellor at Osgoode Hall, Toronto, has set aside as fraudulent the $\$ 5,000$ mortgage given by the Toronto Fringe and Tassel Co. 10 Alonzo Mr. Wright and two others just before it assigned. Belding, Paul \& Co., of Montreal, acting for the other creditors, claimed that the mortgage was given to defraud the creditors, and succecded.

Samacl Law, of the firm of Samuel Law \& Sons. Lid., card clothing manuiacturers, of Cleckheaton, Yorkshire, has been on a short visit to Canada, and is now in the United States. This firm are sad to be the largest manufacturers of card clothing in tise world. Mr. Law has appointeu Mackintosh, Robert \& Co., 356 S; James strect, Montreal, his Canadian agents.

David Morrice, head of the firm of D. Morrice \& Co., cotion and woolen manufacturers agents, returned this month from a trip to Great I3ritain, in company with Mrs. Morrice. The trip was undertaten chiefly to place Miss Morrice in une of the educational institutions of Edinburgh. While in London, however, Mr. Morrice, upon the request of the shareholders of the Royal Electric Co., floated $\$ 750,000$ bonds (at $41 / 2$ per cent.) for that company on very good terms. Mr. Morrice has been congratulated on this feat, as it is the first time that securities of this nature were placed upon the London market. The achievement will certainly add to his reputation as a financier.

TEXTILE MACHINERY (New and Second Hand)


CARD CLOTHING TETLOW's
Condenser Aprons ${ }^{\text {Burfed surfaue }}$ Buffed Sur.Pace
Plain \& Gr $\%$ ved.
0ak-Tanned and White Belting Cotton Banding, Rim Spindle and Braided

Shuttles, Pickers, Heddles, Harness
Patent frames, GENERAL FURNISHINGS

## ROBT. S. FRASER

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Prompt Delivery, and no Customs Duties.

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# Barker's Patent Double Apron Rubbing Motions for Condenser Cards 

Are in successful operation on all grades of stock, being generally adopted because they change carding and spinning

rooms for the better.<br>James Marlien, Cotton and Woolen Machinery<br>Second and Somerset Streets, Philadelphia, Pa.

The Gutta Mercha and Rubber Manufacturing Company. Torontc, a few dajs ago received a registered ietier, which read:

- Xou will please find enclosed one ten dollar bill. which is the properts of your firm. (Signed) Rfstitition The company have noidea as to who was the sender of this note

The St Cathannes. Ont, Carpet Manufactunigg Co have assigned to $D E$ Furter the orignnator of the business was Michael Gates, formerly of Woodstuck It was mored to St. Catharanes last May, Gates being juned by S Syer. The latter withdren a short time afterwards and was replaced by W. H Gardner. who, with (iates, has carned on the business since that time.

Wallıam H. Pricst, astockholder in the Pike River, Que, Mills Company, has brought an action in the Superior Court against Feodor Boas, the president and selling agent for that company, for $\$ 66,200$, which he claims for services rendered the company as manager, and as the value of 183 shares of capital stock. Defendant claims there is nothing in the case at all, and tbat the whole affair had its origin in a misunderstanding.

Cronkhite Bros, of Wisawasa, is in communication with the town fathers and Board of Trade $C^{f}$ North Bay, Ont., with a view to removing their woolen factory to that town, if satisfactory ar. rangements can be made. They propose to put up a mill with double the capacity of their present one-a brick ouilding $40 \times 80$ with extension $q 0 x$, 0 boiler, dyc, picking and storehouse, using 2 50 -horse power engine with the latest improved machinery, capable of using 120.000 pounds of wool yearly and employing from thirty to thirty-five hands.

The St Stephen, N.B., mill of the Canadian Culored Cotton Company is now ruaning full time, and manufacturing some new lines of gingham, oxfords, zephyrs, and crinkles of a class not heretofore made in the Domimon The mill has been refitted and remodelled for this specia! work, new English carding and weaving machinery having recently been erected. The old hands are nearly all back to work. having found that with the new machinery and a ittle harder work. they can make nearly as mucb as before the cut io wages

Arthar Bates, superntendent of the Stormont mall, was marned last month to Miss May Swanson, eldest daughter of John Swanson, of Valleyfield, Que. Rev. Mr. Debrois, pastor of the Presbyterian church, Valleyfield, officiated. The bride was the recipient of many presents, including a handsome silver tea service from the Presbyterian choir, of which she has been a leading soprano for several years. After partaking of a sumptuous repast the happy couple left for Niagara Falls on their wedding trip.Corrisuall Standard.

