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## Editorial.

## Small Proats. Surt Smash-

To make large sales is not to make large profits; an annual turn-over of a million and a.quarter dollars may not mean even a profit of twenty-five cents, as a number of men in the trade have learned during the past three months. The ancient saw about all not being gold that glitters, has not been enough thought of lately; but we will hear more of it from this on. There are a number of firms doing a very large business, who are
selling goods at less than they cost. That this is so, anyone can see by looking at the wares. Very many cheap sales are fraudulent, and all are dangerous, as we state elsewhere; we now refer not to specinl sales, but to the big general stores where everything is' sinld, not to the smaller one handling one department. The fact that a particular firm is selling a line below cost does not seem to alarm the wholesaler or manufacturer's agent that supplied the goods. He smiles at the size of the order he has booked, fingers the cheque he has received in part payment, and reflects on the enormous business done by the firm, and feels confident he will be paid all right. Did he for one moment reflect on the probability of there being a profit of perhaps only three per cent. on what part of the business did yield any profit, and a certain loss amounting to more than that on the rest, he would not feel so sure of his final payment. Where would he be if the expansion of the business were to cease temporarily and a number of heavily-interested agents began to ask for their money? But the large stores keep on growing, reporting an increased turn-over every month to their so deeply interested friends, and the friends who do not know each other, nor suspect that they are so numerous nor so deeply interested, consent to retain their friendly interest a little longer. But where is it going to end ? In absolute and complete ruin. Not even sales of a million dollars a day will keep a business going if the goods, expenses of handling, etc., amount to one million dollars anci one cent per day. It is not less certain that an inadequate profit is an equally sure cause of ruin, though it may be slower.

## Russian <br> Cottons.

The Russians ate making determined efforts to make their empire self-con-tained-to produce within its own wide boundaries everything its people need. One of the latest efforts in that direction is the cultivation of cotton in Asiatic Russia. Large stretches of land there are rendered fertile by irrigation, and the propoztion of cotton grown is steadily increasing. The completion of the Trans-Siberian Ralway will do much to increase the production of the Russian cotton, because it will then become possible to find a market for the product of fertile districts that are now shut out, owing to the high charges for freighting the cotton in carts. This railway will be one of the chief factors in twentieth century changes.

## THE YORKSHIRE OF CANADA

The county of Lanark is a textile centre of great importance, and to those unfamiliar with the sources of our Canadian woolens and worsteds the number and size of the mills in Almonte and the surrounding country is a surprise. A very large proportion of the outpart of cloth in Canadn is manufactured in this section of Ontario, owing to the natural advantages possessed both by the locality and the inhabitants. The Mississippi Riv ar, in its course through the county of Lanark, makes a considerable descent, in most places over ledzes of limestone, in such a way as to afford excelieft water-power. At Almonte the difference between the river levels above and below the town is fully sixty feet, and the water-power has been employed for various industrial purposes since the earliest settlement. A number of tributary streams enlarge the flow of the river, and are themselves the scene and support of thriving establishments, as the Clyde, near whose mouth the busy village of Lanark is situated. Lanark is well known in the textule trade as the site of Boyd, Caldwell \& Co.'s woolen mill, one of the most flourishing and progressive in the district. At Innisville, Carleton Place, Appleton, Blakeney and Pakenham, the water-power developed by the river is taken advantage of more or less fully. At Carleton Place and Almonte little additional power is available, though in the latter town there is one remarkably fine power unused of late years, though it was one of the earliest to be improved, as it is especially valuable on account of the fact that it is but little effected by low water. At Blakency there are only two users of power, though there is an abundant supply of water and a head of twentytwo feet. There is a fall of about ten feet between Almonte and Blakeney, a mile and a-half below the former town, which is entirely unused. Tlere are rumors at present that both these powers will shortly be used to develop electricity for emplayment in the mills at Almonte. The fall known as Wylie's Rapid is the property of the Rosamond Woolen Company, and it is reported that thoy intend using it to supplement their water-power, which is deficient in low water. There is also a report that Jas. H. Wylue intends to employ the water-power of the Baird mill to generate electricity to run his flannel mill, thus effecting a saving, as the mill is at present run by steam.

The matural bent of the carly settlers was largely towards the textile industries. The village of Almonte and vicinity, or more properly speaking, the township of Ramsay, was principally settled in the years $\mathbf{1 8 2 0}$ and 1821 by operatives from Glasgow, and Paisley Perthshre, Scolland, who enigrated under the auspices of the Government. They were furnished on their arrival in Quebec with a free passage (such as it was) to the village of Lanark, then the nearest place at which accommodation could be procured for them,
till they had an opportunity ot going upon their land. The Ramsay setters, from their former mode of lise being necessarily unacquainted with agriculture and not having been accustomed to severe labor, had, as might be expected, many privations to endure during the early days of the settlement. In 1823, ta large contingent of immigrants was brought over from Ireland; after spending the winter in camp on the site of D. M. Fraser's knitting mill, they were locatad in the township of Huntley. The town of Almonte is situated on east half lot number fifteen, ninth concession of Ramsay, which was granted by the Crown, in 1819, to David Shepherd, a native of Perthshire, Scotland. The land was sold by Shepherd to a man named Shipman, after whom the village was called for a number of years, who developed the water-power and made the first industrial use of it, building a saw-mill and grist-mill in 1821.

It was not till 8851 that the woolen indiatry began in the village, with the organization of the Ramsay Woolen Cloth Manufacturing Co. This company was ruined by the burning down of their mill in the following year. The property then passed into the hands of Jas. Rosamond, of Carleton Place. The progress of the town which was attendant upon Mr. Rosamond's moving to Almonte, is referred to in the sketch of that gentleman's life on another page.

Ardrew Elliot, of Galt, Ont., bought No. 2 Mill from the Messrs. Rosamond in 1870 , and formed a partnership with Messrs. Routh and Sheard, who were former employés of the Messrs. Rosamond, but had been for some time in Appleton, where they had acquired an interest in the Teskey mills. The mill was enlarged from four to five sets, and the output was somewhat changed, a larger proportion of the product being flannels, for the most part unions. When Mr. Sheard left Elliot \& Co. and formed a partnership with Mr. Thoburn, the former firm became Elliot ì Sherriffs, by the entry of Arch. Sherriffs, of Lanark. The output of the mill was then made equal to that of a nine-set mill by running it day and night. Had the nrm been satisfied to continue as they were they would probably be prosperous to day, but they determined upon a further enlargement of their plant, and added the Victoria mills at an expense of about $\$ 30,000$. This great outlay, together with the fact that the mill premises then consisted of \{our buildings, of which the new one was at a considerable distance from the rest, thus making supervision more expensive, left the firm's capital very seriously impaired, - and finally Elliot \& Co. were compelled to suspend, The buildings are now cccupicd by Wylie \& Shaw, the Banner File Works, and D. M. Fraser's knitting mill.

No. 3, which occupied the site of Wnm. Thoburn's flannel mill, was run for a short time by Jro. MacIntosh, who came from Carleton Place to establish the
business. It was locally known as the Brown mill, and when it passed into the hands of the Messrs. Rosamond it became kncivn as No. 3. It was a 3 -set mill and ran on blankets and coarse tweeds.

Baird \& Co. ran a 2 -set mill from 1871 to 1895 , but they were not successful towards the end of that period. The firm was, to say the least of $i t$, not averse to litigation, and in defence of their rights they sometimes incurred expenses which were greater than the amount of business done would justify.

In 1870, Gilbert Cannon built a 2 -set mill, which he ran for two years on coarse and fine tweeds. He rented it to $\mathrm{W}{ }_{3}^{1} \mathrm{H}$. Wylie in 1872 , who ran it till it was burnt down in the winter of 1877 .

Cannon Bros., who are sons of Gilbert Cannon, built a 1 -set mill in 8874 , which they ran on etoffes and frieze till ahout 1885. Since 1890 . this mill has been standing idle. It has what is undoubtedly the best water-power now available for any new undertaking in Almonte.

A write-up of Almonte's inù 1 stries would be incomplete without a reference to the Gasutte, its leading newspaper, which has probably done as much as any other factor in bringing the town into favorable prominence throughout the Dominion. Enthusiastically loyal to Almonte's best interests, ably managed, with its columns kept clean and up-to-date in all respects, the Gazette gets credit for being at the head of the list of Ottawa valley weeklies, and has no superior in the province as a bright and well-conducted paper. The Gaxette was established 28 years ago by Wm. Templeman, now managing editor of the Victoria, B.C., Times (who was a candidate for parliamentary honors in opposition th Col. Prior a short time ago). McLeod \& McEwen (both of whom, we understand, graduated from the office) bought it from him 33 years ago, and have owned and managed it since. It has a circulation larger than any other weekly in the Ottawa valley, has a well equipped job office, with latest machinery, etc. Mr. McLeod formerly owned the Smith's Falls News, while Mr. McEwen learned his business in the Gazette office, and has been there ever since-over 21 years. They employ a dozen hands in all.

## thr LATE jAESES ROSAMOND.

There is a beautiful stained glass window in St. Paul's Church, Almonte, a memorial of the late Jannes Rosimond. There is, however, a much greater and more lasting memorial to be seen in the town in which he lived, the thousands of contented and prosperous people who find employment directly or indirectly in the woolen manufacturing business which his foresight and industry established and developed. James Rosamond, who is often spoken of as "the father of the woolen industry in Eastern Ontario," was born near Ballinamore, county of Leitrim, Ireland, on Feb. y4th, 1805. His parents were Bennet and Fanny Rosamond, and his father followed the three. fold occupation of farmer, reed-maker and linen weaver. The subject of this sketch came to Canada in 1827.

For about two years after coming to Canada, Mr. Rosamond lived at Ogdensburg, N.Y., where he learned the distilling business. In 1830 he removed from Ogdensburg to Carleton Place, Ont.


After coming to Carleton Place, Mr. Rosamond was engaged in the distilling business for three years, and then went into the sawmill and gristmill business in partnership with Join McEwen. Their mill was one of the few in this section of the country at that time. This partnership lasted for four years, when it was dissolved and a new one formed with R. Bell \& Co. The now tirm determined to extend their business, and added a carding and cloth-dressing establishment, which also was then the only one in this part of the province. The firm rented the mills in Carlcton Place from a man named Bolton for sixteen or seventeen years, and continued for that time in business in that village, which was known then as "Morphy's Falls." In the course of time Mr. Rosamond went into the spinning, weaving and manufacturing of grey, all-wool cloths, light and dark, dressed and undressed, which sold at from 57 cents to 67 cents per yard, and satinettes, a union cotton and wool goods, which sold at from 50 cents to 55 cents per yard. The output from this mill was equal to that of any mill in Canada, and found a market all over the country.

These enterprising early manufacturers kept constantly adding to ther machinery and increasing their business, and towards the close of their lease wanted to buy or rent the water-power, but the owner, Mr. McLaren, of Beckwith, would do neither. Just then an employt of Mr. Rosamond's cane to Almonte-at that time called " Waterford"-and succeeded in forming a company, known as the Ramsay Woolen Manufacturing Company. Among those who held stock in this company were the late John Scott and the late John Patterson, who, about the year 1853 or 1854 , one year after the company was formed, went to California, but before going disposed of their shares in the company to Mr . Rosamond. The mill was burned shortly afterwards. In 1856 Mr . Rosamond moved to Almonte. After the mill was burned a sale was called, and the site-the one on which No. 2 mill is built (now the property
of Wylie \& Shaw), was knocked down to the late Albert Teskey for about Cgo. Mr. Teskey afterwards repented of his bargain, and sold the water power to Mr. Rosamond, who built No. 2 mill on it, moving his machinery from Carleton Place to Almonte in 1857. No. 2 mill was built in $\mathbf{8 8 5 6}$, and additions were made to it afterwards by Messrs. Bennet and William Rosamond, who put in more machinery and gradually incoffingsed its capacity. In 186r, 100 close application to . ass beginning to tell on Mr. Rosamond's health, he leased the business to his sons, Bennet and William, and afterwards sold to them. In 1862 Mr . Rosamond and his sons formed a joint stock company, with capital of $\$$ too,000, to build a larger mill, which resulted in the crection of what is known as No. I mill. When Mr. Rosamond retired from active business he retained an interest in No. I mill, and at the time of his death was still a shareholder in it. He was also for some time in the tanning business, his tannery being situated on the site of the present dye-room of No. I mill. Although always very widely and actively en. gaged in business, Mr. Rosamond did not forget his obligations as a citizen, and was always ready to assume his share of public duties. He was $n$ member of the Carleton Place School Board from 1833 till he remuved to Almonte. He has been an active and useful member of the Almonte Board ff about 35 years, having occupied a seat there ever since he came to the town, with the exception of a year and a half (about the year 1869), when he removed to Vineland, New Jersey, for the benefit of his health. He has filled the position of justice of the peace for the county of Lanark continuously for over half a century. He was also a life member of the board of the Ottawa Protestant Hospital. When he died Mr. Rosamond was Almonte's oldest citizen, and certainly the one that had done most for its progress in every way.

williax thoburs.
William Thoburn, an illustration of whose flannel mills may be seen on another page, is one of the most prominent figures in the political and commercial life of Aimonte to day. This montb he takes the chair for his fourtic term as mayor of the town. The business men of Almonte are keenly interested in municipal
politics and many of them have places in the council. What can be done for a town when its business is conducted on a business basis may be seen in the fact stated by Mr. Thoburn, in his nomination speech, that the rate of taxation in Almonte was only $17 \frac{1}{8}$ mills on the dollar, while in the surrounding towns it was: in Carleton Place, 20 mills; Arnprior, 217 mills ; Renfrew, 22 mills; Smith's Falls, $24 \frac{1}{2}$ mills.

