

THE Cities and Towns of Canada

ILLUSTRATED.

VALLEYFIELD.

ITS WATER POWER AND MANUFACTURING INDUSTRIES.

It is a trite but true saying that England knows but little of her colonies; equally true it is that the average colonist knows but little of his own country. It is with the purpose of removing, in some measure, this reproach from both parent and child that we propose to devote a portion of our space henceforth to correspondence by a Special Commissioner now making a tour of the Dominion. These articles will be liberally illustrated and will embody an historical sketch of the place treated, descriptions of the industrial establishments, leading business houses, public institutions and other places of note, biographical sketches of prominent citizens (with portraits), &c., &c. It is hoped and believed that these articles will prove not only interesting to the general reader but valuable to the parliamentarian and statistician, and beneficial to the Dominion at large. There can be no doubt that Canada has suffered much at the hands of legislators and treaty-makers, simply because of the vague ideas which are so prevalent respecting the extent of the country, its natural resources, the social status of the inhabitants and the value and variety of their manufacturing and commercial enterprises. Our purpose is to improve matters in this respect. The success of the undertaking will, of course, depend somewhat upon the amount of support and assistance afforded by the public. Upon that point we are, however, sanguine, believing that the movement is one which will commend itself to every true Canadian, every patriotic Briton.

We begin with Valleyfield, County of Beauharnois, Province of Quebec, 40 miles S.W. of Montreal, known to the ordinary traveller as a place where the steamboat goes through a lock and leaves the Beauharnois Canal, but which, in fact, is a manufacturing centre of no mean order, and a place where Nature, aided by man, offers for utilization one of the grandest water-powers in the world. Elsewhere vast sums are spent in the formation of mill-ponds and race-ways, but here, broadly speaking, the mill-pond is the wide expansion of the St. Lawrence, known as Lake St. Francis, and the race-way is the steep descent in the river-bed which forms the Cedar Rapids, and which necessitated the construction of the Beauharnois Canal. Here, by throwing a dam from the mainland to Grand Island, no easy task, but a minor work compared to what Nature had already done, a water-power which is practically unlimited has been brought under control. As certain as sunrise it is the cheapest in the world. In most establishments where water-power is used it is felt necessary to provide against a failure of the power by erecting a steam engine—which, in a few years, represents a large amount of capital lying idle. No such precautions are necessary at Valleyfield. As long as Niagara's flood pours over its rocky ledge the Valleyfield manufacturer is sure that his wheels will revolve.

The creation of the Valleyfield water-power was due to the construction of the St. Lawrence Canals. In 1842 the Beauharnois Canal was begun. The work of completion occupied three years. When finished it was found that there was insufficient water in the channel through the lake, and to throw back the stream and reduce the current somewhat the dam before mentioned was constructed. Subsequently the Government constructed another dam between Grand Island and Clark's Island which greatly improved the water-power. The construction of the canal was unhappily marked by bloodshed due to the labor riots. About 1500 men, rightly or wrongly incensed against a contractor named Crawford, marched to St. Timothy, six miles from Valleyfield, and were confronted by a small body of troopers. Having dismounted, the soldiers were speedily surrounded and had considerable difficulty in effecting their escape. The mob followed, demanding that Crawford should be given up to them, but, the troopers having mounted their chargers, a stand was made, the Riot Act was read and the order to fire given. At the volley the mob ran, and the soldiers, being enraged at their recent ignominious retreat, pursued savagely, driving several of the rioters into the river where they met a watery grave. Since then the history of Valleyfield has, happily, been but a record of industrial progress and development.

A Mr. Miller founded the first manufacturing establishment—a paper mill—the seed from which has sprung the present vast mills of Alexander Buntin. Mr. Miller sold out to Mr. Buntin who speedily re-built on a larger scale. A detailed description of these mills will be found further on. About this time the Anderson family came upon the field and to them is to be attributed quite a batch of manufacturing industries. In 1875 Valleyfield was made a town; Mr. Plante, an enterprising general

merchant, being elected Mayor, a position he has since held with honor to himself and satisfaction to his constituents. In 1875-6 the Montreal Cotton Co.'s handsome mills were erected. These mills, like the other buildings in the neighborhood, are built of stone quarried on the spot. The lime used in the erection is also made from the excavated debris. The building stone is of fine quality and easily quarried. These facts, taken in connection with the splendid water-power privileges so cheaply to be obtained, ought to commend Valleyfield highly to those contemplating embarking in manufacturing enterprises.