Messrs. Terzot, the builders of the Boas-King automatic knitting machine, have added an automatic splicing mechanism to these machines. The principle as applied to their French circular machines is the one adopted. The splicing thread, being delivered. through an independent movable carrier, lays the thread into knitting position at the same needle each revolution of the machine, and again cuts off same when the required width of the stocking has been spliced, which can be done on any segment of the circle and continued until the splicing mechanism is thrown out of action, which is also automatic.-Textil. Manufacturer.


## THEORY AND PRACTICE OF DYEING.

Bellhouse \& Dillon, the Montreal representatives of Wm. Pickhardt \& Kuttroff, New York, are distributing among the mills a very useful little pamphlet entitled "The Theory ann Practice of Wool Dyeing with Alizarine Colors," published by the latter This little book opens with a brief sketch of the struggle which ensued after the discovery of artificial coloring matters between these and the universally used vegetable product. The result o that conflict is well known, and now there is hardly a dyer of any standing at all who does not prefer for most puposes the alizarine dyes to madder, indigo, or any of the other old-fashioned pigments The remainder of the pamphlet is taken up with detached informa. ton about each of the many alizarine colors and combinations, together with some valuable hints as to the proper processes and methods of application. We can confidently recommend it to the notice of mill managers and dyers.

## MR. MURRAY'S INVASION OF THE UNITED STATES.

We noted in the October 15 number of The Review a report that a Canadian carpet manufacturing concern was about to establish a plant in the States for manufacturing a patent carpet fabric. This report has since been verified by james $P$. Murray, of the Toronto Carpet Manufacturing Company. Mr. Murray has formed an alliance with John $R$. White. of the Boyd-White Carpet Company, and they, with other prominent Philadelphia carpet men, are establishing a stock company, to be capitalized at $\$ 200,000$, for the manufacture of Mr. Murray's patent chenille Axminster carpets, rugs and squares. John R. White will probably be the president and manager of the company, which will be named the WhiteMurray Carpet Company. A site will be selected, probably in Philadelphia, and Mr. Murray anticipates that the looms will be in operation in about three months. The fabric and machinery for making it are patented in the United States, Canada a add Europe. Chenille Axminster is different from any Axminster fabric now made in this country, in that the chenille pile is first made separately and.then woven into a carpet. The Toronto Carpet Manufacturing Company has been making it in Toronto for the past two years.-Carpet and Upholstery Trade Review.

## TORONTO WOOL MARKET.

"An exceedingly quiet month" is the judgment of every wool dealer when considering the period which we have to review. Although there is no activity in the receipts of domestic fleece, some country merchants who have been holding for an advance in price are getting discouraged in their wait for better things, and as a consequence have been offering stock. The lots for the most part are small, but when totalled together make a considerable amount. Since the removal of the duty prices have not altered, and dealers are paying 88 c . Canadian mills are not taking stock, while few sales have been recorded on American account. Some large shipments, however, have been made, one dealer shipping $100,000 \mathrm{lbs}$. of fleece to the United States. This wool had been sold in July, it consisted of both coarse and fine sorts, and we understand $173 / 2$ and 19 cents were the prices realized. For pulled wools there is but poor enquiry, and merchants consider the outlook ratier discouraging. Some considerable quantitics of extra super have recently been imported from Chicago, and the local market is in consequence depressed.
A. H. Sins \& Co.'s shirt and collar warehouse, in Montreal, was damaged carly ti:ss month by fire and water to the extent of \$10,000.