Mr. Thoburn was born in Portsmouth, ling., in 1847. When he was ien years old he accompanied his parents to Canada. They made their home for a time in the village of Fitzroy Harbor, Ont., then a thriving little community, afterwards removing to the village of Pakenham, Ont., where the subject of this sketch continued his studies in the public school. In 1867 he removed to Almonte, and for the next couple of years he was employed in different capacities in one of the woolen mills, where he acquired the knowledge of woolen manufacturing which enabled him to enter that field so successfully himself some years later. For the next eleven years Mr. Thoburn was in the grocery business, which he conducted so prudently and profitably that at the end of that time he was owner of the fine shop in which he carried on business, a comfortable dwelling house not far from the site of his present mansion, and sufficient capital to make a safe start in a new enterprise.

In 1880 he entered into partnership with Samuel Sheard, who was one of the active partners in the firm of Elliot \& Co., and bought the building which had been put up on the site of old No. 3 for a furniture factory. This is the second furniture factory that has become a flannel mill in Almonte, and the fact indicates strongly the industrial bent of the people. The mill was equipped and stocked to run on union flannels, such as were being turned out at the time by Elliot \& Co., but it was soon seen that an all-wool flannel was more in demand in the Canadian market, and so the mill changed off to that line of goods, and as Mr. Thoburn says, "From that day to this, there has not been an ounce of cotton in this mill." Shortly after the mill was started, a most unforiunate circumstance threatened the prosperity, if not the existence, of the new firm. Mr. Sheard suddenly disappeared, and no trace of him has since been found. The business outlook was bright, the two partners were in most perfect harmony, and no fact hasever been discovered which would lead to the theory being adopted that his disap. pearance was planned. The result of this distressing occurrence was, that Mr. Thoburn lost the experienced partner upon whose teshnical knowledge he had relied for the successful management of the manufacturing side of the business, and the affairs of the partnership were administered for a time by the Court of Chancery, At the sale which the Court ordered, Mr, Thoburn bought in the mill and has operated it continuously ever since, closing down only for absolutely necessary repairs, and never seeing a season go by that did not leave a comfortabie balance on the right side of the books. The output of this mill is about 500,000
yards, enough to enable Almonters to say that their flannel mills put a million yards of as good flannel as can be found in Canada on the market every year.


James h. wylie.
James H. Wylie, proprietor of the Elmsdale flannel mill, was born in the town of Perth, Lanark county, July 11th, 8825 , and is therefore in his 7rst year. He was the second youngest son of the late Hon. James Wylie, who came out from Paisley, Scotland, in 1821, and died in 1854. When the latter first came to Ontario, he had a contract on the Rideau Canal. A great deal of the land in this section was deeded by the crown to the elder Mr Wylie, and by him sold to various persons who settled in this neighbörhood. He was appointed a member of the Legislative Council of Canada in 1849. Mr. James H. Wylie was educated at the Perth grammar school, and afterwards at Kingston ; and shortly after the completion of his education he entered upon his mercantile career in Almonte, more than half a century ago. About thirty years ago he built the large store where he carried on the business of a general merchant until about eight years ago, when he disposed of his business to his son, John B. Wylie.

The late Hon. James Wylie had been postmaster at Almonte for many years, and on his death J. H. Wylie received the appointment from the Hon. Malcolm Cameron, Postmaster-General, without his having made application for it, and he still fills the position to the satisfaction of all the townspeople.

The industrial life of the town has always owed much to the energy and sound good sense of Mr . Wylie. In 1857 he inherited the site of the present roller mills from his brother, J. B. Wylie, with whom he had been io partnership for a number of years, the frm being known as J. \& J. Wylie. The sawmill, shingle mill and flour mill on this property were continued till 1866, when the latter was leased and passed from Mr. Wylie's control till 1886 , when he built the large roller mill on the site now operated by his son, Jas, W. Wylie. It is, however, in the fact that among his numerous successful business ventures Mr. Wylie is the proprietor of the Elmsdale Flannel Mills, that the readers of The Canadian Journal or Fabrics are chiefly interested. In 188 I Mr. Wylie bought the property of the Almonte Furniture Company, and
adapting it to the purpose, entered the market as a woolon manufacturer. For a short time the mill was run on shawls, and was managed by W. H. Wylie, son-in-law of the proprietor. It was seen, however, that the market for this class of goods was narrow, and attention of the owner was turned towards flamnels, on which the mill has now been running very successfully for the past fourteen years. About fifty hands are employed and half a million yards of flannel annually produced.
tile rosamond, woolen cumpans.
The industry that has been the centre and soul of the prosperity of Almonte for the past forty years is the woolen manufacturing business established in Almonte by the late Jas. Rosamond in 1856, and subsequently carried on upon a larger scale after 1861, when he retired from business and leased the premises to his sons, Bennet and William Rosamond. A juint stock company was formed in 1862 by Mr. Rosamond and his two sons, and the business transferred to its present site at the south-western point of Coleman's Island. It was at this time that the mills canie to be designated by numbers, as for a short time, the Messrs. Rosamond were running their large new nill-No. 1 , the old fourset mill since universally known as No. 2, and also a three-set mill which then stood on the site of Wm. Thoburn's flamel mill. Shortly after No. I was complete, No. 2 was sold to Andrew Elliot, of Galt, who formed a partnership with Routh and Sheard, former employes of the Messrs. Rosamond, and carried on the business after enlarging the mill to five s.sts. The output of the Rosamond Woolen Co.'s mill has always been varied, and has comprised fine and coarse tweeds, cassimeres, etc., but, however varied it has been, it has always been high class. In i 880 a worsted department was added to the mill, the buildings and plant being very much enlarged. This is at present the most profitable side of the business, as worsted goods seem to be taking the market by storm.

At the present time the mill has twelve sets of wool and three worsted cards-in all fifteen sets, but it is found in working that the actual product of the mill equals that of sixteen sets more nearly. There are twenty-seven broad looms and fifty-five single looms. In the worsted department there are four thousand eight hundred spindles. About three hundred and fifty hands are employed, of whom the larger number are women. The operatives are most intelligent and prosperous in their appearance. Many of them hold responsible positions in the town council, school boards and the managing bodies of the different churches. A large number of them who have been omployed by the company for a long period own their houses, and this is true not only of the men, but there are also property holders among the women. The ordinary system of hiring people for what their work is worth, and discharging them when incompetent or wasteful, is followed; and there is absolutely no labor question in the town, nor has there been at any time.

There is no labor union, nor has there ever been a strike, lockout, or any disturbance or trouble among the working people. In many cases, the employes in the mill today are the children and grandchildren of those who were in the mill forty years ago. Some time ago a system of profit-sharing among the employes was undertaken by the management, but as it was found to be unsatisfactory, the old system was restored. A number of those employed in the more responsible positions in the mill are stockholders to a small extent. The majority are Canadians of Scotch and Irish descent, who have been accustomed to the mill from childhood, and take a pride in the splendid property. One of the features of the mill which strikes a visitor, next to the cleanliness and order of the whole premses, is the beautiful and in-
some grounds and residences of Jas. H. Wylie and D. M. Fraser. To the east the scene includes the chimneys and church towers of the town. Such an outlook cannot but have an clevating tendency in its effect upon the minds of those who are brought into constant relationship with it.

The output of the mill is between $\$ 300,000$ and $\$ 500,000$ per annum, which is very readily taken up by the leading wholesale houses all over the Dominion. The latest and most improved machinery can be seen at work in this mill, and much of the success of the business must be ascribed to the energy which the management displays in availing itself of new ideas wherever they may be found. Mr. Bennet Rosamond frequently visits the centres of the textile industries in

spinting view which presents itself upon looking out of any of the windows. On the north s.de of the mill hes a large lawn, with trees and flower beds, which is closed to everyone except the employes of the mill. Beyond that is the river, and on the high ground across the river one of the finest purtions of the town, containing the residences of Mirs. Jas. Rosam ind, Jas. Rosamond, sec. treas. of the company, J. M. Rosamond, secretary of the Almonte Knittung Company, W'm. Thoburn, and a number of others. On the west the river descends in two falls a distance of forty feet, and opposite the mill ate the roky islands and stretches of sloping lawn connected by rustic bridges, which go to make the magnificent srounds of " Pincharst," the resideace of Bennt Rosamond, M.P., president and managing directut of the company. To the south the view is across the full width of the river, to the hand.

Europe and the United States, and thus keeps in touch with forergn competitors. Alex. G. Rosamond, son of Jas. Rosamond, secretary of the company, has lately returned from taking three years study in the Yorkshire College, Leeds, England, where he saw much during his successful course which will be of advantage to the company whose employ he entered this month. The Rosamond Woolen Co. is one of the not too plentiful woulen businesses that make money and do it regularly year after year. The shareholders never receive an excessively large dividend, and on that account they never receive a small one. In the years which yield very large returns all but the amount necessary to pay the usual dividend is carried cver, and is either employed in improving the plant or augments the returns in what would otherwise be a lean year. As may naturally be supposed, there is no stock of the Rosa-
mond Woolen Co. on the market, nor is there likely to be.

## THE ELXSDALE FLANNEL MILL.

In 1880, James H. Wylic converted the buildings of the defunct Almonte Furniture Co. into a woolen mill, where he manufactured shawls for a short time, the mill being managed by his son-in-law, Wm, H. Wylie, of Carleton Place. After a short tinne, it was seen that money could bo made more easily in flannels than in shawls, and so the mill was adapted to the pro-


THE ©ELMSDALEXTLANNEL"MLLL
duction of that line of goods, and has now been running continuously on it for the past fourteen years. The only stoppage during that time was one of a few
mutually advantageous are entered into between the tivo companies. Not long ago the firc protection of both mills was raised to its present high condition by putting in a now pumping plant in the Rosamond Woolen Co.'s mill and laying down water mains, with numetous hydrants, on the island in the vicimty of both mills. This taken in connection with the nutomatic sprinkling systems, water towers, force pumps and fire companies in each mill, makes their hability to damage from fire small, especially when it is remembered that the town has an efficient fire brigadis, with all the nsual equipment of steam engine, etc.

The mill has four sets of cards, twelve hundred spindles and twenty-five sewing machines. It runs on underwear of all grades, and has an output of about $\$ 100,000$ per annum. The employós, who number about 90 , are largely women and girls, and they recenve $\$ 25,010$ per annum in wages. Jas. I Canthe, of Montreal. os the manaking director if the company, and Juhn M. Rosamond the secretary treasurer. The company has been in business since 1882.

## ALMONTE BLANKET PACTORY-WYLIR \& GHAW, PROPRIETORS.

For the past two years Wylie \& Shaw have been carrying on a very successful business in the premises which are known as No. 2, formerly occupied by Elliot is Co. and the Messrs. Rosamond. Neither of the proprietors had previously had experience in woolen manufacturing, but it comes naturally to Almonte to go into that industry, and the new firm is doing well. days while a new boiler was being put in. The samples shown by this mill include goods of the very highest class manufactured from fine wools, absolutely pure, as well as union goods.

The manager of the Elmsdale Mill, Joseph Ainley, is a veteran of the American War and one of the leading citizens of the town. He is one of the strongest supporters of every movement which tends towards the intellectual elevation of the townspeople, and the public library owes much to his wide reading and kindly sympathy. The Elmsdale Flannel Mill runs three sets of cards, and has fourteen broad looms. The annual output is about half a million yards. Steam power is exclusively employed.

## almonte miltting co.

The mills of the Almonte Knitting Company are built on the south-eastern end of Coleman's Island, and are very finely situated with regard to the water power, by which they are exclusively supplied with power. The shareholders of the company are many of them also saterested in the Rosamond Woolen Co., and sometimes arrangements which are

aryonte knitting company s mills
Mr. Wylie, who is the eldest son of J. H. Wylie of the Elmsdale Mills, was formerly in business as à general storekeeper, and is at present one of the proprieturs of the A!monte Electric Light Cu., as well as a heary in vestor in cheese manufacturing, which is thoroughly

almonte blanket pactory
gilt-edged in the county of Lanark. Mr. Shaw is the proprictor of a large hardware store, and is one of the leading business men of the town. The mall has two sets of cards and runs on blankets, friezes, and coarse tweeds.