THE MONTREAL COTTON CO.'S MILLS AND BLEACHERY

are comprised in a noble pile, magnificently situated, enjoying control of a water-power second to none on the continent, which, in this particular, is equivalent to saying: the world. Massive, substantial, complete in all its details, its originators are yet able to boast that for a building of its size and kind the time occupied in the erection and fitting up is the shortest on record. Active operations were begun in the summer of 1875 and the main building was finished and the machinery put in by November, 1876. The mill is by far the largest in the Dominion; its full capacity being forty thousand spindles and seven hundred looms. At present there are twenty-seven thousand spindles and five hundred and twenty looms. The Bleachery will turn out ten thousand pieces per week. The volume and quality of the water supply is a most important question in connection with this department of a cotton mill. As in the matter of power, Nature is beneficent. The water supply of the Valleyfield Bleachery could not possibly be better than it is. An experienced judge has expressed the opinion that such a supply in Manchester, England, would be worth one million pounds sterling and be eagerly bought at that. The power which sets in motion this forest of machinery is conveyed to two turbine wheels of two hundred and fifty horse power each by a canal one hundred feet wide and eleven feet deep, cut through solid rock for a distance of five hundred feet. Provision has been made for the reception of a third wheel. The Company own all the unleased water privileges on Grand Isle and have provided for an extension of the above mentioned canal by securing a tract of land one mile square. They are prepared to treat liberally with parties contemplating the erection of works.

Upon entering the mill the visitor notices at once the evidences of thoroughness and thoughtfulness which are everywhere apparent. The various flats are lofty, light and well ventilated. Gas is laid throughout, the Company having erected gas works large enough to supply the whole town if needs be. The precautions against fire are admirable. At the top of the tower there is a 20,000 gallon tank which supplies hydrants on each floor. There are also two powerful pumps which give an immense volume of water at a very high pressure. At a recent trial a stream was thrown thirty feet over the chimney. But the precautions do not stop with hydrants and high pressure. On each flat, near the ceiling and under the floor, there are iron tubes minutely punctured from which a heavy shower can be thrown in a moment. The whole of the fire-extinguishing apparatus is under easy control; the operator having merely to turn a specified valve in order to flood not only a particular flat but a particular section of any flat. The efficiency of this system has been so thoroughly demonstrated that the effect has been likened to the emptying of a good-sized water-pot upon a tallow-candle. Wherever it has seemed admissible, the passages and doors have been made fire-proof. The effect of all this has been to secure a lower rate of insurance than is enjoyed by any other mill in the country.

The mill is now engaged wholly in the manufacture of shirtings of from thirty to forty inches in width. Some very fine goods are turned out, the machinery being of the most modern description, indeed, some of the leading mills in the old country are only now having similar machinery introduced. The excellence of the machinery enables the Company to run from twenty to thirty per cent. faster than the average speed of mills and the "mules" are longer than is ordinarily the case. For instance, each "mule" carries one thousand spindles, which make eight thousand revolutions per minute. At present the monthly pay-roll is about \$4000, representing nearly 300 hands. By next summer it is expected that there will be work for 500, and eventually for 700. As may be imagined, the mill has literally been "a Godsend" for Valleyfield and the neighbourhood. The population had out-grown the sources of employment, and had not the Cotton Works been started a large number of people must have left the place. It is pleasant to be able to add that both as regards appearance and demeanour the operatives of this mill will compare favourably with any of their class the world over. Visitors from the manufacturing centres of the United States have frequently remarked this.

A few words respecting the financial aspect of cotton spinning and manufacturing in Canada. The originators of this enterprise believe there "is money in it" for three reasons:

- 1st. They have at their command the finest possible power at the cheapest possible cost.
- 2nd. The most desirable class of help—the French-Canadian race—being naturally exceedingly well adapted for such employment.
- 3rd. The low rate at which the raw material can be laid down.

These reasons lead those interested in the trade to predict that it will eventually become a staple Canadian industry and the one turning over the largest amount of capital.

Up to the present time the expenditure by the Company upon the buildings, machinery, &c., has amounted to about \$400,000, and they contemplate to spend \$100,000 more. The authorized capital is \$500,000, two-thirds of which was subscribed in Montreal and the rest in England.

In every respect the enterprise is creditable to all concerned, and our closing words must be words of congratulation to those gentlemen who, in the face of fiscal regulations by no means encouraging, have united to give to Canada such a noble addition to what must eventually become her great main-stay—NATIVE MANUFACTURES.