Comasenting on the fact mentioned in this journal that iV. H. Storey \& Son, glove manufacturers of Acton, Ont., have recently established an agency in Australia for the sale of their goods, and are preparing to establish a business in Japan, the American Glover says: It would seem in this respect that our Canadian friends are exceedingly enterprising in thus taking the initiative toward building up a business in a ficld heretofore supplied by the French, English and German glove madufacturers,

The Dry Goods Clerks' Association of Montreal had their annual meeting on the r2th inst., when the following officers were elected for the ensuing year: President, J. E. Lafontaine ; ist vice. president, E. Beaudry ; 2nd vice-president, J. U. Perreault, corre sponding-secretary, L. J. Prudhomme, assistant corresponding secretary, A. L. Macbeth, treasurer, D. Seguin, assistant-treasurer, U. Page, secretary, Gcorge Marcotte, ist marshal, A Grarger. 2nd marshal librarian, O. Nolin, assistant librarian, J. A Bastien The secrs tary's and treasurer's reports, as submitted, showed the society to be in good condition. Only sever members partuuk of the society's benefits during the past year, while there were no deaths reported. A vote of condolence was unanimously adupted to the family of the late Honore Mercier.

## RAW FUR MARKET REPORT

Montreal, Nov. 1 sth, 1894.
In the raw fur trade practically nothing is moving. Prices at present are merely nominal, and are likely to rule low in the future. Advices from the other side are not promising at all for any ad vance. It is useless to give any quotations at present

## CHEMICALS AND DYESTUFFS.

Trade steady, but will fall of next week, and price advance on all lines as navigation closes

| Blea | \$ 220 |  | \$ 250 |
| :---: | :---: | :---: | :---: |
| Bicarb soda | 225 | " | 235 |
| Sal soda | 070 | " | - 75 |
| Carbolic acid, I lb. bottles | 025 | " | - 30 |
| Caustic soda, $60^{\circ}$ | 230 | " | 250 |
| Caustic soda, $70^{\circ}$ | 260 | - | 275 |
| Chlorate of potash. | 0.18 | " | - 20 |
| Alum | 140 | " | 150 |
| Copperas | 070 | * | - 75 |
| Sulphur flour | 175 | * | 200 |
| Sulphur roll | 200 | " | 210 |
| Sulphate of copper | 400 | " | 500 |
| White sugar of lead | $0071 / 2$ | " | - 081/2 |
| Bich. potash | 010 | " | 012 |
| Sumac. Sicily, per ton | 7000 | $\cdots$ | 7500 |
| Soda ash, $48^{\circ}$ to $5^{\circ}$ | 125 | " | 150 |
| Chip logwood | 200 | " | 210 |
| Castor oil.. | $0061 / 2$ | " | 007 |
| Cocoanut oil | c 06\% |  | - $07{ }^{\prime}$ |

FNGLISHMAN, now residing in United States, thoroughly practical in the manufacture of Marseilles crochets, Mitcheline quilts and Turkeg red table covers, is desirous of meetink capitalists who are willing to put capital against experience, or would superintend new place in 2 slock company, if compensation is satisfaciory. No objection to any location, and is willing to learn incaperienced help and guarantee better sesults than any other manufactured fabrics. Address P.O. Boz 267, Beverly, New Jersey, U.S.A.

WANTEDD-By a Maritime Province mill-a picee scwer and mender dress Box r, JOURNAL of FayRics, Fraser Building, Monircal.

## A. KLIPSTEIN \& COMPY

 122 PEARL STREET, NEW YORK Chemicals and Dyestuffs aNILINE COLORS OF EVERY KIND BPRCTALTIES:Thos. Roberts, manufacturer of mattresses, etc., Toronto, has assigned to W. A. Campbell.
T. M. Parker, Winnipeg, has added to his steam-dyeing works a steam cylinder and rollers for finishing ribbons, velvets. piece goods, etc.

Theoriile Beland, dry goods, Que., is endeavoring to settle with his creditors at 75 c on the dollar. to be paid during eighteen months. Liabilities are $\$ 72,000$, and assets about $\$ 70,000$.

Carsiery Bros.' men's furnishing stock was sold at Winnipeg last month to Colin Campbell, a representative of J. W. Mackedie \& Co., Montreal, at $67 \frac{1}{2} \mathrm{c}$. on the dollar. The book debts weic sold to the same party for $14 \frac{1}{2} \mathrm{c}$. on the dollar.

Morris Chaffee, a former employe of the Crompton Corset Co., Toronto, has been missing some days, and his friends are anxious concerning his whereabouts. A short time ago Chaffee lost his position, and since then has been subject to great despondency. It is thought he committed suicide.

## "We hold thee safe." <br> The Dominion Burglary Guapartee Co. Limited

Head Office, Montreal, Can.
oApITAL, $\$ 200,000$.
Insurance against burglary and housebreaking. Policies clear and free rom vexatiqus or restrictive clauses. john a. crose, General maracer.