WN. THOBURN'S FLANNEL MILX.
The establishment and continued progress of this mill is descrijed in the sketch of the proprietor on another page. It is a three-set mill, has twelve broad looms, and depends for power entirely on the river. Mr. Thoburn here divides with the Almonte Roller Mills on the opposite bank the whole flow of the river, so that he has an abundance of water even in the driest seasons. About forty hands are employed, and between four and five hundred thousand yards of all-wool flannel are turned out every year. this issue.
machines. The goods run on are men's underwear of medium grades chiefly, though the finest goods are also produced, but in small quantutes. Low grade goods are not produced. The annual output is between forty and fifty thousand dollars. Mr. Fraser is a barrister, as well as a manufacturer, and is a partner in the legal firm of Fraser \& Kirkland. He is also one of the chief proprietors of the Almonte Electric Light Com. pany.
D. SHRPHEKD, WOOLEN WASTE.

This business was begun in 187x by the firm of Elliot \& Shepherd, and has since been carried on very successfully by Mr. Shepherd. The mill does a large business in garnetting waste for the numerous mills in the town and surrounding district, besides manufacturing a large quantity of shoddy. There are two sets of machinery. Mr. Shepherd was !ormerly head of the dyeing department in Elliot $\&$ Co.'s mill.

## THE COUNTY.

The other towns in the County of Lanark are all represented in the woolen trade, though we are unfortunately unable to give full descriptions of the mills in
carleton place.
There are three thriving factories in Carleton Place; those of the Hawthorn Woolen Co., and the Gillies Manufacturing Co., and MacDonald \& Brown. The Hawthorne Woolen Mill has G. B. Benson, of Montreal, as its president ; J. B. Clearihue, secretary-trea-

## D. M. FRASER, KNITTED GOODS.

This is one of the newer industries of the town, as Mr. Fraser has been in business as a woolen manufacturer for the past two years only. The building is the old Vic toria mill, which was erected by Elliot $\mathbb{A}$ Co., without regard to expense. Though it is only of two storics, it cost wer $\$ 30$. ooo, including land and water puwer. The walls are so constructed as to make the addition of several more stories a matter of trifiisg expense, and the beiler plant is suffi cient for the needs of a factory many times the size of the present one. While these fea tures of the rroperty had much to do with the embarrassed condition inte which Elliot \& Co.'s business fell not long after their new building was erected, it is not at all an en cumbrance to the present occupant, whu ob tainec the premises at a bargain, and is now in a position to expand his business, without any considcrable expense, as the need mas arise. I new water whed was recentl? put in, which enables the mill to be run without recourse to steam purier, thus effecting a large annual sating. The mill has two sets cards, ninc handred spindles, and twelve sewing


WN. THOIURN'S TLANNEL MILL
surer. It was established in $\mathbf{1 8 7 2}$. It has five sets cards, twelve bruad and twelve narrow looms, and 2,000 spindles. The product is fancy $t$ weeds and cassimeres. Steam supplies the porrer. Miacdonald \& Brown have waterpuwer to drive their one-set mill. There are five looms,
four hundred spindles; the output is tweeds, eloffes, yarns, etc. Gillies \& Co.'s mill is managed by D. Breck enridge; steam and water are the sources of power. There are five sets of cards; twenty-four looms, 1,632 spindles. The output is fancy tweeds.

## PERTH.

Perth has two mills, those of T. A. Code. r.which is a two-set mill, having 480 spindles, twenty-thtee machines, and running on yarns and hosiery; and Thos. Gemmill \& Sons, who moved from Port Elmsley to Perth in 1892 This mill is a two-set mill, running on fine and medium tweeds.

## lanark.

The village of Lanark is'the site of one of the most prosperous manufacturing industries in Ontario-the woolen mill of Buyd, Caldwell \& Co. It is a 4 -set mill, and runs on fine tweeds and cassimeres, which are becoming well and favorably known in the trade. Steam power is employed.

APPLETON.
The Mississippi Woolen Mills at Appleton are owned by J. Adam Teskey, and were established in 1862. The mill is driven by water-power, has 2 sets cards, 12 looms, 800 spindles, and runs on fancy tweeds, and cassimeres.

## BLAKENEY.

The Rosebank Woolen Mill at Blakeney is a 2 -set mill, having 6 broad looms and a narrow loom, and 720 spindles. Peter McDougall is the proprietor, and the output is tweeds.

> JAMIESON.

At Jamieson there is the 2 -set mill of John Spiers. This mill is driven by water-power and runs on tweeds etoffes, yarns and custom carding.
Cotton
for
Japan.

A Japanese syndicate has bought 50,000 tales of cotton in the United States. The same spinners have declared the intention of subsequently placing an order for 100,000 bales. While the cotton planters see in this increased demand for raw cotton an enlarged market for their product, there are other considerations which will in time present toemselves to the manufacturers in the United States. Hitherto the spinners of the Island Empiie of the East have confined themselves to the production of the coarser gauges of yarns, and although they have succeeded in driving the similar products of Lancashire and Bombay out of the Japanese market, the finer numbers have continued to be imported from England. The short staple cotton of China and the coarse product of India, while admirably suited for the spinning of low gauge yarns, are useless in the production of medium and higher numbers. The initial order for American cotton indicates that the Japanese contemplate the manufacture also of fine yarns and cotton cloths. There can be no doubt that this cotton will come nato competition with that from England and the United States when it has passed through the hands of the Japanese.

## Galt Knitting Co.

Changes are coming ever the face of trade in Canada, and one of the signs of the times is that the Galt Knitting Company has determined to leave the wholesale trade and place their goods on the market themselves. Tur Canadian Journal of Fabrics has pointed out several times that the policy of the wholesale trade in forcing down the prices of manufactured goods, and compelling the manufacturers to reduce the quality of theiroutput or go out of business, would lead to a rebellion somewhere. This company has determined to go back to the former high class grade of goods, and place them directly before the public, where they are sure to be appreciated. When $;$ oods are sold in this way, and the manufacturers are known, every really satisfactory garment sent out from the-mill increases the demand, and instead of appearance being the only consideration, as it is to the trade very largely at present, quality will come first. J. E. McClung has been appointed their traveler, and the Galt Knitting Company will be ably represented on the road. We shall watch with interest the success of the new departure.

Cut Ratos
Every one is impressed with the

## and

Cut Purses. straw, but when fraw, when the matter becomes one of a manuifacturer or merchant carrying on business without selling his goods at a profit, this same everybody expects to see it done. Not only that, but done on a large scale, with music, flowers, free lunches and menageries thrown in, to reward the kindly public for taking an interest in the commercial suicide that is going on. It is quite aside from the subject that many of the alleged cheap sales are fraudulent, that the goods are anything but what they are represented, and that many so-called bargan days are only pretents for extortion and robbery upon one line of goods under the pretence of offering exceptional values in another-that other being " just sold out," or " only till so o'clock," as the case may be. There are a great many honest men in business in Canada-not so many as at one time, but still a great many, and they are the chief sufferers from the present "cut rate" mania. They, poor creatures, when they advertise a bargain, and they have to do so now and again or shut the shop, actually place the goods on the counter as advertised. The public gathers them in and carefully abstains from buying anyt'ing on which there is a legitimate profit, knowing full well that if A sells cotton on Monday for half price, $B$ will offer silks on Tuesday at an equally ruinous reduction. The result is that " shoppers " are always on the watch for bargains, they buy nothing else, and the whole trade is rendered unprofitable. The dishonest merchant, however, marks inis goods buth up and down. His fifteen-dollar cloaks go at six dollars, but as they only cost him threc, he is in nuimmediate danger of insolvency. His "heavy suitings, all wool, regular $\$ 1.25$ at joc.," are composed of shodly and cotton, and may have cost him igẏc., and su cn. But this is only obtaining money under false pretences.

He has recourse to genuine bargain sales when he wants to commit grand larceny．A firm on its last legs has a huge sale，goods are gomg at half of nothing，the public crowds the shop for days and departs delighted． The firm suspends，the wholesaler and manufacturer＇s agent gets nothing or almost that，and the members of the defunct firm inhale the arr of more healthful clunates． Everyone knows what the merchant is then，but what about the accessories before the fact．Do they not share his guilt？There can be no gettong round the fact that value exists to a certam amount in every object，that amount being determined by a number of conditions．To give less than ats value for an article is ＂to obtain without giving value in exchange，＂and that is about as near the definition of theft as most people would care to go．Remember this in doing your buy－ ing：when you see a＂cut rate＂．look out for a＂cut purse．＂

## HOMESPUN．

In the days of homespun four ounces of lint，cot－ ton，or a half pound of lork wool was a day＇s stint in spinning，though a clever spinner could easily do twice as much．Wool was often colored before spinning－ dyed black or red，then carded with white．The resultart thread，steel or red mixed，was wonderfully soft and harmonious in color．Old silk carefully ravel． led，then carded with white wool or cotton，made the silk mixed that was such a favorite for the long stock－ ings worn with knee breeches，as well as for homespun gowns．They were woven in checks，stripes，and cloudings．One of the pretticst was dice cloth－a kind of basket weave－of alternate white and black or grey threads，thirteen to the group．It was troublesome to weave－a thread too many made a balk in the pattern． Children and servants had simple checks in blue or copperas and white．Linseys for winter wear were gorgeous in green and scarlet and black and blue．Dye－－ ing was part of the home work，as well as weaving and spinning．From walnut hulls，bark，and root came twenty shades of brown．Green walnuts and sumach berries gave a beautiful fast black that did not stain the wearer．Hickory bark or peach leaves gave a glowing yellow；swamp maple，a blackish purple；sugar maple，a light leather tint，and oak bark，set with copperas，a handsome gray－ ish color．In fact，a skilled dyer could get twenty colors from the woods and fields．Except for flannels，carpets and blankets，the warp was usually of flax or cotton． A very pretty carpet had half the warp of coarse wool doubled－a strand of green and onc of brown．In weav－ ing，when the woof came uppermost，a very coarse wool thread was shot in．When the cotton came up a very fine thread caught and held it almost invisibly．Beaten up thich，the effoct was that of a mossy，clouded Turkey fabric．Other carpets were woven in stripes or plain， like webbing，the woolen woof threads passing over and under the cotton warp two at a time．Size was esti－ mated by the number of threads that，laid side by side，
made cloth the regulation yard wide．The coarsest was 400．From that it went up and up with hardly a limit except that of the spinner＇s skill and patience．There was scarcely anything they couldn＇t weave on the looms－jersey and serge，and cotton and linsey，house linen，bed linen，blankets and counterpanes．The coun－ terpane was homespun high－water mark．Woolen ones had usually the figure in cclors skipped up on a white or a blue ground．Those of cotton were left white and bleached till they dazzled the cyes．Of some easy pat－ terns，a clever woman could weave eight yards in a day． Of honeycomb，huckaback and diamond diaper three yards was a good day＇s work．Fancy patterns were more tedious．The crown of skill and patience was knotted cloth．The weave was perfectly plain，but at intervals of an inch，a big soft cord was woven in and pulled up in little knots all along its length．Over the body of the cloth they formed regular diamonds．For the centre they made an elaborate arabesque design． Down one side of the spread，the maker generally drew shem up to shape her initials，with either the date of making in Roman letters or her husband＇s name oppo－ site，to balance her own．There was room，and to spare．Beds in those days stood four feet from the floor．Counterpanes were three yards by four without the fringe，which was either woven with dates and initials in the deep open heading，or knitted in open lozenge pattern to which deep tassels were attached． It fell over a valance，also homespun，and was either fringed or edged with netted points at the bottom．

## conbustion•

by thomas wensley，otrawa．
（Concluded from laet issue．）
I will here give you an approximate list of square feet of heating surface per horse－power in different styles of boilers and various other data for comparison：－

| Typz of Boilri． |  |  |  |  | Avinority． |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Water tube．．．． | 101012 | ． 3 | 1.00 | 1.00 | Isherwood． |
| Tubular ．．．．．．． | If 1018 | ． 25 | ． 91 | ． 50 | ${ }^{\circ}$ |
| Flue．．．．．．．．．． | 8 to 12 | ． 4 | ． 79 | ． 25 | Prof．Trowbridge． |
| Plain cylinder．． | 6 to 10 | ． 5 | ． 69 | ． 20 |  |
| Locomotive ．． | 12 to 36 | ． 275 | ． 85 | ． 55 |  |
| Vertical tubular | 15 to 20 | ． 25 | ． 80 | ． 60 |  |

A horse－power in a steam engine or other prime mover is 550 foot lbs．raised one foot per second，or 33,000 lbs．one foot per minute．

In Enginecring of August 17th，I894，there is a report of two tests made with a triple expansion mill engine of 1,000 horse－power，built by Victor Coates \＆ Co．，limited，of Belfast，for the spinning mills of the Brookfield Linen Company，limited，of the same city． This engine was set to work on the 18th of September， 1893，and has been at work ever since，giving satis－ factory results，especially in the matter of fuel con－ sumption and steady driving．As shown by these

[^0]tests, the amount of water used is remarkably small, being Ix.5 lbs. per hourly horse-power, and the coal consumption was I lb . The diameters of the cylinders are respectively 19,29 and 46 inches, with a stroke of 48 inches. The steam was generated in two Lancashire boilers, 7 feet 6 inches in diameter and 30 feet long ; each boiler has two furnaces of the Adamson type, having five Galloway tubes in each, and the total neating surface of the two boilers is 1,900 square feet. On these tests the engines were not running at full power, but were developing 787.4 horse-power, so that the heating surface per horse-power in this case was 2.41 square feet. The feed water was heated in the economiser to $250^{\circ}$ Fahrenheit, and if we include the heating surface of the economiser, 3,600 square feet, there would be a total of 5.500 , or 7.112 square feet per horse-power. The economiser is placed in the base of the chimney, and the feed water is heated by the hot gases which are passing away to the atmosphere, and would otherwise be a total loss.