THE VALLEYFIELD PAPER MILLS,

owned by Alex. Buntin, are the largest in the Dominion, their full capacity being seven tons per day. The works, solidly built of stone, comprise three distinct mills; one being employed in the manufacture of fine envelope, book and toned, calendered papers; the second and third turning out the lighter and cheaper kinds of paper, such as are used by the daily press, also Manila and fine wrapping papers. The machines are capable of producing paper six to seven feet wide, and any length desired. The raw material used embraces rags, old paper, ropes, fishing nets, &c., grass and wood. That wood should enter into the manufacture of paper will, no doubt, astonish many of our readers, yet the inventive genius of the age, aided by science, has produced a process which deals with the timber in such a manner as to convince the observer that the utilization of trees in paper-making is the most natural thing in the world. The wood used is principally soft maple and poplar; the logs are barked, cut up in short lengths, and ground to fibre by Voelter's patent machines. The product is mixed with other pulp and, going in at one end of the mill a milky white liquid, it issues forth at the other spotless, gleaming paper, fit for the press. So, it will be seen, the emblematic tree of Canada might well be called the modern "tree of knowledge." The fact that a forest tree may be metamorphosed into a book, a newspaper, or even a love-letter, invites fanciful flights of imagination, but our purpose just now is more practical. At the Valleyfield Mills about 2,400 lbs. of wood pulp are ground daily. Mr. Buntin owns large tracts of timbered land in the neighbourhood, but purchases a great deal of the wood he uses, the idea being to keep the growing wood on his lands as a reserve. For drying and other purposes the Works consume about 4,500 cords annually. To work the machines of the mills there are required thirteen Leffel water wheels, ranging from thirty-four to sixty horse-power. The busy whirl is heard unceasingly from half-past twelve Monday morning to half-past eleven Saturday night, the half hour at the beginning and end of the week being allowed for the arrival and departure of the employees, so that the Sabbath is not encroached upon. When fully at work the mills employ 250 hands; just now there are between 180 and 200 employed. The principal hands live rent free in houses built and owned by Mr. Buntin, near the works. The pay-roll, even now, amounts to about \$4,000 monthly. Yet, there are those who affect to be little the importance of encouraging native industries. Mr. Buntin owns a fine wharf, on which stand four large store-houses. The facilities for shipping goods are excellent, the whole of the forwarding fleet of the St. Lawrence having to pass the very doors. The first mill was erected in 1853; the latest addition was a building erected last summer for the preparation of grass, a material now largely used in paper making.

The resident Manager is Mr. John Crichton, who has had charge for the past twenty-one years. He is a thoroughly practical paper-maker.

It is, perhaps, hardly necessary to add that the products of the Valleyfield Mills are first-class; wherever they have been exhibited they have been awarded premiums. The leading newspapers and periodicals of the Dominion (including the CANADIAN ILLUSTRATED NEWS) are printed upon paper made at these mills.

The warehouses of Alex. Buntin & Co., of Montreal; Buntin Bros. & Co., of Toronto, and Buntin, Gillies & Co., of Hamilton, are the centres from which all the products of the Valleyfield Paper Mills are sold and distributed to every part of the Dominion.

THE WOOLLEN MILL,

owned by Anderson, Wattie & Co., is a substantial structure of five stories, with a commodious dye-house attached. At present there are three sets of cards, but the mill has a capacity for five. About sixty hands are employed, principally in the manufacture of tweeds, of tasteful patterns and durable texture. The weekly production averages 2,500 yards, besides a large quantity of stocking yarn. The firm also manufactures plain and fancy flannels, clouds, cardigan jackets and other varieties of knit goods. Close by are the

GRIST AND SAW MILLS

owned by Alexander Anderson. The grist mill has four run of stones. The saw-mill, besides being of a capacity for all ordinary work, is fitted with both shingling and planing machinery. Mr. Anderson also owns a pump and furniture factory, now leased by Mr. C. Perham. Behind the grist-mill is a small foundry owned by Mr. James Anderson.

In the town proper the most prominent establishment is that of D. B. Pease & Co. Tastefully designed and substantially built, it is an exceptionally fine specimen of a country store where pretty well everything "from a needle to an anchor" can be found. The Montreal Telegraph Co. has its office in the block. Mr. Pease is one of the pioneers. He came to Valleyfield when only a couple of houses marked the site of the town. He saw then that the place was destined to become a great manufacturing centre, and he looks forward to great strides in this respect in the near future. With him is associated Mr. C. T. Irish, late of Montreal, brother of Mr. M. H. Irish, proprietor of the Rossin House, Toronto. From the cupola of Messrs. Pease building a very fine view is obtained of the surrounding country and the Covey Hills in the distance.