## DYEW00D EXTRACTS

$\mathbf{W}^{\text {ANTED-Tluoroghly expercrenced Represenalive for Cunada. Appls:- }}$ The manager,

THE WEST INDIES CHEMICAL WORKS, LTD Spanish Town. Jamaica, W.I.


Manufacturers of Wadded Garpet Lining and Stair Pads Hamilton, Ont. Ofyice:
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Winding Machinery, Improved Self-Acting Mule, Suspended Steam Driven Centrifugal Hydro-Extractor, Tentering and Drying Machines, Patent Wool and Cotton Dryer, Patent Wool Scouring Machine, Cross Raising Machine, Yatent Crabling and Winding-on Machine, Warp Slzing, Cool Alr Drying and Beaming Machine, and other Woolen Machinery.

## catalogue on application

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in force . . 823,901,046.64
t. b. macaulay. b. maciulay. Secretary.

President.

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83 \& 86 Front St. Eust, - - Toronto, and
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DOMESTIC AND FOREIGN WOOLS, Sumac, Japonica, \&o.

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THE SMITH WOOLSTOCK CO.
Manufacturers and Dealers in all Lines of
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2 Brest prices paid for Wool Pickings, Woolen and Cotton kass, Metals, \&c. Hard Waste, \&c., purchased or worked up and returi ed.
219 Front St. E., Toronto | Foot of Ontario St.

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Manufacturers of
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YARMOUTH WOOLEN MILL CO., Ltd. Manufacturers of
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54S. A. CANTLIE \& CO., Selling Agents MONTREAI, and TORONTO

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## Card Clothing, Loom Reeds, Leather Belting



Gotton and Zuroolen mill Supplies, 耳̧c.

## 428 ST. PAUb ST.

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Manufacturers of English or American Fulling Mills and Washers, Wool Pickers Exhaust Fan Driers, Dusters, Rotary Force Pumps for Firo Duty, Boller Feed Pumps, Shafting, Hangers, Castings, Pulleys, Genting, Forgings.
Full equipment of mills of every kind.
YOUNG BROS., Almonte, Ont.

> HAWORTH Ee WNATSON PAPERCOP TUBES FORMULE SPINNING. LARGE PAPER TUBES FOR USE ON BOBBINS

## RECENT CANADIAN PATENTS.

The Granite mills of St. Hyacinthe, Que., have patented a sock composed of an inner and of an outer section (both reversible). having an air space between them, and joined transversely at the open end and longitudinally down the back and front.

Alfred, Peter, Frank and Andrew Swanson, all of Buffalo, have patented a washing machine, which consists of a box with inwardlyextending rocker or rubber-supporting pins, a rubber-supporting frame or hanger having pivotal bearings within the box, a rockershaft, pivutally journalled in this frame, a rocker attached to the shaft and composed of a series of disks or plates, having at their front and rear eilges some curved teeth or fingers. Between the disks there is a series of strips cunverging inwards. The water passes along transverse and longitudinal wa's in the bottom of the rubber.

Edward Murby, St. Louis, Mo., has patented a machine for making looped fabric. There is a needle cylinder containing a dial plate provided with points. There are also fingers with springs for moving the loops into position, together with mechanism for moving the fingers out of working position. Stops are provided also for limiting the inward movement of the fingers.

A Mitscherlich, Frieburg, Baden, Germany, has patented a method of manufacturing fibre capable of being spun, and also byproducts of the same, from thin layers of wood or from the woody parts of plants. The fibres are separated by means of frequent bendings at short distances from one another and by means of loosening them by pulling and pricking. The wood is first soaked in a dilute solution of sulphurous acid in order to render disintegration easy. The bendings are effected by means of small press devices formed of small rods, which are placed either in the form of ribs applied to rollers or plates, or placed side by side in layers one above the other, with wood inserted between them, and thus receiving a pressure in the direction of the fibre. The rods work either alone or together in such a manner that the projection of a rod on one side is opposite to the intermediate space between two projections on the other side. Owing to the pressure in the direc. tion of the fibre, the wood layers are fastened latterly in small divisions, these fastenings not;permitting the wood to give way laterally. but allowing of a compression in the direction of the fibres, so that small bendings of the wood layers are caused. These pressure effects being combined with lateral to-and-fro motions of the alternating fastening device, the wood becomes gradually bent or cracked, but not broken. The pulling off of the fibres from the surface of the partly disintegrated wood is accomplished by means of tools with rough edges, some being blunt and some sharp. The wood, after it has been treated as above, is converted into a pulverulent mass by impregnation with liquids capable of being converted into brittle bodies, such as with saturated solutions of sulphate of soda, and the product is then dried and submitted to a mechanical reducing process.