When anthracite or hard coal is used, there should be from 22 to 24 inches between the top of the bars and the lowest part of the boiler. If bituminous or soft coal is the fuel used, then from 27 to 30 inches.

It is an absolute condition of economy and effi. ciency that the gratc bars shall at all times be well and evenly covered with the fuel, but this condition is one that is frequently neglected. If the bars are not uniformly and evenly covered, the air enters irregularly in streams, passing through the thinnest or uncovered parts; if too thickly covered it prevents the air entering. You all know that the thickness of the fire will depend upon the size of the coal used. The smaller the fuel the thinner the fire. With egg coal from 6 to 8 inches, and with furnace coal from 8 to to inches, have been found the best results in practice. In burning soft coal the charges should be light, as the gases which are evolved will have a better opportunity of getting the requisite quantity of oxygen.

I have seen from 15 to $x 6$ inches of coal on the bars at a time, and upon asking the fireman his reasons for having such a heavy fire, his answer has been that he could not get steam unless he had that quantity. It is argued by some that it is necessary, when a boller is worked to a high rate of capacity, to maintain heavy fires, and that thin fires are well enough for slow rates of combustion; but when the call for steam increases, it must be met by an increased thickness in the bed of coal on the grate. The ordinary fireman is apt to favor this method, for the reason that he can introduce large quantities at a firing, and afterward he is not obliged to give the fires much attention, for perhaps an hour's time, when he will again fill the furnace full in the same manner as before. As an explanation, however, of the favor which this method receives, it is probable that the class of labor which is generally employed considers the muscular effort required muck less of a task than the more frequent and careful attention which is needed when the fires are thin. Under such conditions it is almost impossible to regulate with
natural draught the supply of air, upon which we nust depend entirely for perfect combustion and economy.

As regards a comparison between thick and thin fires, the fact is that more capacity can be obtained from a boiler when a fire of medium thickness is carried and proper attention is given to its condition, than can be realized by any system of management when the fixes are exceedingly heavy, and advocates of thick fires, who take the ground that they are a necessity, are mistaken. As to the economy of the two, some persons maintain that heavy fires give the most economical results, but this is questionable. Valuable information on the subject has recently been brought out by the results of two evaporative tests which were made on a 72 -inch return tubular boiler, having one hundred $3 \frac{1}{2}$ inch tubes, 17 feet in length. The heating surface amounted to 1,642 square feet, and the grate surface to 36 square feet, the ratic of the two being 45.6 to 1 . On the thick fire test, the depth of the coal on the grate varied from 10 to 20 inches, being heaviest at the rear end and lightest at the front end. On the thin fire test, the depth was maintained uniformly at about 6 inches. The coal was New River semi-bituminous coal. The difference in the results, r.s appears from the figures, is an increased evaporation due to thin fires amounting to 15.6 per cent.

The quantity of heat generated in the furnace is dependent on the relative weight of hydrogen first, and carbon afterwards, chemically compined with their equivalent weights of atmospheric oxygen. If chemistry did not teach us this, our daily experience would soon convince us.

In using soft or bituminous coal, which contains a large percentage of volatile matter, it is necessary to introduce air over the fuel (unless we are working with the forced draught system), as we cannot get sufficient air through the grates, and that which comes is loaded with carbon which it has picked up in its passage through the fire. For this purpose 'we have aperturcs in the doors, or we leave the door ajar after a new charge of coal. You will readily perceive that the admission of any large quantity of air in this way must be objectionable, as it will cool the gases below the point of ignition, and if too much is admitted it will carry off heat from the furnace. There are a number of ways of admitting air to a better advantage; the simplest is to conduct the air through a hollow bridge wall and discharge it through apertures in the top, the air mingling with the lower strata of the burning gases as they pass over the bridge, thus ensuring a more perfect combustion.

George W. Barrus, M.E., made tests with a boiler where provision had been made for the admission of air as above, with Cumberland, anthracite and a mixture of two parts pea and dust, and one part Cumbèriand. In the case of the Cumberland, the evaporation was increased about six per cent.; with the anthracite, the evaporation was decreased about one per cent. The hot air completed the combustion of the volatile products of the soft coal, which would otherwise escape
unburned. The slower burning anthracite did not need this supply and did better without it. The effect which the introduction of air had upon the appearance of the products of combustion, as viewed from the "peek hole" back of the bridge wall, was very noticeable in both cases, but greatest with the soft coal; but Mr. Barrus says that there was a heightened color and increased activity to the flame, which ever fuel was used, notwithstanding the average evaporative result with the hard coal was lower. Mr. Barrus' conclusion, drawn from many tests, is that a considerable advantage at. tends the admission of air above the fuel when bituminous coal is employed, but that there is no advantage when mixtures of anthracite screenings and bituminous coal are used, and little or no benefit is derived when anthracite coal is used.

The importance of good draught, natural or mechanical, for the supplying of sufficient oxygen for the rapid and economical combustion of fuel, has long been felt by the engineer. The gain both in capacity and efficiency which would be obtained by the rapid and energetic combustion of the various kinds of coal, and the high furnace temperature resulting therefrom, is well established, but its importance has only been admitted within the last few years. High initial furnace emperature is essential with all kinds of boilers to obtain the greatest economy, and to obtain this high temperature requires proper draught to deliver an abundant supply of oxygen to the furnace. This result is obtained by natural draught in a well-proportioned chimney, or forced draught obtained by mechanically creating 'a pressure under the grates with a fan or blower. The advantages of the forced draught are: rst. It is under complete control. 2nd. The more perfect combustion of fuel by reason of the more abundant supply of oxygen to the furnace, and the possibility of using a cheaper grade of coal, with a proper combustion of the same. It is a fact, however, that the most perfect plant will be a failure if the firing of the boilers is not properly attended to, and the fires kept at an even and uniform thickness suitable to the grade of coal used, and it is to be regretted that so little attention is paid to this fact.

There is a furnace in use in the United States, a sketch of which I submit herewith, and known as the Hawley Down-Draught Smoke-Consuming Furnace. The characteristic features of the Hawley setting will be of interest; it consists of a double set of grate bars, one above the other; the upper, or water grate, is made of 2 -inch pipe, screwed into headers, or druns, connected with the circulating system of the boiler. The supply pipes to the front header are taken from near the bottom of the front end of the shell, the water passing through the grates into the rear header, which is connected to the boiler shell some distance back from the iront, just below the water line, and the space between the drum and shell is built up solid with firebrick. The operation of the down-draught furnace is directly opposite to that of the ordinary setting. Comparatively little air is admitted below the water grates,
and the entire supply of coal, and practically all the air, entering above. The fire burns downward, instead of upivard, there being no passage except downward through the grates. The gascous products of combustion, together with the fincly diveded carbon particles which form the visible smoke, are forced through the incandescent mass of coals and are highly heated, after which they meet the equally hot flame from the lower grate, on which there is burning what is practically a coke fire. The combined water of the volatile matter in the coal, as well as its moisture, are decomposed into hydroger and carbonic oxide gases, and these combine with the air supplied below the grate, or drawn downward through it, and burn, thus adding to the efficiency of the furnace: The separated carbon meanwhile is transformed into carbonic acid gas, and the result is almost complete combustion. Whatever additional air is required is furnished through registers in the doors between the two grates, or through those of the ash pit. This style of furnace requires a somewhat increased chimney capacity, if it is desired that the boilers be capable of doing as much work as those set in the ordinary way. If the demand for steam never greatly exceeds the rated capacity of the boiler, the ordinary chimney will answer, it simply being necessary to carry thinner fires. The best results, however, in efficiency and smokelessness, as well as in capacity, are secured by having a chimney of ample height, but this is equally true with regard to ordinary settings, which rarely have enough chimney. They claim a saving for this furnace of from 20 to 30 per cent.

The highest value that has been found by actual test of a pound of coal is 14,603 heat units, and each heat unit is equivalent to 778 foot pounds, so that each pound of coal furnishes the equivalent of $1 x, 36 x, 134$ foot pounds per hour, but we only get-back $1,980,000$ foot pounds, or about one-sixth of the mechanical equivalent of the heat supplied.

A pound of coal or any other fuel has a definite heat-producing capacity, and is capable of evaporating $\dot{a}$ definite quantity of water under given conditions; this is a limit beyond which even perfection cannot go, and yet, I have heard, and doubtless you have heard, of cases where inventors have claimed that their improvements will enable you to evaporate from 16 to 17 pounds of water per pound of coal, and so-called engineers have certified to these results.

You all know that this is impossible, the highest value for a pound of coal being 14,603 heat units, and it is a known fact that it takes 965.7 heat units to evaporate one pound of water from and at $212^{\circ}$ Fahrenheit, so that by dividing 14,603 by 965.7 , we have 15.1 pounds of water per pound of coal, and then only when every heat unit is put into the water. The highest value of evaporation so far has been in.5 pounds of water per pound of coal, per hour ; but, as a general rule, it is from $7 \frac{1}{3}$ to 8 pounds per pound of coal, per hour.

In conclusion, I would say that in the combustion
of fuel there is but one body combustible to be dealt with, carbon and hydrogens and but one supporter, the oxygen of the air. That in combustion, atmospheric air is the principal element, but it is the one to which practically the least attention is given, either as to quantity or control, and that chemistry and experience teach us that combustion depends, not so much on the quantity of air passing through the incandescent fuel, as upon the weight of oxygen taken up in its passage through it. In fact, the quantity of air passing through it may be destructive of combustion if improperly introduced and distributed. That the quantity of heat generated depends upon the relative weight of carbon or hydrogen, and chemically considered, their equivalent weights of atmospheric oxygen, so also the quantity of steam generated does not depend so much upon the intensity of the fire as on the quantity of heat absorbed by the water. Now, it is well known that success in generating the most heat and steam, and consequently power, from a given amount of coal, depends upon a compliance with the necessary conditions to perfect combustion, which involves not only a theoretical knowledge of chemistry, but also a practical knowledge of the best methods of combining them with mechanical appliances, and the perfect mixing of the constituent elements with which we have to deal, in strict aceordance with the laws of nature.

For the standard method of testing coal referred to in this paper, the following is the outline of procedure: For the muisture a finely ground sample is dried for one hour in an air bath at $105^{\circ}$ to $110^{\circ} \mathrm{C}$. For the other constituents a fresh sample is taken of about a gram in quantity and put in a platinum crucible, the crucible being covered; it is now heated for $3 \frac{1}{2}$ minutes over a Bunsen burner, followed immediately with the highest temperature of the blast lamp for an equal length of time. The loss in weight, less the moisture obtained, equals the volatile combustible matter. The fixed carbon is next burned off by removing the crucible cover and heating in the flames of a Bunsen burner, with access of air till the carbon.is burned off; the loss of weight equals the carbon, the residue is ash.

## THE WOOL MARKET.

Toronto: Owing to the fact that the United States Congress is engaged in one of its inimitable tariff tinkerings, there is a somewhat uncertain sound in the voice which Canadian dealers quote prices for wools. Little is offering and what Canadian fleece is coming forward is being met with quotations of 20 to 2 xc . The mills are doing very little buying, as they are most of them now showing their samples and are not going ahead very fast till they see how orders are coming in.

Montreal : The market is very quiet and selling has been confined to small lots. Prices are fairly well maintained, and we quote: Greasy Cape. 14 to 16 c. ; Natal. 75 to 17c.; Canadian fleece, 22 to 25c.; B.A. scourod, 27 to 35c. In Canada palled wool 20 to $21 \frac{1}{2} \mathrm{c}$. is quoted for supers, extra 23 to 26 c .
E. J. Dignex \& Co., wholesale woolens and tailors' trimmings, Toroato, have sold out their wholesale stock to Robert Darling \& Co., Toronto. Mr. Dignum will continae the agency business, representing Richardson Sons \& Owden, Belfast, etc.