Near the bridge which connects the town with the cluster of mills, is the old-established general store of J. McIver & Co.—a commodious stone building. Standing in the centre of the floor, and turning slowly, one sees as many well-stocked departments as would represent half a dozen stores in a city street. To maintain a really well assorted stock in a country store is no easy matter, but McIver & Co. seem to know how to do it to a nicety.

Back of Valleyfield there are very curious peat beds, in some places ten feet deep; the average depth being from four to five. This peat is far more woody than the ordinary article, and it is used by a good many of the townspeople just as it is dug up. The St. Lawrence is supposed to have flooded this peat region in the old days. In the course of the canal excavations imprints of the human foot were found in the rocky strata, showing apparently that the geography of the country has undergone great changes at some time or other.

The population of Valleyfield is said to number about 2,500, the majority being French. The Rev. Mr. Lanier is the Parish Priest. The Presbyterians who make up a very fair congregation worship in an unpretentious though comfortable building on Grand Island. They enjoy the ministry of an eloquent man, the Rev. Mr. Lockhead. The Episcopalians and Wesleyans hold only occasional services in the English school-house.

Our illustrations, with the exception of that of the Paper Mills, are from photographs by Mr. O. P. Dennie, whose establishment upon the canal bank is quite a curiosity in its way. Mr. Dennie is determined to do business if there is any to be done. He will take your photograph or paint you a sign, or sell you a town lot, or let you have a skiff on hire. He is also proprietor of a patent "dumb stove" which is said to be a wonderful economizer. Mr. Dennie has great expectations respecting Valleyfield's future.

Messrs. Nicolson have a large number of building lots, situated in the best part of the town, to dispose of and we learn that they would sell them on reasonable terms.

MUSICAL AND DRAMATIC.

SIGNOR VERDI is said to have a new opera nearly finished.

GOUNOD's new Mass is said to be finer than anything of the kind since the days of Mozart.

SIGNOR VERDI has taken up his residence at the Doria Palace, Genoa, where he intends to pass the winter, as he has done during the last few years.

DI MURSKA is fond of pets. She keeps in her room an affectionate mouse, two Austrian parquies, a Scotch poodle, and a remarkably profane parrot.

THE father of Albani denies that she is married, and says that such an event is in the far future. She sings at the Italian opera, Paris, in January.

NEGOTIATIONS are on foot for the production of Johann Strauss's "La Tzigane" in England. An Italian troupe proposes to give it also in Spain and Portugal.

MR. FECHTER has achieved a marked success in his powerful and original performance in the "Count of Monte Cristo," which is witnessed nightly with breathless interest, at the Broadway Theatre.

THE musical world has just suffered a serious loss by the death, at Conegliano, of Frederico Ricci, composer, alone or in participation with his brother, of so many works. He was a native of Naples, and was born in 1809.

THE critic of the *Debuts* deplors the fact that there is not a theatre in Paris where Shakespeare's masterpieces form part of the repertory, and urges the Français to give M. Worms an opportunity of trying his powers in "Hamlet" and "Othello."

Mlle. LITTE, the American singer, who has recently made such a successful debut at the Italiens, as Lucia, is a small blonde, by no means handsome, but she sings so finely that one forgets the beauty nature has refused her face in admiration of her voice.

A TELEPHONIC concert in the Berlin Opera House is the latest novelty. The wire transmitted the chorus tolerably well, but the instrumental music was only heard as a confused noise. The experiment will be repeated with Wagner.

SALVINI has just made a tremendous impression in Paris with his acting in the closing scene of "La Mort Civile." He was so absolutely true to nature that those who saw him felt that they were looking at a reality. Some interval elapsed after the curtain fell before the audience ventured to applaud. Then they recalled Salvini repeatedly, but—strangest tribute of all to the impression produced—they still lingered about their places, unwilling to leave, the women sobbing and the men very pale.

The principal event in Paris is a new drama in six acts and seven tableaux by MM. d'Ennery and Cormon, entitled *Une Cause Célèbre*. The plot of the drama, which is too complicated to be told briefly, turns upon the story of an innocent man found guilty of murder on the evidence of his infant daughter, the sentence of death being subsequently commuted into penal servitude, and his innocence being ultimately established. The drama is admirably constructed, and abounds in touching scenes, which drew forth many tears. The acting was of great excellence.