Julius Janowitz, New York, has patented a dress and corset stay, composed of wire, with a bares icsilient coating overlapping on all sides. The necessary perforations are made through this covering only, thus leaving the metal body of its original strength.

Geo Airey, St. Leonard's on Sea. England, has patented a corset having a support consisting of a number of lengths of wire or other material interlaced in such a manner as to form a compact strand, and haviug capped ends and a protective covering.
R. Spocndilin, Zurich, Switzerland, has patented a process for treating nettle-fibres, and preparing them for the manufacture of underwear The process consists in subjecting the fibres to the action of a vegetable oil which has been purified by sulphuric acid and neutralized by a suitable alkali and then mixed with ammonia.
H. Dorenwend, Torontu, has patented a piece of harr-work comprising a border ribbun, and a series of intermediate ribbons secured to each end of it. Each of these ribbons is folded upon itself and thus forms a casing. One edge of the hair weaving is secured to cords, the latter being placed within the casings formed by the border and intermediate ribbons, and the other portion is placed outside the casings.

Chas. J. Filgate, Kingston, Ont., has patented a machine for knitting stockings.
A. M. Newlands, Galt, Ont., has patented a rug in which there is a long-haired surface knit or woven in wool, with a nap in imitation of buffalo or long-haired fur, in addition to another surface with a nap in imitation of Persian lamb or other short-haired curly fur. There is an impervious lining sewn between the two surfaces,
J. B. Dowswell, Hamilton, Ont., has patented a clothes wringer.
E. C Brewer, North Yakima, Wash, has patented a washing machine. It comprises a vertical supporting stem with a clamp at the lower end on adjustable sleeve mounted on the stem, a collar arranged in an opening of this sleeve, a block swivelled to the sleeve and provided with an opening. an operating lever slidingly mounted in the opening, and a clothes pounder with a rod pivoted to the operating lever.
J. M. Grover, Winnipeg, Man., has patented a washing machine in which the man corrugated roller is journalled into cylindrical blocks on spindles extending through the slots of some tubular standards which are connected together at the bottom by a crossbar. The feed rollers have pins extending through the slots in the tubular standards and supported in position by spiral springs.
J. H. Mayer, Waterloo, Ont., has patented a let-off mechanism for looms, comprising the warp beam and shaft for operating it, with a sliding pinion, a pawl and ratchet for operating the pinion, a lever for operating the pawl, the whip roll having a shifting joint connection with the paivl lever, and the support for controlling the position of the shifting parts, which support bears on the warp beam.
F. R. Nicholson, Toronto, has patented a catch band for the waist or ankles of trousers and similar articles, consisting of band and end tapes and discs provided with catch hooks interposed between the main position and the tapes.

The Chicago Hosiery Company have patented a knitter provided with loopug devices located outside of the needles, and with means for actuating the same whereby the central opening of the machine remains unobstructed, and the operator is able to watch the work as it proceeds. There is a series of radially movable yarn lifters also outside the needle cylinder.

Anton Hagele, Philadelphia, Pa., has patented a floor-cloth provided with a backing material such as burlap, or camera, covered with a compound of dried and ground leaves, and a binder of oil or gum.

Sarah C. Benham, Columbus, Ohio, has patented a waist having a series of under-garment supports, extending around under it, and a series of buttons extending across the middle back portion of the waist, above the under.garment supports. Removable elastic supporting straps or tabs are loosely fastened to the upper ends of the buttons, and are provided with means at their lower ends for connecting with the pantaloons.
F. G. Annison, London, England, has patented a method of treating fabrics by impregnating them with liquid hyconite or celluloid.
F. Buyck, Philadelphia, Pa, has patented a heddle actuating mechanism for looms.