## Joreign Textile Centres

Manchastir.-The reports this month must be meagre, in accordance with the general condition of business. On 'Change there has been a diop in cotton quotations. The fact, however, that a small crop is expected should help to keep quotations steady. There is no sympathy here with the jingo utterances that have been uttered of late regarding the American difficulty. Lancashire wants cotton, not war, and $i t$ is hoped that the United States will not prejudice their stability and credit with the greatest of their customers and creditors. An interesting question for some time was whether the South, alarmed at war prospects, might " let go" the cotton she had on hand while there is a possibility of selling under conditions approaching the normal. The action of local shippers to Smyrna and other Levant ports in offering a renewal of the contract to the Liverpool houses for the conveyance of their yarns and other goods, on the condition that the steamers load here and proceed direct to sea, has brought forward a counter.blast from. the monopolists who control the trade. The Liverpool shipowners, whose methods are more suggestive of those of London than any others I kncw of, say in effect that they will not load here, and that should attempts the made to establish another service for Man. chester they will crush it. This is a sample of the difficulties against which Manchester is fighting.

Oldham.-It is stated that three-fourths of the textile machinery now being made by the local firms is for export, only one. fourth being for the mills at home. A good many alterations are being carried out at the local mills, especially in the cardroom. Some firms are having the whole of the machinery replaced at easy stages. Respecting the strike of reelers at the Clarksfield mill the employers have given the following as their explanation of the circumstances of the dispute, which is in reality an answer to the statement made by the officials of the operatives and published by us last week:-"The reelers at this mill left work a month ago on account of notice being given by the firm to have certain classes of work done at the same price as was being paid by other firms in the town. This was a considerable reduction of the prices paid by the firm up to that time. The reelers left without even having talked the matter over with their employers. The firm at once gave out the reeling to other firms in the town, and since then some thousands of bundles have been reeled by members of the Oldham Reelers' Association, at prices which the officials refuse to accept at Clarisfield Mill, despite the fact that at this mill the reelers have the advantage of working bomespun yarn, against bought yarn at other firms. Messrs. Bioadbent have offered the same prices and conditions obtaining at other firms, but, under the advice of their trade-union officials, they will not accept those offered. The last phase of the question appears in a letter written by Mr. Bistles, secretary of the Operatives' Association, to Mr. S. Andrew, the employers' secretary, in which he states in effect that the reelers' council, on Wednesday night, decided not to enteriain the suggestion of Messrs. Broadbent's reelers working under the same conditions as those at other firms, there being a great dis. parity between what is required at Clarksfield Mill and what is required by other firms. The matter, therefore, stands as it did. It is clear from the letter there is some serious misunderstanding, and that the members are not allowed to work at some firms under the same conditions and prices as at others."

Leevs.-All departmeats of the woolen cloth trade have been very quiet lately. Many merchants are yet engaged in stock-taking. Some fresh patterns were at hand of summer and winter specialties, but they did not receive much attention. They show that quietness of style which has increased in favor of late, and they are modernte in price considering that the value of raw material has advanced. Dress and mantle cloths are rather weaker, but buyers are few. Meltons both plain and printed are casily supplied from stock when wanted Ready-made clothing firms are full of sezson's orders. The blanket, rug, and flannel trades are no worse than they have been for two or three weeks past. Yarn
spinners have not a great number of forward orders, but their quotaliont aro unchanged.

Braprond.-Whis market has not been changed by th threatening attitude of the Government of the United States. It was not likely there would bo much doing during holidays, but a good feeling exists and prices are fairly firm. A steady business is doing for the home trade in yarns, but tho demand for export is very quict. Tho inquiry is mostly for lustres, and it is confidently asserted that the fashion for this class of material will continue, although some people entertain doubts on the point. The future is regardod as being encouraging, and prices on the whole are well maintained. Manufacturers for the time of the year are well employed, and as a spriog season of bright goods is expected the prospect is promising

Kidderminster. - The year 2895 opened with a feeling of disappointment at the result of the Mickinley Act. When tho new clip season canic round a beller tone was observed and all lustre wools especially went up, and very shortly an advance of 30 to 40 per cent. was established. It seems now quite clear that the consumption of wool throughout the world has at length overtaken the production, and, but for tho shadow of the present American difficulty, the year would be closed with a firm tone and with excellent prospects. It is to be regretted that local wools, such as the Shropshire, have ceased to be the fashionable classes they were once regarded, and consequently these have not participated to the full in the improved tone which has of late characterized this market. Yarn trade has experienced improvement and most spinners have been well employed throughout the year. The Kidderminster spinners are not confining themselves as formerly to carpet yarns, but spin all classes of hosiery woolen and worsted yarns. Important contracts are running with many continental houses, and an opening has been made with the United States. The result of the year's trading in this department can be regarded as on the whole satisfactory, and no doubt stock-taking will show better results than ior several years past. In the carpet trade many changes have occurred in the year and a number of firms bave succumbed to low prices. About 200 looms are idie. In the Brussels trade, machinery is now exceedingly well employed, and the changed altitude of the Carpet Weavers' Association on the overtime question has enabled many looms to work longer hours, and added considerably to the wage bill of the year. The Axminster trade has been excellent, and we shall be within the mark in saying that the yardage of carpets produced has neverbeen greater than in 1 S95 The outlook is healthy and promising. Several new varieties have been placed on the market, and some of them have certainly "caught on" with the public. The American endeavors to capture the English market have utterly failed, and home producers have even benefited by the Yankee scare of last year. for despite the advance of prices made many months ago, the demand has kept on increasing. The fact is, the American designs do not suit the English taste, and many dealers will not touch the imported article at any price. The taste is growing for richer colorings in carpets, the old love for Persians giving way for the more effective chinizes. The neutral tints are dying out, and brighter and bolder effects are being produced. Never before, probably. has there been such a splendid range of designs and colorings on the market as now, and there is an evident determination that England, and in particular, Kidderminster, shall still govern the carpet trade of the civilized world.

Norringuan - Labor matters are more discussed here at presont than prices. The Nottingham Lacemakers' Society have been occupled for some weeks past in considering the question of prices. There are something like 3.000 operatives in the society A meeting has been held to consider a communication from the Lace Manufacturers' Society in reference to the assimilating of outside prices, which the oparatives are aesirous of seeing brought about. The masters' reply after a protracted discussion, was referred to the board of conciliation The prices in Nottingham are on a uniform basis, but in the outside districts there are five or six different prices. Meantime there is little business going on here. Some
very fair shipping orders have been placed for heavy crochet laces in white. Maltese, Torchons, Brabant and combination laces are required in white, crearn, beurre and two-tones. Valenciennes are most in favor, and the assortments are rich. The goods are principally roquired in ivory shades, and partly in cream or mais, the cheaper qualities in white. Falls and veillngs are steady, and manufacturers of caps, collarettes, aprons and other fancy articles are well employed. Bobbin nets and all plain goods are slow of sale, but steady in value, and the production is being limited to the actual demand. Tariff revision apart, the outlook for cotton goods is brighter, and the new goods which are just being launched ought to work an improvement, especially as fashion seems inclined to favor laces. It is a matter for regret-a very loudly expressed regret-that most of the business continues to go to the continent. Perbaps the reason is that the continental mapufacturers are more energelic and more desirous to conciliate and please than those of Nottingham. Possibly, too, they are not afraid of striking out into new lines, th sigh I have not yet found the Nottingham designer who will admit this. Manufacturers of fancy millinery lace are busy in the preparation of patterns fe the home trade and for export. Buyers are walting the New Year and watching the indication of fashions. The outlook for silk laces is rather blick, all things considered. Here, at least, is a branch in which a Nottingham man might, if he would, learn something from his Erench and German brother.

South of Scotinand.-The present state of the South of Scotland woolen trade, taking it all round, is not an active one. Manu. facturers of worsted goods aro very busy, with all looms going, but makers of the regular Scotch tweeds are far from being busy. Repeat orders are not coming in at all well; the consequence is that 2 number of the mills are going on short time. Yarn spinners bave littlo in hand to talk about, although full time ie still being worked. Very little can be said of the prospects for next season. Worsteds, however, will still be in demand.

Donder.-There is little change to announce in respect of the state of affairs in Dundee. But a few sample lots of flax have been sold, and full rates have been paid for good quality, There is a steady inquiry for most sizes of tow yarns at full prices, but flax sorts are not so much wanted, and common wefts are slightly lower. Few orders for linens are reing received, and we must expect a quiet demand until the beginning of the year. A large Government order for tent duck has been placed, the greater part going to Aberdeen and Brechin manufacturers. There has been less inquiry for heavy fahrics, and quotations of sacking, bagging and tarpaulin are all reduced ahout $f_{\mathrm{E}} \mathrm{d}$. per yard. Some amount of atuiety has been manifested amongst jute merchants in Dandee as to the space in the public warea houses consequent upon the large quantities of jute which have recently been landed at Dundee. Careful inquiry into the matter indicates that the private warehouse accommodation is almost fully taxed, the mills in the east end of the city having warehouses attached, being fully suppliex with material for many months to come. The public warchruses are also filling rapidly.

Beifast-Flax supplies at the Ulster markets are pretty large for the season, but the quality offering is still very poor. Good lots are firm at Jate rates. Yaros have been selling mainly for assortment and in small lots, as most manufacturers are waiting delivery of old orders. Prices remain very firm for all classes. Machinery is very fairly employed on recent linen orders, but without much new business offering. Coarse brown and white linens are chiefly in demand, but a fair trade is being done in fancy lines and fine goods

Crefran.-Retailers are ordering little from wholesale houses, and the latter's transmctions with manufacturers are limited to small piece lots in new styles and novelties which are needed to complete tho spring collections of samples. The weather bas not been favorable to consumption, and as stocks have not-moved much lately, buyers, both whr"e sle and retail, show little disposition to place further orders in mu. Jnce of spring reguirements. A distinctive feature of the present situation is the fact that sellers
are not anxious and are not pressing for orders. Sufficient spring business having already been done, manufacturers have enough work on hand, and are therefore not disposed to makeany sacrifice in order to secure more. As they are working on firm orders, manufacturers are not accumulating goods for their own stocks, and feel therefore more free. In the orders previously placed, which are now being filled, taffetas play a leading role in warp-printed effects, chameleon and stripes. They are the favorites in dress and trimming silks. Taffeta plaids will also be largely made in next season's consumption, although the first great rush for these has already disappeared. In broad silks other favorite styles are damassés in medium-sized blouse patterns and armures. Umbrella silks are selling well for ready delivery, while in parasol silks good orders for summer goods are to be filled. Tie silks are rather slow for this time of the year, but manufacturers of ribbons have good orders on hand for future dellivery. Velvets and plushes are quiet,

Chemnitz.-Trade is rather quiet here at the present tine. Orders are coming in slowly, and the season has not turned out nearly as lively as it was expected to. The mills are running on full time to fill orders placed last summer, and every week large shipments of hosiery and gloves leave our town. Most manufacturers have enough orders booked to keep them busy till the middle of Februasy. In hosiery black is still leading and will do so for some time to come. All houses are now showing their new lines of fall samples for 1896 . Prices on fleeced hose aro considerably higher than last season, as these goods are heavy, and therefore the advance of the raw material makes a considerable difference in the cost. Besides, for fall mostly coarse-gauge goods are used, and those are comparatively high in price, as the production is not nearly as large as that of fine gauges. In the latter there are several stock lots offered in the market at very low quotations. Cashmere hosiery also costs from six to ten per cent. more than last year, and there is no outlook for any reduction of prices in these goods, as the wool market stays very firm and spinners will not accept any contracts at cut prices. Among the specialties shown for next season are ladies' cotton hose, Hermsdorf black, with a black or natural woolen foot, the cotton leg of which feels like cashmere, an effect produced by a special finish. Then there are stockings with woolen legs and cction maco feet, or all-cashmere hose with merino split soles or merino feet. There is also the silkette or silkene finish, which makes the goods look like silk and also makes them crackle, as the cashmere hosiery now made. Cotton goods in that finish are not bought to any great extent, most likely because the finish was lost by the washing, so that the goods looked like ordinary cotton hose afterward. Maco feet are.expected to sell well alsu in fleeced goods for the coming season. In the better grades the herringbone soles seem to be preferred to the all-maco feet, however. Fancy striped goods are not wanted for fall to any extent, but for the next spring season they are expected to sell well. Lisle and silk-plated hose are not in large demand. Cashmere and silk qualities are selling for ladies' and infants' wear mostly. Large collections of fleeced qualities in men's and children's goods are also shown. Gloves are quiet. The orders for spring did not come up to expectations. In gloves the advance in price is not so large, as these goods do not weigh mucb, but the wages have also advanced somewhat on this article, as hands to seam the gloves are rather scarce. Toqnes have been bought very freely and in a great variety of patterns; a line of Scotch plaids is shown and has been taken up by the buyers.

Zurich,-While actual consumption as represented by readydelivery buying by the distributing trade is not giving much encouragement to business, the market has been visited by outside buyers who have shown good disposition to purcbase fabrics for next sesson's delivery. A fair basiness has been done for German and English account, and lots which manufacturers had prepared for the emergency have found takers. A belter business still could have been done in advance orders if manufacturers conld have guaranteed an early delivery, but, as it was, buyers had to be satisfisd with April delivery or do without. In these orders taffetas have taken the leading ahare. They have been ordered in
warp-printed effects, plaids and in shaded effects. Plain white taffeta has also received attention.