The Grasselli Chemical Co., Cleveland, Ohio, have patented a method of producing dyestuffs from petroleum by subjecting the residue from the distillation of the oil to sulfonation, then washing the products with water, treating those of the products which are soluble in hot water with lime. and asolating from the sulfo salts thus obtaned a yellow dyestuff by treatment with an alkali, and then with a precipitant such as sndium chloride. The artucle thus obtained is called sulfunated petroleum hydrocarbon, which is capable of dyeing wool or salk, in aeddulated solutuon, without mordant.

Cimon S. Goldman has patented a needle threader, consisting of a hollow body having a guide at one end to engage a needle, and a threading hook held in the body and adapted to penetrate the eye of the needle.

# THE CENTURY <br> <br> IN 1895 

 <br> <br> IN 1895}

Taking adyantage of tho general revival of Interest in the Great Emperor, The Cenfury will print during 8895 A NEW LIFE OF

## NAPOLEON

## Maguificently Illustrated.

The Century is famous for its great historical serials, and never in its history has a greater one becn projected than this "Life of Napoleon, ...s:t:esis oy Prof. Willain M. Sloane, of Princeton, who has spent many years in preparatfon for his woik. Thus tat so buykaphy of the man of destiny "has tppeared in clither English or French that is free from rancor and attentive to the laws of historicat critucism. Ihe Century has secured thethe gre.nt, all-round, complete and interestimg history of the life of one of the most marvelous of men No matter how much you alicady know of Napoleon, you will want to read this;here is the concentrution of all the lives and memulis The illustiations will be magnificent - the wealth of The Century's art department will be lavished upon them. Two members of the staff have just returned from parts, where they have been securing all that is best of Napoleonic materlal. New portralts will be printed, great historical paintings reproduced, and Castaigne and oher mod crn artists have drawn anew some of the great scenes of Napolcon's llfe for thls history.

In additon there will bo A NEW NOVEL by

## MARION CRAWFORD.

Thicuto is Cașa Braccio. and has a romance of Italy, full of hurnan pas sion and exciting episode.

A NEW NOVEL by

## MRS. BURTON HARRISON

will be published during the year. It is calted "An Errant Woolng." and is a tale of wandermg (and love) among new scenes of travel in Northern Africa and Southern Spait.

OTHER FEATURES will be several familiar papers on " Washington in Lincoln's Titne," by Noah Brooks, who was on terms of unusual intimacy with the War President: "The Cathedrals of France," by Mrs. Schayler Van Rensselaer, with illustrations by Joseph Pemuell. Many gore serials will be announced later.

## RUDYARD KIPLING

contributes his first American story to the December number of The Century.
THE PRICE of The Century is $\$ 4 . \infty$ a sear. "No home is complete without it." Begin subscriptions with November number. Whatover other magazines you may take, you must have The Century. All agents at.d dealers take subscriptions, or aemittance may be made directly to

THE CENTURY CC.,
Union Square, NEW YORK
Send for our beautifully illustrated pamphlet, "The Century Co, and Its Work," and mention where you saw this.
B. L. Armstrong, New London, Conn., has patented a thread package, consisting of a folded casing for holding the skeirs, the casing being provided with a folded bearing piece located between the walls of the package and forming a partition between the sides of the skeins.
G. W. Snyder, Herkimer, N.Y., has patented an automatic feed stop for knitting machines, in which there are two cutters or yarn-severing devices, provided with means whereby cach yarn controls the cutter for dhe other yarn.

The Appleton Auton'atic Machinery Co., Long Island City, N.Y., have patented a circt lar rib kmting machine, in wheh, to. gether with the vertical ind horizontal needles, means are employed to throw the latter needles into and out of operation, and there are hold-downs adapted to hold the work down on the vertical needles when the horsontal ones are out of operation.
W. C. Meggison, Quinn, Ont., has patented a quilting frame.
J. B. Williams, Toronto, has patented a shirt front protector in the form of a light arched spring steel frame, curving partially round the neck. Fitted to the frame are vertical and cross ribs covered with chamois.

Minnie A. Hewsun, Toronto, has patented a dressing for rubber and leather goods, consisting of a mixture of varnish, boiled linseed oil, coloring matter and sone turpentine.
C. L. Higgins, Montreal, has patented a foot-covering composed of a knitted leg portion with a double bottom edge, and a rhbber portion secured to the latter.
J. H. Vanderburgh, Winona, Ont., has patented a cloth measuring machine.
G. Robson Buckham, Toronto, has taken out a trademark for dress fabrics.

Fownes, Bros. \& Co., London, Eng., have taken out a trademark for gloves, cuffs and mittens.


Published simultaneously in Toronto and Montreal. Subscription, $\$ 1.00$ a year.

THIS Journal is devoted to the interests of Civil, Mechanical, Electrical and Mining Engineers; Stationary, Marine and Locomotive Engineers, Sanitary Engineers and workers in the metal trades, Machinists and Iron and Brass Founders, and generally to Mill-owners, Manufacturers, Contractors and the Hardware trade.

The success of the Canadian Enginecr has been unprecedented in the history of trade journalism in Canada, for not only was it encouraged and assisted from the start by able Canadian writers in the various branches of engineering, but it achieved what was still harder to accomplish-a sound financial position within the first year of its existence. The number of subscriptions received, and the number of firms who have sought the use of its advertising pages, have justified the publishers in twice enlarging the paper in its first year, and preparations are now being made for a further enlargement. It is hoped, by this increase, to make it twice its original size. While this will mean a large growth in advertising
patronage, it will also mean a greater variety of reading matter and illustrations for our subscribers.

## CONTENTS OF NOVEMBER, 1894, NUMBER :

A Method of Distribution
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## LITERARY NOTES.

The Textile World of Boston is adding a new and interesting feature. It is publishing not only a complete directory of all the textile mills, bleacheries, dyeing and finishing establishments in the United States, but also gives maps showing the location of mill towns. The maps are divided into five and ten mile squares, and the lecation designated by number and letter. October issue gives New England in full, and later issues at intervals will give the mills in other sections, thus completing the entire country during a year's subscription. In statistical and kindred information, as well as technical articles, the Textile World has a high reputation, so much so that in Ex. President Harrison's last message to Congress the statistics conceraing the growth of textile manufactures were taken from the Tcxtile World and duly credited in the message. Guild \& Lord, publishers, 620 Atlantic Ave., Boston, Mass.

The Century for Novembersignalizes the oponing of its twenty. fifth year by the beginning of a new Life of Napoleon, by William M. Sloane, Professor of History at Princeton College. It is believed the time has come to make a new and unprejudiced review of the facts of Napoleon's life in the light of the documents now accessible and the memoirs of which the last twenty years have been so prolific. The first chapters deal with Napoleon's childhood and youth, including the Corsican period and has school days in France, and in this period the history has the value of a unique fulness. Much 'care has been bestowed in the selection of illustrations from the large amount of accessible material, and the instalment is rich in portraits, in pictures of places, and in carefully drawn views of typical scenes in Napoleon's life. Among the illustrations are a hitherto unpublished portrait of Napcleon at sixteen, drawn by a school fellow, and a fac simile of the last page of his exercise-book at school, containing a curious reference to St. Helena. The frontispiece of the magazine is an engraving of Greuze's portrait of Bonaparte as Lieutenant of Artil. lery. Charles Dudley Warner contributes an article on Prof Slozne and his work. Kose Hawthorne Lathrop contributes to the number a series of letters by her father and mother, Nathaniel and Sophia Hawthorne, and by Herman Melville and others, which set forth incidents of the life of the Hawthornes in Lenox, with the cmbellishment of a hitherto unengraved portrait of Hawthorne made from life by Leutze. Besides the articles here mentioned this mouth's Century contains the usual amount of other interesting reading matter, including poems, short tales and general articles

The November number of The Canadian Magazine contains a rich variety of fiction, history, literature and descriptive writing, and is well illustrated. The illustrated articles are: " Glimpsas of tiexican Life." by H. S. Grant Macdonald; "The Round Towers and Irish Art," by Fred. T. Hodgson, and "Land of the Pilgrims," by Alla Eric. "A Decade of the History of New France," by 'r. P. Bedard, of Quebec, is a valuable and most entertaining sketch of social and administrative life in the period $1660 \cdot 1670$. James Dickson contributes an article full of information relative to "On. tario's Big Game" in the northern forests of the province. Attor ney-General Longley, of Nova Scotia, treats entertainingly of the famous Joseph Howe. David Boyle discusses, after a pers ona investigation on the supposed site of the old Scandinavian city of Norembega, "Where was Vineland?" Other contributions are: "The Position of the Established Church," by J. Castell Hopkins ; "The Clown in Twelfth Night," by Walter Townsend; "Little Kosh-She-She-bog-a-mog." by Erastus Wiman; two stories-" A Collection of Materials," by Bernard McEvoy, and "Face or Phantom," by A. H. Morrison-and several short poems. The Canadian Magazine is published by the Ontario Publishing Co., Ltd, Tornnto. \$2.50 per annum.