## Textile ${ }^{\circ}$ Design



1,792 ends in warp; 28 eads per inch: 36 picks per inch ; $7 s$ reed, 4 ends in a reed; 64 inches wide in the loom: 56 inches wide when finished. 24 oz . cloth.

## suiting.


2.128 ends in warp: 34 ends per inch; 32 picks per inch; $83 / 2$ reed, 4 ends in a reed; 63 inches wide in tbe loom, 56 inches wide when finished. 17 oz . cloth.

## THE WORKING OF WARP LOOMS.

The ordinary bearded needle warp loom is, in principle, somewhat like the ordinary hand frame, from which it originated. This machine has a number of bearded needles fixed to the needle bar in the usual manner. The threads used are equal in an ordinary warp fabric to the number of needles in the frame. The number of threads required are wound side by side on a warp beam; each of these threads are passed tr-ough a thread guide, of which the required number are fixed on to a bar standing in front of the frames, in such a manner that the guides can be below or above the needles as required, and having a movement sideways, while under or over the needles. To form a row of lcops, the thread guides are below the needles and each thread, we suppose, is connested to the loops previously made. The guides are moved sideways under the needle, raised through them, moved in the same direction over them, and so a shread is laid over every needle: this thread is then formed into a new loop in a manner similar to that observed in the hand frame. The new loop is brought under the needle beards and is closed by a presser. while the old loops are lauded by a set of fixed sinkers, all of one
kind, which afterwards knock over the loop and then take them back to the stem of the needle, ready for the making of a second course in a slmilar manner.

A latch needle warp loum consists of a needle bed, usually standing perpendicular, in which are a number of latch needles whict bave a rising and falling motion in tront of a knocking over plate. Each needlo is supplied with a thread from a warp beam supported above the frame, the single threads boing gulded to their respective noedles by a thread guide, which guido is fixed hanging perpendicular from a gulde bar, and has a swirging movement througls the needles, a sideway motion behind or !a fromt of them, and so lays a thread round each needie; thoy then descend and draw the now thread through the old loop, so forring a new loop on each needte. In warp work, the loops have a sideway connection in succeeding courses, which forms the solid fabric required.K'nitters' Curcular

## Among the Mills

Co-operation in one of the gulding principlee of induatry today.
 In "The Canadian Journal of Fabricn" by contributing oceneloumlly auch ltems an may come to your knowledge, and recelvo as divjdend an tmproved paper.

The colton mills at Merritton, Ont., are working day and night.

Goldetick's hat and cap factory was damaged by fire to extent of $\$ 8,500$ on January 14 th at London, Ont.

W H. Jago \& Son, glove and leather manufacturers, Rockwood, Ont., have called a meeting of their creditors.

Arnold Booth. till recently owner of the woolen mills at Odessa, Ont., died suddenly at Kingston, Ont., Jan. 14th.

The breaking of 2 bobbin in the Farmers' Twine Works, 13rantford. Oat., seriously wounded Ruth Bond on January 8th.

Robt. Mercer, head dyer at the Hamilton woolen mills, Carleton Place, Ont., has gone to Cobourg, Ont., in the same capacity.

The woolen mill belonging to $R$. Asselin, Barachoir do Malbaia, Gaspd county, Que, was destroyed by fire recently. Loss $\$ 4,000$.

D M. Frascr, Almonte, Ont., is now running his knittiag mill entirely by water-power, his new water-wheel enabling him to dispenso with steam.

O'Hare \& Sons have purchased the woolen mill business hitherto conducted by A. Jeckel, at Midland, Ont. Mr. Jackel has retired from business.

J M Masson, manager of the Hamilton woolen mill, Carleton Place, Ont, has retired from that company, and has accepted a position across the lines.

The insurance adjusters estimated the damage in Wm. Parks \& Sons' cotton mill, St John, N.B., done by the fire, which we noted in last issue, at $\$ 379.96$.

Thos. Sonne, jr,, and Joseph Colbeck have been manufacturing tents and awnings for a year or so in Modreal. They have now assigned. Liabilities, $\$ 2,000$.

The Kingston knitting mills shipped $\$ 20,000$ worth of goods in one day not long ago. Some packages went to Victoria, B.C., and others to Charlottetown, P.E.I.

There was a small fire in S. Lennard's Sons' knitting mill at Dundas, Ont., recently, which was extinguished by the mill pumps before the firemen arrived. Damages only about $\$ 25$.

The frm of Brodie \& Co., woolen manufacturers, Hespeles, Ont., was dissolved on January 1st, R. $\dot{T}$. Brodie retiring from the firm, which is now carried on by A, W. Brodie in his own name.

At Paris, Ont., on the 13th. the death occurred of George Dawes, mechanical superintendent of the Paris wincey mills. Deceased was a prominent man in Paris, and leaves a wife and family.
A. 」 Erer. Wyoming, Ont , is offering 5 cents on the dollar, cash, or 20 cents at 6. 12 and 18 months, on the two-thirds of his liabilities, which are unsecured by real estate. The liabilities are $\$ 7.828$.

The cotton millis at Corawall, Ont., are ruoning full time sid orders are well ahead.

The other day, the goods which were stolen from the storerooms of the Cornwall Manufacturing Co.'s mill, at Cornwall, on December 20th last, were found concealed in a vacant house, in Lorneville, Ont.
$\Lambda$ verdict of $\$ \mathrm{r}, 200$ has been given by the jury in Talbot vs. Canadian Colored Cotton Mills Co. This was an action to secover for injury to an eye suffered by Elizabeth Talbot when in the company's employment.

The Goderich Knitting Co.'s factory bas not had the machinery placed in position yet, though it is ready to receive it. The mill will be run on hose at first, but the company hopes to make the output more varied later on.

The York Woolen Mills, Harvey Station, N.B., were burned down on the morning of January 34th. It was a two-set mill, and the owner, V. H. Robinson, estimates the loss at $\$ 7,000$. Insurance $\$ 1.500$. Cause of fire unknown.

It it rumored that the Rosamond Woolen Co. will shortly put in an electrical plant at Wylie's Rapids, a mile and a half below their mill, and employ the power generated to supplement their water-power, which is deficient in low water.

Jno. Conner, St. John, N.B., N. K. Connolly, of Quebec, and M Connolly, E. A. Moran, J. Ogilvy, of Montreal, have been incorporated as the Continental Twine and Cordage Co., Limited. Capital is fixed at $\$ 50,000$, five hundred shares of $\$ 100$ each.

When the Eastern Ontario Dairy Association was meeting in Campbellford, January gth, the members were shown through the Kent Valley woolen mills by the manager, S. L. Owen, and secretary, W. W. Cumming, and expressed themselves as highly pleased with the visit.

John Hope, manufacturer of bobbins, etc., Lachute, Que., reports business as very brisk. His factory has been running overtime for some months, and he has orders on hand that insure his continuing the pace till spring. He recently placed a number of large orders in the Maritime Provinces.

The Almonte manufacturers take a lively interest in the town's affairs. Wm. Thoburn is filling the mayor's chair for the fourth time, and J. W. Wylie, who is interested in the Elmsdale flannel mills, and J. M. Rosamond, sec.-treas. of the Almonte Knitting Co., are in the council. In Arnprior, P. Doutigay represents textile interests as 2 councillor.

Three cases of typhoid fever having occurred among the employbs of the St. Croix cotton raills, Milltown, N.B., a rigid investigation of the sanitary arrangements of the mill has been carriod on by the management and the local board of health. Althoagh not yet quite complete, the investigation has reflected nothing bu: credit on the proprietors.

The Sisters of the Bon Pasteur have filed a declarati in in tise Tutelle office attesting their intention of carrying on business in the parish of St. Martin, Que., under the firm name of $F$. Lavoie \& Cie., running the saw. grist and carding mill known as "Moulin du Crochet." and doing a general business in graic, etc. The deciaration is signod by Sister M. de St. Alphonse Liguori Cadotte, Provincial Superioress.
E. R. C. Clarkson, assignee, is proceeding against the Belding Paul Co., of Montreal and Toronto. According to the statement of claim the Worsted and Braid Company, Toronto Junction, owed the defendants an account and banded over to them about $\$ 200$ worth of goods as security. Within 60 days the Junction company made an assigument to Mr. Clarkson, and he now wants the defendants to give back those goods or the equivalent. Judgment reserved.
J. E. McClung, who for the last three years has acted as western representative for Munderioh \& Co., of Montreal, has moved to Galt, having secured a position with the Galt Knitting Co. Fred. W. Winter, who represents the Cornwall Manufacturing Co. and the Chambly Woolen Mills, has taken over Munderloh \& Co.'s agency for Ontario. Mr. Winter has worked up the business of his agencies very energetically. The Cornwall Manufac turing $C o$. bas been rucning full time for the past six months.

Application is made to the Dominion Government on behali of E. M. Small, W. C. McIntyre, Duncan McIntyre, C. H. Dobbin, and E. A. Robert, merchants of the city of Montreal, for incorporation as the Dominion Woolen Mig. Company, to manufacture blankets, wool, jute and cotton cloths, etc. It is said that E. A. Small has bought the business of the insolvent Dominion Blanket Company, and has undertaken the formation of a company to carry it on. The capital is fixed at $\$ 300,000$ in 3,000 shares of $\$ 100$ each.

## FABRIC ITEMS.

Gough Bros., elothiers of Peterboro, are going to establish a branch business in Barrie, Ont.
W. M. Codling \& Son, Woodstock, Ont., men's furnishings, has assigned. Liabilities and assets nearly equal, $\$ 6,000$.

Dingman \& Lorrimer, commission agents, laces, veilings, etc., bave dissolved partnership, the sentor member continuing the business.

The Paul Frind Woolen Machinery Company, Toronto, has been appointed Canadian agents for Francis Willey \& Co., Bradford, England. .
F. R. Collins, dry goods, Kincardine, has assigned to C. B. Armstrong, and Marquis Rich, tailor, Arcade, Toronto, has assigned to G. H. Clay.
R. B. McGregor's clothing store at St. Thomas, Ont., was damaged by fire on Dec. 24th last. The loss amounted to $\$ 84,000$; insurance $\$ 9,500$.

On Jan. $7^{\text {th }}$ the dry goods store Jelonging to J. Walsh, on Princess street, Kingston, was damaged by fire, and a large amount of stock totally destroyed. The loss was covered by insurance.

- Wm. Alexander \& Co., dry goods, St. Catherine street, Montreal, have suspended payment, on demand of Gault Bros. Mr. Alexander was formerly in business in Oshawa and Winnipeg. Liabilities are about $\$ 90,000$.

In the Dominion Waterproof Co, vs. Mi;chell, reported in our December issue, we noted that Judge. Armour dismissed the case, leaving the question of costs to appeal: Appeal has been dismissed; and costs refused by Judges Boyd and Rose.

The firm of Walter Blue \& Co., wholesale clothiers, Sherbrooke, Que., has lately erected a handsome new warehouse in that town. It is a brick and stone structure four stories high, and cortains 27,000 square feet of floor space. D. G. Loomis \& Son were the contractors.
E. H. C. Young and others, receivers for the National Cordage Company of New York, are proceeding against the Consumiers' Cordage Company for the recovery of $\$ 44,144.64$, the price of certain quantities of manilla, sisal, hemp, etc., bought by the former company from the latter. The Consumers' Company has a counter. claim of $\$ 50,000$.

The manufacture of lisle thread bas hitherto been monopolized by England, but one of the largest and oldest cotton mills in Saxony is now making it with good results on machineo brought from Eingland. This, although a small matter now, will take alarming dimensions in a few years, and may possibly kill EngJand's trade with Germany in this article, or at least considerably diminish it.

The well-known firm of John Macdonald \& Co. announced to the trade this month a number of changes in the firm. Paul Campbell, who has been with the firm for thirty-five years, and has been a paitner since 1887, retires, and D. M. and A. M. Macdonald, sons of the founder of the house, have been admitted to partnership. The firm now consists of John Kidston Macdonald, James Fraser Macdonald, Duncan M. Macdonald, and Arthur N. Macdonald, all of Toronto.

The strike that has been going on since December 27th among the tailors of Toronto does not seem to be nearing a conclusion. The merchant tailors desired to include in an agreement with the Tailors' Union a clause that they would bind themselves not to interfere with the non-union hands. This was refused, and the Union ordered a strike. The tailors then deciared their shops nonunion, and filled them up with non-union hands. At present the employds seem to be the only ones hurt.

Daniord Roche \& Co., now of Newmarket and Woodstock, but once general merchants on Yonge strect, Toronto, have failed again. and have assigned to D. Blackey, of Toronto and Ilamilton. Some time ago a writ was filed against the firm by the IBank of Com. merce for $\$ 5.313$, and one of the members was sued by McKean, Scarfo \& Co. for $\$ 5,008$. There are many other claims agninst the firm, but the failure is due to the assignment of Samson, Kennedy \& Company. The assets aro fixed at $\$ 22.000$, and liabilitics 34,000 . The firm offers 30 cents on the dollar.