Richard H. Edmonds, of the Manufactarers' Record. Baltimore Md., has sent us a copy of his pamphlet, entitled "Facts about the South " That the Southern States have made remarkable progress during the last few years is known to people of all sections of the country, but many entertain the idea that this development has been brought about mainly, if not entirely, by the efforts of northern and eastern capitalists Mr. Edmonds combats this widelyspread opinion, and shows that in the rehabilitation of the South
after the war Southern men were not behind. He devotes a good deal of attention to the cotton and other manufacturing industries of the South, the extensive naturo and bright prospects of which are even now only partially realized in other sections. Another portion of the pamphlet compares the position of the South before the war with that of the North, which certainly goes far to disprove the statement sooften made in other parts of the conntry that Southerners were slothful and unenterprising. For instance, in 1860 , the total assessed value of property in the United States was $\$ 12$.: $000,000,000$, and of this the South had $\$ 5,290,000,000$ or 44 per cent. The havoc wrought by the war, was terrible, but since 1880 both agriculture and manufactures have been steadily becoming rehabilitated on a firmer basis than ever, and at this day there are unmistakable signs that the next great wave of developing energy in the States is to take place, and that soon, in the South

Canadin Textile Directory.-This important reference work inclu ies all the generally recognized textile trades, and also manufactures, and dealers in hats and furs, paper makers, the principal dealers in dyestuffs, etc. The work, which has now reached its third year, is a hundred pages larger than the edition of last year, and the furniture and upholstery trades, not before included, now find their place in its pages. The full text of the American tariff as affecting the customs paper trades is printed in full We note that many English asvertisers bave grasped the chance of giving publicty in Canada to their wares in the advertisement pages of the Directory. The book is excellently printed, and the get-up and arrangemeat leave nothing to be desired. Certainly the publics tion is a wonderful example of a rapid increase of size and a general improvement of contents effected in a short period of time It will be found extremely useful to all merchants having any dealings with Canada.-Textile World. Londok, Eng.

The publishers of the Dry Goods Economist, New York, are shortly to double the size of their premises and put in more type and machinery. The ampunt and variety of information given by our contemporary every week is surprising to those who are not posted in the progress of foreign trade jo irnals, and the claim of the Ecoromist to be ng the greatest dry goois weekly in the world can hardly be questioned.

The Duminion Suspender Co., Niagara Falls, Ont., are erecting a new building 100 by 50 ft .

Tororro city council have given a contract to C. $R$ Martin \& Co. for firemen's clothing, the prices being $\$ 10.40$ for coats, $\$ 240$ for vests, and $\$ 5$ for pants, union wages to be paid for their making.
J. H. BLack, formerly of the firm of J. H. Black \& Co., Detroit, is starting a commission business in Toronio in carpets, upholstery and cabinet hardware, representing American firms chiefly
a trade journal with a thousand subscribers often has a greater number of readers of the sort the advertiser wishes to appaal to than the daily paper circulating a hundred thousand copies. -Ex.

Jas McMillan \& Co.furs, wools, etc., Minneapolis, propose to start a branch of their business in Winnipeg, with Frank Lightcıp, form :rly connected with the Toronto Hide and Wool Co., as manager.

Benning \& Barsalou's 27th annual sale of India rubber goods took place in Montreal last month, the offerings being about 4,800 cases of goods made by the Canadian Rubber Co., and about 1.000 cases made by other manufacturers. The attendance at the sale was large, and the prices realized above the average. The sales totalled up to $\$ 60,000$.
A.s English manufacturer has been making some experiments to determine the best method of illuminating cloth mills. Gas jets, incandescent lamps and arc lights were all tried and found wanting, as they either failed to give light enough, gave too much light or cast heavy shadows. Finally a continental idea was adopted. The walls of a room were painted white and under each of a number of arc lights was suspended a reflector, which threw all the light up to the white ceiling, from which it was reffected to the room below. This system is stated to have been successful.

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