Gault Bros. \& Company, wholesale dry goods, are applyitg to the Governor-General-in.Council for an act of incorporation. The capital stock is to be $\$ 750,000$, divided into 7,500 shares of one hundred dollars each The applicants are Andrew Frederick Gault, Robert Walters MacDouzall, Leslie Hamilton Gault, James Rodger, with Charlotte L. Dorwin, widow of the late Robert Leslie Gault, A. F. Gault and James Rodger, as executrix and executors of the late Robert L. Gault. The provisional directors are A. F. Gault, R. W. MacDougall, L. H. Gault and Jas. Rodger.
T. A. Garland, general storekeeper, Portage la Prairie, has made a composition with his creditors for 60 cents on the dollar. The assets of the estate are estimated at $\$ 200,000$, consisting of $\$ 40,000$ stock and $\$ 100,000$ in lands throughout the North-West, and the liabllities about the same. The principal trade creditors are in Toronto and Montreal, John Macdonald \& Co. are interested to the extent of $\$ 21,000 ; \mathrm{McMaster} \&$ Co., about $\$ 15,000$, and W. R. Brock \& Co., $\$ 17,000$. The real estate was deeded over to John Kidston Macdonald, who is one of the trustees, and the stock has been sold at 60 cents on the dollar to Nicholas Garland.

The liquidation of the Samson, Kennedy \& Co.'s estate still drags itself along. The unaccountable absence of Fred. Kennedy, who was manager at the time of the smash, does nothing towards hastening the winding-up process. A great many statements have found their way into the public press about the affairs of this firm. which we believe the investigation will show to have been without foundation. Those who have the matter in hand wisely refuse to allow the facts to come out till they are in a position to give the whole statement to the public. Tho stock, amvunting to $\$ 88,600$, was sold on the 1oth to the John Eaton Company, at $223 / 4$ cents on the dollar.

Last August, F.W. Newman, dry goods commission merchant, Montreal, reported to the police the loss of a thousand dollars worth of jewelry from his house at Westmount. The matter was shrouded in mystery till the uther day, when Mr. Newman ieceived a letfer from a man who declared that he was one of the robbers, and if the owner would not take action against then the goods would be restored. Correspondence followed, and accordingly Mr. Newman went to what is called the Priest's Farm, the alleged burial place of the treasure, and sure enough the lost jewels were recovered. The whole story looks fishy, says the Montreal correspondent of the Toronto World, but it is declared to be true, nevertheless.

The case of Sangster vs. Eaton has been decided by the Supreme Court, a verdict for $\$ 950$ being given for the plaintiffs. The case arose from an accirent which happened in 1892, to the child of Mrs. Sangster, whil! she was shopping in the T. Eaton Co.'s store. The mother asd child were up in the cloak department on the second floor, where Mrs. Sangster was trying on a coat. The little boy was looking into a mirror, which was standing perpendicularly against the wall: As he walked away from it the mirror fell, according to the plaintiff, pinning the child to the floor. When he was picked up it was found that his hand was badly swollen and black. Prior to this, the hand had been afflicted with nævus, a disease arising from a birth-mark. The accident caused his hand to become much worse, and there are now, it is claimed, no hopes of his ever being able to use it. The plaintiffs, therefore, asked for $\$ 2,000$ damages. They claimed that the accideat occurred through the negligence of the defendants, while the defence claimed that they were not negligent, but that the child and his mother were. Judgment as stated for the plaintiffs. This case is specially interesting as showing the liability of traders to the pablic who come on their premises.

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## ALMONTE, Ont.



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Colors Warranted as Fast as the best British or Foreign Goods.

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# JAS. H. WYLIE 

Manufacturer of

## FLANNELS

## ALMONTE, Ont.

ESTABLISHED 1880

## The Almonte Knitting Co.

 M上anufacturexs of

FINE AND COARSE GOODS IN ALL GRADES

$$
\text { ALMONTE, } \quad-\quad-\quad \text { ONT. }
$$

## WM. THOBURN

Manafacturer of

# ALL-W00L FLANNELS 

Established in 1880
ALMONTE, - - - ONT.

## PERSONAL.

If. F. . ... will manago the neir knilting factory at Goderich. Ont.
D. J. Delaney, dry grods merchant, Main street. St. John, N.B. dropped daid from heart failure not long ago

Wm Whitelaw one of the oldest inhabitants of tho Guelph district, and a famous breeder of Leicester shecp, died near Guclph, Ont., December 24 th last

R R Stevenson, of Stevenson, Blackader \& Co. Montreal, has been elected a director of the Montreal Cotton Co , succeeding the late IR I. Gault

Herbert Gage, a popular employs of the Cornwall Mig Co.. Cornwall, Ont., has left the omployment of the company and returned to his home in Bath, Ont

Farmham Ladden, who represented the Consumers' Cordage Company in the maritimo provinces, died suddenly from heart failure, in Hallfax, N.S. January 6 th.

11 Walker, who was with the defunct firm of Samson, Kennedy \& Co. for fourtecn years, has accepted a position of buyer with Greenshiclds, Sons \& Co., of Montreal.

John Stanfield. of the Truro knilling mill. Truro, is S., Is makIng a tour of the leadtag textile cilties of the United States, looking for new ideas in that depariment of industry

The retiring manager of the Hawthnro mills J M Masson, was presented with a complimentary addrass by the employos of the company. previous to his leavitg Carleton Place Ont

Jas Ollrien, formerly head of the firm of Jas. O'Brien \& Co . manufacturing cluthiers, Montreal, is one of the Montrealers honored by betng called to take a scat in the Senate at Ottawa

The IIon. W. E. Sanford, of Hamilton, Ont., president of the Sanford Manulacturing Cu., returned recently from a ten weeks sojourn at Hot Spungs, Ark., leeling much improved in health.

Robt Hurst, an old employo of the Canada Colored Cotton Mill Co. at Cornwall, was presented by his former companions with a purse containing a handsome sum of money on Christmas Day.
A. F. Hatch, who was on the road from Toronto to Windsor, in the interests of Samson. Kennedy \& Co, has been appointed to look after the trade in the same district for Gault Bros., Montreal.

Robert Alercer. who was for some time head of the dycing department in the Hawthorn mills Carleton Place. Ont , has accepted a similar prsition with the Cohourg Woolen Company. Cobnurg, Ont.
J. A. Girard, who was formerly connected with the wholesale house of Thibaudeau Bros., Montreal, and was for thirteen years manager of that largo establishment, committed suicide recently His friends cannot account for the fearful act in any way.
A. G. Rosamond, son of Jas. Rosamond, sec.-trons. of the Rosamond Woolen $\mathrm{C}_{1}$.., Almonte, Ont., who has just returned from a threo years technical course in the Yorkshire College, Leeds, England, is now assisting his uncle, Bennet Rosamond, M.P., in the management of the company.

Jack \& Robertson, Montreal, importers of anilines, alizarines, chemicals and dyestuff, have been so fortunate as to secure tho scrvices of J. D. Allen, who recently managed the dyo department of Brayley, Sons \& Co., Montreal. Mr. Alten's abilities as a practical dyer and chemist are well known, and we are contident that thay will be of great advantage to Messrs. Jack \& Robertson, and their numerous customers.

Graham Bros., of Aurora, Ont., who were accused of claiming insurance on wool which it was alleged had not been burnt in the froight shed, as they declared it had, have succeeded in having the whole matter gone into by the courts, and they have been acquitted of the charge. We congratulato the Messrs. Graham on having established their innocence.

David Allan, one of the founders of the town of Guelph, died on the first of January, at the age of eighty-cight. Mr. Allan setted in Guelph in 1832, with his father, the late William Allan, who bought the water-power on the River Speed from the Canada Company in that year. Mr. Allan was the founder of Guelph's prospertty, and the saw, grist and woolen mill which ho established contributed greatly to it.

Arnold Booth, of Odessa, Ont., died January 14th, of heart failure. Mr. Booth was well on in years, being about fifty years of age. He vas born in Odessa, in the County of Frontenac, and spent the most of his life anong the people of his native village. For many years he controlled the woolen and grist mills in that place, and by his untiring energy built up an excellent trade, and was considered one of the mainstays of the town. About six or seven years ago he retired from business life, and moved into Kingston with his family. Two months ago his wife and daughter removed to Boston, where the deceased was to have joined them, as soon as he could settle up his persona! affairs at Odessa. It was this that called him to that village, where death claimed bim through heart disease. The deceased was a Conservative in polutes, and a member of the English Church, and was greatly respected for his uprightness of character and geniality of spirit.

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Fine and Medium Grades......

## ALMONTE BLANKET FACTORY WYLIE \$ SHAW <br> Blankets, - - Coarse TTweeds and Etoffes Alrionte, Ont.

## D. SHEPHERD

 Woolen Waste Garnetiing.Up to the time of death, Mr. Booth appeared to be in oxcellent health, and the news will be a great shock to his family, who are all at present in Boston. Besides his wifo and daughter, he has another daughter, married to a former Kingstonian, now in Boston.

## LITERARY NOTES.

An appeal is made by Michael Austin, M.P, the Very Rev: Canon Murnane, V.G., on belalf of the widow and orphans of the late Peter O'Leary, who in his lifetime had been "a consistent Irishman and an advocate of the rights of labor." Mr. O'Leary was a prominent figure at the Colonial and Indian Exhibition, 1886, and was the author of a volume describing a tour through Canada.

Among the calendars reccived at the office of The journal or Fabrics none is more appreciated and none finds a more promi. nent position in our office than that of Morton, Phillips \& Co., stationers and printers, Montreal. It cannot be excelled for practical use. The Calvert-Wilson Wool Company have sent us a most tasteful wall calendar in black and gold. We propose to look at it every day, not only to remind us of the date, but to enjoy a sight of i .

The second mid-winter carnival opeas in Quebec on the 27 th January. A grand souvenir number, printec in eleven colors, and containing bundreds of original illustrations printed on beautiful coated llthograph paper, tognther with three superb colored supplements and pieces of music, making the most elaborate work of the kind ever issued in Canada or the United States, will shortly be published by the Qucbec Daily Telegraph, the promoter of the winter carnivals. Messrs. Gilbert Parker, J. M. Lemoine, $\mathfrak{J}$ M. Fairchild, jr., Dr. Prosper Bender, N Levasseur, Faucher de St Maurice, John J. Procter, C. P. Storey, P. Spanjaardt, and many other well-known litterateurs, have contributed interesting stories and sketches of the habiss and customs of the Canadian people. A work of art and beauty, costing thuusands of dollars. Mailed to any address in Canada or the United States on receipt of 40 cents Address Daily Telegraph, Quebec, Canada.

Henry M. Stanley, in an article on the "Development of Africa," which is to appear in the Fehruary Century, recalls the fact that troubles with the Boers in southern Africa first induced David Livingstone to travel to the north, and so led the way to the opening of Equatorial Africa. Livingstone, who was a misstonary at Kolobeng, accused his Boer neighbors of cruelty to the natives. They resented his interference, and threatened to drive him from the country. He published their misdeeds in the Cape new ipapers, and his house was burned in revenge. This led to his leaving southern Africa and going to a region where he could follow in peace his vocation as a missionary, unmolested by the Boer farmers.

## the prevention or seconds in knit goods.

The prevention of seconds is a deeper and more vexatious sub. ject than would be at first supposed. An almost synonymous expression is "How to run a mill successfully." The prevention does not lie in the knitting department alone, but it extends to all others as well. Then again, "What are seconds?" This term has 2 wide significance. In the cheaper grades of goods, "everything goes:" all kinds are thrownin together: good, bad and indifferent. But in the better classes finer distinctions are made and some of the seconâs are nearly as good as the firsts. The layman's idea of a second is sometimes very crude. The following is a fact that came to the writer's notice: A person looking after retail bargains at the mill (the pest of busy bands), after pulling over enough seconds to fill a thirty dozens case, innocentiy inquired, "Are the seconds not made of cheaper stock ?"

The sure prevention of seconds begins with the buying of the stack. It should be selected with due regard to the working qualities. It is quite needless to say that a slippery camel hair and a low grack of cotton will not work well together. Careful attention should also be paid to the long threads sure to crop out in the
botany thread waste, that makes the goods feel so soft, but if not worked correctly, will produce many seconds. Those using card wa sto and low grades of shoddy should avold trying to spin the yarn too fine, for thin places, if not absolute breaks, on the frames, will result. Tar spots are also to bo kept watch of. If there is any tar in the wool used for whitevork or work to be dyed, it will ieave a blur when finished. It cannot be washed out and will have to be mar' into a second Wool should be examined thoroughly before buying, and all with tar in it rejected.

A machine greatly overlooked and underrated is the mixing pickor. It acts as teoth to masticate, and the cards do the assinailation. What is the result when one chews his food only once and then swallows it ? It does not assimilate wall. Now, exactly the same thing applies to the stock when it gets in the cards, if it is sent through the mixing picker but once. It should be put through twice, and care should be taken the first time to put in but a small portion of each kind of stock at once. This all tends to mako even work and provent seconds.

In the carding department the best preventive of seconds is good card clothing. The cylin er of the fiaisher card is the most important part of the threc. Every strip of card clothing should be periect on that.

The end threads of the finisher give a carder the most trouble, because they fre so Jtten apt to be light. All good carders, of course, make an allowance on their end doffer rings, even then the threads are apt to be light. Then the round card-board end, that goes on the fancie shaft, must be used to keep the stock from being blown away.

It is always best to keep the spinning room clean. Spinners ought not to work ankle deep in waste, for it "creates flyings," that get twisted in the yarn, and even if they do go through the winder guides, they are apt to fill up the needles on the frame and cause a smash.

All the oands should be at an uniform tension, for goud work cannot be made on a jack when one end of the carriage strikes the head before the other. The machine should back of quietly, not $t 00$ quickly, for when it rebounds suddenly it makes 240 fine places in the yarn. Some of these will surely make a hole on the initting frame. To always 'prevent this, set the roping gear to work just a moment before the jack gears.

The knitting department is the most important place to prevent seconds. The greater share of them are made at this stage of the manu facture. The first thing is to see that the cone that the base of the winder bobbin rests on when in the winder does not touch the neck of the bobbin, for when that occurs, the yarn is cut and an end runs in. Someone has remarked that the bobbin itself has caused more seconds than all the other causes put together. I think that statement can be taken "Cum grano salis." But it is quite true, nevertheless, that the bobbin does cause many seconds. When the base has a dirty, greasy covering on 1t, the yarn will cling to itself rather than that; and when the yarn is nearly unwound, suddenly, all that is left on the bobbin tries to goin at once. Then a quarter runs up. Many times the neck is only slightly splintered, but the yarn will catch on the splinter, ayd the result will be either a hole in the cloth or a break in the yarn.

To prevent these things occurring the base should be covera. with a coarse flannel, or some like better a seamless felt bobbin base cover. The neck should have an annual sand papering and shellacing, or better still, a metallic tube drawn over the neck of the bobbin and made fast. This will effectually do away with the splintering and annual repairing.

The next thing to look after are the knitting frames, for one cannot be too careful with them. The needles should be of the best quality of wire and set in metal that is neither too hard nor too soft. If the metal is too hard there is no "give" to the needles, aud they will soon break off, and when it is too soft they will soon get out of alignment. The burrs give a great deal of trouble if not adjusted properly. The sinker burr, especially, with the little nick in the edge of the wing, which is so liable to becume rough, will make many seconds. The burrs inside the cylinders must not be neglected. Thelanding burr must work in unsinn with the presser, and
the preser and the pusin-down must help both of these. Thecast.off burr must gently push the yarn up. and over the top of the needle, thus completing the stitch Each wing ehould be exactly straight, for if not. It will strike some of the needies, thereby causing smashes and breaks. They should also be very smooth. Careful examination of theso burrs and immediate repairing will greatly reduce bad work. The take-up must also be watched, for if Jt is too tight the yarn will pull out of the needles, and if it is too loose the zeedles will fill up.

The best friend the knitter has is the automatic stop motion, on round frames. That saves a great deal of bad work, but it is unfortunate that he cannot have an attachment ibat will stop the frame before the whole is made, or the needle breaks, and indicate the weak point The nearest thing to this is the right-anoled lever, attached to the presser, which throws the presser out of work the moment an end runs in It also sates many seconds

All these aro preliminary stages, and at this point the manufacture of the cloth stops Then follows an entirely distinct business, that of tailoring on a large seale

A good cutter can keep out many seconds, for he can turn and twist the cloth so as to get the holes and smashes where they may be trimmed out. Great attention must be paid to the lengths of the garments. Uniformity is essential The best method, at present, is a power cutter, by which hall a dozen are cut at a time.

In dyeing goods, the washing is where many seconds are made. It is generally causod by using such soap as will not thoroughly rinse out. If the goods are streaked and spotted when they come from the dye-tub, the fault is not always chargeable to the dyer, as it is frequently the consequence of improper washing.

After the goods pass this point the greatest cause of seconds is oil. It gets on from the brushers. it drips from overhanging shafts and it flies from the sewing machines. It is, indeed. a problem how to cope with this "slippery" fore. When the brushes are oiled, all superfluous oil should lye carcfully wiped away and the bearings covered. If the goods are pilel up in rooms or carried from one department to another in barrows, they shou'd be covered with thick sheets, as this prevents oil from getting on from adjaecnt shates. On the sewng machines, a so-called stainless cil should be used This oil, although it will stain the fabric, is nevertheless susceptible to the influence of soap, and the stains caused thereby can be washed out

In getting the trimmings on the goods, no seconds need be made, if the best materials, the best machines and careful operators are employed
"Care and Cleanliness" are the most successful factors in the problem "How to prevent seconds." Observe those and the seconds will be greatly reduced The total prevention of seconds will only come with the millenium, if it comes all The only thing that the manufacturer of the present day an do is to keep the ways and means of prevention constantly in his mind, and that will reduce the per centage of seconds to a minimum.-Hositry and Linis Goods Journal.

## New York and Boston

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Valtod Statos ada Canada for tho . . . . .
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Hostox 115 and $11 \%$ mbla Sb

a. W. LEITCH, IGIUghson St. South, HAMILTON, ONT.

Evarytinng points to a revival of poplins, or at least of dress goods with poplin grounds. Many of the new plaids are made in this way, and the smooth hard finish of the fanous Irish weave is much admired.

Tuu New York Silk Conditioning Works will cease business on Dec. 31st. Lack of proper support from the trade is the enuse. It is much to be regretted, that in a country which consumes so large a portion of the world's product of silk, says the Dry Goods Ecomomist, the single conditioning establishment existing here should. nfter a struggle extending over: a number of years, be finally forced to close its doers.
" Inntgo satr," the newest substitute for a valuable dye, is said to posjess the property of being converted into indigo by means of caustic soda. In dyeing, all that is necessary is to treat the cotton in a bath of the salt, and ther pass the treated cotton into a solution of the soda; and in printing a suffices to thicken a solution of the salt with dextrine: print this on, and pass the printed fabric through the caustic soda.

Turre is no abatement in the discussion, amongst both retailers and wholesalers, of the cotton print agreement. The question is not on a settled basis yet, in the opinion of a leading wholesaler. Another firm, which handles the Magog goods, told the Redicw that orders were holding back, and this they attributed not so much to price as the provision in the agreement to sell to certain large retailers.-Dry Goods Revitio.

## CHEMICALS AND DYESTUFFS.

The volume of business is small, not many enquiries bsing made, but an improvement is looked forward to at an early dite, The following are current quotations in Montreal:

| Bleaching powder. | \$ 225 |  | \$ 250 |
| :---: | :---: | :---: | :---: |
| Bicarb soda. | 225 | -' | 235 |
| Sal soda | 070 | 19 | 075 |
| Carbolic acid, I lb. botlles | 025 | ${ }^{\prime}$ | - 30 |
| Caustic soda, $60{ }^{\circ}$ | 190 | " | 200 |
| Caustic soda, $70^{\circ}$ | 225 | " | 235 |
| Chlorate of potash | 013 | ${ }^{\prime \prime}$ | - 18 |
| Alum | 140 | ${ }^{\prime \prime}$ | 150 |
| Copperas | 070 | * | - 75 |
| Sulphur flour | 150 | - | 175 |
| Sulphur roll | 150 | " | 175 |
| Sulphate of copper | 400 | ' | 50 |
| White sugar of lead | 007 | 0 | 006 |
| Bich potash | 010 | * | 0 12 |
| Sumac, Sicily, per ton | 6500 | 16 | 7000 |
| Soda ash. $4^{\circ}{ }^{\circ}$ to $55^{\circ}$ | 125 | ${ }^{\prime}$ | 150 |
| Chip logwood | 200 | " | 210 |
| Castor oil. | $00 \%$ | " | 008 |
| Cocoanut oil | 0 00y | * | 007 |

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GRASS CLOTH, HAIR CLOTH, HAIRETTES, FLANNELETTES.
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Fine TWEEDS, CASSIMERES, and Fancy WORSTED SUITINGS AND TROUSERINGS
Colors warrantedias fast as the best British or Forcign goods.

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Power Knitting Machines


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 can ted it when they the, work for work or phace for glace.
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gil Merill St., Monimal 1as Rank St. Ottama क0 Klng St. Finit, Toronto AF Jnlan Se, quebeo


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Buffalo Far Cloth Coats Black Dogskin Cloth Coats Actrachans, Lambskins Strijo Jorxoys, Eider Downs Gioto nind Slioo Lining


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The success of The Camadian Enginecr has been unprecedented in the history of trade journalism in Canada, for not only was it encouraged and assisted Irum the stark by able Canadian writers in the various brancies of engirecring, but it achieved what was still harder to accomplish-a sound financial position within the first year of its existence The number of subseriptions reccived, and the number of firms who have sought the use of its advertising pages, have justified the publishers in thrice enlarging the paper. It is now twice its original size. While this means a large growth in advertising patronage, it also means a greater variety of reading matter and iltustrations for our subsenbers.

CONTENTS OF JANUARY, 1896, NUMBER:


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## AMERICAN INDIAN TEXTILE WORK.

The Indians of the south in early tumes mado very handsome carpels. They had a wide hemp that grew about sir. feet high in open, rich level dands, and which usually ripened in July It is still found growing wild When it was fit for use thoy pulted, steeped, peeled and beat it, and the old women spun it off the distaffs with wooden machunes, having some clay on the middles of them to hasten the motion. When the coarso thread was preparod they pue it into a frame about six fect square, and, instead of a shuttle, they thrust through the thread with a long cano having a largo string through tho web, which they shifted at every second course of the thread. When they had thus finished their arduous labor they painted each side of the carpet with such figures of various colors as their fruitful imaginations devised, particularly the images of those birjs and beasts they were acquainted with, and likewise of themselves, acting in their social and martial stations. The Nuscogecs, time out of mind, passed the woof with a shuttic, having a couplo of threads which they moved with the hand so as to enable them to make good dispatch, something after our early manner of weaving. The women were the manufacturers of these fabrics. Buffaloes' wool was extensively used for spinning and weaving. The Choctaws made turkey feather blankets with the long feathers of the neck and breast of that large fowl. The inner end of the feather was twisted and made fast in a strong double thread of hemp or coarse twino made of the inner bark of the mulberry trec. These threads were then worked together after the manner of a fine netting. The long and glittering feathers imparted to the outside of the blankets a very pleasing appearance. Such fabrics were quite warm. Their head ornaments of feathers were also very beautiful. Various clays and the juices of roots, barks, berries and plante were employed in dyeing their manufactures. Tassels of the hair of deer, colored red, were held in special esteem.

Tur general mecting of the Commercial Travelers' Associa. tion of Canada was held on December 7th, in Toronto. There was
a large attendance of members, and the president, Robert H. Gray, occupied the chair. The annual report of the secretary James Sergeant, showed an increaso in membership and a su-stantial addition to the reserve fund. The folfowing officurs for the ensuing year were elected by acclamation: President, R H. Gray: first vice-president, R. J. Orr, second vice-president, C. E IKyle; treasurer, J. C. Black. The chief topic of discusnion at the meeting was the wretched sanitary arrangements of the hotels in the smaller towns and country places in Ontazio.

Tus Japanese are bound to enter the world of commerce. A fow years ago, a flannel manufacturer of Thuringia received two Japanese workmen into his factory. After a stay of two years they quietly left his service, and returned to their own country. The manufacturer had an enormous trade with Japan, but shortly afterward bis trade ceased entirely. His two Japanese workmen had studied his methods down to the smallest details, and when they returned to Japan erected a factory after the Gercanan model. Before legg the rest of the world is haund to feel the influcace of Japanese enterprise. Their skill, industry and cheaplabor are sure to make themselves felt. The sooner this is recognized by the trade unions the better it will be for our industries.

At the annual menting of the dry goods section of the Toronto Board of Trade, John D. Ivey, president; arrupied the chair. In his annual address the chairman touched upon a number of matters of great moment to the dry g'ods trade, and in fact to all branshes of Canadian commerce, and made some practical suggestions which may bear fruit in the future. The address was not lengthy, hut it was practical, and showed a grasp of the situation and ability to put some points concisely but suggestively. The treasurer submitted his statement, which showed a balance on hand. The election of the executive committeeresulted as follows: Messrs. J. D. Ivey, Andrew Darling, J. Short McMisister, W F Brock, J. K. Macdonald, Wm. Blackley, and T. O. Anderson. Aud the committee has chosen Mr. Andrew Darling, chairman, and Mr. J. Kidston Macdonald, deputy chairman.
 of Land, with 10 dwellinge, etc., is now offered FOR SALE. It contains seven sets of $60-\mathrm{in}$. manufacturing Cards, 2,500 Spindles (Tatham Mules), 45 Broad Looms, and all other machinery to match. It is advantageously situated on the banks of the Fuinber river, and has an excellent water power.

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